

Draft decision on proposed revisions to the Dampier Bunbury Pipeline access arrangement 2021 to 2025

Submitted by DBNGP (WA) Transmission Pty Ltd

14 August 2020

Economic Regulation Authority

WESTERN AUSTRALIA

D217042

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Invitation to make submissions

Submissions are due by 4:00 pm WST, Monday, 26 October 2020

The ERA invites comment on this decision and encourages all interested parties to provide comment on the matters discussed in this decision and any other issues or concerns not already raised in this decision.

We would prefer to receive your comments via our online submission form <https://www.erawa.com.au/consultation>

You can also send comments through:

Email: publicsubmissions@erawa.com.au
Post: PO Box 8469, PERTH BC WA 6849

Please note that submissions provided electronically do not need to be provided separately in hard copy.

All submissions will be made available on our website unless arrangements are made in advance between the author and the ERA. This is because it is preferable that all submissions be publicly available to facilitate an informed and transparent consultative process. Parties wishing to submit confidential information are requested to contact us at info@erawa.com.au.

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Contents

Summary of required amendments	iii
Draft decision	1
Background.....	1
DBP's proposal	2
ERA's draft decision	3
Reasons	4
Decision making framework	4
Regulatory framework	4
Changes to the regulatory framework	6
Content of an access arrangement	8
DBP's consultation process	12
DBP's proposal	12
Submissions	12
Draft decision.....	14
Identifying the pipeline and primary dates	15
DBP's proposal	15
Submissions	16
Draft decision.....	16
Pipeline and reference services	19
DBP's proposal	20
Submissions	22
Draft decision.....	24
Demand forecast	45
DBP's proposal	45
Submissions	49
Draft decision.....	51
Revenue and tariffs	58
Total revenue.....	58
Operating expenditure	59
Opening capital base.....	85
Projected capital base	128
Return on the regulatory capital base	181
Depreciation	192
Taxation	216
Incentive mechanism.....	231
Allocation of total revenue	257
Reference tariffs	261
Reference tariff variation mechanism	268
Fixed principles.....	277
DBP's proposal	277
Submissions	278
Draft decision.....	278
Terms and conditions	283
DBP's proposal.....	283

Submissions	284
Draft decision.....	286
Other access arrangement provisions.....	376
Access and queuing requirements	376
Capacity trading.....	386
Extension and expansion requirements	388
Receipt and delivery points	392

List of appendices

Appendix 1 List of Tables.....	394
Appendix 2 List of Figures	398
Appendix 3 Abbreviations.....	399
Appendix 4 Submissions received.....	400
Appendix 5 Terms and conditions for reference services.....	401
Appendix 6 Tariff Model – Public Version	438

Summary of required amendments

Required Amendment 1

DBP must amend the list of Attachments in clause 17 of the proposed revised access arrangement to reflect the pipeline description document submitted by DBP, which is a description of the DBNGP as at 15 September 2019.

Required Amendment 2

DBP must amend the access arrangement information to clarify the pipeline services that are available to prospective users by deleting references to the Seasonal Service, Metering and Temperature Service and Odourisation Service, which are services that exist within the contractual rights of reference services and cannot be provided as individual (stand-alone) pipeline services.

The term “Seasonal Service” in clause 16 (Definitions) of the proposed revised access arrangement must also be deleted.

Required Amendment 3

DBP must amend the proposed revised access arrangement to include the following trigger event (new clause 14A) to accelerate the review submission date specified in clause 14.2 of the access arrangement if the trigger event occurs.

14A. TRIGGER EVENT

14A.1 Subject to clause 14A.2, the review submission date specified in clause 14 accelerates on the occurrence of the Trigger Event to the date that is 14 months after the Trigger Event.

14A.2 The Trigger Event accelerates the review submission date if the Trigger Event occurs prior to 1 May 2023.

14A.3 **Trigger Event** means the execution by Operator of a binding agreement (whether conditional or unconditional) for the transport of gas through the DBNGP, the performance of which requires a re-direction of the flow of gas through the DBNGP.

Required Amendment 4

DBP must amend the pipeline services information in clause 3 of the access arrangement to include descriptions of the reference and non-reference services that are listed in clause 3.1 (as per the statement in clause 3.2 of the proposed revised access arrangement).

The list of non-reference services in clause 3.1(b) must include the Pilbara Service, Storage Service and Peaking Service (in addition to the non-reference services already listed in the proposed revised access arrangement).

Required Amendment 5

DBP must amend the information for the Spot Capacity Service in clause 3.6(b)(ii) of the proposed revised access arrangement to correct a referencing error by deleting the reference to “clause 5.3(g)(i)” and replacing it with a reference to “clause 3.6(b)(iv)”.

Required Amendment 6

Consistent with Required Amendment 4, DBP must amend clause 3 of the proposed revised access arrangement to include a reference to, and a description of, the Peaking Service, which is a non-reference service that is to be specified as a rebateable service for AA5 pursuant to rule 94(4) of the NGR.

Required Amendment 7

DBP must amend its demand forecast for full haul reference services to maintain throughput and contracted capacity at 2020 forecast amounts as shown in Table 14 of this draft decision.

Required Amendment 8

DBP must amend the total revenue requirement for AA5 to \$1,553.08 million. The yearly values for each year of the access arrangement period are set out in Table 16 of this draft decision.

Required Amendment 9

DBP must amend forecast operating expenditure for AA5 to \$456.44 million (real as at 31 December 2019). The yearly values for each year of the access arrangement period are set out in Table 23 of this draft decision.

Required Amendment 10

DBP must amend the opening capital base at 1 January 2021 to \$3,327.39 million (real as at 31 December 2019). The calculation of the opening capital base is set out in Table 55 of this draft decision.

Required Amendment 11

DBP must amend the projected capital base to reflect the values set out in Table 103 of this draft decision so that the closing capital base as at 31 December 2025 will be \$3,132.07 million.

Required Amendment 12

Subject to the nomination of a final averaging period, DBP must amend its rate of return to be 4.03 per cent (vanilla nominal after-tax).

Required Amendment 13

DBP must amend the forecast depreciation of the capital base for AA5 to \$559.09 million (real as at 31 December 2019). The yearly values for each year of the access arrangement period are set out in Table 112 of this draft decision.

Required Amendment 14

DBP must amend the calculation of income tax as follows:

- Amend the approach to use unsmoothed revenue to determine taxable income.
- Amend the approach to maintain a 20-year tax asset life for the tax asset class 'Other depreciable' assets.
- Separately identify any building assets from its tax assets purchased on or after 1 January 2021, which should be depreciated using straight-line depreciation for tax purposes.
- Separately identify any refurbishment capital expenditure in its access arrangements that is to be included in forecast operating expenditure and capital expenditure.
- Amend the formula for the diminishing value method to use an asset's effective life.
- Amend the estimate cost of corporate income tax in accordance with the values set out in Table 120 of this draft decision.

Required Amendment 15

DBP must amend clause 15.11(b) of the proposed revised access arrangement to read as follows:

(b) any operating expenditure sub-category not forecast using a top-down, revealed cost approach. These costs:

(i) may include, but are not limited to, operating costs incurred by the Operator relating to:

- A. system use gas; and
- B. non-recurrent operating expenditure.

(ii) must not include operating expenditure previously classified as capital expenditure that was forecast on a bottom-up basis.

Required Amendment 16

DBP must remove clause 15.11(c) from the proposed revised access arrangement.

Required Amendment 17

DBP must remove clause 15.11(e) from the proposed revised access arrangement.

Required Amendment 18

DBP must amend clause 15.11(f) of the proposed revised access arrangement to read as follows:

(f) any other operating expenditure amount that the ERA notifies the Operator is required by the ERA to exclude from the E Factor benchmark.

Required Amendment 19

DBP must amend clause 15.12 of the proposed revised access arrangement to read as follows:

Where the Operator changes its approach to classifying costs as either capital expenditure or operating expenditure during the access arrangement period, the Operator will adjust the E Factor benchmark to be consistent with the capitalisation policy changes to the effect that outcomes under the efficiency mechanism are not affected by the change in capitalisation policy.

Required Amendment 20

DBP must amend clauses 15.2(c) and 15.8 of the proposed revised access arrangement to correct the following typographical errors:

- In clause 15.2(c), the reference to “clause 16.11” must be changed to “clause 15.11”.
- In clause 15.8, the reference to “(A5 in paragraph (16.7) above)” must be changed to “(A₅ in paragraph (15.7) above)”.

Required Amendment 21

DBP must amend the proposed revised access arrangement to reflect the draft decision tariffs in Table 126.

Required Amendment 22

DBP must amend clause 11 (Reference Tariff Variation Mechanism) and Annexure A of the proposed revised access arrangement to:

- Include a rebate mechanism for the rebateable peaking service.
- Amend the description of the debt risk premium (in Annexure A) to ensure it conforms with the ERA’s Rate of Return Guideline. The required amendments are set out at paragraph 1233 of this draft decision.
- Correct the typographical error in paragraph 11.5(j) so that the reference is identified as “clause 11.5” (and not “clause 0”).

Required Amendment 23

DBP must amend clause 13 of the proposed revised access arrangement to delete the proposed amendments to the fixed principles so that the fixed principles remain the same as the current (AA4) fixed principles. That is:

- Clause 13.1(b) must be amended to read: “the revenue earned by Operator during the period commencing on 1 July 2005 and ending on 31 December 2015 from the sale of any services ...”
- Clause 13.2 must be amended to read: “For the purposes of the Fixed Principles referred to in clauses 13.1(a) and 13.1(b) of this Access Arrangement, the fixed period is until 31 December 2031”.

However, DBP must make the proposed amendment to clause 13.1(b)(i) to insert the words “for T1 Service” to clarify that the reference tariff is for the T1 Service.

Required Amendment 24

DBP must consider deleting the fixed principle for determining the capital base in clause 13.1(a) of the proposed revised access arrangement and replacing it with the words “[DELETED]”.

Subject to the fixed principle in clause 13.1(a) being deleted, a consequential amendment to clause 13.2 to delete the reference to “clause 13.1(a)” must be made so that the clause reads: “For the purposes of the Fixed Principles referred to in clause 13.1(b) of this Access Arrangement, the fixed period is until 31 December 2031”.

Required Amendment 25

DBP must amend the term “DBNGP” in clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to change the date “1 January 2020” to a date that reflects the commencement date of the revised access arrangement, which is expected to be 1 January 2021.

Required Amendment 26

DBP must amend the term “P1 Capacity Reservation Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Capacity Reservation Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the term “B1 Capacity Reservation Tariff” and “T1 Capacity Reservation Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Required Amendment 27

DBP must amend the term “P1 Commodity Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Commodity Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the term “B1 Commodity Tariff” and “T1 Commodity Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Required Amendment 28

DBP must amend the term “P1 Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the terms “B1 Tariff” and “T1 Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Required Amendment 29

DBP must amend the term “Reference Tariff Variation Mechanism” in clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete the words “from time to time”.

Required Amendment 30

DBP must delete the term “T1 Reference Tariff” from the proposed terms and conditions for the P1 Service and B1 Service.

Required Amendment 31

DBP must amend clause 3.2(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to retain subclause (i) that reads:

(i) can only be Curtailed in the circumstances specified in clause 17.2;

Required Amendment 32

DBP must amend clause 4.8(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to capitalise the words “access request form” (in the first line) so that the words become the defined term: “Access Request Form”.

Required Amendment 33

DBP must amend clause 6.11(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to:

- Clarify the criteria for the allocation of maintenance charges across shippers.
- Correct grammatical and typographical errors.
- Make clear that there is no amortisation of relevant construction costs where those costs are already paid for by the shipper or another third party.

The required drafting amendments are set out at paragraph 1458 of this draft decision.

Required Amendment 34

DBP must amend clauses 6.11(d), 6.11(e) and 6.11(f) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to clarify that the rebate given is a proportion of the excess which is the same proportion as the greater of the amount determined by the respective subclauses (i) and (ii).

The required drafting amendments are set out at paragraph 1467 of this draft decision.

Required Amendment 35

DBP must amend clauses 8.9(c) and 8.9(f) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to specify that:

- For the purpose clause 8.9(c), *inlet point* means an inlet point on the DBNGP.
- For the purpose of clause 8.9(f), *outlet point* means an outlet point on the DBNGP.

The required drafting amendments are set out at paragraph 1489 of this draft decision.

Required Amendment 36

DBP must amend clause 8.10(b) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to replace the words “the Operator is taken to have issued a Curtailment Notice at the time it schedules that Capacity Service” with the words “the Operator must issue a Curtailment Notice at the time it schedules that Capacity Service”.

Required Amendment 37

DBP must amend clause 8.16(e) of the proposed terms and conditions for the P1 Service and B1 Service to read:

(e) the Shipper has complied with its obligations under clause 6.13 in respect of the relevant inlet point or outlet point.

The same amendment must also be made to clause 8.16(d) of the proposed terms and conditions for the T1 Service (which is the equivalent clause).

Required Amendment 38

DBP must amend clause 9.6(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to make the clause subject to any other agreement to change the imbalance limit by inserting the following words at the beginning of the clause: “Except where the Shipper has contracted with the Operator for a different Outer Accumulated Imbalance Limit, ...”.

DBP must also amend clause 9.5(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to make the clause subject to any other agreement to change the imbalance limit by inserting the following words at the beginning of the clause: “Except where the Shipper has contracted with the Operator for a different Accumulated Imbalance Limit, ...”.

Required Amendment 39

DBP must amend clause 9.8 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete proposed new clause 9.8(a).

Required Amendment 40

DBP must amend clause 14.7(b) of the proposed terms and conditions for the B1 Service to make the clause read:

(b) Except where the Shipper has contracted with the Operator for a different Outer Accumulated Imbalance Limit, if a relocation of Capacity under this clause results in Gas being transported to the Shipper from, or Received from the Shipper at, a point downstream of the southern most point of the DBNGP as at 30 December 2003 (being Clifton Road), in addition to the matters described in clause 14.7(c), the Shipper ...

Required Amendment 41

DBP must amend clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to:

- Delete the term “Networks”.
- Amend the term “Distribution Network” to mean “any Gas distribution system which receives Gas from the DBNGP”.

Required Amendment 42

DBP must amend the proposed terms and conditions for the B1 Service to insert a new clause 3.5 (Need for sufficient Forward Haul Gas) which requires the operator to not contract additional B1 Services unless it considers as a reasonable and prudent person that there will be sufficient forward haul gas under normal operating conditions to provide all B1 Services on a firm basis.

The required drafting for new clause 3.5, including a consequential drafting change to clause 17.3(b)(ii), is set out at paragraph 1600 of this draft decision.

Required Amendment 43

DBP must amend clause 28.3(b)(i)(C) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete the proposed amendments so that the clause prohibits the permitted disclosure of confidential information to any person who is directly involved in the generation or sale of electricity in Western Australia (rather than the generation or sale of electricity in the South West Interconnected System of Western Australia).

Required Amendment 44

DBP must amend clauses 4.3 and 4.5 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to provide for options to extend that are more than one month and less than one year. The required drafting for these amendments is set out at paragraph 1708 of this draft decision.

Consequential amendments must also be made to clauses 4.6 and 4.7 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service. The required drafting for these amendments is set out at paragraph 1709 of this draft decision.

Required Amendment 45

DBP must amend clause 1 and schedule 2 (row 4) of the proposed terms and conditions for the P1 Service and B1 Service to reinstate the provisions that applied in the second access arrangement period (AA2) for determining the Unavailable Overrun Charge. The required drafting for these provisions is set out at paragraph 1719 of this draft decision.

DBP must also amend clause 11.1(b)(ii) of the proposed terms and conditions for the P1 Service and B1 Service to add the words “multiplied by the Distance Factor” at the end of the clause.

Required Amendment 46

DBP must amend rows 1 and 2 in schedule 2 of the proposed terms and conditions for the P1 Service and B1 Service to reinstate the provisions that applied in the second access arrangement period (AA2) for determining the Excess Imbalance Charge and Hourly Peaking Charge, respectively.

The required drafting for these provisions is set out in paragraph 1723 of this draft decision.

Required Amendment 47

DBP must include definitions for the terms “P1 Reference Tariff” and “B1 Reference Tariff” in the terms and conditions for the P1 Service and B1 Service, respectively. A definition for the term “Access Arrangement Period” must also be included in both the terms and conditions for the P1 Service and B1 Service.

The required meanings for these terms are set out at paragraphs 1724 and 1725 of this draft decision.

Required Amendment 48

DBP must amend the requirements for access requests in clause 5.3 of the proposed revised access arrangement to insert new clause 5.3(d), which will apply to an access request for a reference service where the shipper states, in accordance with clause 5.2(c)(viii)(A), that it accepts the Access Contract Terms and Conditions.

The required drafting for new clause 5.3(d) is set out at paragraph 1746 of this draft decision. Consequential amendments to renumber the remaining subclauses in clause 5.3 must also be made.

Required Amendment 49

DBP must amend the queuing requirements in clause 5.4 of the proposed revised access arrangement to require the disclosure of information to enable a user to determine its actual position in the queue for access to capacity (as required by rule 103(5)(b) of the NGR).

Required Amendment 50

DBP must amend the queuing requirements in clause 5.4(f) of the proposed revised access arrangement to clarify the requirements in instances where an access request requires the terms and conditions of the access contract to be negotiated between the operator and prospective shipper or is subject to conditions.

The required drafting for these amendments is set out at paragraph 1755 of this draft decision.

Required Amendment 51

DBP must amend the extension and expansion requirements in clause 7.3 of the proposed revised access arrangement to change the date from “1 July 2021” to “1 January 2021” to reflect the expected commencement date of the revised access arrangement for the fifth access arrangement period (AA5).

Required Amendment 52

DBP must amend the extension and expansion requirements in clause 7 of the proposed revised access arrangement so that the requirements satisfy rule 104 of the NGR. The matters that DBP must address are set out at paragraphs 1770 to 1780 of this draft decision.

Required Amendment 53

DBP must amend the terms and conditions for changing inlet and outlet points in clause 8.1 in the proposed revised access arrangement to read: “In accordance with NGR 106, the Shipper under an Access Contract may: ...”

Draft decision

Background

1. On 2 January 2020, DBNGP (WA) Transmission Pty Ltd (DBP) submitted proposed revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline. DBP is the operator of the DBNGP and submitted the proposed revisions on its own behalf and on behalf of DBNGP (WA) Nominees Pty Ltd (the Pipeline Trustee) as the complying service provider.
2. DBP's proposal comprised a proposed revised access arrangement, access arrangement information and other supporting information.^{1, 2} The proposal covers the five-year period from 1 January 2021 to 31 December 2025 (otherwise known as the fifth access arrangement period or AA5). DBP's current access arrangement covering the fourth access arrangement period (AA4), 1 January 2016 to 31 December 2020, applies until a revised access arrangement is approved.
3. The purpose of an access arrangement is to provide the terms and conditions, including price, upon which an independent third party user can gain access to a regulated pipeline to transport gas.
4. The role of ERA is to consider DBP's proposed revisions to the access arrangement for the DBNGP. The National Gas Law (NGL) and National Gas Rules (NGR) set out the requirements for what should be included in the access arrangement, as well as the processes the ERA must follow when considering whether to approve DBP's proposal.
5. The ERA invited submissions from interested parties on DBP's proposal by publishing an initiating notice on 23 January 2020.
6. On 17 March 2020, the ERA published an issues paper to assist interested parties to prepare submissions and understand some of the issues the ERA would address when determining whether to approve DBP's proposal.³ Interested parties were invited to make their submissions by 31 March 2020. Submissions were received from seven parties:⁴
 - Australian Gas Infrastructure Group (AGIG)
 - CITIC Pacific Mining Management Pty Ltd (CPM)
 - Gas Trading Australia Pty Ltd (gasTrading)
 - NewGen Power Kwinana Pty Ltd (NPK)
 - Perth Energy Pty Ltd
 - Synergy
 - Wesfarmers Chemicals, Energy & Fertilisers Ltd (WesCEF)

¹ DBP, *DBNGP Access Arrangement 2021-25*.

² DBP, *2021-2025 Final Plan*, January 2020. This document is DBP's access arrangement information.

³ ERA, *Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025 – Issues Paper*, 17 March 2020.

⁴ The ERA extended the original closing date for submissions from 24 March 2020 to 31 March 2020. The ERA also subsequently decided to accept submissions that were received after the closing date.

DBP's proposal

7. The DBNGP is a gas transmission pipeline that extends approximately 1,600 kilometres from Dampier to Bunbury. The pipeline connects the gas fields located in Western Australia's north-west to mining and industrial customers and to residential customers via gas distribution networks. DBP is the operator of the pipeline and is a part of the Australian Gas Infrastructure Group (AGIG).
8. In May 2020, DBP updated the demand forecasts submitted in its original (January 2020) proposal. The updated demand forecasts were required following the completion of contract renegotiations with some shippers and have affected other forecasts. For example, DBP has revised its system use gas forecasts based on the updated demand forecasts and this has affected its operating forecasts. Based on DBP's updated demand forecasts and other proposed revisions to the access arrangement:
 - DBP's proposed reference tariffs for AA5 increase by approximately 9.9 per cent in real terms from the average tariff applying during AA4.
 - DBP's proposed expenditure for AA5 includes:⁵
 - \$453.89 million of forecast operating expenditure. DBP used the base-step-trend method to forecast its operating costs for most operating expenditure categories.
 - \$158.58 million of forecast conforming capital expenditure, which was 29.70 per cent higher than DBP's proposed capital expenditure for AA4. DBP submitted that more replacements of pipeline assets were due during AA5 than during AA4, leading to the proposed increase in capital expenditure.
9. DBP's proposed rate of return was 4.31 per cent (nominal after tax), based on the methods and values detailed in the ERA's rate of return guidelines and market data for 20 trading days to 29 October 2019.
10. DBP also proposed to:
 - Introduce an operating expenditure carryover incentive mechanism in AA5, called the *E Factor* scheme. DBP noted that the purpose of the scheme is to remove the timing distortion in incentives to implement efficiency gains throughout the access arrangement period.
 - Amend the terms and conditions for reference services (that is, reference contracts) following a wholesale review to:
 - Correct errors and omissions.
 - Remove redundant drafting.
 - Reflect changes in the ownership structure of DBP.
 - Align the reference contracts with negotiated contracts in place with shippers.

⁵ Real dollars as of 31 December 2019. The ERA has converted dollar figures supplied by DBP in real dollars as of 31 December 2020 to real dollars as of 31 December 2019 using the inflation figures supplied by DBP in its tariff model.

- Amend other access arrangement provisions, such as the procedures for making access requests, to reflect amendments that were made to the NGR in March 2019.

ERA's draft decision

11. The draft decision of the ERA is to not approve DBP's proposed revisions to the DBNGP access arrangement for 2021 to 2025. The reasons for not approving DBP's proposal are set out in the remainder of this document.
12. DBP is required to make 53 amendments to the access arrangement before the ERA will approve it. The required amendments, as listed on page iii, are also stated in the reasons for this decision at the point where each relevant part of DBP's proposal is considered.
13. Under rule 59(3) of the NGR, the ERA is required to fix a period (revision period) within which DBP may, under rule 60, submit additions or other amendments to its proposal to address the matters raised in this decision. The ERA fixes a revision period of 30 business days from the date of this decision. That is, DBP may submit revisions to its proposal by 4.00 pm (WST) Friday, 25 September 2020.
14. Consistent with rule 59(5)(iii), the ERA invites submissions on its draft decision for a period of 20 business days following the revision period fixed for DBP. Submissions are due by 4.00 pm (WST) Monday, 26 October 2020. The ERA will consider any submissions received and make a final decision to approve (or not approve) DBP's proposal or revised proposal if submitted by DBP.

Reasons

Decision making framework

Regulatory framework

15. The requirements for an access arrangement are established by the National Gas Law (NGL) and National Gas Rules (NGR) as enacted by the *National Gas (South Australia) Act 2008* and implemented in Western Australia by the *National Gas Access (WA) Act 2009*.

16. Under rule 100 of the NGR, all provisions of an access arrangement must be consistent with the national gas objective, which is specified in section 23 of the NGL:

The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

17. Sections 28(1) and (2) of the NGL specify the manner in which the ERA must perform or exercise its regulatory functions or powers:

28 Manner in which [ERA] must perform or exercise [ERA] economic regulatory functions or powers

- (1) The [ERA] must, in performing or exercising an [ERA] economic regulatory function or power—
- (a) perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the national gas objective; and
 - (b) if the [ERA] is making a designated reviewable regulatory decision —
 - (i) ensure that —
 - (A) the covered pipeline service provider that provides the pipeline services to which the applicable access arrangement decision will apply; and
 - (B) users or prospective users of the pipeline services that the [ERA] considers have an interest in the matter; and
 - (C) any user or consumer associations or user or consumer interest groups that the [ERA] considers have an interest in the matter,
 are, in accordance with the Rules —
 - (D) informed of the material issues under consideration by the [ERA]; and
 - (E) given a reasonable opportunity to make submissions in respect of the decision before it is made; and
 - (ii) specify —
 - (A) the manner in which the constituent components of the decision relate to each other; and
 - (B) the manner in which that interrelationship has been taken into account in the making of the decision; and

- (iii) if there are 2 or more possible designated reviewable regulatory decisions that will or are likely to contribute to the achievement of the national gas objective —
 - (A) make the decision that the [ERA] is satisfied will or is likely to contribute to the achievement of the national gas objective to the greatest degree (the preferable designated reviewable regulatory decision); and
 - (B) specify reasons as to the basis on which the [ERA] is satisfied that the decision is the preferable designated reviewable regulatory decision.
 - (2) In addition, the [ERA]—
 - (a) must take into account the revenue and pricing principles—
 - (i) when exercising a discretion in approving or making those parts of an access arrangement relating to a reference tariff; or
 - (ii) when making an access determination relating to a rate or charge for a pipeline service; and
 - (b) may take into account the revenue and pricing principles when performing or exercising any other [ERA] economic regulatory function or power, if the [ERA] considers it appropriate to do so.
 - (3) For the purposes of subsection (2)(a)(ii), a reference to a “reference service” in the revenue and pricing principles must be read as a reference to a “pipeline service”.
18. As specified in section 28(2), the ERA must consider the revenue and pricing principles. These principles are set out in section 24 of the NGL:

24 Revenue and pricing principles

- (1) The revenue and pricing principles are the principles set out in subsections (2) to (7).
- (2) A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in—
 - (a) providing reference services; and
 - (b) complying with a regulatory obligation or requirement or making a regulatory payment.
- (3) A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides. The economic efficiency that should be promoted includes—
 - (a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
 - (b) the efficient provision of pipeline services; and
 - (c) the efficient use of the pipeline.
- (4) Regard should be had to the capital base with respect to a pipeline adopted—
 - (a) in any previous—
 - (i) full access arrangement decision; or
 - (ii) decision of a relevant Regulator under section 2 of the Gas Code;

- (b) in the Rules.
- (5) A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.
- (6) Regard should be had to the economic costs and risks of the potential for under and over investment by a service provider in a pipeline with which the service provider provides pipeline services.
- (7) Regard should be had to the economic costs and risks of the potential for under and over utilisation of a pipeline with which a service provider provides pipeline services.

Changes to the regulatory framework

19. In March 2019, the Australian Energy Market Commission made a final determination to make changes to the regulatory framework for covered transmission and distribution natural gas pipelines in Australia.⁶ The specific changes to the NGR are set out in National Gas Amendment (Regulation of covered pipelines) Rule 2019 No.1.⁷
20. The amended rules:⁸
- Set out a new process for determining which services will have reference tariffs set by the regulator. Reference tariffs are the prices that pipeline operators can charge their customers.
 - Clarify how regulators calculate efficient costs so reference tariffs can be set at more efficient levels.
 - Strengthen reporting obligations to support more balanced negotiations. Pipeline owners will be required to provide more relevant, timely and accessible information for pipeline users through the Natural Gas Bulletin Board or on the pipeline owners' websites.
 - Give stakeholders, including pipeline users, more input into regulators' decisions.
 - Set a clear trigger for pipeline users to start arbitration if negotiations fail.
21. Most of the amended rules commenced on 21 March 2019, including new transitional provisions. Transitional rule 62 (in schedule 1) of the NGR applies to the DBNGP, which provides for exemptions from new rules 46, 47A and 48. These new rules introduced provisions for the submission of a "reference service proposal" to the ERA prior to the submission of an access arrangement proposal.⁹

62 Application of Amending Rule to transitional pipelines

- (1) The application of the Amending Rule to the transitional pipelines is modified under this rule 62.

⁶ Australian Energy Market Commission, *Regulation of covered pipelines, Rule determination, 14 March 2019* ([online](#)) (accessed April 2020).

⁷ Australian Energy Market Commission, *National Gas Amendment (Regulation of covered pipelines) Rule 2019 No.1* ([online](#)) (accessed April 2020).

⁸ Australian Energy Market Commission, 'Regulation of covered pipelines' ([online](#)) (accessed April 2020).

⁹ In the NGR a "reference service proposal" means, in respect of a service provided for a full regulation pipeline, the proposal submitted under rule 47A. The proposal allows for the separate assessment of reference services prior to the assessment of an access arrangement or revisions to an access arrangement. In the case of revisions, the proposal must be submitted no later than 12 months prior to the review submission date for the access arrangement.

- (2) New rule 46, 47A and 48 do not apply to the transitional pipelines in respect of the access arrangement for the next access arrangement period.
- (3) Old rule 46 applies to the transitional pipelines in respect of the access arrangement for the next access arrangement period.
- (4) Modified rule 48 applies to the transitional pipelines in respect of the access arrangement for the next access arrangement period.
- (5) Modified rule 48 is:

“48 Requirements for full access arrangement (and full access arrangement proposal)

- (1) A full access arrangement must:
 - (a) identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected; and
 - (b) describe all of the pipeline services that the service provider can reasonably provide on the pipeline, which must be described having regard to the characteristics of different pipeline services, including those listed in subrule 47A(2) of the Amending Rule;¹⁰ and
 - (c) from the pipeline services identified under subrule (b), specify the services the service provider proposes to specify as reference services having regard to the reference service factors including any supporting information required by the [ERA]; and
 - (d) if the pipeline service provider has engaged with pipeline users and end users in identifying the reference services under subrule (c), describe any feedback received from those users about which pipeline services should be specified as reference services; and
 - (e) specify for each reference service:
 - (i) the reference tariff; and
 - (ii) the other terms and conditions on which each reference service will be provided; and
 - (f) if the access arrangement is to contain queuing requirements – set out the queuing requirements; and
 - (g) set out the capacity trading requirements; and
 - (h) set out the extension and expansion requirements; and
 - (i) state the terms and conditions for changing receipt and delivery points; and
 - (j) if there is to be a review submission date – state the review submission date and the revision commencement date; and
 - (k) if there is to be an expiry date – state the expiry date.
- (2) This rule extends to an access arrangement proposal consisting of a proposed full access arrangement.”

22. Transitional rule 62(2) removed the need for DBP to submit a reference service proposal and for the ERA to make a decision on this proposal prior to DBP submitting proposed revisions to the access arrangement. Instead of submitting a reference

¹⁰ Subrule 47A(2) of the Amending Rule states: “A pipeline service is to be treated as distinct from another pipeline service having regard to the characteristics of different pipeline services, including: (a) the service type (for example, forward haul, backhaul, connection, park and loan); (b) the priority of the service relative to other pipeline services of the same type; and (c) the receipt and delivery points.”

service proposal, DBP's proposed reference services for AA5 formed part of its access arrangement proposal under the modified rules.

23. Transitional rule 62(4) provides for a modified version of rule 48 of the NGR, which details the modified requirements for a full access arrangement proposal. Modified rules 48(b), (c) and (d) established a modified process to identify the pipeline and reference services to be offered under the revised access arrangement for AA5. The modified process is to be conducted as part of the access arrangement review process.
24. For the next access arrangement review, where DBP proposes revisions to the access arrangement for the sixth access arrangement period (AA6) for the ERA's assessment, modified rule 48 will not apply. For AA6, reference services will be proposed and assessed under rule 47A of the NGR, which requires DBP to submit a reference service proposal to the ERA at least 12 months before the review submission date for the access arrangement.¹¹

Content of an access arrangement

25. DBP is required to submit a "full access arrangement" for the DBNGP. Section 2 of the NGL provides that a full access arrangement is an access arrangement that:
 - provides for price or revenue regulation as required by the Rules; and
 - deals with all other matters for which the Rules require provision to be made in an access arrangement.
26. The required content of a full access arrangement proposal is specified in rule 48 of the NGR. However, as stated at paragraph 21, a modified version of rule 48 applies to the DBNGP for this access arrangement review.¹² Table 1 details the required content pursuant to modified rule 48 and indicates where the ERA has considered it in this decision.

¹¹ DBP has proposed a review submission date of 1 January 2025 (see paragraph 46 of this decision), meaning that DBP will need to submit a reference service proposal to the ERA on or before 1 January 2024.

¹² Modified rule 48 as set out in schedule 1 (rule 62) of the NGR.

Table 1: Required content of a full access arrangement pursuant to modified rule 48 of the NGR¹³

National Gas Rule	Requirement	Draft decision reference
48(1)(a)	Identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected.	Paragraphs 40 to 59
48(1)(b)	Describe all of the pipeline services that the service provider can reasonably provide on the pipeline, which must be described having regard to the characteristics of different pipeline services, including those listed in subrule 47A(2) of the Amending Rule.	Paragraphs 61 to 153
48(1)(c)	From the pipeline services identified under subrule (b), specify the services the service provider proposes to specify as reference services having regard to the reference service factors including any supporting information required by the [ERA].	Paragraphs 61 to 153
48(1)(d)	If the pipeline service provider has engaged with pipeline users and end users in identifying the reference services under subrule (c), describe any feedback received from those users about which pipeline services should be specified as reference services.	Paragraphs 61 to 153
48(1)(e)(i)	Specify for each reference service, the reference tariff.	Paragraphs 1192 to 1216
48(1)(e)(ii)	Specify for each reference service, the other terms and conditions on which each reference service will be provided.	Paragraphs 1254 to 1727
48(1)(f)	If the access arrangement is to contain queuing requirements, set out the queuing requirements.	Paragraphs 1728 to 1755
48(1)(g)	Set out the capacity trading requirements.	Paragraphs 1756 to 1763
48(1)(h)	Set out the extension and expansion requirements.	Paragraphs 1764 to 1780
48(1)(i)	State the terms and conditions for changing receipt and delivery points.	Paragraphs 1781 to 1788
48(1)(j)	If there is to be a review submission date, state the review submission date and the revision commencement date.	Paragraphs 40 to 59
48(1)(k)	If there is to be an expiry date, state the expiry date.	There is no expiry date

27. Further to a full access arrangement proposal, rule 43(1) of the NGR requires DBP to submit access arrangement information with its proposal. Rule 42(1) of the NGR defines access arrangement information as information that is reasonably necessary for users and prospective users to understand the background to the access arrangement and the basis and derivation of various elements of the access arrangement.

¹³ As set out in transitional rule 62 (in schedule 1) of the NGR.

42 General requirements for access arrangement information

- (1) Access arrangement information for an access arrangement or an access arrangement proposal is information that is reasonably necessary for users and prospective users:
 - (a) to understand the background to the access arrangement or the access arrangement proposal; and
 - (b) to understand the basis and derivation of the various elements of the access arrangement or the access arrangement proposal.
- (2) Access arrangement information must include the information specifically required by the Law.

43 Requirement to provide access arrangement information

- (1) A service provider, when submitting an access arrangement proposal for the AER's approval, must submit, together with the proposal, access arrangement information for the access arrangement proposal.

28. The specific requirements for access arrangement information relevant to price and revenue regulation are set out in rule 72 of the NGR:

72 Specific requirements for access arrangement information relevant to price and revenue regulation

- (1) The access arrangement information for a full access arrangement proposal (other than an access arrangement variation proposal) must include the following:
 - (a) if the access arrangement period commences at the end of an earlier access arrangement period:
 - (i) capital expenditure (by asset class) over the earlier access arrangement period; and
 - (ii) operating expenditure (by category) over the earlier access arrangement period; and
 - (iii) usage of the pipeline over the earlier access arrangement period showing:
 - (A) for a distribution pipeline, minimum, maximum and average demand and, for a transmission pipeline, minimum, maximum and average demand for each receipt or delivery point; and
 - (B) for a distribution pipeline, customer numbers in total and by tariff class and, for a transmission pipeline, user numbers for each receipt or delivery point;
 - (b) how the capital base is arrived at and, if the access arrangement period commences at the end of an earlier access arrangement period, a demonstration of how the capital base increased or diminished over the previous access arrangement period;
 - (c) the projected capital base over the access arrangement period, including:
 - (i) a forecast of conforming capital expenditure for the period and the basis for the forecast; and
 - (ii) a forecast of depreciation for the period including a demonstration of how the forecast is derived on the basis of the proposed depreciation method;
 - (d) to the extent it is practicable to forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period, a

- forecast of pipeline capacity and utilisation of pipeline capacity over that period and the basis on which the forecast has been derived;
- (e) a forecast of operating expenditure over the access arrangement period and the basis on which the forecast has been derived;
 - (f) [Deleted];
 - (g) the allowed rate of return for each regulatory year of the access arrangement period;
 - (h) the estimated cost of corporate income tax calculated in accordance with rule 87A, including the allowed imputation credits referred to in that rule;
 - (i) if an incentive mechanism operated for the previous access arrangement period—the proposed carry-over of increments for efficiency gains or decrements for efficiency losses in the previous access arrangement period and a demonstration of how allowance is to be made for any such increments or decrements;
 - (j) the proposed approach to the setting of tariffs including:
 - (i) the suggested basis of reference tariffs, including the method used to allocate costs and a demonstration of the relationship between costs and tariffs; and
 - (ii) a description of any pricing principles employed but not otherwise disclosed under this rule;
 - (k) the service provider's rationale for any proposed reference tariff variation mechanism;
 - (l) the service provider's rationale for any proposed incentive mechanism;
 - (m) the total revenue to be derived from pipeline services for each regulatory year of the access arrangement period.
- (2) The access arrangement information for an access arrangement variation proposal related to a full access arrangement must include so much of the above information as is relevant to the proposal.
- (3) Where the [ERA] has published financial models under rule 75A, the access arrangement information for a full access arrangement proposal must be provided using the financial models.

DBP's consultation process

DBP's proposal

29. DBP provided details of the consultation process it undertook throughout the development of its access arrangement submission.¹⁴ DBP's consultation process consisted of a four-stage engagement program involving its customers and stakeholders:¹⁵
- Stage one was a research stage to better understand customer and stakeholder needs and expectations.
 - Stage two included targeted engagement to guide the development of the plan. This included shipper roundtable meetings to consult on principal topics.
 - In stage three, DBP consulted on its draft plan, engaging with customers and stakeholders through one-on-one meetings in addition to further shipper roundtables.
 - Stage four involved consultation feedback from the Draft Plan as well as feedback gained from further shipper roundtable meetings to inform the Final Plan.
30. DBP's main method of consultation was the shipper roundtable meetings. In the first phase of its consultation process, DBP received support for the establishment of these shipper roundtables. The shipper roundtables were designed to act as a forum for DBP to actively consult with its customers and to discuss major topics and subjects of interest that were relevant to its access arrangement submission.
31. Prior to the submission of DBP's proposal, DBP held nine shipper roundtable meetings. In addition to the roundtables, DBP also held one-on-one meetings with customers and stakeholders. DBP noted that it kept all stakeholders apprised of developments via regular digital updates and fact sheets published online.¹⁶
32. DBP documented feedback received from any stakeholder or customer throughout the consultation process and used this feedback to shape and inform its draft plan and Final Plan. DBP's Final Plan became DBP's proposal to the ERA. DBP's proposal included a summary of the feedback it received at each stage of its consultation process for each topic presented and its response to the feedback.
33. DBP indicated that almost all the proposed changes in its access arrangement proposal were supported by its stakeholders and customers. DBP noted that it did not have full support for its proposed amendment of the overall asset life, as some customers wanted to reserve their position on the matter until the Final Plan had been submitted to the ERA.¹⁷

Submissions

34. Four of the submissions received in response to the ERA's issues paper provided comments on DBP's consultation process.

¹⁴ DBP, *2021-2025 Final Plan*, January 2020, pp. 28-49.

¹⁵ DBP, *2021-2025 Final Plan*, January 2020, pp. 30-31.

¹⁶ DBP, *2021-2025 Final Plan*, January 2020, p. 34.

¹⁷ DBP, *2021-2025 Final Plan*, January 2020, pp. 39-49.

35. Submissions from CITIC Pacific Mining Management Pty Ltd (CPM) and Wesfarmers Chemicals, Energy & Fertilisers Ltd (WesCEF) commended DBP on the approach it took with its consultation process.^{18, 19}

- CPM noted:

CPM wish to use this section to applaud AGIG on the path they chose to develop their Proposed Revisions. CPM believe it provided an opportunity to provide inputs for AGIG consideration in finalising their Proposed Revisions.

- WesCEF noted:

WesCEF found the approach beneficial and commends AGIG's efforts. The opportunity to share different points of views highlights the challenges in forming a consensus on a broad range of issues.

36. NewGen Power Kwinana Pty Ltd (NPK) was supportive of DBP's consultation process and provided responses about whether DBP's submission aligned with stakeholder expectations and if DBP's consultation process was a useful approach for stakeholders to be actively involved in developing the Final Plan.²⁰

With the 9 Shipper Roundtables, the ability for NPK to gain a deeper understanding of the underlying assumptions that made up the Draft Plan, and then the Final Plan as submitted to the ERA has aligned with the expectation that was set through the process.

NPK's review of the Final Plan is in line with the expectation that was set through the process.

NPK would welcome a continuation of the engagement program approach for future access arrangement programs as the benefit gained from the extensive consultation allowed for greater internal reporting capability within the organisation.

37. Gas Trading Australia Pty Ltd (gasTrading) also commented on DBP's consultation process, stating that it found DBP's consultation process informative and helpful. However, after a more detailed review of DBP's access arrangement submission, gasTrading considered that DBP did not consider all stakeholder feedback.²¹

However, it is only from detailed review of the submissions that it appears DBP may not [have] fully considered all market perspectives.

[gasTrading noted] DBP's position in the Stage 1 Stakeholder Engagement Report that DBNGP's customers raised "the future of gas trading was an issue for consideration".²²

[gasTrading commented that] this claim has been made in several DBNGP's documents. DBNGP has not reflected how this impacts the Access Arrangement, if at all.

¹⁸ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 1.

¹⁹ Wesfarmers Chemical Energy and Fertilisers, *Submission to the ERA issues paper*, 30 March 2020, p. 12.

²⁰ NewGen Power Kwinana Pty Ltd submission, 31 March 2020, p. 1.

²¹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 7.

²² DBP, *2021-2025 Stage 1 Stakeholder Engagement Report*, October 2018, p. 14. The quote in full from a section described as a summary of stakeholder feedback is: The future of gas trading in Western Australia was commonly raised by customers as an issue for consideration.

Draft decision

38. The ERA acknowledges the submissions received from stakeholders about DBP's consultation process, which were largely positive and supportive of the approach DBP took with its consultation process.
39. The ERA has considered DBP's consultation process, as well as stakeholders' comments on DBP's consultation process in the respective sections of the draft decision assessing DBP's proposal.

Identifying the pipeline and primary dates

40. Modified rule 48(1)(a) of the NGR requires the DBNGP access arrangement to “identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected”.²³

48 Requirements for full access arrangement (and full access arrangement proposal)

- (1) A full access arrangement must:
- (a) identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected; and

41. Further to identifying the pipeline to which the access arrangement relates, rule 49(1)(a) of the NGR requires the access arrangement to contain a review submission date and a revision commencement date. Rule 3 of the NGR defines these dates to mean:

review submission date means a date on or before which an access arrangement revision proposal is required to be submitted.

revision commencement date for an applicable access arrangement means the date fixed in the access arrangement as the date on which revisions resulting from a review of an access arrangement are intended to take effect.

42. Rule 50 details specific provisions for the review submission and revision commencement dates:

50 Review of access arrangements

- (1) A service provider, as part of an access arrangement proposal for a full access arrangement (other than a voluntary access arrangement), must propose a review submission date and a revision commencement date. The proposed revision commencement date must be not less than 12 months after the proposed review submission date.
- (2) The [ERA] must approve the dates proposed by the service provider under subrule (1) if it is satisfied that those dates are consistent with the national gas objective and the revenue and pricing principles and if the proposed revision commencement date is not less than 12 months after the proposed review submission date.
- (3) If the [ERA] does not approve the dates proposed by the service provider for the review submission date or the revision commencement date (as the case may be), because it considers those dates are not consistent with the national gas objective and the revenue and pricing principles, the [ERA] must fix an alternative review submission date or revision commencement date (as the case may be).

DBP’s proposal

43. Clause 2 of the proposed revised access arrangement identifies the pipeline to which the access arrangement relates and states that a description of the pipeline can be inspected on the DBP website.²⁴

²³ As set out in schedule 1 (rule 62) of the NGR.

²⁴ <http://www.dbp.net.au>

44. The DBNGP is made up of the assets that are described in the pipeline licences issued under the *Petroleum Pipelines Act 1969 (WA)*, and which are listed in clause 2.1(a) of the proposed revised access arrangement. DBP amended this list of pipeline licences to add Pipeline Licence 123 (new clause 2.1(a)(x)).
45. A detailed description of the DBNGP, including a schematic of the pipeline, is provided as Attachment 1 to the access arrangement.
46. DBP proposed a five-year period from 1 January 2021 to 31 December 2025 for AA5, with a review submission date of 1 January 2025 and a revision commencement date of 1 January 2026.²⁵

Submissions

47. Gas Trading Australia Pty Ltd (gasTrading) addressed the identification of the pipeline and submitted that it had concerns over the location of Inlet Point I1-02 on the DBNGP.²⁶

DBNGP states Attachment 8.5 – Capex Business Cases (p.432):

“Between 2010 and 2015, changing pipeline hydraulics has resulted in CS1’s gas flow being below its design capacity. Further reductions have been experienced with the Varanus Island inlet gas bypassing CS1 – a request by the Producer to inject into the downstream side of CS1. The flow of gas has reduced time to approximately half of the design flow.”

From this statement it appears the Varanus Island (I1-02) moved from upstream (north) of CS1 to downstream (south) of CS1 during the period 2010-2015.

Therefore, is I1-02 upstream of CS1 or downstream of CS1?

DBP responded to this issue on 30 March 2020, after Shipper Roundtable #10, and stated that “the proposed works at CS1 will not change the custody transfer point for the Varanus Island Inlet”. From the Access Arrangement Information Appendix 8.5, gasTrading is led to believe Varanus Island changed location between 2010 and 2015.

This change of location has a serious impact on gas transport from I1-02. I1-02 would become a “Back Haul” service to the GGP and FRGP slashing the tariff from \$0.13/GJ to less than \$0.001/GJ and would put gas from I1-02 on the same tariff as I2-01, Gorgon. For a typical small mining customer (2.5TJ/d), this change would save them \$118,000pa.

DBP’s pipeline description has not changed the location of I1-02 over this period.

If this change occurred, DBP failed to make this change public and notify shippers.

Draft decision

48. Modified rule 48(1)(a) of the NGR requires DBP to identify the pipeline to which the access arrangement relates and to reference a website where a description of the pipeline can be inspected.
49. DBP identified the pipeline to which the access arrangement relates as the DBNGP, which is made up of the assets that are described in the pipeline licences listed in clause 2.1(a) of the revised access arrangement. A detailed description of the

²⁵ DBP, *DBNGP Access Arrangement 2021-25*, clause 14.

²⁶ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, pp. 5-6.

DBNGP is provided in Attachment 1 to the access arrangement and is also available for inspection on DBP's website.

50. Clause 17 (attachments of the access arrangement) included a description of the DBNGP as at 1 January 2016 (Attachment 1). However, the attachment submitted to the ERA is a description of the DBNGP as at 15 September 2019.²⁷ Subject to amending clause 17 of the revised access arrangement to reflect the document submitted by DBP, the ERA considers that DBP's proposal meets the requirements of the NGR.
51. The ERA notes gasTrading's submission concerning the location of Inlet Point I1-02 on the DBNGP. However, as stated by gasTrading, the location of Inlet Point I1-02 has remained the same in the access arrangement pipeline description documents that cover the period from 2010 to 2015 (being AA2 and AA3). As further noted by gasTrading, AGIG (owner of DBP) addressed this matter at the shipper roundtable meeting held on 30 March 2020.
52. In its submission to the ERA, AGIG provided a copy of its responses to questions raised at the shipper roundtable, which included questions concerning gas flow direction and the effects on tariffs. In response to the questions, AGIG provided the following information.²⁸
- The re-wheeling of Compressor Station 1 (CS1) is not related to enabling bi-directional flow, but is required to protect pipeline integrity and improve efficiency under lower throughput conditions, which have been observed since 2010. AGIG refers readers to Capex DBP29, page 432.²⁹
- AGIG confirms that proposed works at CS1 will not change the custody transfer point for the Varanus Island inlet. As such, no change will be made to the pipeline description map and therefore no change on distance factor or direction applied to tariffs for that inlet.
- In terms of the tariff impact of bi-directional flows, the regulated tariffs are the same for full haul, part haul and back haul on a per km basis. In other words, they do not relate to physical flows but instead are a fair and equitable way of dividing up the regulated revenues by Shipper. Therefore, there would be no reason to change the tariff principles just because physical flows change.
53. AGIG's response reiterates that pipeline works have not changed the transfer point for the Varanus Island inlet and that no change to the pipeline description map was needed. Consistent with this statement, all the pipeline description documents submitted for each access arrangement period (AA1 to AA5) show that the location of Inlet Point I1-02 has not changed. That is, Inlet Point I1-02 is upstream (north) of Compressor Station 1 (CS1) in all pipeline description documents.
54. Notwithstanding DBP's incorrect reference to the pipeline description document in clause 17 of the proposed revised access arrangement, DBP's description of the pipeline meets the requirements of rule 48(1) of the NGR.

²⁷ The document submitted by DBP is titled: *Description of the Dampier to Bunbury Natural Gas Pipeline System as at 15 September 2019*.

²⁸ AGIG submission, 31 March 2020 – Attachment C: Shipper Roundtable #10 Issues Response Paper, March 2020, p. 2.

²⁹ In Attachment 8.5 (Capex Business Cases – public) to DBP's Final Plan.

Required Amendment 1

DBP must amend the list of Attachments in clause 17 of the proposed revised access arrangement to reflect the pipeline description document submitted by DBP, which is a description of the DBNGP as at 15 September 2019.

55. DBP proposed a review submission date of 1 January 2025 and a revision commencement date of 1 January 2026 (clause 14 of the revised access arrangement).
56. Pursuant to rule 50(2) of the NGR, the ERA must approve the dates proposed by DBP if it is satisfied that the dates are consistent with the national gas objective and the revenue and pricing principles, and if the proposed revision commencement date is at least 12 months after the proposed review submission date.
57. DBP's proposed revision commencement date of 1 January 2026 is 12 months after the proposed review submission date of 1 January 2025. The proposed dates meet the requirement of rule 50(2) of the NGR.
58. The proposed five-year access arrangement period (1 January 2021 to 31 December 2025) provides a balance between the need to review provisions of the access arrangement for the DBNGP and the cost of regulation. The ERA considers that maintaining the convention of a five-year access arrangement is consistent with the national gas objective and revenue and pricing principles.
59. The ERA is requiring the inclusion of a trigger event in the access arrangement for AA5 (see Required Amendment 3). If the trigger event occurs, the review submission date of 1 January 2025 will accelerate to an earlier date. Consequently, the revision commencement date for the next access arrangement period (AA6) may change.

Pipeline and reference services

61. Pipeline service is defined in section 2 of the NGL as follows:

Pipeline service means

- (a) a service provided by means of a pipeline, including—
 - (i) a haulage service (such as firm haulage, interruptible haulage, spot haulage and backhaul); and
 - (ii) a service provided for, or facilitating, the interconnection of pipelines; and
- (b) a service ancillary to the provision of a service referred to in paragraph (a), but does not include the production, sale or purchase of natural gas or processable gas.

62. Modified rules 48(1)(b), (c) and (d) of the NGR detail the requirements for identifying pipeline and reference services in the access arrangement.³⁰ The modified rules state:

48 Requirements for full access arrangement (and full access arrangement proposal)

- (1) A full access arrangement must:
 - ...
 - (b) describe all of the pipeline services that the service provider can reasonably provide on the pipeline, which must be described having regard to the characteristics of different pipeline services, including those listed in subrule 47A(2) of the Amending Rule; and
 - (c) from the pipeline services identified under subrule (b), specify the services the service provider proposes to specify as reference services having regard to the reference service factors including any supporting information required by the [ERA]; and
 - (d) if the service provider has engaged with pipeline users and end users in identifying the reference services under subrule (c), describe any feedback received from those users about which pipeline services should be specified as reference services; and

63. Subrule 47A(2) of the Amending Rule states:

A pipeline service is to be treated as distinct from another pipeline service having regard to the characteristics of different pipeline services, including:

- (a) the service type (for example, forward haul, backhaul, connection, park and loan);
- (b) the priority of the service relative to other pipeline services of the same type; and
- (c) the receipt and delivery points.

64. The reference service factors are specified in rule 47A(15) of the NGR.

47A(15) The reference service factors are:

- (a) actual and forecast demand for the pipeline service and the number of prospective users of the service;

³⁰ As set out in schedule 1 (rule 62) of the NGR.

- (b) the extent to which the pipeline service is substitutable with another pipeline service to be specified as a reference service;
- (c) the feasibility of allocating costs to the pipeline service;
- (d) the usefulness of specifying the pipeline service as a reference service in supporting access negotiations and dispute resolution for other pipeline services, such that:
 - (i) reference services serve as a point of reference from which pipeline services that are not reference services can be assessed by a user or prospective user for the purpose of negotiating access to those other pipeline services;
 - (ii) a reference tariff serves as a benchmark for the price of pipeline services that are not reference services; and
 - (iii) reference service terms and conditions serve as a benchmark for the terms and conditions of pipeline services that are not reference services;
- (e) the likely regulatory cost for all parties (including the [ERA], users, prospective users and the service provider) in specifying the pipeline service as a reference service.

DBP's proposal

- 65. Clause 3 of the proposed revised access arrangement details the pipeline services to be offered under the access arrangement, which are classified as either reference or non-reference services.
- 66. DBP proposed to keep the three reference services offered under the current (AA4) access arrangement. As set out in clause 3.1(a) of the revised access arrangement, these reference services are the full haul T1 Service, part haul P1 Service and back haul B1 Service.
- 67. Descriptions of the proposed reference services are set out in clauses 3.3, 3.4 and 3.5 of the revised access arrangement for the T1 Service, P1 Service and B1 Service, respectively. DBP amended the drafting of these clauses to align the clauses with:
 - The proposed amendments to the terms and conditions for each of the reference services (considered at paragraph 1254 of this decision).
 - The proposed reference tariff, which is expected to commence on 1 January 2021, for each of the reference services (considered at paragraph 1192 of this decision).
 - The pipeline description document provided as Attachment 1 to the proposed revised access arrangement.
- 68. For non-reference services that are subject to the availability of capacity, DBP proposed to delete the Seasonal Service and add the following pipeline services: Other Reserved Service; Pipeline Impact Agreement Service; Data Services; and Inlet Sales Service (clause 3.1(b)(i)).
- 69. DBP further deleted all pipeline services that were subject to operational availability (that is, DBP deleted existing clause 3.1(b)(ii) from the access arrangement). Under the amended clause 3.1(b) of the proposed revised access arrangement:
 - Non-reference services that are subject to availability of capacity include the following pipeline services: Spot Capacity Service; Park and Loan Service;

Other Reserved Service; Pipeline Impact Agreement Service; Data Services; and Inlet Sales Service (clause 3.1(b)(i)).

- Non-reference services will continue to include pipeline services provided under contracts entered into prior to AA5 that are not reference services (clause 3.1(b)(ii)).³¹
- DBP will continue to negotiate with prospective shippers to provide any other (non-reference) pipeline service (clause 3.1(b)(iii)).³²

70. In preparing its submission to the ERA, DBP sought feedback from its customers and stakeholders. DBP submitted that it:³³

... discussed pipeline and reference services at the Shipper Roundtables and included the proposed reference services in our Draft Plan for further engagement.

Shippers valued the current reference services as the key services offered on the DBNGP and in support of negotiations.

Our shippers agreed it was appropriate to continue with the current three reference services in AA5. This was on the basis that the reference services continue to reflect the key services demanded on the DBNGP, noting other pipeline services reflect the bespoke requirements of certain shippers (which also have largely unpredictable demand, costs and revenue).

71. DBP provided a summary of the customer and stakeholder feedback it received on pipeline and reference services and how it responded to the feedback.³⁴

- Stage 1 and 2 engagement – developing the plan:
 - DBP held two shipper roundtable meetings where information on available pipeline services was provided and later published on DBP’s website.
 - Based on agreement at the meetings, DBP proposed to offer full haul, part haul and back haul reference services consistent with the current (AA4) reference services, noting that it would continue to negotiate bespoke services with customers.
- Stage 3 engagement – consultation on the draft plan:
 - DBP provided more information on the proposed reference services at another shipper roundtable meeting, including information on the importance of reference and non-reference services on DBP’s revenues.
 - DBP identified proposed changes to the reference service terms and conditions and advised customers of the changes.
- Stage 4 engagement – refining the draft plan:
 - DBP provided a summary of proposed changes to the reference service terms and conditions, including marked-up copies of the terms and conditions, to customers for comment.
 - DBP noted that the consultation period for customer feedback was “tight” and offered to continue to engage with customers (shippers) after submitting its access arrangement proposal to the ERA.

³¹ Existing clause 3.1(b)(iii) in the current access arrangement.

³² Existing clause 3.1(b)(iv) in the current access arrangement.

³³ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, pp. 50-51.

³⁴ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 52, Table 6.1.

Submissions

72. Submissions from Wesfarmers Chemicals, Energy & Fertilisers Ltd (WesCEF), Gas Trading Australia Pty Ltd (gasTrading), CITIC Pacific Mining Management Pty Ltd (CPM) and AGIG (owner of DBP) addressed the matter of pipeline and reference services. WesCEF and gasTrading both suggested that the access arrangement could include additional reference services.
73. WesCEF submitted that the Spot Capacity Service should become a reference service under the access arrangement:³⁵

WesCEF understands that shippers use the Spot Capacity Service as a way to adjust their daily gas transport requirements and/or hedge against the risk that their actual gas demand deviates from their forecast. AGIG has tested this service against the reference service factors in the NGR to conclude that this service was (a) in low demand in the current period, and (b) substitutable to the extent that capacity swaps may be entered into between the shippers. WesCEF believes that the forecast presented in its plan is likely to change the conclusions of this assessment.

- **Increased future demand:** WesCEF has observed a significant increase in bidding activity on this service in the past twelve months and in parallel, a reduced availability of this service. Going forward, WesCEF notes that AGIG plans a strong reduction in the difference between the contracted capacity and the expected throughput and believes that, as the volatility of gas demand will continue to increase, the demand for Spot Capacity Service will increase accordingly.
- **Reduced capacity swaps:** Capacity swaps have been the shippers' preferred way of optimising short term capacity requirements as AGIG's Spot Capacity Service has been set at a floor price largely exceeding shippers' opportunity cost of trading excess short term capacity. However, as shippers' excess capacity holding is expected to reduce in AA5, the market for short term transport capacity will be essentially the Spot Capacity Service.

Therefore, WesCEF believes that, looking forward, this service will satisfy more criteria of the reference service factors. WesCEF believes that converting this service into a Reference Service will improve the transparency of the floor price determination as well as the daily availability of this service.

74. WesCEF further submitted that:

AGIG should be in a position to model the expected daily and hourly usage of its customers and derive an understanding of this variability on its Spot Capacity and Over-run services in the context of lower subscribed capacity. Such an exercise may expose a growth in demand for these services which would warrant that service being included as a reference service in AA5. In such a case, it would be reasonable to assume that the revenue forecast to be earned by AGIG from the sale of such a service should reflect the portion of total revenue and costs that should be allocated to this service (regardless of whether it is a reference or nonreference service).

75. gasTrading submitted that it had noticed an increase in demand for the Pilbara Service and was of the view that demand would continue to increase, which could make the Pilbara Service more common than point-to-point part haul or back haul services over the access arrangement period. It submitted:³⁶

The Pilbara Service provides a valuable option for gas shippers to purchase gas from sellers with diverse supply portfolios and leverage the supply security offered by gas sellers who have access to multiple production locations whilst avoiding being locked

³⁵ Wesfarmers Chemical Energy and Fertilisers, *Submission to the ERA issues paper*, 30 March 2020, p. 8.

³⁶ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, pp. 13-14.

into a long-term arrangement. With the move to equity marketing shippers are being pushed to consider the use of the Pilbara Service.

In gasTrading's opinion, the fact that 8 customers have a Pilbara Service (we estimate DBNGP has 30 unique shippers) which represents approximately 27% of customers is a reasonable basis for considering coverage, especially given that the move to equity marketing is a relatively new phenomenon.

The Pilbara Service also provides flexibility to participate more actively in short term or spot opportunities, a necessary precursor for the growth in a liquid spot and/or secondary market. With the continued development of spot gas markets, gas transport arrangements that are flexible, increase the ability of shippers to trade gas at different Inlet Points, knowing they have in place gas transport. DBP has numerous times stated that customers raised that "the future of gas trading was an issue for consideration". This would further indicate that there is likely to be increased demand for a flexible service.

Finally, the Pilbara Service includes gas supply from the Perth Basin. With increasing production from the Perth Basin, and much of the growth in gas demand being in the Pilbara region, it is likely that customers will be seeking gas supply from the Perth Basin and gas producers in the Perth Basin, such as Mitsui, may like to provide gas from their portfolio of gas projects.

76. gasTrading also submitted that while the development of gas projects in Western Australia was generally good for the availability of domestic gas, such projects could raise concerns for the DBNGP access arrangement. One such gas project included the proposal to export gas via the North West Shelf joint venture.³⁷

Numerous media reports have been made proposing "back fill" of North West Shelf Gas with production from the Perth Basin or other fields in the Carnarvon Basin.

The proposals generally revolve around the concept of "back haul" on the DBNGP. The idea being that gas flows into North West Shelf from the DBNGP instead of the [North West Shelf] being a domestic gas producing facility.

77. gasTrading considered that the North West Shelf proposal would present issues for the access arrangement and that these issues should be considered by the ERA.³⁸ gasTrading identified four primary issues.

1. The Access Arrangement is based on a concept of forward haul from North West Shelf (I1-01) to Perth. This would no longer be valid.
2. The supply of gas from the DBNGP to North West Shelf Gas will involve physical reversal of capacity upstream of Compressor Station 1. This will change the commercial terms of a part haul and back haul contract from producers north of CS1 or for customer receiving gas north of CS1 including on the PEPL [Pilbara Energy Pipeline].
3. The Access regime may require significant review as assets funded by Shippers will no longer be required to deliver full haul transport.
4. Irrespective of NWS using domestic gas for backfill, the BEP [Burrup Extension Pipeline] lease and After Coolers at I1-01 are redundant and should not be included in the Asset Base.

78. In support of its submissions concerning the North West Shelf, gasTrading provided additional information, including three gas flow scenarios covering: (1) existing gas arrangements; (2) a situation where the North West Shelf ceases producing domestic

³⁷ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 20.

³⁸ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 20.

gas; and (3) a situation where the North West Shelf ceases production and becomes a gas consumer of domestic gas for conversion to LNG for export.³⁹

79. While CPM was primarily concerned with the proposed terms and conditions for reference services rather than the proposed reference services themselves, CPM did (like gasTrading) refer to the increasing possibility of bi-directional gas flows on the DBNGP to accommodate gas projects taking place in the north-west of Western Australia:⁴⁰

Additionally, there is no contemplation within the P1 and B1 agreement terms and conditions to deal with the ever increasing likelihood that the north part of the DBNGP will become a bi-directional gas transport arena.

80. AGIG advised of its ongoing engagement with customers and stakeholders, including the continuation of shipper roundtable meetings. The most recent roundtable meeting presentation and responses to questions raised by shippers at the meeting were provided as Attachments B and C to AGIG's submission, respectively.⁴¹ These documents:

- Reiterated DBP's proposal to continue with the reference services that are currently offered, being the T1, P1 and B1 Services.
- Confirmed the direction of gas flows on the DBNGP and effect on tariffs. In particular:

[AGIG's] demand forecasts and assumed pipeline use for 2021 to 2025 period are based on actual information provided by our Shippers, with a focus on current contractual arrangements in place.

The DBNGP already has bi-directional capabilities, in sections of the pipeline, which are used to manage flows from upstream producers in ad hoc instances when operationally required to meet our obligations to deliver each Shipper's contracted capacity. AGIG has not proposed any forecast capex in AA5 specifically related to bi-directional flow of the pipeline.

...

In terms of the tariff impact of bi-directional flows, the regulated tariffs are the same for full haul, part haul and back haul on a per km basis. In other words, they do not relate to physical flows but instead are a fair and equitable way of dividing up the regulated revenues by Shipper. Therefore, there would be no reason to change the tariff principles just because physical flows change.

Draft decision

Proposed pipeline and reference services

81. Table 2 reproduces Table 6.2 of DBP's proposal, detailing the pipeline services provided by means of the DNBGP.

³⁹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, pp. 20-31 (Attachment 2).

⁴⁰ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 3.

⁴¹ AGIG submission, 31 March 2020 – Attachment B: Shipper Roundtable #10, 25 March 2020, slide 9; and Attachment C: Shipper Roundtable #10 Issues Response Paper, March 2020, p. 2.

Table 2: DBP's proposed pipeline services for AA5

Pipeline service name	Service type	Category of service
Full haul T1 Service	Forward Full Haul (subject to available capacity) with outlet point south of CS9, regardless of the location of inlet point	Reference
Part haul P1 Service	Forward Part Haul (subject to available capacity) with outlet point upstream of CS9, regardless of the location of inlet point	Reference
Back haul B1 Service	Back Haul (subject to available capacity) service where the inlet point is downstream of the outlet point.	Reference
Seasonal Service	A gas transportation service where the profile of reserved capacity can be customised to suit the monthly requirement of the Shipper (subject to available capacity)	NA – not a stand-alone service
Metering and Temperature Service	A pipeline service where particular metering and temperature specifications can be set (subject to available capacity)	NA – not a stand-alone service
Odourisation Service	A pipeline service where particular odourant requirement can be specified (subject to available capacity)	NA – not a stand-alone service
Pilbara Service	The Pilbara Service is an interruptible transportation service on the DBNGP where deliveries are within the Pilbara Zone (subject to available capacity)	Non-reference
Spot Capacity Service	Allows access to gas transmission capacity on a day ahead basis where available via auction (subject to available capacity)	Non-reference
Peaking Service	A pipeline service where a shipper can obtain additional peaking limits to those set in standard terms (subject to operational availability)	Non-reference
Pipeline Impact Agreement (PIA)	An agreement specified under the Gas Supply (Gas Quality Specifications) Act 2009 developed to compensate PIA Pipelines (including AGIG) for costs incurred when producers wish to bring broader quality gas into the relevant pipeline	Non-reference
Inlet Sales Agreement	A pipeline service that facilitates the trading of gas between shippers at a single inlet point on the DBNGP (subject to operational availability)	Non-reference
Data Services	A service developed to assist gas marketers providing gas allocations on Shippers' behalf on the DBNGP (subject to operational availability)	Non-reference
Storage Service	A service designed to allow shippers to store gas in the pipeline. Forecast to decline substantially due to rise of competitive storage market (Tubridgi and Mondarra)	Non-reference
Other Reserved Service	A suite of interruptible services offered on a bespoke basis to shippers with new projects and/or uncertain demand, often ahead of a firm service	Non-reference

Source: DBP, 2021-2025 Final Plan, January 2020, p. 53, Table 6.2.

82. DBP categorised three pipeline services as reference services for AA5. These proposed reference services are the same three reference services offered under the current (AA4) access arrangement. Descriptions of the reference services are set out in clauses 3.3, 3.4 and 3.5 of the revised access arrangement for the T1 Service, P1 Service and B1 Service, respectively.
83. To determine the reference services, DBP assessed each of the identified pipeline services against the reference service factors (reproduced at paragraph 64 of this decision) as required by modified rule 48(1)(c) of the NGR. DBP's assessment was provided as an attachment to its Final Plan.⁴² The assessment determined that the T1, P1 and B1 Services:⁴³
- are in high demand;
 - are non-substitutable with other services (meaning there is no other way shippers can obtain the service);
 - form the foundation of [DBP's] demand forecasts and cost allocation;
 - provide prospective users with an aid for use in access negotiations; and
 - minimise the cost and regulatory burden.

Non stand-alone services

84. The ERA clarified the classification of "NA – not a stand-alone service" with DBP, which applies to the Seasonal Service, Metering and Temperature Service and Odourisation Service. DBP confirmed the following:⁴⁴

Three services have been identified as non stand-alone services in the Final Plan. These services are largely legacy ancillary services that have been offered since the original 2000 to 2004 AA period. These services were referred to as 'non stand-alone' services because they form part of the existing reference services.

That is, full haul, part haul or back haul services contain metering, odourisation and an ability to include a seasonal profile. The services can therefore only be offered in conjunction with a reference/transportation service. The three services are:

- Metering and temperature services – this service provides the shipper with the ability to obtain non-standard metering or gas temperature arrangements.
 - Odourisation services – as noted in clause 7.12 of the reference service terms and conditions, odourisation is currently provided as part of the reference service at outlet points that required odourisation as at 24 October 2004 in compliance with the specifications set out in the Gas Standards (Gas Supply and System Safety) Regulations 2000 (WA).
 - Seasonal services – this service provides the shipper with the ability to obtain additional capacity (i.e. over and above the capacity provided for in its full haul, part haul or back haul service) from the incremental capacity that may be available when ambient temperatures are lower (e.g. in winter). The provision of this service is subject to operational availability and DBP meeting its obligations under other contracts entered into prior to the AA period.
85. DBP further confirmed that no revenue was earned from these services in AA4 and that no revenue was forecast for AA5. The inclusion of these services was for completeness and consistency with previous access arrangements. Given that the

⁴² DBP, *2021-2025 Final Plan, Attachment 6.1: Pipeline Service and Reference Services Supporting Information*, January 2020.

⁴³ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 54.

⁴⁴ DBP, *Response to information request ERA13*, 5 June 2020.

services exist within the existing contractual rights of reference services, DBP suggested that the services be removed from the list of services provided.⁴⁵

86. As submitted by DBP, the ERA considers that the Seasonal Service, Metering and Temperature Service and Odourisation Service should not be specified as individual pipeline services to be offered in AA5, if they are and can only be provided with other pipeline services. Removing references to these services in the access arrangement information (that is, DBP's Final Plan) would clarify the pipeline services that are available to prospective users.⁴⁶

Required Amendment 2

DBP must amend the access arrangement information to clarify the pipeline services that are available to prospective users by deleting references to the Seasonal Service, Metering and Temperature Service and Odourisation Service, which are services that exist within the contractual rights of reference services and cannot be provided as individual (stand-alone) pipeline services.

The term "Seasonal Service" in clause 16 (Definitions) of the proposed revised access arrangement must also be deleted.

Changes to existing pipeline services

87. Submissions that addressed the matter of pipeline and reference services did not directly address DBP's proposal to retain the current (AA4) reference services for AA5. Instead, the submissions suggested that additional pipeline services could be offered as reference services and/or were focused on the proposed terms and conditions for the proposed reference services. The ERA has considered the matter of additional reference services below (at paragraph 109) and has separately considered the terms and conditions for the proposed reference services elsewhere in this decision (at paragraph 1254).
88. gasTrading suggested that the development of gas projects in the north-west of Western Australia would affect the provision of the proposed reference services, including the application of the terms and conditions for those reference services. gasTrading submitted that one such project was the "much-rumoured export of onshore gas to the North West Shelf Project for 'back fill' or export as LNG."⁴⁷
89. While CPM did not specifically mention the North West Shelf, it did refer to the increasing possibility of bi-directional gas flows on the DBNGP to accommodate gas projects taking place in the north-west of Western Australia.⁴⁸ Such gas projects may include the project specifically identified by gasTrading.
90. DBP noted that the regulated tariffs were the same for full haul, part haul and back haul customers on a per kilometre basis and that these tariffs were not related to physical gas flows. Given this, DBP did not consider that there would be any reason to change tariffs due to a re-direction of gas flow. However, the ERA notes that tariffs

⁴⁵ DBP, *Response to information request ERA13*, 5 June 2020.

⁴⁶ The Seasonal Service is also defined in clause 16 (Definitions) of the proposed revised access arrangement.

⁴⁷ Liquefied Natural Gas (LNG).

Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 4.

⁴⁸ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 3.

are calculated on a full haul equivalent basis and that any change to the kilometre distance of full haul will affect the calculation of reference tariffs as the share of capacity and throughput will change.

91. The ERA has considered the information provided in gasTrading's submission and concludes that the gas flow scenarios presented could occur in the future and affect the provision of pipeline services offered by the DBNGP. However, the ERA has decided not to take into consideration any scenarios based on projects with uncertain timing. While there is information that proponents are considering a Waitsia Stage 2 project, which will further develop the Waitsia gas field with additional production wells and a new 250 TJ/day processing plant, there is no confirmation of expected timing other than a statement advising that: "Waitsia Stage 2 is in design stage and subject to a joint venture Financial Investment Decision".⁴⁹ The media have reported negotiations between Waitsia and the North West Shelf which would see Waitsia supply gas from the Perth Basin to the North West Shelf to be shipped overseas as LNG but these negotiations have not concluded.⁵⁰ In the absence of more certain information on timing and contractual arrangements, the ERA considers this matter should not be addressed as part of this access arrangement review.

92. In any case, rule 51 of the NGR provides for the acceleration of the review submission date.

51 Acceleration of review submission date

- (1) The review submission date fixed in an access arrangement advances to an earlier date if:
 - (a) the access arrangement provides for acceleration of the review submission date on the occurrence of a trigger event; and
 - (b) the trigger event occurs; and
 - (c) the review submission date determined, in accordance with the access arrangement, by reference to the trigger event, is earlier than the fixed date.
- (2) A trigger event may consist of any significant circumstance or conjunction of circumstances.
- (3) The [ERA] may require the inclusion in an access arrangement of trigger events and may specify the nature of the trigger events to be included.

93. Rule 51(2) provides the following three examples of trigger events:

- 1 A re-direction of the flow of natural gas through the pipeline.
- 2 A competing source of natural gas becomes available to customers served by the pipeline.
- 3 A significant extension, expansion or interconnection occurs.

94. The matters raised in submissions concerning gas projects in the north-west of Western Australia would be covered by the first trigger event example. That is, should the gas project identified by gasTrading proceed and/or additional gas projects emerge that cause a re-direction of the flow of gas through the DBNGP, and provided that the access arrangement had the necessary trigger event, the review submission date would advance to an earlier date. However, if there was no re-direction of the

⁴⁹ Mitsui E&P Australia, 'Waitsia Stage 2', ([online](#)) [accessed July 2020].

⁵⁰ Thompson S, Macdonald A and Boyd T, 20 January 2020, 'M&A dominoes from potential Waitsia, North West Shelf gas deal', Financial Review, ([online](#)) [accessed July 2020].

- flow of gas through then the DBNGP the trigger event would not activate and the access arrangement would be reviewed at the (original) review submission date.
95. The ERA considers that, given the uncertainty concerning the timing of and contractual arrangements for gas projects in the north-west of Western Australia, the inclusion of a trigger event in the access arrangement for the DBNGP for AA5 may be beneficial. Should circumstances change during AA5 that affect the operations of the DBNGP, the review submission date for the access arrangement would accelerate at this point in light of this operational change.
96. Pursuant to rule 47A of the NGR, which applies for the next access arrangement period (see paragraph 150 of this decision), DBP must submit a reference service proposal to the ERA at least 12 months before the review submission date. That is, the submission of DBP's *reference service proposal* must precede the submission of DBP's *access arrangement revision proposal* for the next access arrangement period. Pursuant to rule 52(1) of the NGR, DBP's access arrangement revision proposal must be submitted on or before the review submission date.
97. Given the regulatory costs involved for all parties, the ERA considers that the review submission date of an access arrangement should only be accelerated by a trigger event if the period of the acceleration leads to a meaningfully earlier review submission date – for example, if the review submission date is accelerated by at least six months. The new (accelerated) review submission date must also allow DBP to comply with rule 47A of the NGR, which requires the submission of a reference service proposal at least 12 months before the review submission date. Consequently, the accelerated review submission date must be more than 12 months after the trigger event.
98. Under normal circumstances (that is, no trigger event occurring) a service provider would commence preparing its reference service proposal some time before the required submission date, with the actual length of preparation time dependent on the individual service provider and its planning approach. Given the variations in preparation time and purpose of establishing a trigger event, the ERA considers it is reasonable to allow the service provider at least two months from the trigger event to prepare its reference service proposal.⁵¹ Allowing the service provider two months to prepare its reference service proposal means that the accelerated review submission date should be 14 months after the trigger event.⁵²
99. As indicated above, the period by which the review submission date is accelerated should be meaningful. The ERA considers such a period to be at least six months, and based on this, a trigger event *should only* accelerate the review submission date if it occurs *more than 20* months before the review submission date (if the accelerated review submission date is 14 months after the trigger event).
100. Based on the considerations above, the ERA requires DBP to include a trigger event for a re-direction of the flow of natural gas through the DBNGP in the proposed revised access arrangement. If the trigger event occurs before 1 May 2023 (being 20 months before the review submission date), the review submission date specified in clause 14.2 of the access arrangement will accelerate to the date that is 14 months after the trigger event. The acceleration of the review submission date may

⁵¹ Two months is the period by which the ERA may extend the review submission date under rule 52(3) of the NGR.

⁵² An accelerated review submission date that is *14 months* after a trigger event allows *2 months* for the service provider to prepare its reference service proposal, which must be submitted 12 months before the accelerated review submission date.

consequently affect the *revision commencement date* for the next access arrangement period (that is, AA6).

Required Amendment 3

DBP must amend the proposed revised access arrangement to include the following trigger event (new clause 14A) to accelerate the review submission date specified in clause 14.2 of the access arrangement if the trigger event occurs.

14A. TRIGGER EVENT

14A.1 Subject to clause 14A.2, the review submission date specified in clause 14 accelerates on the occurrence of the Trigger Event to the date that is 14 months after the Trigger Event.

14A.2 The Trigger Event accelerates the review submission date if the Trigger Event occurs prior to 1 May 2023.

14A.3 **Trigger Event** means the execution by Operator of a binding agreement (whether conditional or unconditional) for the transport of gas through the DBNGP, the performance of which requires a re-direction of the flow of gas through the DBNGP.

Reference and non-reference services

101. DBP classified the following pipeline services as non-reference services based on its assessment of the services against the reference service factors:⁵³

- Pilbara Service
- Spot Capacity Service
- Peaking Service
- Pipeline Impact Agreement
- Inlet Sales Agreement
- Data Services
- Storage Service
- Other Reserved Service.

102. DBP's assessment identified the following issues with the above pipeline services that supported the continuation of these services as non-reference services for AA5:⁵⁴

- varying degrees of demand and revenue forecastability;
- high substitutability with reference services where the pricing applied to reference services provides an appropriate basis on which to consider the reasonableness of prices for non-reference services (e.g. using the Part Haul reference service to understand the Pilbara service);
- costs which are in general separable from the costs of providing reference services and thus not included in the cost base which makes up [DBP's] regulatory services;

⁵³ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 53, Table 6.2.

⁵⁴ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 54.

- minimal usefulness as an aid to negotiations for other services because the service is unique and does not provide a useful benchmark in considering the reasonableness of other services; and
 - impose a high regulatory cost-burden relative to the share of the service in [DBP's] revenue, specifically where revenues generated are small relative to the likely regulatory costs.
103. Subject to DBP describing the non-reference services to be offered for AA5 in the revised access arrangement as required by the ERA's Required Amendment 4 (see paragraphs 107 and 108), the ERA considers that DBP's assessment of these pipeline services against the reference service factors supports the continuing provision of these services as non-reference services for AA5.
104. DBP has retained the current (AA4) reference service classifications for the T1 Service, P1 Service and B1 Service for AA5. The ERA considers that DBP's proposal to retain the current reference services for AA5 meets the requirements of the NGR. As submitted by DBP, an assessment of the reference services against the reference service factors supports the continuing provision of these pipeline services (that is, the T1, P1 and B1 Services) as reference services:
- Actual and forecast demand for the pipeline services:
 - Actual and forecast demand for reference services are discussed as part of the ERA's considerations of DBP's demand forecast (at paragraph 154). While demand for reference services over AA5 is forecast to reduce, demand for these services relative to other pipeline services remains high.
 - Extent to which the pipeline services are substitutable:
 - The reference services, being full haul, part haul and back haul pipeline services, are not substitutable with each other or any other pipeline service.
 - Feasibility of allocating costs to the pipeline services:
 - The allocation of costs for the reference services are feasible and are discussed as part of the ERA's considerations of revenue and tariffs (at paragraph 203).
 - Usefulness as a reference service:
 - The reference services and their respective tariffs and terms and conditions can form the basis for negotiations for other pipeline services.
 - Likely regulatory cost for all parties:
 - Being established, the reference services minimise the regulatory cost for parties (that is, the services have an established tariff setting process and terms and conditions to which revisions can be proposed and considered).
105. Additionally, apart from amended descriptions of the reference services in clause 3 of the proposed revised access arrangement, the reference services are substantively the same as the existing reference services. There were also no submissions from interested parties objecting to DBP's proposal to continue to provide the T1, P1 and B1 Services as reference services.
106. The proposed revised access arrangement lists the reference and non-reference services in clause 3.1(a) and 3.1(b), respectively. Clause 3.2 states that a description of each of the pipeline services follows. However, there is no description of the following non-reference services in the revised access arrangement:

- Other Reserved Service
 - Data Services
 - Inlet Sales Service.
107. Consistent with the statement made at clause 3.2 of the proposed revised access arrangement, the ERA considers that DBP should include descriptions of each of the non-reference services in the access arrangement for completeness. Some of the required descriptions are included in Table 6.2 of DBP's Final Plan (reproduced as Table 2 in this decision); however, this information is inconsistent with the information in the revised access arrangement. For example:
- The Final Plan describes Data Services as being a service that is "subject to operational availability". The description for Inlet Sales Service (which is assumed to be the same as the "Inlet Sales Agreement") is also described as a service that is "subject to operational availability". DBP's proposed amendments to clause 3 of the revised access arrangement, however, included amendments to delete all pipeline services that were subject to operational availability. In any case, the revised access arrangement has Data Services and Inlet Sales Service as being "subject to availability of capacity".
 - The Pilbara Service, Storage Service and Peaking Service are listed as a non-reference services in the Final Plan but are not listed, or described, in the revised access arrangement.
 - The Park and Loan Service is not listed in the Final Plan but is listed and described in the revised access arrangement (at clause 6.3(c)) as a non-reference service.
108. The ERA considers that the information on reference and non-reference services in both the access arrangement and access arrangement information (DBP's Final Plan) should be accurate and consistent. This may require DBP to make corrections to the access arrangement and/or access arrangement information when addressing Required Amendment 4.

Required Amendment 4

DBP must amend the pipeline services information in clause 3 of the access arrangement to include descriptions of the reference and non-reference services that are listed in clause 3.1 (as per the statement in clause 3.2 of the proposed revised access arrangement).

The list of non-reference services in clause 3.1(b) must include the Pilbara Service, Storage Service and Peaking Service (in addition to the non-reference services already listed in the proposed revised access arrangement).

Additional reference services

109. DBP identified the Spot Capacity Service and Pilbara Service as pipeline services that are provided by means of the DBNGP. Based on its assessment of these services against the reference service factors, DBP proposed to classify both services as non-reference services for AA5, which is consistent with the current (AA4) access arrangement. As noted at paragraph 107, the Pilbara Service is not currently listed in the proposed revised access arrangement (clause 3.1) as a pipeline service that is being offered as a non-reference service, despite the information in DBP's Final Plan (Table 6.2).

110. WesCEF and gasTrading submit that the Spot Capacity Service and Pilbara Service, respectively, should be reclassified and offered as reference services under the access arrangement for AA5.

Spot Capacity Service

111. The Spot Capacity Service is described at clause 3.6(a) of the proposed revised access arrangement as:

Spot Capacity Service: a Spot Capacity Service is a pipeline service available on an interruptible basis (and at varying levels of interruptibility), subject to availability of Capacity in accordance with the following principles.

112. The principles that apply to spot capacity and spot transactions are detailed in clauses 3.6(b)(i) to (viii) of the revised access arrangement and form the basis of the spot market rules. Clause 16 (Definitions) of the revised access arrangement sets out the following definitions for the terms “Spot Capacity”, “Spot Transactions” and “Spot Market Rules”.

Spot Capacity means any capacity on the DBNGP on a Gas Day (being the capacity available after all Nominations for Reserved Capacity for that Gas Day have been allocated by the Operator for that Gas Day), which capacity, is, according to the Operator (acting in good faith) available for purchase.

Spot Transaction means a transaction for a Spot Capacity Service between the Operator and Shipper in accordance with the Spot Transaction Terms and Conditions.

Spot Market Rules means the rules published by the Operator from time to time to apply to Spot Capacity Service and the market for Spot Capacity, which the Operator will make available on its website.

113. DBP assessed the Spot Capacity Service against the reference service factors and determined that the service should not be offered as a reference service (instead it should be offered as a non-reference service). DBP’s assessment is reproduced in Table 3.

Table 3: DBP’s assessment of the Spot Capacity Service against the reference service factors

Reference service factor (NGR 47A)	DBP assessment
Actual and forecast demand and number of prospective customers (rule 47A(15)(a))	Can be forecast but has high variability Low demand and revenue in the current period
Substitutability (rule 47A(15)(b))	No reference service substitutes, but capacity swaps between shippers are a direct substitute
Feasibility of allocating costs (rule 47A(15)(c))	Difficult to allocate costs due to variability
Usefulness in supporting negotiations and dispute resolution for other pipeline services (rule 47A(15)(d))	An adjunct to other services, so limited use in its own right to support negotiations
Likely regulatory cost (rule 47(A)(15)(e))	High regulatory cost to specify a regulatory version of service which is consistent with what shippers want and other regulatory services

Source: 2021-2025 Final Plan, Attachment 6.1: Pipeline Service and Reference Services Supporting Information, January 2020, p. 3.

114. In its submission, WesCEF acknowledged DBP's assessment of the Spot Capacity Service against the reference service factors. WesCEF was of the opinion that DBP's assessment conclusions that the service was: (1) in low demand in the current period and (2) substitutable to the extent that capacity swaps may be entered into between shippers, would be likely to change based on the forecast presented by DBP in its Final Plan. WesCEF submitted that the Spot Capacity Service would satisfy more criteria of the reference service factors going forward. Also, converting the service into a reference service would improve the transparency of the floor price determination as well as the daily availability of the service.⁵⁵
115. The ERA requested additional information from DBP about the Spot Capacity Service. DBP confirmed that the Spot Capacity Service "is made available through a day-ahead auction of spare capacity as part of the T1 Standard Shipper Contract (T1 SCC) negotiated with shippers in 2004, with the price payable for this service determined by the market (subject to the floor price) rather than through negotiation."⁵⁶ The governing rules for the DBNGP spot capacity market are published on DBP's website.⁵⁷
116. DBP further confirmed that:⁵⁸

The Spot Capacity service is not available in its own right, but rather as an adjunct to the T1 SSC transportation service. Shippers with firm SSC transportation services, for example, who find they have an unplanned need for more capacity on a given day, will sometimes enter the spot market to purchase that capacity.

It is important to note that shippers do not need to obtain a Spot Capacity service in order to gain access to more capacity on a given day (or to have additional gas supplied to a location on a day). Rather, there are substitutes for this service that provide shippers a firmer (i.e. a better quality) product than the Spot Capacity service provides. A shipper may, for example:

- procure firm capacity from other shippers that are not using their capacity on a day through a bilateral capacity trade (secondary capacity), where the contractual rights are outlined in clause 27 of the SSC;
- enter into an agreement with a shipper (or other market intermediaries) that have spare capacity to transport gas on its behalf to the location it requires the gas; or
- enter into a transportation service on the DBNGP.

Consistent with rule 105(2) of the NGR and the terms of existing services on the DBNGP, shippers can enter into bilateral capacity trades without obtaining our consent. We are aware that this is a fairly well used feature of existing contracts.

The ability of our shippers to use these substitute services places a constraint on the floor price that we can set for the day-ahead auction and the price that shippers are willing to pay for the Spot Capacity service through the day-ahead auction.

117. Actual and forecast demand and revenue for the Spot Capacity Service for AA4 and AA5, respectively, are shown in Table 4. DBP noted the difficulty in developing forecasts given the nature of the service which catered for unplanned changes in demand. For this reason, the forecasts for AA5 are based on a simple average of the most recent years. DBP submitted the following explanation for the increase in demand that occurred in 2019.⁵⁹

⁵⁵ Wesfarmers Chemicals, Energy & Fertilisers Ltd submission, p. 8.

⁵⁶ DBP, *Response to information request ERA14*, 5 June 2020.

⁵⁷ DBP, *Governing Rules for the market for the Spot Capacity*, ([online](#)) [accessed June 2020].

⁵⁸ DBP, *Response to information request ERA14*, 5 June 2020.

⁵⁹ DBP, *Response to information request ERA14*, 5 June 2020.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Table 4: Spot Capacity Service demand and revenue for AA4 and AA5

AA4	2016 (actual)	2017 (actual)	2018 (actual)	2019 (actual)	2020 (forecast)
Demand (avg TJ/day)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Revenue (\$ million)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
% of reference service equivalent revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] (estimate)
AA5	2021 (forecast)	2022 (forecast)	2023 (forecast)	2024 (forecast)	2025 (forecast)
Demand (avg TJ/day)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Revenue (\$ million)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: DBP, Response to information request ERA14, 5 June 2020.

118. DBP considered it to be inappropriate to assess the Spot Capacity Service against the reference services factors, given the service was only offered as an adjunct to the full haul T1 Service. Nevertheless, DBP provided further information on its assessment of the Spot Capacity Service against the reference service factors and concluded that the assessment supported the continuing provision of the service as a non-reference service.⁶⁰
119. The ERA has considered DBP's additional information and, having regard to the reference service factors set out in rule 47A(15) of the NGR, does not consider the Spot Capacity Service can be offered as a reference service for the following reasons.

Actual and forecast demand for the pipeline service

120. Average demand for the Spot Capacity Service is low when compared with average demand for full haul, part haul and back haul services. As submitted by DBP, the demand for the Spot Capacity Service is unplanned and variable making it difficult to forecast. While demand can be forecast, the forecasts are inherently uncertain. DBP expected demand for the Spot Capacity Service to decrease over AA5, as some shippers made use of the Peaking Service under recently renegotiated contracts.⁶¹
121. WesCEF submitted that it had observed a significant increase in bidding activity in the past 12 months and reduced availability of the service. It suggested that DBP analyse expected daily and hourly usage to determine if there had been sufficient growth in demand to warrant including the service as a reference service.⁶² Given the nature of the service, the modelling of such usage would not necessarily provide

⁶⁰ DBP, Response to information request ERA14, 5 June 2020.

⁶¹ The Peaking Service is described in DBP's Final Plan as "a pipeline service where a shipper can obtain additional peaking limits to those set in standard terms (subject to operational availability)" (Table 6.2, which is reproduced at paragraph 81 of this decision).

⁶² Wesfarmers Chemicals, Energy & Fertilisers submission, 30 March 2020, p. 8.

any certainty as to whether there will be sustained demand for the service over a longer period of time. In any case, even if there was a demonstrated increase in demand for the Spot Capacity Service, the market determined price for spot capacity is not a sufficiently certain method for determining the reference tariff, which must be specified if the service becomes a reference service.

Extent to which the pipeline service is substitutable

122. The Spot Capacity Service has competitive substitutes and shippers do not need a Spot Capacity Service to gain access to more capacity on a given day or to have additional gas supplied to a location. Consistent with rule 105(2) and the terms of existing contracts, shippers can enter into bilateral capacity trades without obtaining consent from DBP.⁶³ The Peaking Service is also a substitute for the Spot Capacity Service, with DBP expecting demand for the Peaking Service to increase following contract renegotiations with shippers.

Feasibility of allocating costs to the pipeline service

123. The primary purpose of allocating costs to a pipeline service is to determine the tariff that should be paid for that service. While costs may be allocated to the Spot Capacity Service, it is not possible to determine a reference tariff using a market bidding (auction) process. The NGR require a reference tariff to be specified for each reference service, with the overarching requirement being that when reference tariffs are determined and reviewed, the tariffs should be based on the efficient cost (or anticipated efficient cost) of providing the associated reference services.⁶⁴ The auction process that results in a “market price on a day” for spot capacity is not considered to be a sufficiently certain method to determine the reference tariff for the Spot Capacity Service.
124. Additionally, the established bidding process for available spot capacity and the prices that are subsequently paid by shippers reflect the willingness of shippers to obtain additional capacity to meet their operational needs on any given day.⁶⁵ A set reference tariff would distort this willingness to pay.

Usefulness as a reference service for access negotiations and dispute resolution

125. The Spot Capacity Service is made available to shippers that have an existing transportation service (for example, a full haul T1 Service) through a day-ahead auction and is subject to competition from bilateral capacity trades. The price paid by shippers for spot capacity is determined by the market and not through negotiations with DBP. Given this, the usefulness of specifying the Spot Capacity Service as a reference service, with a reference tariff and reference service terms and conditions, to support access negotiations and dispute resolution for other services would be limited.

Likely regulatory cost for all parties

126. The likely regulatory costs in specifying the Spot Capacity Service as a reference service would likely exceed any benefits. The likely benefits would be minimal given

⁶³ See clause 6.2 of the proposed revised access arrangement.

⁶⁴ See Division 8 (Tariffs) of the National Gas Rules.

⁶⁵ The prices payable for spot capacity are determined, subject to a floor price, by the market via a bidding (auction) process. The floor price (“Minimum Bid Price”) is set in accordance with clause 3.5(f) of the Standard Shipper Contract. Clause 3.6(b)(iv) of the proposed revised access arrangement is the equivalent clause for shippers accessing spot capacity with a reference service.

the availability of other competitive substitutes and the small amount of revenue derived from the service (less than ██████████ of reference service equivalent revenue). The likely regulatory costs that would be incurred, however could be significant given the complexities that would be involved in establishing and reviewing the required reference tariff.

127. While the ERA does not require any amendments to the Spot Capacity Service, the ERA requires DBP to amend clause 3.6 of the proposed revised access arrangement to correct a cross-referencing error. The principles applying to spot capacity and spot transactions, set out in clauses 3.6(b)(i) to (viii), are substantively consistent with the principles set out in clause 3.5 of the Standard Shipper Contracts that are published on DBP's website.⁶⁶ This confirms that the words "(subject to clause 5.3(g)(i))" in clause 3.6(b)(ii) are in error and should read "(subject to clause 3.6(b)(iv))".

Required Amendment 5

DBP must amend the information for the Spot Capacity Service in clause 3.6(b)(ii) of the proposed revised access arrangement to correct a referencing error by deleting the reference to "clause 5.3(g)(i)" and replacing it with a reference to "clause 3.6(b)(iv)".

Pilbara Service

128. As noted at paragraph 107, the Pilbara Service is not listed or described in the proposed revised access arrangement. However, in DBP's Final Plan the Pilbara Service is described as follows:⁶⁷

The Pilbara Service is an interruptible transportation service on the DBNGP where deliveries are within the Pilbara Zone (subject to available capacity).

129. The Pilbara Service is also described on DBP's website, with the "Pilbara Zone" being identified as the zone between and inclusive of Inlet Point "I1-01" and Main Line Valve "MLV31".⁶⁸

The Pilbara Service is an interruptible transportation service on the DBNGP where deliveries are within the Pilbara Zone (between I1-01 and MLV31 includes I1-01 and MLV31)).

130. DBP assessed the Pilbara Service against the reference service factors and determined that the service should be not be offered as a reference service (instead it should be offered as a non-reference service). DBP's assessment is reproduced in Table 5.

⁶⁶ DBP, *Standard Shipper Contracts*, ([online](#)) [accessed June 2020].

⁶⁷ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 53, Table 6.2.

⁶⁸ DBP, 'Customer Access' ([online](#)) (accessed May 2020).

Table 5: DBP’s assessment of the Pilbara Service against the reference service factors

Reference service factor (NGR 47A)	DBP assessment
Actual and forecast demand and number of prospective customers (rule 47A(15)(a))	Can be forecast Low customer numbers (8 in the current period)
Substitutability (rule 47A(15)(b))	Part Haul / Back Haul Reference Service is a suitable and close substitute
Feasibility of allocating costs (rule 47A(15)(c))	Difficult to allocate costs because it can be Part Haul one day and Back Haul the next
Usefulness in supporting negotiations and dispute resolution for other pipeline services (rule 47A(15)(d))	Limited use in its own right to support negotiations due to readily available substitutes (part haul and back haul)
Likely regulatory cost (rule 47(A)(15)(e))	High regulatory cost to specify a regulatory version of service which is substitutable with other reference services

Source: 2021-2025 Final Plan, Attachment 6.1: Pipeline Service and Reference Services Supporting Information, January 2020, p. 2.

131. In its submission, gasTrading submitted that it had noticed “an increasing preference for the Pilbara Service” despite DBP’s assessment “that the service has low revenues and customer numbers and is easily substituted with an alternate reference service (being a Part or Back haul)”.⁶⁹ gasTrading further submitted that:⁷⁰

The Pilbara Service provides a valuable option for gas shippers to purchase gas from sellers with diverse supply portfolios and leverage the supply security offered by gas sellers who have access to multiple production locations whilst avoiding being locked into a long-term arrangement. With the move to equity marketing shippers are being pushed to consider the use of the Pilbara Service.

The Pilbara Service also provides flexibility to participate more actively in short term or spot opportunities, a necessary precursor for the growth in a liquid spot and/or secondary market. With the continued development of spot gas markets, gas transport arrangements that are flexible, increase the ability of shippers to trade gas at different Inlet Points, knowing they have in place gas transport. ...

Finally, the Pilbara Service includes gas supply from the Perth Basin. With increasing production from the Perth Basin, and much of the growth in gas demand being in the Pilbara region, it is likely that customers will be seeking gas supply from the Perth Basin and gas producers in the Perth Basin, such as Mitsui, may like to provide gas from their portfolio of gas projects.

In gasTrading’s view it is likely we will see increased demand for this service. Indeed, this service could become more common than point to point Part Haul or Back Haul services over the Access Period.

132. As stated in DBP’s assessment of the Pilbara Service against the reference service factors, there are eight customers with a Pilbara Service in the current period. gasTrading considered this number of customers, which represents 27 per cent of

⁶⁹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 12.

⁷⁰ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, pp. 13-14.

customers (based on an estimate of 30 unique shippers) was a reasonable basis for considering coverage of the service.⁷¹

133. The ERA requested additional information from DBP about the Pilbara Service. DBP confirmed the following.⁷²

The Pilbara Service provides shippers with the ability to ship gas from any inlet point to any outlet point within a prescribed zone (the Pilbara, between and including I1-01 and MLV31)) for [REDACTED]. The service is priced at [REDACTED] (escalated from the 1 January price set out in the terms and conditions). When first established, the negotiated price was based on [REDACTED]. [REDACTED] The Pilbara Service has the same position in the curtailment plan as “other reserved services”, making it less firm than reference services.

The Pilbara Service emerged to meet the needs of shippers responding to changing market dynamics in the Pilbara. With the entry of new gas producers in the Pilbara, shippers in the region could secure gas from different sources, which would require both part haul services and back haul services. In response to these market developments, the Pilbara Service was developed to reduce administrative complexity (one contract to replace a combination of part haul and back haul contracts) and provide the flexibility of a service that is less firm but with a lower associated fixed cost. Importantly, shippers in the Pilbara remain able to, and continue to, make use of part haul and back haul services where there is a requirement for firm services. The part haul and back haul reference services can therefore be viewed as substitutes for this service.

134. Actual and forecast demand and revenue for the Pilbara Service for AA4 and AA5, respectively, are shown in Table 6.
135. In the additional information provided to substantiate its assessment against the reference service factors, DBP noted that demand for the Pilbara Service had grown, but the quantum of revenue remained low relative to existing reference services. The growth in demand during 2018 to 2019 resulted from shippers moving from the firm part haul service and other reserved services to the Pilbara Service, and with the transition between these services completed demand for 2020 and beyond is forecast to remain consistent at an average [REDACTED].⁷³

⁷¹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 13.

⁷² DBP, *Response to information request ERA15*, 5 June 2020.

⁷³ DBP, *Response to information request ERA14*, 5 June 2020.

Table 6: Pilbara Service demand and revenue for AA4 and AA5

AA4	2016 (actual)	2017 (actual)	2018 (actual)	2019 (actual)	2020 (forecast)
Demand (avg TJ/day)					
Revenue (\$ million)					
% of reference service equivalent revenue					
AA5	2021 (forecast)	2022 (forecast)	2023 (forecast)	2024 (forecast)	2025 (forecast)
Demand (avg TJ/day)					
Revenue (\$ million)					

Source: DBP, Response to information request ERA15, 5 June 2020.

136. The ERA has considered DBP's additional information and, having regard to the reference service factors set out in rule 47A(15) of the NGR, does not consider that the Pilbara Service should be offered as a reference service for AA5 for the following reasons. As indicated at paragraph 150, reference services for the next access arrangement period (AA6) will be determined in accordance with the process set out in rule 47A of the NGR. A revaluation of the Pilbara Service against the reference service factors should occur as part of this process.

Actual and forecast demand for the pipeline service

137. Average demand for the Pilbara Service is low when compared with the average demand for full haul, part haul and back haul services. As set out above, average demand for the service during AA5 is forecast to be , with forecast revenue from the provision of the service being less than per year.

Extent to which the pipeline service is substitutable

138. The Pilbara Service was designed as a substitute for part haul and back haul reference services in the Pilbara region of Western Australia (that is, the "Pilbara Zone"). DBP submitted that the service was therefore substitutable with part haul and back haul reference services. The ERA considers that while shippers could substitute the Pilbara Service with separate part haul and back haul services, they are unlikely to do so, unless a firm transportation service is required.
139. As submitted by DBP, the Pilbara Service was introduced to meet the specific needs of shippers in the Pilbara region. Given this, the service is not necessarily substitutable as it provides unique benefits to these shippers. In particular, the Pilbara Service enables shippers to secure gas from different sources in the Pilbara Zone using flexible (less firm) part haul and back haul transportation services with a lower fixed cost under a single contract. Without the Pilbara Service, shippers would need to contract for separate part haul *and* back haul services, respectively, and pay the associated tariffs for each of these services. Based on these considerations the ERA considers that the extent to which the Pilbara Service is substitutable is somewhat limited.

Feasibility of allocating costs to the pipeline service

140. The Pilbara Service provides a flexible (less firm) alternative to the existing part haul and back haul reference services and is not charged on a distance basis. Unlike the part haul and back haul reference services, which are charged on a distance basis, the Pilbara Service is charged [REDACTED] (adjusted yearly in line with the Pilbara Service terms and conditions). DBP submits that given this pricing structure it is not clear how pipeline costs can be allocated to the Pilbara Service.
141. The ERA considers that it is feasible for the costs for the Pilbara Service to be allocated given that the demand and costs for providing the service can be reasonably forecast. The Pilbara Service is essentially a hybrid of the existing part haul and back haul reference services, which as reference services must have reference tariffs that are determined in accordance with the requirements of the NGR. The overarching requirement of the NGR is that when reference tariffs are determined and reviewed, the tariffs should be based on the efficient cost (or anticipated efficient cost) of providing the associated reference services.⁷⁴ The base costs for providing part haul and back haul services are therefore known, which can be used as a basis to determine and allocate costs for the Pilbara Service. Once allocated, the costs can be used to determine an associated reference tariff for the service.

Usefulness as a reference service for access negotiations and dispute resolution

142. The Pilbara Service is derived from the part haul and back haul reference services. As such the terms and conditions for the service have been derived from the terms and conditions for the part haul and back haul reference services and are limited in their usefulness for access negotiations and dispute resolution.

Likely regulatory costs for all parties

143. Given the relatively low demand for and revenue received from the Pilbara Service, the likely regulatory costs in specifying the service as a reference service would likely exceed any benefits. As firm substitutes for the Pilbara Service, the part haul and back haul reference services place a constraint on the price that can be paid for Pilbara services. For AA4, the Pilbara Service accounted for less than [REDACTED] of reference service equivalent revenue. For AA5, DBP has forecast an average of [REDACTED] of revenue per year from the Pilbara Service, which accounts for [REDACTED] of forecast reference service equivalent revenue for AA5.⁷⁵

Rebateable services

144. In May 2020, DBP advised the ERA that it had completed contract renegotiations with shippers. The renegotiations affected the demand and pipeline services information previously provided by DBP in its Final Plan. Concerning changes to pipeline services, DBP advised that some shippers would now use the Peaking Service during AA5 and that this service should be specified as a rebateable service. DBP submitted:⁷⁶

In our Final Plan, we did not propose any services as rebateable services. However, as set out above, since the submission of our Final Plan we have finalised a renegotiation of contractual arrangements with [REDACTED] shippers. [REDACTED]

⁷⁴ See Division 8 (Tariffs) of the National Gas Rules.

⁷⁵ Based on DBP's updated forecast of reference service revenue. DBP, 'Information Requests – ERA17 to ERA20', [email] 29 May 2020.

⁷⁶ DBP, 'Demand and Services Update', [email] 22 May 2020.

non-reference service for AA5. The ERA also considers that DBP's proposal to specify the Peaking Service as a rebateable service is consistent with the requirements of the NGR for rebateable services – the Peaking Service is not a reference service and there is substantial uncertainty concerning the extent of the demand for the service and the expected revenue to be generated from the service.

148. Consistent with DBP's proposal and the ERA's decision to include the Peaking Service as a rebateable service for AA5, the ERA requires DBP to include the Peaking Service as a non-reference service and to include a description of this service in clause 3 of the proposed revised access arrangement (similar to the description provided for the Spot Capacity Service at clauses 3.6(a) and (b)).
149. The ERA has considered the allocation of costs for the Peaking Service as a rebateable service as part of its considerations of the allocation of total revenue (at paragraph 1176). The rebate mechanism for the Peaking Service, which will rebate a portion of the revenue generated from the service to reduce reference tariffs, is considered as part of the ERA's considerations of the reference tariff variation mechanism (at paragraph 1217).

Required Amendment 6

Consistent with Required Amendment 4, DBP must amend clause 3 of the proposed revised access arrangement to include a reference to, and a description of, the Peaking Service, which is a non-reference service that is to be specified as a rebateable service for AA5 pursuant to rule 94(4) of the NGR.

Reference services for next access arrangement period

150. As set out at paragraph 19 of this decision, the Australian Energy Market Commission made a final determination in March 2019 to change the regulatory framework for covered transmission and distribution natural gas pipelines in Australia. One such change introduced new rule 47A, which created a new assessment process for reference services. However, transitional provisions were also introduced that provided for exemptions. Under transitional rule 62(2) in schedule 1 of the NGR, DBP is exempt from having to comply with new rule 47A for AA5. Instead modified rules 48(b), (c) and (d) of the NGR apply.
151. For AA6, reference services must be proposed and assessed under rule 47A of the NGR, which requires DBP to submit a "reference service proposal" to the ERA at least 12 months before the review submission date for the access arrangement. The required content of the reference service proposal is set out in rule 47A(1).

47A Reference services

- (1) A service provider in respect of a full regulation pipeline must, whenever required to do so under subrule (3), submit to the [ERA] a reference service proposal in respect of a forthcoming full access arrangement proposal that:
- (a) identifies the pipeline and includes a reference to a website at which a description of the pipeline can be inspected;
 - (b) sets out a list of all the pipeline services that the service provider can reasonably provide on the pipeline and a description of those pipeline services having regard to the characteristics in subrule (2);
 - (c) from the list referred to in subrule (1)(b), identifies at least one of those pipeline services that the service provider proposes to specify

as reference services having regard to the reference service factors including any supporting information required by the [ERA]; and

- (d) if the service provider has engaged with pipeline users and end user in developing its reference service proposal, describes any feedback received from those users about which pipeline services should be specified as reference services.

152. Notwithstanding the considerations set out in this decision on pipeline and reference services, the ERA considers that the amended process for reference services in the NGR has the potential to better support the national gas objective. Rule 47A of the NGR essentially creates a separate assessment process for identifying, proposing and assessing pipeline and reference services. A process that is focused on one specific aspect of an access arrangement is potentially more manageable for interested parties, including the service provider, and may result in better access arrangement outcomes, such as, for example, the identification of further reference services that had not been considered in the past. Rule 47A provides for:

- The submission of a reference service proposal, by the service provider to the ERA, 12 months before the review submission date for the access arrangement. In developing the proposal, rule 47A(1)(d) contemplates the service provider engaging with pipeline and end users.
- An initial assessment of the service provider's reference service proposal to ensure compliance with the rules. For example, rule 47A(1), sets out the required content of a reference service proposal.
- Public consultation on the reference service proposal submitted to the ERA (for a period of at least 15 business days) and, at the discretion of the ERA, opportunities for further consultation.
- A decision by the ERA on the reference service proposal that is made no later than six months before the review submission date for the access arrangement.

153. Based on a review submission date of 1 January 2025 for the access arrangement for AA5, DBP would be required to submit a reference service proposal (for AA6) on or before 1 January 2024.

Demand forecast

154. Rule 72 of the NGR contains requirements for access arrangement information relevant to demand forecasts:

72 Specific requirements for access arrangement information relevant to price and revenue regulation

(1) The access arrangement information for a full access arrangement proposal (other than an access arrangement variation proposal) must include the following:

(a) if the access arrangement period commences at the end of an earlier access arrangement period:

...

(iii) usage of the pipeline over the earlier access arrangement period showing:

(A) for a transmission pipeline, minimum, maximum and average demand for each receipt or delivery point; and

(B) for a transmission pipeline, user numbers for each receipt or delivery point;

...

(d) to the extent it is practicable to forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period, a forecast of pipeline capacity and utilisation of pipeline capacity over that period and the basis on which the forecast has been derived; ...

155. Rule 74 of the NGR contains specific requirements for the provision of forecasts and estimates:

74 Forecasts and estimates

(1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.

(2) A forecast or estimate:

(a) must be arrived at on a reasonable basis; and

(b) must represent the best forecast or estimate possible in the circumstances.

DBP's proposal

156. Rule 72(1)(a)(iii) of the NGR requires DBP to provide information on the use of the pipeline over the previous access arrangement period (AA4). DBP provided information on the maximum, minimum and daily average demand for the three reference services, as well as the number of shippers by inlet and outlet point.

157. Table 7, Table 8 and Table 9 show the actual demand for reference services for AA4. DBP could not forecast maximum and minimum demand for 2020.

Table 7: Daily demand – Full haul (T1 Service) 2016 to 2020 (TJ)

	2016	2017	2018	2019	2020 (forecast)
Maximum	703.2	703.4	688.2	687.5	N/A
Average	584.5	569.1	574.0	589.6	589.3
Minimum	479.6	509.5	511.6	544.2	N/A

Source: DBP Response ERA 28, July 2020

Table 8: Daily demand – Part haul (P1 Service) 2016 to 2020 (TJ)

	2016	2017	2018	2019	2020 (forecast)
Maximum	168.1	182.7	175.8	166.3	N/A
Average	88.9	129.6	120.7	140.9	136.9
Average full haul equivalent basis	7.7	11.0	11.4	13.2	15.1
Minimum	67.2	72.9	84.1	70.0	N/A

Source: DBP Response ERA 28, July 2020; DBP Response ERA06, February 2020

Table 9: Daily demand – Back haul (B1 Service) 2016 to 2020 (TJ)

	2016	2017	2018	2019	2020 (forecast)
Maximum	209.6	215.8	233.8	300.3	N/A
Average	168.0	165.3	206.7	208.9	225.0
Average full haul equivalent basis	13.1	13.2	17.1	17.2	17.6
Minimum	91.9	115.3	101.9	101.6	N/A

Source: DBP Response ERA 28, July 2020; DBP Response ERA06, February 2020

158. DBP also provided information on demand for non-reference services (Table 10) that use the capacity of the pipeline. DBP noted that it was difficult to provide demand quantities for non-reference services in the same format as the reference services in the tables above. DBP also noted that if the ERA wanted to understand the use of the pipeline for reference and non-reference services combined then the non-reference services would need to be aggregated to a full haul equivalent basis. While part haul and back haul reference services can be converted to a full haul equivalent basis, it was difficult for DBP to do this for non-reference services as DBP would need to discount differences such as “firmness [of gas supply], position on the curtailment order and a myriad of other rights.”⁷⁸

⁷⁸ DBP, Response to information request ERA, 16 July 2020.

Table 10: Demand for non-reference services (average TJ/day)

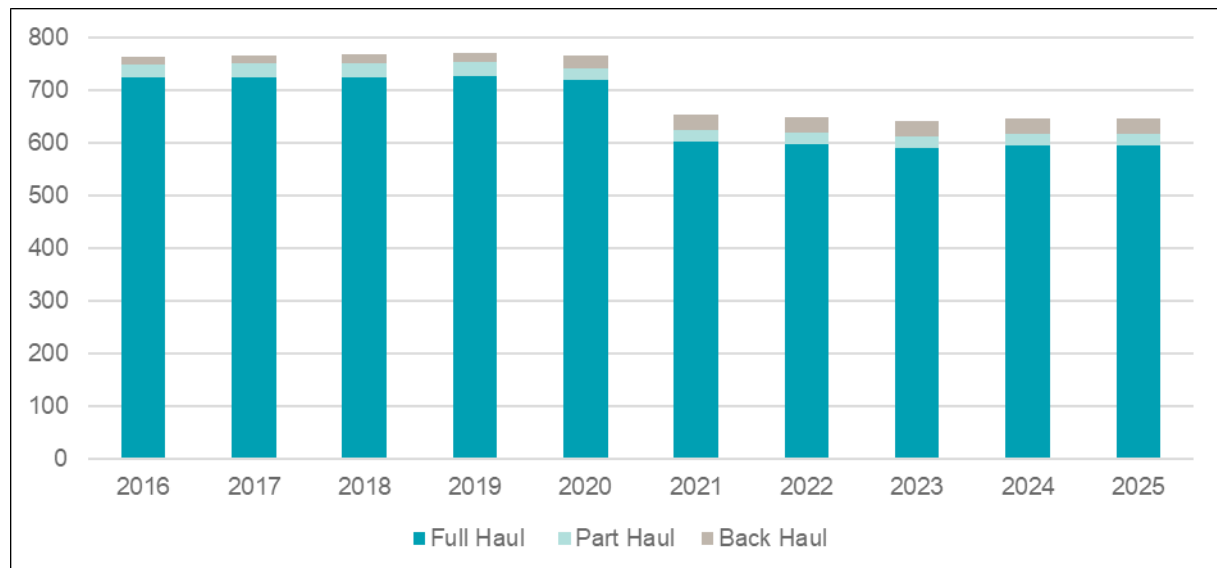
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Spot capacity services	0.27	2.34	36.59	65.94	35.00	35.00	35.00	35.00	35.00	35.00
Pilbara service	0.00	9.40	14.93	24.15	24.00	30.00	30.00	30.00	30.00	30.00
Other reserved services	87.92	88.79	46.09	42.64	38.98	39.00	39.00	39.00	39.00	39.00

Source: DBP response ERA28

159. DBP is required to include a forecast of contracted capacity and throughput over the AA5 period for each of the three reference services. This forecast must:

- be arrived at on a reasonable basis
- represent the best forecast or estimate possible in the circumstances.

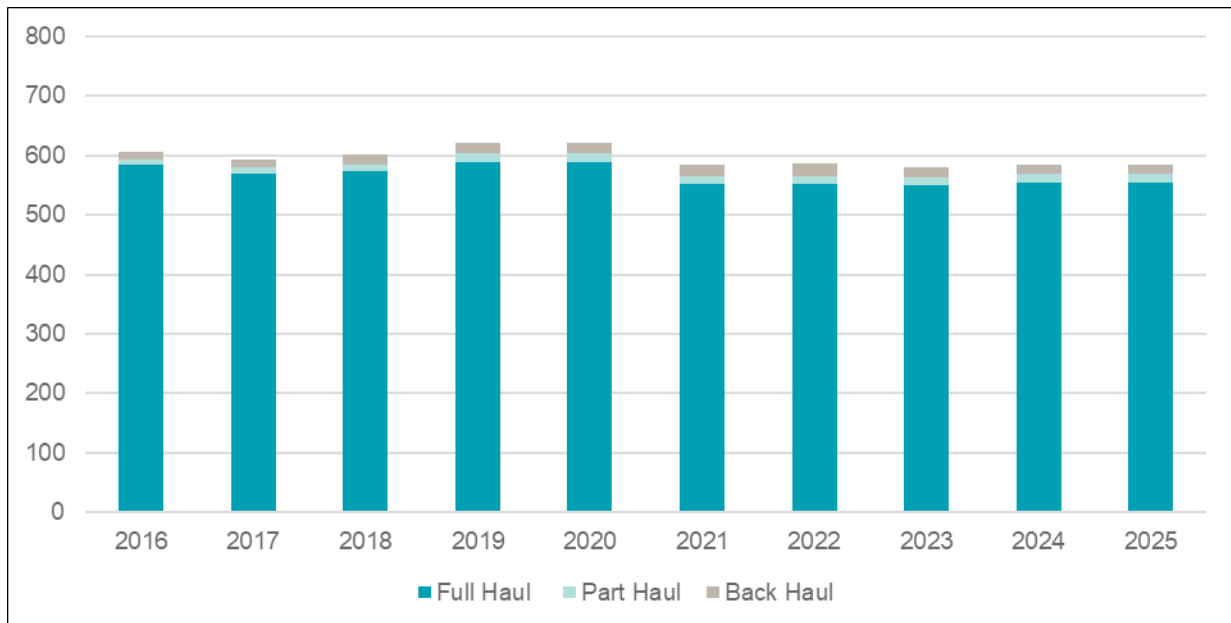
160. DBP forecast average daily contracted capacity for reference services in AA5 of 647 TJ/day on a full haul equivalent basis, which was 16 per cent lower than the contracted capacity in AA4. This decrease in reference service contracted capacity is comprised of decreases in both full haul and part haul contracted capacity, partially offset by an increase to back haul. Figure 1 shows the comparison of contracted capacity on a full haul equivalent (TJ/d) basis.

Figure 1: Contracted capacity (full haul equivalent TJ/d) – Actual 2016 to 2019, forecast 2020 to 2025

Source: DBNGP FP_11.1.3_30 Aug 2019 Demand Template for Commercial (KPMG Audit) v4, ERA06 Demand Template for Commercial (Actuals) incl 2016-2020 update.

161. Figure 2 shows the throughput on a full haul equivalent (TJ/d) basis for AA4 and AA5.

Figure 2: Throughput (full haul equivalent TJ/d) – Actual 2016 to 2019, forecast 2020 to 2025



Source: DBNGP FP_11.1.3_30 Aug 2019 Demand Template for Commercial (KPMG Audit) v4, ERA06 Demand Template for Commercial (Actuals) incl 2016-2020 update.

162. DBP considered that the lower forecast throughput and contracted demand compared to AA4 reflected the significant change occurring in the Western Australian energy market. Renewable electricity penetration grew rapidly over AA4 and is forecast to continue over AA5, displacing electricity generated from other sources including natural gas. Further, with new developments in gas producing basins, pipelines other than the DBNGP may be used to bring gas to Perth.
163. In its proposal, DBP submitted that it expected full haul throughput to increase from October 2022 with the staged retirement of two coal-fired units at Muja C power station. DBP expected these retirements to increase demand for natural gas to meet the need for additional sources of dispatchable electricity.
164. DBP expected part and back haul contracted capacity to be relatively stable throughout AA5.
165. DBP submitted that its forecast was informed by two external reviews and feedback from its customers. DBP considered that its demand forecast was arrived at on a reasonable basis and represented the best forecast possible in the circumstances.

DBP's forecasts for reference services

166. DBP's AA5 forecasts for capacity and throughput are shown in Table 11, in comparison to DBP's forecast demand for 2020 (the final year of AA4). The forecasts are based on a bottom-up model of demand and are provided for full haul, back haul, and part haul services on a full haul equivalent basis.

Table 11: DBP's initial proposed demand forecasts for AA5 compared to forecast demand for 2020 (full haul equivalent TJ/d)

	2020 AA4	2021 AA5	2022 AA5	2023 AA5	2024 AA5	2025 AA5
Full haul						
Throughput	589.35	551.81	551.31	549.71	554.71	554.70
Contracted capacity	718.08	601.50	596.50	590.70	595.70	595.70
Part haul						
Throughput	15.09	14.05	14.01	13.97	13.94	13.93
Contracted capacity	22.61	21.78	21.49	21.22	20.94	20.33
Back haul						
Throughput	17.57	19.53	20.60	16.43	15.99	15.46
Contracted capacity	24.95	29.31	29.31	29.31	29.69	30.07
Total system						
Throughput	622.01	585.39	585.92	580.10	584.64	584.09
Contracted capacity	765.64	652.58	647.30	641.22	646.33	646.10

Source: DBP's spreadsheet DBNGP FP_11.1.3 Aug 2019 Demand Template for Commercial (KPMG Audit) v4, ERA06 Demand Template for Commercial (Actuals) incl 2016-2019 throughput.

167. DBP submitted that its demand forecasts for reference services were the best estimate because:

- The forecasts were consistent with the Australian Energy Market Operator's (AEMO) Gas Statement of Opportunities. DBP provided a confidential report by ACIL Allen Consulting comparing AEMO's forecasts with DBP's forecasts.
- DBP undertook stakeholder consultation to inform customer contracted capacity and throughput forecasts.
- ACIL Allen Consulting developed an economic model to determine the optimal contracted capacity of DBP's customers.
- KPMG provided a quality assurance report of DBP's forecasts.

Submissions

168. The ERA received four submissions that included a review of DBP's demand forecasts, in response to the issues paper:

- Wesfarmers Chemicals Energy and Fertilisers Limited (WesCEF)
- Gas Trading Australia Pty Ltd (gasTrading)
- CITIC Pacific Mining Management Pty Ltd (CPM)
- Australian Gas Infrastructure Group (AGIG), DBP's parent company.

Wesfarmers Chemical Energy and Fertilisers

169. WesCEF submitted that DBP did not provide enough information in its proposal for WesCEF to assess the demand forecasts. However, WesCEF expected the DBP's forecasts should reflect increased gas consumption due to the closure of the coal-fired Muja C power generator in 2022.⁷⁹

WesCEF cannot observe the impact of a shutdown of Muja C from October 2022 on AGIG's estimated throughput. It is WesCEF's expectation that the closure of a coal-fired power generator would lead to an increased consumption of gas from replacement gas-fired generation.

170. WesCEF also did not agree with DBP's position that use of alternative pipelines would reduce demand for the DBNGP.⁸⁰

AGIG justifies the reduction in capacity subscription from the competition from another pipeline which can bring gas to Perth, namely, the Parmelia Gas Pipeline (PGP).

WesCEF does note that, from latest information publicly available, this pipeline will have reduced throughput of gas from the Perth Basin to Perth as the Xyris processing plant is being connected away from the PGP into the DBNGP from July 2020 onwards.

Gas Trading Australia Pty Ltd

171. gasTrading raised concerns with the transparency of DBP's forecasts.⁸¹

gasTrading is of the view that getting transparency on the forecast is very difficult given the confidential nature of information received by DBP. However, gasTrading would like to see more clear comparisons to rolled up data, for example comparing AEMO's GSOO [Gas Statement of Opportunities] and ESOO [Electricity Statement of Opportunities] with DBP's forecasts. gasTrading also notes DBP often makes data confidential which is available from public sources (such as historical gas demand) which can frustrate the process. Forecasts could be aggregated in categories aligning with existing GBB data and transitions from actual to forecast could demonstrate these trends without breaching confidentiality (where forecasts are not available for loads included in historical data they could be identified and held constant).

CITIC Pacific Mining

172. CPM raised concerns with DBP's demand forecasts, in particular the forecast step change in contracted capacity and throughput.⁸²

AGIG's forecast throughput does not reflect the current actual throughput of the DBNGP. The graph on page 107 of AGIG's submission shows an unrealistic step change from 2020 to 2021 which continues throughout AA5. With domestic gas daily production capacity in WA over double daily consumption, low gas prices compared to the east coast, ample available land in WA for east coast business to relocate to get access to lower priced energy, TOGETHER with new gas fields being discovered and major LNG projects to come on stream and deliver more gas to the WA domestic gas market AND a number of new mining and existing mining projects that anticipate constructing new gas fired power stations or replacing existing diesel burning power

⁷⁹ Wesfarmers Chemical Energy and Fertilisers, *Submission to the ERA issues paper*, 30 March 2020, p. 12.

⁸⁰ Wesfarmers Chemical Energy and Fertilisers, *Submission to the ERA issues paper*, 30 March 2020, p. 12.

⁸¹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 12.

⁸² CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 2.

stations with gas fired generation – all are relevant for the AA5 period and so reflect a more likely increase in throughputs compared to current; CPM ask the Authority to consider whether the demand numbers used by AGIG are realistic.

173. CPM also submitted that gas volumes in Western Australia would increase over the AA5 period, from the Gorgon and Wheatstone joint ventures, and that it expected a transition from diesel to gas (or hybrid gas) for many industries.⁸³

CPM submits that domestic gas supply volumes are likely to be further assisted by the reduction in global LNG spot prices making sale of domestic gas in WA as profitable as sale of international LNG spot cargoes and therefore encouraging producers to divert natural gas to their domestic gas facilities as opposed to their LNG production facilities.

...

Despite iron ore operations being scaled back, oil price reductions and the state's economy slowing; the steady throughput in gas volumes appears to have been driven partly by a fall in the spot price of gas. Moreover, demand throughput is therefore even more likely to increase as new projects come on line over the next 2 to 5 years.

Australian Gas Infrastructure Group

174. DBP's parent company, AGIG, submitted that the stakeholder engagement process for developing the demand forecasts was adequate.⁸⁴

More specifically, the demand forecast replicates agreed contractual terms, historical utilisation and engagement with shippers on an individual working level.

Draft decision

AA4 demand

175. Rule 72(1)(a) of the NGR requires DBP to submit information on the use of the pipeline for the previous access arrangement period (AA4). DBP provided information on the actual use of the pipeline for providing reference services for AA4 (TJ/d), as shown in Table 7, Table 8, and Table 9.

AA5 demand forecast

176. Rule 72(1)(d) of the NGR requires DBP to submit information on the forecast pipeline capacity and use of pipeline capacity over the access arrangement period (that is, AA5).
177. DBP provided AA5 forecast throughput and contracted capacity for its reference services (see Table 11). DBP submitted that its demand forecasts for reference services were the best estimate for the reasons stated at paragraph 167.
178. In May 2020, DBP provided the ERA with new demand forecasts for reference services reflecting the completion of major contract renegotiations. Table 12 shows these revised forecasts. Table 13 shows the percentage difference between DBP's revised demand forecast and DBP's initial proposal forecast.

⁸³ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, pp. 4-5.

⁸⁴ Australian Gas Infrastructure Group (DBP), *Submission ERA Issues Paper*, p. 3.

Table 12: DBP's revised May 2020 demand forecasts for AA5 (full haul equivalent TJ/d)

	2021	2022	2023	2024	2025
Full haul					
Revised forecast throughput	536.28	526.80	520.22	514.45	508.15
Revised forecast contracted capacity	592.25	582.25	574.15	557.45	549.35
Part haul					
Revised forecast throughput	17.74	17.86	19.57	21.27	23.60
Revised forecast contracted capacity	25.97	25.39	26.87	28.34	30.36
Back haul					
Revised forecast throughput	13.89	13.27	13.27	13.27	13.27
Revised forecast contracted capacity	18.09	17.29	17.29	17.89	17.89
Total system					
Revised forecast throughput	567.91	557.93	553.06	548.99	545.03
Revised forecast contracted capacity	636.31	624.93	618.31	603.69	597.60

Source: DBP Tariff model May 2020.

Table 13: Variance of revised May 2020 demand forecasts from initial proposal forecasts (%)

	2021	2022	2023	2024	2025
Full haul					
Full haul throughput	(2.81)	(4.44)	(5.36)	(7.26)	(8.39)
Full haul contracted capacity	(1.54)	(2.39)	(2.80)	(6.42)	(7.78)
Part haul					
Part haul throughput	26.23	27.48	40.04	52.62	69.45
Part haul contracted capacity	19.22	18.11	26.63	35.35	49.32
Back haul					
Back haul throughput	(28.86)	(32.55)	(15.41)	(13.11)	(10.11)
Back haul contracted capacity	(38.28)	(41.00)	(41.00)	(39.73)	(40.49)
Total system					
Total system throughput	(2.99)	(4.67)	(4.56)	(5.99)	(6.58)
Total system contracted capacity	(2.49)	(3.46)	(3.57)	(6.60)	(7.51)

Source: ERA analysis

179. The ERA considered the information provided by DBP and sought and received further information from DBP on individual customer demand to assist with this review. The ERA also compared AEMO's gas demand forecast for Western Australia with DBP's demand forecast.
180. The ERA's consideration of DBP's revised demand forecasts is structured around the following issues:
- The transparency of DBP's process to derive demand forecasts.
 - A comparison of DBP's throughput forecasts with AEMO's demand forecasts for Western Australia.
 - Substitution between reference services and the peaking service.
 - Economic conditions and DBP's demand forecast.

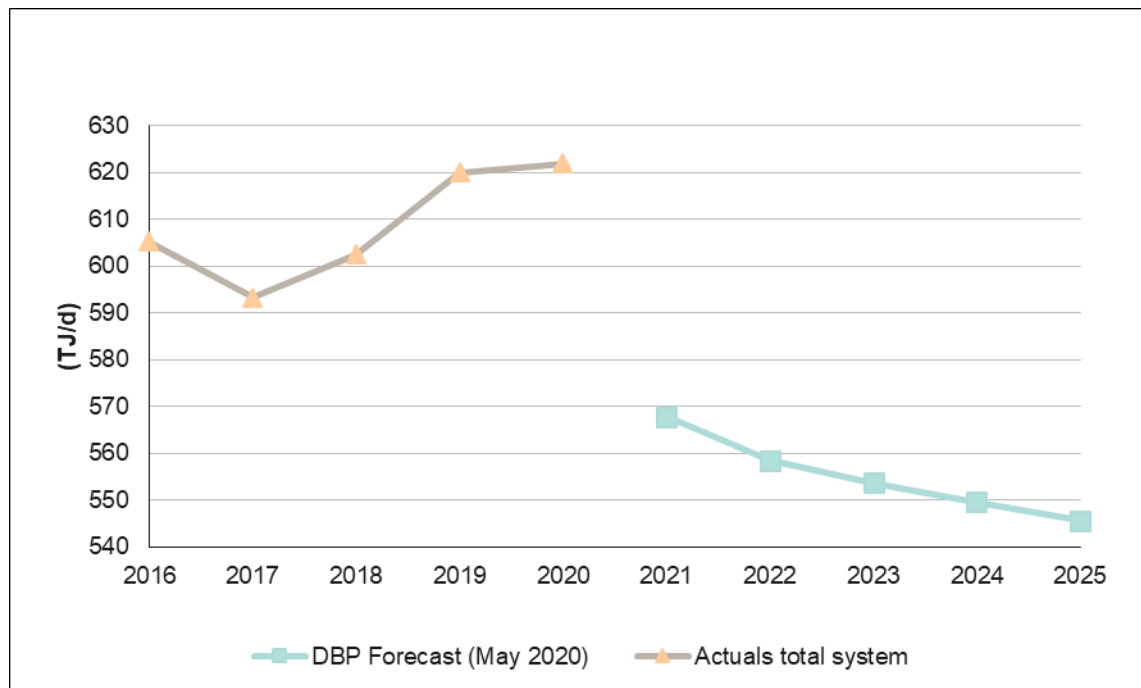
Transparency of DBP's process

181. DBP consulted shippers using stakeholder roundtable meetings to derive its initial bottom-up forecast.
182. In submissions received by the ERA on its issues paper, stakeholders noted concerns on a lack of transparency from DBP in determining the demand forecast. WesCEF submitted that DBP did not provide enough information in its initial proposal for WesCEF to assess the demand forecasts.
183. The ERA considers that DBP undertook significant consultation to derive its demand forecasts for AA5. In response to stakeholder concerns regarding a lack of transparency, the ERA notes that there is a need to balance commercial-in-confidence contracts with transparency. As noted above, the ERA sought and received further information from DBP on individual customer demand to assist with its review. DBP also commissioned a quality assurance review from KPMG which was provided to shippers and to the ERA as part of this review process.
184. DBP revised its original forecast in May 2020 to factor in new renegotiated contracted capacity. DBP provided shipper by shipper changes to the demand forecast and evidence of contracted demand. The ERA has not published shipper-by-shipper information due to commercial-in-confidence concerns but the aggregate revised demand information is provided in Table 12.

Comparison of gas forecasts

185. DBP forecast a significant step decrease in contracted capacity and throughput, from 2020 to 2021. Figure 3 below shows DBP's forecast step decline in total system throughput from 2020 to 2021 and the declining trend in throughput over AA5 (2021 to 2025).

Figure 3: Total system throughput – Actual 2016 to 2020 and DBP’s May 2020 forecast 2021 to 2025 (full haul equivalent TJ/d)



Source: DBP’s tariff model and DBP’s demand model

186. DBP submitted that its forecast throughput was in line with past actual throughput and aligned with AEMO’s forecast for gas demand in Western Australia, when excluding the step decline for electricity generation. DBP noted that the step decline was due to the increasing proportion of renewable energy used in electricity generation. While DBP submitted that the closure of Muja C would increase gas throughput from October 2022, DBP’s forecast throughput continues to decline, implying that DBP’s forecast of a displacement of gas generation to renewable sources more than offsets the effect of the Muja C closure. DBP also considered that there would be a reduction in demand due to customers using alternative pipelines to the DBNGP.
187. The ERA assessed DBP’s throughput forecasts and supporting information and considers that the step decline in full haul throughput from 2020 to 2021 is inconsistent with AEMO’s gas demand forecasts.⁸⁵ AEMO has forecast a 1.9 per cent increase in gas demand each year between 2020 to 2024 in Western Australia. In aggregate, AEMO forecast a 15 per cent increase in gas demand from 2019 to 2029, supported by the closure of Muja C to maintain electricity system stability and to provide support to base load power over the period. In the 2019 Gas Statement of Opportunities report, AEMO notes that the deviation between its historic forecasts and actual demand is small.⁸⁶ AEMO noted that “improvements to [its] forecasting methodology, access to formal information request (FIR) data and improvement of gas use (GBB) data have contributed to improving the accuracy of the forecasts over time.”⁸⁷

⁸⁵ DBP supporting information, ACIL Allen ‘Gas Forecast Review’ January 2020

⁸⁶ AEMO, *2019 Gas Statement of Opportunities*, December 2019, p. 26. AEMO notes that for 2019 (to 14 August 2019), actual gas demand was 9 TJ/day (0.8 per cent) higher than forecast in the 2018 WA Gas Statement of Opportunities.

⁸⁷ AEMO, *2019 Gas Statement of Opportunities*, December 2019, p. 26.

188. The ERA's technical consultant EMCa found significant inconsistencies in the comparison of AEMO's forecasts and the gas demand forecasts of DBP. EMCa stated that:

Given the considerable and largely unexplained differences between the AEMO forecasts and the DBP forecasts, we cannot accept that the AEMO forecasts support the DBP forecasts.

189. Submissions from CPM and WesCEF raised concerns with DBP's demand forecasts, particularly the forecast step change in contracted capacity and throughput. CPM submitted that it expected gas volumes in Western Australia to increase over AA5 from the Gorgon and Wheatstone joint ventures, and that it expected a transition from diesel to gas (or hybrid gas) for many industries.
190. WesCEF considered that DBP's forecasts should reflect increased gas consumption due to the closure of the coal-fired Muja C power generator. WesCEF's submission contradicted DBP's position that use of alternative pipelines would reduce demand for the DBNGP. WesCEF noted that, despite suggestions of possible competition from the Parmelia Gas Pipeline to supply gas from the Perth Basin to Perth, the Xyris processing plant was being connected away from the Parmelia Gas Pipeline and into the DBNGP instead from July 2020 onwards.

Substitution between reference services and peaking service

191. When DBP revised its demand forecast in May 2020, it noted that it expected that customers would use the peaking service more and there would be substitution between firm reference services and the peaking service. The peaking service can be used by DBP's customers to meet demand at peak times, lessening the requirement for higher contracted reference service capacity. DBP indicated that the peaking service was not currently being used and hence there was no information about the level of substitution.
192. The step decline in contracted capacity is largely due to renegotiation of contracts by DBP's customers. Two significant customers have recently renegotiated contracts. The customers substantially revised down their contracted capacity and DBP indicated that these customers would use the peaking service.
193. The ERA considers that there will be some substitution between the peaking service and the reference service. While the substitution between the reference service and peaking service could be quantified by economic modelling, DBP has not provided the ERA with a demand forecast for the peaking service. As a result, the ERA has not been able to quantify the substitution effect.
194. The ERA assessed the ACIL Allen economic model that DBP used to determine the optimal contracted capacity of its customers, but this model became out-of-date following the submission of DBP's revised forecasts in May 2020. This type of assessment if updated by DBP may be useful following the draft decision to explain the step change in reference service throughput and the potential substitution to the peaking service.

Economic conditions

195. As noted in CPM's submission, general global economic conditions started to deteriorate in March 2020 and any sustained downward pressure on the oil price from the levels prior to March 2020 could affect domestic gas prices in WA.
196. The ERA considers that there is uncertainty about the effects, if any, of a local or global economic downturn on gas supply using the DBNGP during AA5. The ERA

notes that DBP has already re-contracted with the majority of its customers and that typically gas supply agreements are for a fixed capacity over a longer period. As a result, the capacity forecasts are unlikely to be materially affected. The throughput forecasts may be affected but at this stage there is too much uncertainty and the ERA notes that throughput only accounts for six per cent of the forecast tariff revenue.

Conclusion on demand forecasts

197. The submissions from CPM and WesCEF raised concerns with DBP's proposed step decline in demand from 2020 to 2021 and suggested that gas demand would continue to grow over the period. This is supported by AEMO's forecast which, for the region of Western Australia where full haul services are located, notes that growth in both mining and new projects will be only partially offset by the forecast reduction in demand from South West Interconnected System gas powered generation due to the entry of renewable generation.⁸⁸
198. As required under rule 74 of the NGR, a forecast of demand must be arrived at on a reasonable basis and must represent the best forecast possible in the circumstances. The ERA considers that DBP's forecast is not the best forecast considering the concerns raised above (at paragraphs 185 to 194), including that it does not reflect the stable to small growth that AEMO is forecasting for Western Australia. AEMO is forecasting an annual growth rate of 0.6 per cent per year for gas services in the metro/south-west region which would include DBP's full haul customers. As noted at paragraph 187, the percentage deviation of AEMO's forecast demand to actual demand is small and is improving over time.
199. While DBP provided a bottom-up forecast and information on renegotiated contracts in May 2020, the ERA does not consider that aggregate demand for gas on the DBNGP will fall.
200. The DBNGP throughput does not just consist of reference service demand, as DBP can and does offer other services (non-reference services) on the pipeline (see Table 10). When DBP provided its revised forecast of demand in May 2020 following contract renegotiations, it noted that some customers who had relinquished capacity would be using the peaking service, which is a non-reference service. While some demand for full haul reference services is expected to move to the peaking service, the ERA has not been provided with any demand information for the peaking service. Given the uncertainties of this demand, a flat demand for reference services, instead of AEMO's forecast increase in demand, is reasonable to account for substitution to the peaking service.⁸⁹ In these circumstances, the ERA considers that it is reasonable to forecast constant contracted capacity and throughput from the forecast levels in 2020.
201. Despite the concerns raised above for DBP's full haul reference service demand, the ERA considers that DBP's forecast for part haul and back haul reference services are reasonable. DBP's forecasts for these services are relatively constant over AA5 from current levels, reflecting the ERA's consideration that gas demand should be stable over AA5.
202. The ERA requires DBP to amend its demand forecasts for reference services as set out in Table 14.

⁸⁸ AEMO, *2019 Gas Statement of Opportunities*, December 2019, p. 24.

⁸⁹ DBP anticipates forecast peaking service revenue to be a small percentage of its overall revenue for pipeline services. See paragraph 1187 of this decision.

Table 14: ERA's demand forecasts for reference services for AA5 (full haul equivalent TJ/d)

	2021	2022	2023	2024	2025
Full haul					
Throughput	589.35	589.35	589.35	589.35	589.35
Contracted capacity	718.08	718.08	718.08	718.08	718.08
Part haul					
Throughput	17.74	17.86	19.57	21.27	23.60
Contracted capacity	25.97	25.39	26.87	28.34	30.36
Back haul					
Throughput	13.89	13.27	13.27	13.27	13.27
Contracted capacity	18.09	17.29	17.29	17.89	17.89
Total system					
Throughput	620.98	620.48	622.18	623.89	626.22
Contracted capacity	762.14	760.76	762.24	764.32	766.34

Source: DBP Tariff model May 2020.

Required Amendment 7

DBP must amend its demand forecast for full haul reference services to maintain throughput and contracted capacity at 2020 forecast amounts as shown in Table 14 of this draft decision.

Revenue and tariffs

Total revenue

203. Rule 76 of the NGR requires total revenue to be determined for each year of the access arrangement period using the building block approach.

76 Total revenue

Total revenue is to be determined for each regulatory year of the access arrangement period using the building block approach in which the building blocks are:

- (a) a return on the projected capital base for the year (See Divisions 4 and 5); and
- (b) depreciation on the projected capital base for the year (See Division 6); and
- (c) the estimated cost of corporate income tax for the year (See Division 5A); and
- (d) increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency (See Division 9); and
- (e) a forecast of operating expenditure for the year (See Division 7).

DBP's proposal

204. DBP applied the building block approach to propose a total revenue requirement for AA5 of \$1,717.94 million. This total revenue requirement reflects the updated forecasts for system use gas costs which DBP provided in May 2020. The system use gas costs are included in the operating expenditure building block component and discussed in the operating expenditure section of this draft decision. Table 15 details DBP's proposed building block components.

Table 15: DBP's proposed revenue requirement for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025	Total
Return on capital base	144.57	142.04	139.60	136.30	133.20	695.72
Regulatory depreciation						
<i>Depreciation</i>	140.50	132.88	138.32	142.24	147.37	701.32
<i>Inflationary gain</i>	(39.96)	(39.26)	(38.58)	(37.67)	(36.81)	(192.28)
Operating expenditure	92.95	92.09	93.49	91.27	89.56	459.37
Regulatory corporate income tax						
<i>Corporate income tax</i>	25.00	22.35	20.46	20.04	19.77	107.62
<i>Imputation credits</i>	(12.50)	(11.18)	(10.23)	(10.02)	(9.88)	(53.81)
Total revenue	350.57	338.92	343.07	342.17	343.21	1,717.94

Source: DBP Tariff model May 2020.

Draft decision

205. The ERA has separately considered the forecast value of each of the building blocks that make up the total revenue requirement in later sections of this draft decision. The total revenue requirement resulting from the ERA's considerations is set out in Table 16.

Table 16: ERA's draft decision total revenue requirement for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025	Total
Return on capital base	135.98	134.18	132.56	130.44	128.33	661.49
Regulatory depreciation						
<i>Depreciation</i>	127.16	112.41	114.56	115.89	118.20	588.22
<i>Inflationary gain</i>	(43.48)	(42.90)	(42.38)	(41.71)	(41.03)	(211.50)
Operating expenditure	96.07	95.98	97.70	96.02	94.56	480.34
Regulatory corporate income tax						
<i>Corporate income tax</i>	20.84	12.60	11.84	11.83	11.92	69.04
<i>Imputation credits</i>	(10.42)	(6.30)	(5.92)	(5.92)	(5.96)	(34.52)
Total revenue	326.16	305.96	308.36	306.56	306.03	1,553.08

Source: ERA, August 2020, Draft Decision tariff model

Required Amendment 8

DBP must amend the total revenue requirement for AA5 to \$1,553.08 million. The yearly values for each year of the access arrangement period are set out in Table 16 of this draft decision.

Operating expenditure

206. Rule 91 of the NGR details the criteria that the ERA must consider when approving DBP's proposed operating expenditure.

91 Criteria governing operating expenditure

- (1) Operating expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
- (2) The forecast of required operating expenditure of a pipeline service provider that is included in the full access arrangement must be for expenditure that is allocated between:
 - (a) reference services;
 - (b) other services provided by means of the covered pipeline; and
 - (c) other services provided by means of uncovered parts (if any) of the pipeline,

in accordance with rule 93.

207. Rule 93 of the NGR sets out the method for allocating costs between reference and other services.

93 Allocation of total revenue and costs

- (1) Total revenue is to be allocated between reference and other services in the ratio in which costs are allocated between reference and other services.
- (2) Costs are to be allocated between reference and other services as follows:
 - (a) costs directly attributable to reference services are to be allocated to those services; and
 - (b) costs directly attributable to pipeline services that are not reference services are to be allocated to those services; and
 - (c) other costs are to be allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].

208. Rule 71 of the NGR details the considerations that the ERA may and must consider when evaluating forecast operating expenditure. Rule 74 of the NGR states the specific requirements for forecasts and estimates.

71 Assessment of compliance

- (1) In determining whether capital or operating expenditure is efficient and complies with other criteria prescribed by these rules, the [ERA] may, without embarking on a detailed investigation, infer compliance from the operation of an incentive mechanism or on any other basis the [ERA] considers appropriate.
- (2) The [ERA] must, however, consider, and give appropriate weight to, submissions and comments received when the question whether a relevant access arrangement proposal should be approved is submitted for public consultation.

...

74 Forecasts and estimates

- (1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.
- (2) A forecast or estimate:
 - (a) must be arrived at on a reasonable basis; and
 - (b) must represent the best forecast or estimate possible in the circumstances.

209. All dollar amounts in this section are expressed in real dollars as at 31 December 2019 unless otherwise stated. The ERA has converted amounts supplied by DBP in real dollars as at 31 December 2020 using the inflation figures supplied by DBP. Where DBP has provided amounts in real dollars as at 30 June 2019, the ERA has used the eight capital city weighted average Consumer Price Index published by the Australian Bureau of Statistics to convert to real dollars as at 31 December 2019.

DBP's proposal

210. DBP has forecast operating expenditure of \$453.89 million for AA5. This is a decrease of \$19.77 million on its estimated AA4 operating expenditure of \$473.66 million.

211. DBP's forecast operating expenditure was split into six main categories:
- Wages and salaries
 - Non-field expenses
 - Field expenses
 - Government charges
 - System use gas
 - Reactive maintenance.
212. DBP used the base-step-trend method to forecast its recurrent operating expenditure as well as specific bottom-up forecasts of some expenditure items where it considered this reflected a more reasonable estimate of its efficient costs for AA5. Bottom-up forecasts were used for 'System use gas' and for two sub-categories of expenditure in the 'Field expenses' expenditure category, being Gas Engine Alternators (GEA) and turbine overhauls, and change in capitalisation expenditure.
213. DBP used the 2019 calendar year as its base year for forecasting operating expenditure for AA5 because 2019 was the penultimate year of the current access arrangement period. At the time of submission, DBP provided for this base year, nine months of actual expenditure and three months of forecasts.
214. In using the base-step-trend method of forecasting its AA5 operating expenditure, DBP adjusted its base year in cases where it considered it was not reflective of recurrent costs likely to be incurred in a typical year.
215. DBP used a five-year average of its consulting and reactive maintenance costs due to volatility that can be experienced in these cost categories year-to-year. DBP also used a rolling six-year average of its insurance costs due to the cyclical nature of insurance markets. DBP noted this was consistent with the approach approved by the ERA in AA4.
216. DBP has not proposed any step changes to its base year.
217. DBP has applied a real cost escalation of 0.69 per cent per annum to its labour costs. This was based on the latest WA Treasury data available at the time DBP prepared its submission, October 2019. DBP stated that the method used was consistent with the ERA's determination of real cost escalation for labour costs in the Goldfields Gas Pipeline access arrangement decision of December 2019.
218. DBP noted that, while it considered a premium above the Wage Price Index for 'Electricity, Gas, Water and Wastewater Services' was appropriate to reflect actual empirical observations, it did not include such a premium consistent with the ERA's recent decisions on the Mid-West and South-West Gas Distribution Systems and Goldfields Gas Pipeline access arrangements, to be consistent with DBP's objective of submitting a proposal capable of acceptance.
219. DBP did not include any real cost escalation to its materials costs, which it noted was consistent with recent regulatory decisions for gas and electricity service providers in Australia.
220. Expenditure variances between AA4 and AA5 for the six main operating expenditure categories are as follows:
- Wages and salaries, down by \$4.32 million

- Non-field expenses, down by \$10.31 million
 - Field expenses, up by \$19.59 million
 - Government charges, up by \$10.63 million
 - Reactive maintenance, up by \$0.51 million
 - System use gas, down by \$35.86 million.
221. A change in capitalisation method by DBP contributed to the forecast increase in the 'Field expenses' category between AA4 and AA5. DBP included \$10.42 million of 'Asset inspections', 'Other minor pipeline works' and 'Small health and process safety initiatives' as operating expenditure from AA5.
222. In the past, DBP has treated these costs as capital expenditure but now considers they are better aligned to its operating expenditure activities. The Australian Gas Infrastructure Group (AGIG), owner of DBP, noted that similar activities undertaken across its distribution networks, and by other pipelines and electricity networks, were treated as operating expenditure.
223. DBP has also provided as part of its proposal, expert accounting advice to confirm that its treatment of these costs as operating expenditure is consistent with statutory accounting standards.
224. DBP noted that the decrease in wages and salaries 'Non-field expenses' reflected efficiencies made by DBP in becoming part of the AGIG corporate structure.
225. Within the sub-category 'Turbine and GEA overhauls' which forms part of the 'Field expenses' category, DBP used a bottom-up method to prepare the forecast. In AA5, DBP forecast expenditure of \$30.35 million to overhaul eight turbine units and 20 GEA units.
226. Based on current run hours and utilisation rates for turbine units, DBP forecast overhauling seven turbine units and allowed for an overhaul of one additional turbine unit in the event of a premature failure at a cost of \$25 million. DBP forecast to overhaul 20 GEA units in AA5 at a cost of \$5 million.
227. This compares to DBP's expenditure in AA4 of \$24 million to undertake six turbine overhauls, two turbine failures and two turbine swaps, as well as 16 GEA overhauls in the AA4 period. DBP noted that the lower expenditure in the current period was a result of managing both turbines at each compressor station to spread run hours and keep units below the operational run hour level of 30,000 hours for longer. The 30,000 operational run-hour level acts as the key criterion to identify an asset for overhaul (replacement).
228. DBP's proposal included an increase from AA4 to AA5 of \$10.63 million for 'Government charges', up to \$43.47 million proposed in AA5. DBP's Final Plan did not provide detail on this increase.
229. However, DBP provided additional information in response to an information request from the ERA which noted the increase in 'Government charges' was a result of a re-categorisation of regulatory costs from 'Non-field expenses' into 'Government charges'. DBP noted that this increase in 'Government charges' was offset by the subsequent decrease in 'Non-field expenses' in the AA5 period.
230. DBP noted though that its AA4 expenditure for 'Government charges' was \$4 million, or 18 per cent, above its allowance.

231. DBP forecast expenditure of \$106.47 million on 'System use gas' in the AA5 period, down by \$35.86 million from \$142.33 million in the AA4 period. This was forecast using a bottom-up method and not using the base year. DBP noted the reduction was mainly driven by lower gas prices compared to when it last tendered for its system use gas requirements in 2014.
232. DBP's forecast price for 'System use gas' is based on the weighted average price that it would achieve across its system use gas supply contracts secured in the market. DBP submitted that this was consistent with the ERA's approach in AA4 to adopt the weighted average price of DBP's two system use gas contracts.
233. DBP used a five-year average of its consulting and 'Reactive maintenance' costs due to possible volatility in these cost categories year-to-year. DBP also used a rolling six-year average of its insurance costs due to the cyclical nature of insurance markets. DBP noted this was consistent with the approach approved by the ERA in AA4.
234. DBP's proposed operating expenditure for the AA5 period is set out by year for the six main cost categories in Table 17.

Table 17: DBP's proposed forecast operating expenditure for AA5 (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	Total
Wages and salaries	27.44	27.63	27.82	28.02	28.21	139.13
Non-field expenses	11.76	11.78	11.81	11.83	11.85	59.03
Field expenses	22.25	20.57	20.88	17.60	15.06	96.37
Government charges	8.69	8.69	8.69	8.69	8.69	43.47
Reactive maintenance	1.89	1.89	1.89	1.89	1.89	9.43
System use gas	20.40	20.76	21.02	21.97	22.32	106.47
Total	92.43	91.33	92.11	90.00	88.03	453.89

Source: DBNGP, DBNPG FP_7.1_Opex_Forecast_Model_PUBLIC, 1 January 2020

Submissions

235. Citic Pacific Mining Management (CPM) noted that during the current access arrangement period, AGIG spent \$22 million less than budgeted on operating expenditure (AA4 operating expenditure). For the next access arrangement period, AGIG forecast a significant increase from its AA4 operating expenditure. CPM submitted that AGIG's proposed operating expenditure did not satisfy the prudence test as, among other reasons, its forecast did not reflect current (relatively) low gas prices and labour costs.⁹⁰
236. CPM, Wesfarmers Chemicals, Energy and Fertilisers (WesCEF) and gasTrading all expressed concerns about DBP's forecast expenditure for System Use Gas (SUG),

⁹⁰ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 5.

particularly that the price for SUG did not reflect the current and expected gas prices in AA5.

237. CPM submitted that AGIG's forecast gas prices for SUG may not pass the prudence test, as a prudent service provider would take advantage of low gas prices at least by diversifying its gas portfolio to purchase some gas on the spot market and some under medium term contracts.^{91,92}
238. CPM submitted that the gas spot market and available excess production capacity opens opportunities to secure some low-priced gas and this was representative of the lowest sustainable cost and should be considered for inclusion into AGIG's forecast gas prices. CPM submitted the average price allowed for SUG should be between \$3.50 to \$4.50/GJ.⁹³
239. WesCEF noted the following:
- From its calculations [Combining the information provided by AGIG in its plan, relating to SUG efficiency with ERA's summary of 2020 and AA5 throughput estimates], WesCEF infers that AGIG is estimating its SUG requirements to average 8.2TJ/d in AA5, down from 9.9TJ/d in 2020, and that the unit cost of gas reduces from \$8.40/GJ in 2020 to an average of \$7.20/GJ in AA5. WesCEF believes this price is far in excess of current gas prices and expected gas prices in the AA5 period and does not reflect efficient pricing.⁹⁴
240. gasTrading noted that, without knowing further data behind the SUG calculation assumptions, the SUG price was forecast to grow roughly with the Consumer Price Index (CPI) until 2024 where it jumped 4.5 per cent and then back to CPI. Gas prices are currently low and gas contracts over the period of the access arrangement can be obtained currently with prices escalating only at CPI. Furthermore, forecast full haul volumes are expected to decline which will result in a reduction in SUG volume.⁹⁵

Draft decision

Assessment of operating expenditure

241. The ERA appointed EMCa to provide technical advice on DBP's proposed operating and capital expenditure proposals. EMCa conducted a detailed assessment of DBP's operating expenditure proposal, considering information provided by DBP in its initial submission, at the on-site meeting and in response to additional information requests. This included reviewing DBP's planning documents and business cases; its operating expenditure forecasting methodology and the relevant input assumptions.
242. DBP did not explain its operating expenditure governance process in its submission. However, from discussions at the on-site meeting with DBP representatives, the ERA and EMCa were provided with a better understanding of DBP's operating expenditure governance process. The ERA understands that at the start of each calendar year,

⁹¹ Rule 91(1) of the NGR.

⁹² CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 5.

⁹³ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 5.

⁹⁴ Wesfarmers Chemical Energy and Fertilisers Limited, *Submission to the ERA issues paper*, 30 March 2020 p. 11.

⁹⁵ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 10.

DBP prepares draft budgets of the operating activity for the following five years. The budget is then subject to a review and monitoring process within the organisation.

243. As noted at paragraph 212, DBP used the base-step-trend method to forecast its recurrent operating expenditure as well as specific bottom-up forecasts of some expenditure items where it considered this reflected a more reasonable estimate of its efficient costs for AA5. DBP's bottom-up forecasts were for the following categories:
- System Use Gas (SUG)
 - Gas Engine Alternator (GEA) and turbine overhauls
 - change in capitalisation (capital expenditure to operating expenditure).
244. As noted at paragraph 178, on 28 May 2020, DBP provided the ERA with new demand forecasts for reference services reflecting the completion of major contract renegotiations. As a result of the renegotiations, throughput declined further than DBP proposed in its initial submission for AA5. As SUG expenditure is dependent on forecast throughput, DBP's proposed SUG expenditure for AA5 was also reduced.
245. Table 18 shows DBP's proposal with the revised SUG values. The ERA's assessment of operating expenditure is based on the values in Table 18.

Table 18: DBP proposed operating expenditure for AA5 with revised system use gas values (\$ million real as at 31 December 2019)

Category	2021	2022	2023	2024	2025	Total AA5
Efficient base year	60.48	60.48	60.48	60.48	60.48	302.38
Step changes	0.00	0.00	0.00	0.00	0.00	0.00
System Use Gas	19.05	18.61	18.39	18.29	18.00	92.34
GEA/turbine overhauls	8.85	7.55	7.57	4.31	2.06	30.34
Capital to operating expenditure	2.29	1.90	2.18	2.17	1.88	10.42
Labour cost escalation	0.42	0.64	0.85	1.07	1.29	4.27
Total forecast operating expenditure	91.08	89.18	89.47	86.32	83.71	439.76

Source: DBNGP, DBNPG FP_7.1_Opex_Forecast_Model_PUBLIC, 1 January 2020 and DBNGP-DBP-AA5-Tariff Model, 28 May 2020 (Confidential)

246. Rule 91(2) of the NGR provides for operating expenditure to be allocated between reference services, other covered pipeline services and other uncovered pipeline services (if any). In each case, the allocation must be made in accordance with rule 93.
247. In response to an information request, DBP confirmed that it allocates expenditure between the regulated (that is, DBP) and non-regulated business entities of AGIG in accordance with its operational accounting procedures. Where operating expenditure for non-reference services can be directly attributable to an individual shipper, these costs are allocated directly to that shipper. Examples of such direct

costs include SUG, labour and other variable costs associated with running the service.

248. DBP's proposal did not indicate any further allocation of operating expenditure between reference and non-reference services. Rather, DBP submitted that the allocation of all operating expenditure to reference services, other than costs directly attributable to non-reference services, was consistent with rule 94(3) of the NGR.⁹⁶ Rule 94(3) reads as follows:

94 Tariffs – distribution pipeline

...

- (3) For each tariff class, the revenue expected to be recovered should lie on or between:
- (a) an upper bound representing the stand alone cost of providing the reference service to customers who belong to that class; and
 - (b) a lower bound representing the avoidable cost of not providing the reference service to those customers.

249. The ERA considers that rule 94(3) of the NGR, which sets out the principles for determining tariff classes and tariff charges for *distribution pipelines*, is not relevant for determining the allocation of operating expenditure between reference services and other (non-reference) services. Rather, rules 91(2) and 93(2) of the NGR set out the relevant provisions, which require operating expenditure that is directly attributable to reference services or non-reference services to be allocated to those services. For other operating expenditure that cannot be directly attributed (that is, shared expenditure for the provision of both reference and non-reference services), this expenditure must be allocated on a basis determined or approved by the ERA.
250. The ERA considers that, apart from SUG, operating expenditure is shared expenditure between reference and non-reference services and that the apportionment of this expenditure should be made under rule 93 on a basis consistent with its allocation of total revenue. The ERA is satisfied that this approach is consistent with the Revenue Pricing Principles and the National Gas Objective and is the best basis for allocation in all the circumstances. The ERA has considered the allocation of total revenue at paragraph 1176 of this decision.

Base year components

251. DBP calculated a base year operating expenditure of \$60.48 million for 2019 which it uses to forecast operating expenditure for AA5. Table 19 below sets out the line items making up the base year components.

⁹⁶ DBP, *Response to information request ERA 29*, 21 July 2020.

Table 19: DBP base year components (\$ million real as at 31 December 2019)

Category	Sub-category	DBP adjusted base year
Wages and salaries	Salaries	25.19
Wages and salaries	Salaries - contractors	1.87
Non-field expenses	Employee expenses	0.64
Non-field expenses	Advertising	0.03
Non-field expenses	Consulting	3.34
Non-field expenses	Entertainment	0.15
Non-field expenses	IT	4.13
Non-field expenses	Insurance	2.92
Field expenses	Motor vehicle	1.06
Non-field expenses	Office and administration	0.30
Non-field expenses	Occupational health and safety	0.20
Field expenses	Repairs and maintenance	6.45
Field expenses	Training and development	1.27
Field expenses	Travel and accommodation	2.33
Government charges	Utilities, rates and taxes	8.69
Reactive operating expenditure	Reactive operating expenditure	1.89
Base year total		60.48

Source: DBNGP, DBNPG FP_7.1_Opex_Forecast_Model_PUBLIC, 1 January 2020 and ERA, DBP AA5 Operating Expenditure Model – Draft Decision, July 2020

252. To determine its base year expenditure, DBP used a combination of actual operating expenditure from January 2019 to September 2019 (nine months) and forecast operating expenditure from October 2019 to December 2019 (the remaining three months). DBP forecast its 2019 operating expenditure to be \$61.75 million.
253. DBP then adjusted components of the 2019 forecast operating expenditure that it did not think were reflective of recurrent costs likely to be incurred in a typical year. DBP did this by replacing the 2019 forecast operating expenditure for ‘consulting’ and ‘Reactive maintenance’ with a five-year average value of costs, and ‘insurance’ expenditure with a six-year average of costs.
254. DBP noted that this approach was consistent with the method accepted by the ERA in AA4, and that all three adjustments reduced its 2019 base year cost to reflect the typical expenditure to be incurred each year for each category.
255. These adjustments reduced the 2019 forecast operating expenditure (\$61.75 million) and resulted in a base year operating expenditure of \$60.48 million.

256. The ERA has reviewed the base year components of DBP's AA5 operating expenditure proposal. DBP's approach of using an average cost, based on the previous five or six years, for costs that it considers are not reflective of recurrent costs that are likely to be incurred in a typical year. This approach is consistent with what the ERA accepted in DBP's AA4 proposal. The ERA considers this to be a reasonable approach.
257. DBP determined three cost categories (consulting, 'Reactive maintenance' and insurance) using an average of costs and adjusted its 2019 value down to make it reflective of a typical year's expenditure.
258. To review DBP's 2019 base year proposal of actual and forecast expenditure, the ERA compared the values with the last full year of actual expenditure in 2018. On a line-by-line comparison between the two years, there are some positive and some negative movements at the component level from 2018 to 2019. However, in aggregate the 2019 base year components that DBP has proposed are less than the equivalent components in 2018. In a line-by-line comparison between the two years, some values in 2019 are higher and some values are lower with the overall total in 2019 being lower than 2018.
259. The DBP base year value is also lower than the actual costs of the first two years of AA4 in 2016 and 2017.
260. Based on the information provided, the ERA is satisfied that the proposed expenditure of \$60.48 million on base year components is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
261. However, DBP stated in its submission that it would update its 2019 base year figure with an actual figure by the time the ERA made its draft decision. While DBP has not provided a formal submission including 2019 actual expenditure for evaluation in the draft decision, DBP did provide 2019 actuals expenditure to EMCa in response to an information request.
262. DBP's 2019 actual expenditure was \$5.66 million higher than DBP's adjusted base year value. The ERA considers that this is a significant variance that would require explanation should DBP submit it for consideration in response to the draft decision.

Cost escalation

263. DBP proposed input cost escalation above the growth in inflation (real escalation) to its AA5 operating and capital expenditure forecasts. DBP applied no annual real cost escalation to its material costs, which it cited as being consistent with recent regulatory decisions for gas and electricity providers in Australia. DBP also proposed a real labour cost escalation of 0.69 per cent.⁹⁷
264. As the material costs included in the 2019 base year are considered efficient, and increases in the cost of materials are not expected to exceed CPI growth, DBP's proposed materials cost escalation of zero per cent has been used to calculate the input growth escalation factor in the forecast operating expenditure for this draft decision.

⁹⁷ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, pp. 61-62.

265. To determine the real labour cost escalation, DBP adopted the equation that the ERA used in the ATCO and GGT access arrangement draft decisions from 2019 for the Goldfields Gas Pipeline and the Mid-West and South-West Gas Distribution Systems. The equation subtracted the average growth in CPI from the average growth in the Wage Price Index (WPI). DBP used data published by the Western Australian Department of Treasury, which is consistent with what the ERA used in its 2019 gas access draft decisions.
266. However, since the Goldfields Gas Pipeline and the Mid-West and South-West Gas Distribution Systems access arrangement draft decisions, the ERA has implemented a revised equation to calculate real labour cost escalation. The revised equation was used in Goldfields Gas Pipeline and Mid-West and South West Gas Distribution Systems access arrangements final decisions.

$$\text{Real labour escalation growth rate \%} = \frac{1 + \text{Average growth in WPI}}{1 + \text{Average growth in CPI}} - 1$$

267. In addition, the methods DBP applied to derive the average WPI and CPI growth used to calculate the real labour cost escalation were different to the methods applied by the ERA in the Goldfields Gas Pipeline and the Mid-West and South-West Gas Distribution Systems final decisions later in 2019. DBP arrived at its average WPI annual growth value by first averaging successive Treasury financial year forecasts to convert them to calendar year forecasts, then used the arithmetic average of those calendar year forecasts as its average WPI annual growth value. This is not consistent with the ERA's method of obtaining the average WPI growth, which is to take the average of actual and forecast WA Treasury WPI growth.
268. DBP arrived at its average CPI annual growth value by taking the geometric average of Treasury's CPI forecasts. This is also not consistent with the ERA's method of obtaining the average CPI growth to be used in calculating the labour cost escalation. In recent decisions, the ERA obtained its average CPI growth by taking the arithmetic average of Treasury's actual and forecast CPI growth.
269. DBP has not applied an industry premium to real wage price growth following the decisions made by the ERA in the Goldfields Gas Pipeline draft decision and the Mid-West and South-West Gas Distribution Systems final decision in 2019.⁹⁸
270. Since DBP submitted its proposal, Treasury has released updated actual and forecast WPI and CPI data as part of the 2019/20 mid-year financial projections statement.⁹⁹
271. As a result, the labour cost escalation proposed by DBP cannot be considered the best forecast for the AA5 period and is, therefore, inconsistent with rule 74(2)(b) of the NGR.
272. Table 20 sets out the Treasury data for WPI growth and CPI growth used in the ERA's calculation.

⁹⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, pp. 61-62.

⁹⁹ WA Department of Treasury, 2019, *Government Mid-year Financial Projections Statement*, p. 45.

Table 20: Western Australian Treasury – Wage Price Index and Consumer Price Index data included in calculating the real labour cost escalation (%)

	2018/19 actual	2019/20 mid-year revision estimate	2020/21 forward estimate	2021/22 forward estimate	2022/23 forward estimate	Annual average
Wage Price Index growth	1.60	2.00	2.25	2.50	2.75	2.22
Consumer Price Index growth	1.30	1.75	2.00	2.25	2.25	1.91

Source: WA Department of Treasury, Government Mid-Year Financial Projections Statement ([online](#)) [accessed 31 March 2020]

273. The ERA will update the labour cost escalation estimate in the final decision if Treasury releases revised updates of the WPI and CPI data as part of the 2020/21 state budget.
274. The labour cost escalation rate of 0.30 per cent is applied only to the portion of operating expenditure that contains labour. This results in an increase in operating costs due to labour escalation of \$1.86 million in total over the AA5 period. This is the best forecast or estimate possible for the real labour escalation, as required by rule 74(2)(b) of the NGR.

Productivity factor

275. In its submission, DBP noted that it did not apply a productivity factor to its operating expenditure and that this approach is consistent with the ERA's recent decisions for the Goldfields Gas Pipeline and the Mid-West and South-West Gas Distribution Systems access arrangements.
276. DBP also noted that, while it had not applied an explicit productivity growth adjustment to its operating expenditure for AA5, it proposed to absorb estimated IT operating expenditure step changes of around \$8 million, which DBP noted resulted in an implied annual productivity of around 0.6 per cent per year.
277. DBP decided for its access arrangement proposal to remain consistent with its draft plan and not increase IT operating expenditure in AA5, despite estimating a step change requirement of around \$8 million (mainly in increased managed services costs). This change resulted from the increased IT investment proposed in AA5 to improve its business intelligence, data management and digital capabilities.
278. DBP took this approach because it believed these higher IT operating costs may be offset by reduced operating expenditure in other areas of the business, driven specifically by its IT enabling initiative. DBP noted that this provided a clear incentive to ensure that the benefits these programs could deliver were realised and passed through to customers.
279. No detailed information has been provided by DBP on the \$8 million of operating expenditure that DBP did not include in its submission as a step change. Accordingly, the ERA cannot assess if this expenditure is prudent and efficient as it was not included in the submission.
280. As set out at paragraph 737, the ERA has not accepted DBP's proposed capital expenditure business case CAPEX DBP22, IT Enabling. This business case includes

- aspects of business intelligence, data analytics, digital transformation and program and change management.
281. Only expenditure that forms part of the access arrangement submission can be assessed. As a result, the ERA cannot assess DBP's claim of an implied annual productivity factor of around 0.6 per cent per year.
 282. The ERA has reviewed DBP's proposal to not include a productivity factor as part of its operating expenditure forecast for the AA5 period and notes that DBP is a mature operator of the DBNGP and subject to an incentive-based regulatory regime.
 283. DBP's operating expenditure for AA4, excluding SUG and GEA/turbine overhaul expenditure, averaged around 3 per cent less than the ERA's allowance for this period.
 284. As part of its review for the ERA, EMCa undertook a simple log-log regression to test for productivity improvement within AA4. EMCa found that DBP would have achieved a productivity improvement averaging 0.5 per cent per year in AA4, on the basis that its 2019 operating expenditure was represented by the unadjusted base year expenditure estimated for the purpose of its base-step-trend forecast.
 285. The AER undertook a study on forecasting productivity in 2019. EMCa noted that, while the objective of the AER's study was to determine a reasonable allowance that can be applied to electricity distributors, it included studies on productivity improvements in the gas sector which showed average annual improvements of 0.5 per cent per year.
 286. EMCa noted that the AER considered there to be reasonable comparability between the sectors and, though its study took account of considerable other information, its conclusion was to adopt a 0.5 per cent per year productivity growth target for future regulatory determinations.
 287. EMCa considered that it would be reasonable to incorporate a forecast productivity growth factor of 0.5 per cent per year, in determining a prudent and efficient forecast operating expenditure allowance. EMCa considered it reasonable to apply this productivity growth factor to those components of the forecast that DBP has forecast on a base-step-trend basis, excluding 'Government charges' as EMCa considered those costs to not be controllable by DBP.
 288. As set out at paragraph 275, DBP did not apply a productivity factor to its operating expenditure, which it considered was consistent with the ERA's recent Goldfields Gas Pipeline and the Mid-West and South-West Gas Distribution Systems access arrangements.
 289. However, DBP has stated in several of its capital expenditure business cases that part of the justification for undertaking the capital expenditure was the associated operating expenditure reduction. These operating expenditure savings have not been included in the operating expenditure forecasts for AA5.
 290. Under the base-step-trend approach, any reductions in operating expenditure for the upcoming period as a result of capital expenditure projects in the period would be included as a step change. DBP's AA5 proposal does not include any step changes.
 291. In order to ensure these savings are considered and passed on to customers, the ERA has included a productivity growth factor of 0.5 per cent per year on the base components of the operating expenditure forecast

292. This results in a decrease in forecast operating expenditure of \$6.04 million for the AA5 period.

Gas engine alternators and turbine overhauls

293. DBP proposed forecast expenditure for GEA and turbine overhauls of \$30.34 million in AA5. This is \$6.09 million more than DBP's actual and estimated spend in AA4 of \$24.25 million.

Table 21: DBP forecast GEA and Turbine overhaul operating expenditure for AA5 (\$ million real as at 31 December 2019)

Category	2021	2022	2023	2024	2025	Total AA5
GEA overhauls	1.02	1.02	1.02	1.03	1.03	5.12
Turbine overhauls	7.83	6.53	6.55	3.28	1.03	25.22
Total	8.85	7.55	7.57	4.31	2.06	30.34

Source: DBNGP, DBNPG FP_7.2_Opex Business Cases_Confidential_Rev1, January 2020

GEA overhauls

294. DBP has proposed to overhaul ■■■ GEAs at a forecast cost of \$5.12 million for AA5, compared to ■■■ overhauls in AA4 at a total cost of \$3.84 million.
295. GEAs are the primary source of electricity at many of DBP's remote facilities, including all compressor stations north of Perth. DBP services its GEAs regularly, with major services (overhauls) required at 12,000 hours, 24,000 hours, 48,000 hours and 52,000 hours.
296. The ERA reviewed DBP's proposal and EMCa's report on the proposed GEA overhauls for AA5.
297. DBP stated that its schedule for GEA overhauls was driven by the run hours of each engine (or calendar hours for low use machines) and the original equipment manufacturer recommendations. Run hours are largely driven by site power requirements, which are in turn influenced by throughput as well as site ambient conditions and occupancy by staff.
298. The ERA considers that this approach for managing GEA overhauls is consistent with the operation of a prudent service provider. EMCa noted that DBP's management of run-hours on a per-site and per-machine basis was prudent, with significant operational history to support decision making, and that it was reasonable to expect that the forecast number of engines would reach the required run hours during AA5.
299. The ERA has reviewed DBP's forecast expenditure on the GEA overhauls during AA5 and considers that the unit cost is efficient. The forecast unit costs were only marginally higher for AA5 than for AA4 and were considered reasonable.

Gas turbine overhauls

300. DBP has forecast a total cost of \$25.22 million to overhaul ■■■ turbines in AA5. In AA4, DBP overhauled ■■■ units and had three premature failures at a cost of \$20.39 million.

301. DBP noted that its replacement strategy for its turbine units is to overhaul them after 30,000 run hours in line with manufacturer specifications. DBP noted that, after 30,000 run hours, the likelihood and cost of failure of turbine units increased significantly as turbines were integral to the safe and reliable delivery of DBP's services. Because there can be long lead times in ordering parts, DBP stated that its turbine overhauls must be carefully planned.
302. DBP noted that based on current run hours and use rates for turbine units, it has forecast to overhaul [REDACTED] units in AA5. DBP has also allowed for one additional overhaul in the event of a premature failure.
303. DBP noted that the increase in forecast cost was driven by higher unit costs for overhauling [REDACTED], and by additional work required [REDACTED] due to findings from investigations into premature failures during AA4.
304. DBP noted that the schedule for turbine overhauls was driven by the run hours on each machine, which fed into original equipment manufacturer warranty provisions. Run hours are largely throughput-driven and are managed by configuring the pipeline daily to deliver customers' requirements.
305. To optimise run hours and compressor performance across the fleet, DBP noted that it did, from time-to-time, swap engines between low use and high use sites. As a result, run hours were managed across the entire fleet of turbines as well as on an individual engine basis.
306. After reviewing DBP's business case and response to EMCa's additional information request, EMCa considered DBP's approach to managing its gas turbine fleet was reasonable and in line with sound industry practice.
307. EMCa considered that the forecast cost difference between AA4 and AA5 was reasonable given the significant technological and factory support differences between [REDACTED] machines. EMCa also considered that the proactive measures that DBP undertook to minimise early stage failures [REDACTED] machines were prudent, given the operational and failure history of the machines.
308. The ERA has reviewed DBP's proposal and EMCa's report on the proposed turbine overhauls for AA5. The ERA considers the method used to determine when each individual turbine is overhauled is prudent and the calculation of unit costs is reasonable.

Summary of GEA and turbine overhauls expenditure

309. While it considered DBP's approach to managing its GEA and Turbine overhaul costs prudent, EMCa considered that DBP's forecast did not represent a best estimate of the required expenditure. EMCa noted that, in AA4, DBP spent \$6.1 million less than the allowance for such overhauls, a saving of 26 per cent.
310. DBP explained the measures it took to achieve these savings, which included obtaining overhauled 'swap' machines at lower cost and some overhaul costs being offset by insurance claims. DBP also explained the factors that could lead it to be able to extend run hours in some circumstances.

311. From those discussions, EMCa considered that it is likely that DBP would again find opportunities to optimise the management of its fleet, and its overhaul options and unit costs, to achieve savings that were not incorporated in its forecast.
312. EMCa noted that not all measures that DBP took in AA4 are repeatable, or if they are, may not result in the same level of savings achieved in AA4. However, EMCa considers that DBP would find expenditure optimisation opportunities. Accordingly, EMCa recommended adjusting the GEA and turbine overhauls component of DBP's forecast on the assumption that DBP would achieve 50 per cent of the proportionate savings achieved in AA4. This equates to a 13.2 per cent reduction to DBP's proposed forecast.
313. The ERA considers that there is scope for savings to be made in the proposed expenditure for GEA and Turbine overhauls in AA5 as occurred in previous access arrangement periods including AA4. The ability for DBP to 'swap' machines and recover costs from insurance claims as well as manipulating the run hours of individual machines as part of the portfolio of machines provides scope for savings in this category.
314. Based on the information provided, the ERA is not satisfied that the proposed expenditure of \$30.34 million on GEA and turbine overhauls is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
315. The ERA is satisfied that expenditure of \$26.20 million on GEA and turbine overhauls is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
316. This reduction of \$4.14 million from DBP's proposal is made up of \$0.16 million from recalculating DBP's proposed expenditure using the ERA's draft decision forecast inflation and labour cost escalation values and \$3.98 million being the 13.2 per cent reduction as set out above.

Change in capitalisation

317. DBP forecast \$10.42 million of operating expenditure for activities that were previously treated as capital expenditure.
318. EMCa has reviewed DBP's proposal for the change in classification and noted that while DBP continues to identify some of this work as 'projects' in some of its documentation, EMCa were satisfied that work of this nature, and which is forecast as almost constant annual routine expenditure, is best classified as operating expenditure.
319. The activities for which costs are being moved from capital expenditure to operating expenditure are asset inspections, other minor pipeline works, and health and process safety initiatives, which DBP submitted were recurrent and operating in nature. Table 22 sets out the DBP proposed expenditure.

Table 22: DBP proposed change in capitalisation activities for AA5 (\$ million real as at 31 December 2019)

Category	2021	2022	2023	2024	2025	Total AA5
Health, safety and environment	0.09	0.09	0.09	0.09	0.09	0.46
Station inspections	0.80	0.84	0.80	0.84	0.81	4.09
Asset management	0.56	0.56	0.61	0.56	0.57	2.86
Pipeline and mainline valve inspections	0.79	0.36	0.37	0.37	0.37	2.26
Process safety	0.05	0.05	0.05	0.05	0.05	0.25
Decommissioning	0.00	0.00	0.26	0.26	0.00	0.52
Total	2.29	1.90	2.18	2.17	1.89	10.42

Source: DBNGP, DBNPG FP_7.1_Opex_Forecast_Model_PUBLIC, 1 January 2020

320. The ERA has reviewed the documentation provided for the change in capitalisation projects and is satisfied that the nature of the work outlined for these activities is consistent with the accounting standards criteria to be classified as operating expenditure. Each activity is assessed below for inclusion as part of DBP's AA5 operating expenditure
321. The ERA notes that for the activities proposed by DBP to be moved from capital expenditure to operating expenditure, DBP determined the cost for AA5 inclusive of its forecast inflation and labour cost escalation. In reviewing the total cost for each activity, the ERA has recalculated the cost using the ERA's determined forecast inflation and labour cost escalation values for the Draft Decision.

Health, safety and environment

322. DBP proposed to spend \$0.46 million for 'Health, safety and environment' programs in the AA5 period. This was an increase of \$0.28 million from its expenditure in AA4.
323. DBP noted that its health and safety program delivered initiatives to support the health and safety of its employees and contractors. This included initiatives in safety systems and mental health practices. DBP further noted that its environmental program focused on compliance, ensuring that updates were rolled out as needed to reflect changes to regulatory and reporting requirements, which were often driven by external changes.
324. The ERA has reviewed DBP's proposal for 'Health, safety and environment' expenditure in AA5. The ERA notes that expenditure in this category is driven predominately by changes in legislation and codes of practice requiring DBP to implement, adapt or update its systems to be compliant.
325. The ERA also notes DBP's response to an information request in which it noted the implications of the COVID-19 pandemic and other expenditures that would increase DBP's AA5 expenditure above AA4 levels.
326. Based on the information provided, the ERA is satisfied that the proposed expenditure of \$0.45 million on 'Health, safety and environment' activities is

reasonable and consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

Station inspections

327. DBP proposed to spend \$4.09 million on 'Station inspections' in AA5. DBP estimated that its AA4 expenditure on this item was \$2.6 million, although there was no specific allowance for this inspection program in AA4 as included in a broad category of 'Subsequent works'.
328. 'Station inspections' is the program name given to the three core station inspections activities:
- mandatory inspection of pressure vessels.
 - mandatory inspection of pressure relief valves
 - inspection and re-preservation of compressor bundles in long term storage.
329. DBP proposed to inspect 50 pressure vessels and 70 pressure relief valves at compressor stations and meter stations, and 14 compressor bundles in storage during AA5.
330. The ERA has reviewed the AA5 expenditure for DBP's proposed 'Station inspections'. The ERA notes that 'station inspections' are conducted in line with Australian Standards, particularly AS 3788 (Pressure equipment – In-service inspection).
331. DBP considered three options for this program being:
- Option 1 - Inspect consistent with volume and activities consistent with the Asset Management Plan.
 - Option 2 - Increase frequency of inspections.
 - Option 3 - Do not undertake station inspections program.
332. DBP consider option 1 to be the best option as it was based on the requirements of its Asset Management Plan, aligned to standard industry practice, complied with the requirements of Australian Standard AS3788, and was in line with DBP's Safety Case.
333. DBP noted that undertaking inspections at twice the current frequency was unlikely to reduce risk any further than for following the Asset Management Plan option. Also, if no inspections were undertaken, the failure of these assets would likely result in significant disruption to services and higher costs due to the likely higher consequences of the failure of the asset, being replacement rather than repair.
334. The ERA considers that the expenditure on 'Station inspections' is prudent to minimise the risk of failure to components and avoid disruption to the pipeline operations. DBP noted that pressure vessels and pressure relief valves were considered high risk assets and an important control to managing this risk was preventative maintenance – in this case, inspection.
335. The inspection of pressure vessels and pressure relief valves comply with statutory requirements as denoted in DBP's Asset Management Plan. It is also noted that some of the cost differences between AA4 and AA5 were due to improved activity-based cost capture, rather than a material difference in activities.

336. Regular inspections and re-preservation of compressor bundles is prudent, and the compressor bundles are valuable assets for which the original equipment manufacturers do not offer an exchange service, either for upgrades or for maintenance or repair.
337. EMCa noted that while a comparison with AA4 actual expenditure was problematic the cost breakdown that DBP provided appeared reasonable. EMCa observed that some unit cost reductions from efficiencies identified during AA4 were included in the AA5 forecasts. EMCa considered that DBP's forecast AA5 expenditure for 'Station inspections' was reasonable.
338. As noted at paragraph 321, the ERA has recalculated DBP's proposed expenditure for 'Station inspections' using the ERA's draft decision forecast inflation and labour cost escalation values that reduce DBP's proposed expenditure for 'Station inspections' to \$4.05 million.
339. Based on the information provided, the ERA is satisfied that the proposed expenditure of \$4.05 million on 'Station inspections' is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

Asset management

340. DBP proposed to spend \$2.86 million on 'Asset management' in the AA5 period. This is an increase of \$0.17 million on its AA4 period expenditure of \$2.69 million.
341. DBP noted that effective management of asset risks, including identification of risks and evaluation of the adequacy of controls was a principle of its Asset Management System Framework.
342. DBP's business case for this program outlined its approach for identifying, prioritising and responding to changing asset requirements and functionality based on real-time feedback from field crews.
343. The business case focused on two key streams of work being:
- Engineering and operational projects subsequent costs
 - Management of change projects.
344. DBP's business case noted that the 'Asset management' program provided for the works that could not be adequately forecast on an individual basis, but that DBP knew were likely to occur.
345. The ERA has reviewed DBP's proposed AA5 expenditure for 'Asset management' and notes that DBP has proposed an increase of \$0.17 million between access arrangement periods, which equates to an increase of 6.3 per cent.
346. In its business case, DBP stated that the increases were due to:

The expansion programs which drive increases as additional assets that have been added to the gas transmission system that need to be managed and maintained; and

As work volumes increase and improvement initiatives are assessed and implemented, MoC¹⁰⁰ expenditure has been increasing.

347. EMCa noted that this was an ongoing program and, according to DBP, this level of expenditure was likely to continue across future access arrangements.
348. While DBP's business case for this program provided information on the activities that DBP undertook, EMCa considered that 'Asset management' was effectively a business-as-usual activity and, while the increase that DBP proposed was relatively small, EMCa considered that DBP had not justified the need for the proposed increase. EMCa noted that the "additional assets" that DBP refers to were essentially uncovered assets.
349. EMCa considered that DBP's allowance for 'Asset management' had not been adequately justified and should be adjusted to its AA4 level.
350. The ERA notes that DBP considered three options for this expenditure category. However, the business case includes evaluation in detail of only two of those options:
- Option 1 – Remove provision for engineering and operational projects and management of change projects.
 - Option 2 – Provision for engineering and operational projects and management of change projects based on the average incurred in AA4.
351. DBP noted that Option 3 (to move to a proactive approach of repairing and replacing all identified defects) would result in no discernible risk improvement but would impose higher costs on customers. This was the extent of the evaluation of Option 3 in the submission.
352. DBP's access arrangement proposal is based on Option 2.
353. The ERA has reviewed DBP's options and notes that DBP considered that only Option 2 appropriately addressed risks and reduced the inherent risk of these assets to the 'As Low As Reasonably Practicable' level.
354. DBP's business case for Option 2 assumed that the same level of activity was required in AA5 as in AA4 and that the AA5 forecast expenditure was consistent with historical actual average operating expenditure.
355. The ERA can see no explanation as to why the cost is proposed to increase between access arrangement periods when, as stated by DBP, the same level of activity is required and the expenditure is based on the historical actual average.
356. The ERA considers that the inclusion of a provision for EOP and MoC projects based on an average of expenditure incurred in AA4 would be incurred by a prudent service provider.
357. Based on the information provided, the ERA is not satisfied that the proposed expenditure of \$2.86 million on 'Asset management' is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

¹⁰⁰ MoC projects include initiatives addressing defects or unsafe situations. These are typically engineering changes that are minor but can be safety or operation critical.

358. The ERA considers that expenditure consistent with that in AA4, being \$2.69 million, is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

Pipeline and mainline valve inspections

359. DBP proposed to spend \$2.25 million on 'Pipeline and mainline valve inspections' in AA5. These inspections are scheduled in accordance with Australian Standards AS 2885 and AS 3788. There are five core inspection categories:
- in-line inspections of the main line, loop line and laterals (eight-yearly)
 - inspection of piping at above ground and below ground interfaces (five-yearly)
 - piping inspection under insulation and within buried pits (10-yearly)
 - mandatory inspection of pressure vessels (12-yearly)
 - mandatory inspection of pressure relief valves (five-yearly).
360. In AA4, DBP spent \$13 million on these inspections, including \$12.3 million for in-line inspections pigging, which are not required in AA5.
361. For each year in AA5, DBP proposed to inspect the above/below ground interface piping at 33 pipeline and mainline valve sites, six pressure vessels and 19 pressure relief valves. In the first year only of AA5, DBP proposed to inspect the interface piping at 63 locations where it was located within buried pits or under insulation.
362. DBP noted that the 'Pipeline and mainline valve inspection' program was an essential component of its asset management strategies adopted to ensure the integrity of the pipeline was not compromised over time.
363. The ERA has reviewed DBP's proposed expenditure for 'Pipeline and mainline valve inspections' in AA5. The ERA notes that DBP considered three options for the program of works: an inspection cycle consistent with its Asset Management Plan (chosen option); an increase in the frequency of inspections; and no inspections with only reactive action.
364. DBP noted that increasing the frequency of inspections beyond the Australian Standards would cause more disruption to customers and result in an increase in cost for no additional reduction in risk for the program. Also, DBP recognised that a 'reactive action' approach was not consistent with Australian Standards and failed to reduce the risk assessment to an acceptable level.
365. The ERA considers that the option proposed by DBP prudently considers the risk associated with the program of works and the costs, while ensuring that it meets the Australian Standards for its inspections.
366. EMCa considered that the proposed inspections of above/below ground interfaces and of the interfaces of piping within pits and under insulation were prudent, especially in the light of findings about external pipe corrosion following the catastrophic failure on Varanus Island in 2008.
367. EMCa noted that the inspections of pressure vessels and pressure relief valves complied with statutory requirements set out in DBP's Asset Management Plan. Some of the cost differences between AA4 and AA5 were due to improved activity-based cost capture, rather than a difference in activities.

368. EMCa considered that the proposed work plan was reasonable for a period which did not include any in line inspections and that the forecast expenditure in AA5 was reasonable and comparable with the inferred costs for AA4 for this work stream.
369. As noted at paragraph 321, the ERA has recalculated DBP's proposed expenditure for 'Pipeline and mainline inspections' using the ERA's determined forecast inflation and labour cost escalation values for the draft decision which reduces DBP's proposed expenditure for 'Pipeline and mainline inspections' to \$2.23 million.
370. Based on the information provided, the ERA is satisfied that the proposed expenditure of \$2.23 million on 'Pipeline and mainline inspections', is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

Process safety

371. DBP proposed to spend \$0.25 million on 'Process safety' in AA5. In AA4, DBP spent \$0.04 million on 'Process safety'.
372. In its proposal, DBP noted that 'Process safety' was developed across the oil and gas industry due to recent major incidents in Australia and around the world. These incidents drove regulatory changes that require Pipeline Licence holders to develop measurable KPIs to prevent the occurrence of Major Accident Events. As a result, DBP developed a Process Safety Dashboard in consultation with the Department of Mines, Industry Regulation and Safety (DMIRS)
373. DBP noted that this project was a business improvement initiative that commenced in 2017 and required ongoing evolution to maintain its relevance in changing operational and safety environments.
374. DMIRS advised DBP that Process Safety Indicators would be required under state safety regulations. In its business case, DBP provided further justification for the increase in cost between AA4 and AA5:
- AA4 expenditure related to the introduction of a new system.
 - AA5 expenditure related to ongoing evolution, implementation and continuous improvement of the system, as well as ongoing training for staff.
375. The ERA has reviewed DBP's proposal, including the options analysis provided by DBP for its proposed 'Process safety' expenditure in AA5. The ERA notes that 'Process safety' was a new initiative in AA4, with expenditure taking place in 2016 and 2017. However, for a system that DBP has stated for AA5 requires ongoing evolution, implementation and continuous improvement, the ERA notes, there was no expenditure on the system in 2018, 2019 or 2020.
376. The ERA also notes that DBP considered three options: maintain and improve the safety system as per the Safety Case (DBP's proposed option); maintain the safety system without enhancements; or introduce a new safety system.
377. DBP noted that introducing a new system would be the most expensive option as there was no available 'off the shelf' system, and adopting a system that was currently in use by service providers like Chevron or Woodside would require modification and conversion to be effective in DBP's operating environment.

378. DBP also submitted that maintaining its existing system for AA5 without the proposed enhancements would fail to effectively manage the process safety risk.
379. While DBP noted that DMIRS advised it that Process Safety Indicators would be required as part of the revision and modernisation of Safety Regulations in WA, DBP did not provide any information on when these indicators were required and what information would be required above and beyond that provided by the current system.
380. While DBP provided information in its business case on what it included in this category, EMCa considered that the business case essentially described business-as-usual activities for which EMCa could not see a compelling reason for an increase of the magnitude sought. EMCa considered that DBP's expenditure in AA4 was a more accurate reflection of efficient costs for 'Process safety' expenditure.
381. The ERA considers that DBP has failed to describe the activities for the higher expenditure in AA5 for 'process safety'.
382. Based on the information provided, the ERA is not satisfied that the proposed expenditure of \$0.25 million on 'Process safety', is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
383. The ERA considers that expenditure consistent with that in AA4, being \$0.04 million is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

Decommissioning

384. DBP proposed to spend \$0.51 million during AA5 on decommissioning or mothballing non-operational assets and facilities to reduce risk to the environment and public and employee safety. DBP spent \$0.36 million in AA4 undertaking such projects.
385. While decommissioning renders an asset permanently unusable, mothballing ensures there can be a smooth transition into reoperation where the asset is required to deliver services in the future.
386. DBP noted as part of the variation in costs from AA4 to AA5, some assets are deemed a contractual obligation to keep intact, although they have not been in use for many years or the actual facility they serviced no longer exists, enabling them to be mothballed.
387. DBP has identified 6 sites for decommissioning or mothballing during AA5 being:
- HiSmelt Meter Station & Offtake (decommission – onsite)
 - Carnarvon Power Station Lateral (mothball)
 - Westlime Meter Station (decommission – dismantle)
 - Mondarra Meter Station (decommission – onsite)
 - LM500 Water Bath Heaters (5) (decommission – dismantle)
 - Eneabba Meter Station (decommission – onsite).

388. EMCa reviewed DBP's proposal and the information provided. EMCa noted that DBP stated that this level of expenditure forecast for AA5 was not likely to continue and that, at this stage, there were no further assets identified for decommissioning in AA6.
389. The ERA has reviewed DBP's proposal including its options analysis for the decommissioning program. Other than DBP's chosen option of moving to a more proactive plan for decommissioning, DBP proposed two other options, being to not decommission/mothball non-operational assets or continue to take an *ad hoc* approach to decommissioning.
390. Under the *ad hoc* plan no assets would be decommissioned in AA5, resulting in the two other options effectively being the same. DBP noted that for these other options, while normal planned maintenance would be stopped, there would still be some expenditure from unnecessary repairs and maintenance for safety reasons due to the deterioration of the asset over time.
391. Based on the information provided, the ERA is satisfied that the proposed expenditure of \$0.51 million for Decommissioning, is consistent with rule 91(1) of the NGR and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

System Use Gas

392. In its initial proposal, DBP forecast System Use Gas (SUG) expenditure in AA5 of \$106.47 million. DBP noted that this was a significant reduction compared to the SUG costs incurred in AA4 and that the reduction was mainly driven by lower gas prices than when DBP last tendered for SUG requirements in 2014.
393. DBP noted that its SUG costs were a function of forecast quantity and forecast price. DBP stated that the forecast quantity of SUG was driven by expected gas quality, the quantity required as compressor fuel to transport forecast throughput and the quantity required for all other operational activities, including GEA's and heaters, and vented during normal operation and maintenance activities.
394. DBP adopted the same quantity calculation that was approved in AA4.
395. DBP stated that the forecast price for SUG was based on the weighted average price it would achieve across its SUG supply contracts secured in the market, and that this was consistent with the ERA's approach in AA4 to adopt the weighted average price of DBP's two SUG contracts.
396. On 28 May 2020, DBP provided revised SUG expenditure values for the AA5 period. This was due to a decline in throughput as a result of renegotiation of forecast demand with several major customers.
397. DBP's revised proposal for SUG in AA5 was \$92.34 million.

System use gas – Quantity

398. As noted, DBP provided revised SUG values to the ERA on 28 May 2020, which the ERA reviewed. DBP has used the same quantity calculation method that the ERA approved to calculate the AA4 required SUG quantity.
399. In its initial proposal, DBP forecast a daily average SUG requirement of [REDACTED] TJ/day for AA5. In DBP's revised modelling after contract renegotiations with several major

customers reduced the forecast throughput for AA5, DBP's forecast daily average SUG requirement dropped to [REDACTED] TJ/day for AA5.

400. As set out in paragraphs 176 to 202, the ERA requires that the forecast of demand be amended to equal constant contracted capacity and throughput from the forecast levels in 2020 for full haul reference services.
401. Using DBP's SUG quantity calculation method with the draft decision throughput values calculates a daily average SUG requirement of [REDACTED] TJ/day for AA5.
402. The ERA has reviewed DBP's proposal for the quantity of SUG required in AA5. Based on the information provided and the ERA's determined throughput, the ERA considers that the SUG quantity requirements of an average of [REDACTED] TJ/day for AA5 is reasonable.

System use gas – Price

403. As previously noted at paragraph 395, DBP stated that the forecast price for SUG was based on the weighted average price that it would achieve across its SUG supply contracts secured in the market and that this was consistent with the ERA's approach in AA4 to adopt the weighted average price of DBP's two SUG contracts.
404. To review DBP's SUG price assumptions, the ERA sought additional information from DBP.
405. DBP noted that it required a firm supply to meet its commitments to provide pipeline services and therefore required a contract that incorporated obligations on the supplier to make certain quantities of firm gas available each day.
406. As was the case in AA4, DBP has two SUG contracts in place for AA5 with [REDACTED]. These existing contracts were amended in 2019, modifying price, volumes and the term – extending the relevant supply period to the end of 2025.
407. For the AA5 period, DBP had a minimum daily expenditure to the value of [REDACTED] up to a maximum of [REDACTED] for the [REDACTED]. While the [REDACTED] had no minimum daily expenditure, it did have a maximum of [REDACTED] which was also the amount that DBP was required to request daily, although [REDACTED] was not obligated to supply.
408. DBP's tariff model determined the weighted average price of SUG, taking into account the daily nomination it was required to make with [REDACTED]. DBP then assumed a daily supply of [REDACTED], which covered its minimum [REDACTED] contract obligation. The cost of sourcing SUG from each supplier was then determined by multiplying the applicable contract price by the supply from [REDACTED].
409. The weighted average price was then determined by totalling the cost of supply for both [REDACTED] and dividing this by the total supply of [REDACTED]. The average price was calculated for each year with the total supply of [REDACTED] remaining constant and the price from each supplier increasing as per the contract with DBP.
410. The ERA notes that DBP currently sources its SUG from [REDACTED]. [REDACTED] supplies its own portion of SUG based on its share of throughput.

411. The ERA notes that for AA5, DBP's average daily SUG requirement is [REDACTED] of which [REDACTED] is forecast to provide [REDACTED], leaving [REDACTED] to be supplied from a combination of [REDACTED].
412. In response to an information request from the ERA, DBP stated:
- We note that the forecast SUG (volume and cost) for AA5 reflects only that SUG required for the provision of reference services. DBP has a greater requirement for SUG across the entirety of its business and therefore our contracts with [REDACTED] reflect our total SUG requirement.
413. In AA4, the ERA determined the weighted average price of SUG by first using DBP's total daily requirement and removing the amount of SUG supplied [REDACTED]. After removing the [REDACTED] supply, the remaining amount of SUG required was then assumed to be sourced from the lowest cost supplier based on supply availability up to the maximum daily quantity as set out in the contract. If this did not supply all the required SUG for the day, the remainder was supplied from the remaining contract.
414. The ERA determined that this SUG supply mix would result in the lowest average cost which would then be applied to the total daily requirement giving a weighted average price for SUG.
415. The ERA considers that this calculation should again be the method used to determine the weighted average price of SUG for AA5.
416. In DBP's tariff model for the AA5 period DBP has determined its weighted average price with [REDACTED] supplying [REDACTED] each day for the AA5 period, implying there would be no days in which [REDACTED] did not provide the full [REDACTED] nominated by DBP.
417. The ERA has modelled the supply of SUG on the same basis as DBP with [REDACTED] supplying a full [REDACTED] a day when it is the lowest cost supplier.
418. The ERA has determined that for the first 3 years of AA5, DBP would source a full [REDACTED] as the contract price is lower than that of [REDACTED]. The remaining requirement of gas would then be sourced from [REDACTED].
419. For the last 2 years of AA5, [REDACTED] has a lower contract price than [REDACTED], as a result the ERA has determined that DBP would source a full [REDACTED] from [REDACTED] under its contract with the remaining requirement of gas sourced from NewGen.
420. Based on this supply mix of SUG, the weighted average price of SUG in AA5 is \$[REDACTED]/GJ resulting in a total SUG expenditure for the AA5 period of \$122.07 million.

Draft decision conclusion

421. Following the reasoning and conclusions outlined in paragraphs 206 to 420, the ERA considers that DBP's forecast operating expenditure for AA5 which satisfies rules 74 and 91 of the NGR is \$456.44 million.
422. Table 23 sets out the ERA's draft decision operating expenditure forecast for AA5.

Table 23: ERA determined AA5 operating expenditure (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	Total AA5
Base year operating expenditure	60.48	60.48	60.48	60.48	60.48	302.38
<i>Add: bottom up forecasts</i>						
System use gas	23.71	24.15	24.60	24.83	24.77	122.07
GEA/turbine overhauls	7.66	6.52	6.53	3.71	1.77	26.20
Capital expenditure to operating expenditure	2.22	1.83	2.05	2.09	1.80	9.98
Equals: Baseline forecast operating expenditure	94.06	92.99	93.66	91.10	88.81	460.62
<i>Add: Real labour cost escalation</i>						
Labour Cost	0.19	0.28	0.37	0.47	0.56	1.86
Equals: Baseline forecast operating expenditure including labour cost escalation	94.25	93.26	94.03	91.57	89.37	462.48
<i>Minus: Productivity growth factor</i>						
Productivity factor	(0.61)	(0.91)	(1.21)	(1.51)	(1.81)	(6.04)
Equals: Total operating expenditure	93.64	92.36	92.82	90.06	87.56	456.44

Source: ERA, DBP AA5 Operating Expenditure Model – Draft Decision, August 2020

Required Amendment 9

DBP must amend forecast operating expenditure for AA5 to \$456.44 million (real as at 31 December 2019). The yearly values for each year of the access arrangement period are set out in Table 23 of this draft decision.

Opening capital base

423. Rule 77(2) of the NGR establishes the approach for determining the opening capital base for an access arrangement period that follows immediately on the conclusion of a preceding access arrangement period.

77 Opening capital base

...

- (2) If an access arrangement period follows immediately on the conclusion of a preceding access arrangement period, the opening capital base for the later access arrangement period is to be:
- (a) the opening capital base as at the commencement of the earlier access arrangement period adjusted for any difference between estimated and actual capital expenditure included in that opening capital base. This adjustment must also remove any benefit or

penalty associated with any difference between the estimated and actual capital expenditure

plus:

(b) conforming capital expenditure made, or to be made, during the earlier access arrangement period;

plus:

(c) any amounts to be added to the capital base under rule 82, 84 or 86;

plus:

(c1) in relation to any existing extension specified in the extension and expansion requirements in accordance with rule 104(2), the following value:

(i) the cost of construction of the extension;

plus:

(ii) capital expenditure on the extension since construction of the extension;

less:

(iii) depreciation of the extension since the date the extension was commissioned; and

(iv) the value of pipeline assets constituting the extension disposed of since commissioning of the extension;

less:

(d) depreciation over the earlier access arrangement period (to be calculated in accordance with any relevant provisions of the access arrangement governing the calculation of depreciation for the purpose of establishing the opening capital base); and

(e) redundant assets identified during the course of the earlier access arrangement period; and

(f) the value of pipeline assets disposed of during the earlier access arrangement period.

424. Rule 79 of the NGR sets out the new capital expenditure criteria:

79 New capital expenditure criteria

(1) Conforming capital expenditure is capital expenditure that conforms with the following criteria:

(a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services; and

(b) the capital expenditure must be justifiable on a ground stated in subrule (2); and

(c) the capital expenditure must be for expenditure that is properly allocated in accordance with the requirements of subrule (6).

(2) Capital expenditure is justifiable if:

(a) the overall economic value of the expenditure is positive; or

(b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or

- (c) the capital expenditure is necessary:
 - (i) to maintain and improve the safety of services; or
 - (ii) to maintain the integrity of services; or
 - (iii) to comply with a regulatory obligation or requirement; or
 - (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
 - (d) the capital expenditure is an aggregate amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to in paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).
- (3) In deciding whether the overall economic value of capital expenditure is positive, consideration is to be given only to economic value directly accruing to the service provider, gas producers, users and end users.
- (4) In determining the present value of expected incremental revenue:
- (a) a tariff will be assumed for incremental services based on (or extrapolated from) prevailing reference tariffs or an estimate of the reference tariffs that would have been set for comparable services if those services had been reference services; and
 - (b) incremental revenue will be taken to be the gross revenue to be derived from the incremental services less incremental operating expenditure for the incremental services; and
 - (c) a discount rate is to be used equal to the rate of return implicit in the reference tariff.
- (5) If capital expenditure made during an access arrangement period conforms, in part, with the criteria laid down in this rule, the capital expenditure is, to that extent, to be regarded as conforming capital expenditure.
- (6) Conforming capital expenditure that is included in an access arrangement revision proposal must be for expenditure that is allocated between:
- (a) reference services;
 - (b) other services provided by means of the covered pipeline; and
 - (c) other services provided by means of uncovered parts (if any) of the pipeline,
- in accordance with rule 93.
425. Rule 93(2) of the NGR sets out the method for allocating costs between reference and other services:

93 Allocation of total revenue and costs

...

- (2) Costs are to be allocated between reference and other services as follows:
- (a) costs directly attributable to reference services are to be allocated to those services; and
 - (b) costs directly attributable to pipeline services that are not reference services are to be allocated to those services; and
 - (c) other costs are to be allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].

426. All dollar amounts in this section are expressed in real dollars as at 31 December 2019 unless otherwise stated. The ERA has converted amounts supplied by DBP in real dollars as at 31 December 2020 using the inflation figures supplied by DBP. Where DBP has provided amounts in real dollars as at 30 June 2019, the ERA has used the eight capital city weighted average Consumer Price Index published by the Australian Bureau of Statistics to convert to real dollars as at 31 December 2019.

DBP's proposal

427. DBP's proposed opening capital base for AA5 is \$3,329.03 million, derived as shown in Table 24.

Table 24: DBP proposed AA5 opening capital base (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020
Opening capital base	3,724.25	3,637.05	3,553.51	3,467.05	3,391.99
Proposed conforming capital expenditure	18.10	24.41	22.24	27.30	29.57
Redundant and disposed assets	-	-	-	-	-
Depreciation	(105.29)	(107.95)	(108.69)	(102.36)	(92.52)
Closing capital base	3,637.05	3,553.51	3,467.05	3,391.99	3,329.03

Source: DBP, AA5 tariff model Final Plan with Demand updated 28 May 2020, 28 May 2020.

428. DBP's proposed AA4 conforming capital expenditure comprises its actual capital expenditure for 2016 to 2018 and its forecast capital expenditure for 2019 and 2020.
429. As shown in Table 24, DBP's estimated capital expenditure is higher towards the end of AA4 than the beginning. This increase is attributable to the capital expenditure for the 'Meter stations' business case, which was higher than expected due to three unforeseen events which required additional expenditure on meter stations assets. The 'Meter stations' capital expenditure is outlined at paragraphs 507 to 509.
430. DBP proposed \$122.27 million of conforming capital expenditure for AA4, which was \$8.90 million (7.85 per cent) higher than the capital expenditure included in the AA4 final decision forecast. The proposed capital expenditure is distributed between seven depreciable asset classes as shown in Table 25.

Table 25: Proposed conforming capital expenditure for AA4 by asset class (\$ million real as at 31 December 2019)

Proposed AA4 capital expenditure	
Pipeline	0.33
Compression	14.67
Metering	26.98
Computers and motor vehicles	17.56
Cathodic/corrosion protection	19.16
SCADA, electrical, control & instrumentation and communications	26.81
Other	16.76
Total	122.27

* SCADA is supervisory control and data acquisition.

Source: DBP worksheet EMCa25_AA4 Capex_Confidential_Updated model for Asset Class, 13 March 2020, converted into dollars as at 31 December 2019 shown using the method outlined at paragraph 425. There is a small difference between the amounts shown in Table 25 and the capital expenditure included in the tariff model (Table 24) due to differences in the inflation assumptions applied to inflate nominal values to real values. This difference was advised by DBP in its response to information request ERA 18, 29 May 2020.

431. The seven depreciable asset classes shown in Table 25 comprise the four asset classes included in DBP's current access arrangement and three new asset classes proposed by DBP for AA5.
432. The four asset classes included in DBP's current access arrangement are:
- Pipelines
 - Compression
 - Metering
 - Other.
433. The three new asset classes proposed by DBP for AA5 are:
- Computers and motor vehicles
 - Cathodic/corrosion protection
 - SCADA, electrical, control & instrumentation and communications.
434. DBP provided an example of the types of assets and scope of the categories, which is shown in Table 26.

Table 26: DBP proposed AA5 asset categories

Asset category	Scope of category	Examples of assets
Pipelines	Pipeline system except for those assets included within any of the other categories.	Pipelines Mainline valves
Compression	Assets at a compressor site associated with the compression of natural gas, except for assets in the 'Computers and motor vehicles', 'Cathodic/corrosion protection', 'SCADA, electrical, control & instrumentation and communications' or 'Other' categories.	Compressors and associated rotating equipment Gas cooling equipment Inlet scrubbers Gas / diesel engine alternators Housing / other facilities associated with compressor site (excluding communications / electrical)
Metering	Assets at a metering site associated with the receipt, delivery, measurement and/or odourisation of natural gas, except for assets in the 'Computers and motor vehicles', 'Cathodic/corrosion protection', 'SCADA, electrical, control & instrumentation and communications' or 'Other' categories.	Meters Pressure reduction equipment, including gas heaters Odorant injection facilities
Computers and motor vehicles	Personal computers and personal electrical devices, software development and implementation and motor vehicles and like equipment.	Personal computers and other portable electronic devices Telephones Software development / implementation Vehicles and lifting equipment for maintenance and administration (including fit-out)
Cathodic/corrosion protection	Assets and activities for the prevention and/or control of corrosion to pipeline assets.	Intelligent pigging*Dig-ups / inspections Earthing Transformer rectifier units Sacrificial anodes Insulation joints / insulating gaskets Painting
SCADA, electrical, control & instrumentation and communications	Assets associated with the supervision, monitoring and control of equipment and associated hazard detection systems. Communications networks. Electrical systems, except for compressor-site generators.	SCADA system Control systems, including instrumentation, programmable logic controllers and human machine interfaces Communications infrastructure, including microwave network, fibre Electrical infrastructure, including switching, transformers, load banks and batteries and chargers (excluding compressor-site generators) Fire and gas detection equipment

Asset category	Scope of category	Examples of assets
Other	Assets that do not fit into the other categories	Office fit-outs and office equipment Staff amenities Tools Capitalised management activities / initiatives Equipment storage

Source: Incenta Economic Consulting, 2021-25 Final Plan, Attachment 9.4 Review of Asset Recategorisation (public), January 2020, Appendix A, pp. 16-17.

*DBP proposed that intelligent pigging will be treated as operating expenditure during AA5. If this proposal is accepted these activities would no longer be considered to create assets which would be included within the scope of the 'Cathodic/corrosion protection' asset class.

435. DBP proposed to reclassify some of its capital expenditure incurred during and since 2005 into the three new asset classes from the commencement of AA5. DBP proposed that the historical depreciation of the regulatory asset base up to the start of AA5, and the total size of the regulatory asset base at the beginning of AA5, would be unchanged by its proposed reclassification of assets. The proposed reclassification of DBP's regulatory assets into new asset classes is discussed at paragraphs 930 to 947.
436. DBP's proposed capital expenditure is comprised of expenditure for 104 projects. DBP submitted that the work carried out under these projects was driven by stay-in-business requirements which focussed on maintaining or improving DBP's ability to deliver current reference services through the DBNGP.¹⁰¹ These projects are allocated into business cases according to the asset to which the project-level expenditure relates. DBP's proposed capital expenditure for AA4 is distributed across 27 business cases.
437. Table 27 shows the variance between DBP's proposed AA4 capital expenditure and the AA4 final decision forecast at a business case level.

Table 27: Variance between AA4 final decision forecast capital expenditure and DBP proposed capital expenditure by business case (\$ million real as at 31 December 2019)

Business case	AA4 final decision forecast (A)	Proposed capital expenditure (B)	Variance (B minus A)
Compressor stations	43.46	25.81	(17.65)
Pipeline and mainline valves	7.30	6.22	(1.09)
SCADA	0.04	1.85	1.81
Health, safety and environment	0.61	0.18	(0.44)
Gas engine alternator control system replacement	5.85	0.47	(5.38)
Compressor station accommodation	9.57	2.47	(7.09)

¹⁰¹ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, January 2020, p. 73.

Business case	AA4 final decision forecast (A)	Proposed capital expenditure (B)	Variance (B minus A)
Compressor package control system replacement	3.11	6.47	3.35
Jandakot site redevelopment	0.02	0.52	0.51
Maximo and DMZ	0.00	1.37	1.37
Safety case revisions	0.00	0.45	0.45
Compressor station inspection	0.02	2.59	2.57
Asset management	2.90	2.69	(0.21)
Meter stations	8.00	26.23	18.23
Tools	1.14	1.23	0.09
Fleet and civil equipment replacement	3.84	5.23	1.39
Turbine exhaust replacement*	1.78	0.00	(1.78)
Pipeline mainline valve inspection	11.84	12.96	1.12
Customer reporting system	0.76	0.84	0.08
IT sustaining applications	2.89	6.58	3.68
IT security	0.00	1.41	1.41
Process safety	0.00	0.04	0.04
Decommissioning	0.12	0.15	0.03
Communications	0.79	2.34	1.55
Office relocation	0.00	4.19	4.19
Southern communications upgrade	2.04	6.91	4.86
CS1 compressor re-wheeling	6.21	1.26	(4.95)
IT sustaining infrastructure	1.07	1.81	0.74
Total	113.37	122.27	8.90

*DBP advised that the capital expenditure incurred for the 'Turbine exhaust replacement' business case during AA4 was captured under the reported expenditure for the 'Compressor stations' business case according to the source used to derive Table 27. The zero expenditure reported in Table 27 for the 'Turbine exhaust replacement' business case is therefore the result of a change in reporting structure rather than being an accurate expenditure amount. The expenditure on the 'Turbine exhaust replacement' business case is nonetheless discussed at paragraphs 517 and 517.

Source: Based on DBP worksheet EMCa25_AA4 Capex_Confidential_Updated model for Asset Class, 13 March 2020, converted into dollars as at 31 December 2019 shown using the method outlined at paragraph 425.

438. DBP attributed most of the variance between its estimated actual capital expenditure for AA4 and the AA4 final decision forecast to unforeseen incidents which required it to reprioritise its capital expenditure to metering assets (captured in the 'Meter stations' business case) from other assets, most significantly the 'Compressor

stations' business case. These incidents are outlined at paragraph 508 and include an overpressure incident at a power station receiving gas from the DBNGP, identification of significant corrosion at a meter station facility and identification of unacceptable risks in the DBNGP odorant system following odorant spill events. DBP did not expect that the additional work undertaken due to these incidents would be required during AA5.¹⁰²

439. Other significant sources of the variance between the AA4 proposed capital expenditure and the AA4 final decision forecast were the following business cases:
- 'Southern communications upgrade' (\$4.86 million overspend) – Discussed at paragraphs 562 to 570. DBP attributed the overspend to a change in commercial circumstances during AA4 which resulted in DBP deciding it would be more cost-effective to construct its own towers and infrastructure to host communications equipment on the southern part of the DBNGP. This is an expansion to the original scope of the business case, which assumed that the equipment would continue to be hosted on third-party-owned infrastructure.
 - 'Office relocation' – Discussed at paragraphs 553 to 561. The work covered by this business case was not included in the AA4 final decision capital expenditure forecast. DBP decided to pursue this work during AA4 as its cost analyses showed that relocating to new premises would be more cost-effective than remaining at its existing premises.
 - 'IT sustaining applications' (\$3.68 million overspend) – Discussed at paragraphs 528 to 535. DBP submitted that the overspend on this business case, and the increase in its IT expenditure generally during AA4 and its planned increased IT expenditure during AA5, was driven by a heightened IT threat environment, including increased cyber threats.
440. The overspend on some business cases was offset by underspend on other business cases where DBP was either able to prudently defer work or undertake work at a lower cost than forecast. Significantly, DBP pursued an alternative option to the work originally planned for the 'Compressor station accommodation' business case, resulting in the capital expenditure for this business case being \$7.09 million less than the forecast amount. Other business cases where DBP was able to identify work that could be prudently deferred until a later access arrangement period include 'Compressor stations', 'Pipeline and mainline valves', 'Gas engine alternator control system replacement', 'Turbine exhaust replacement' and 'CS1 compressor re-wheeling'.
441. DBP advised that costs are allocated between the regulated (that is, DBP) and non-regulated business entities of Australian Gas Infrastructure Group (AGIG) through operational accounting procedures and few capital costs are incurred which are shared between AGIG's regulated and non-regulated business entities. Of its AA4 capital expenditure, DBP identified two project costs which were 'shared costs' allocable to both DBP and non-regulated AGIG business entities. DBP excluded the shared costs allocable to non-regulated AGIG business entities from its proposed AA4 capital expenditure.¹⁰³
442. DBP further advised that of its capital expenditure for pipeline services, where it is possible for capital expenditure for non-reference services to be directly attributed to

¹⁰² DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 229.

¹⁰³ DBP, *Response to information request ERA 27 (part 1), attachment ERA27.3 v2*, 15 July 2020. The combined value of the shared capital expenditure costs allocated to non-reference services was \$180,577 (real dollars as at 30 June 2019).

an individual shipper, those costs are allocated directly to that shipper.¹⁰⁴ Otherwise, DBP did not supply information which showed that it had made any allocation of shared capital expenditure for pipeline services between reference and non-reference services.¹⁰⁵

Submissions

443. CITIC Pacific Mining Management Pty Ltd (CPM) submitted that the ERA should evaluate DBP's capital expenditure for both AA4 and AA5 to ensure that it was spent "wisely, efficiently and delivers soundly evaluated economic benefits" for both the Australian Gas Infrastructure Group (AGIG) and the shippers which use the DBNGP.¹⁰⁶

Draft decision

444. The ERA has assessed DBP's proposed opening capital base for AA5 according to rules 77 and 79 of the NGR. Determining DBP's opening capital base for AA5 included an assessment of:
- DBP's conforming capital expenditure in AA4, including the allocation of capital expenditure between reference and non-reference services.
 - The depreciation of DBP's regulatory asset base.
 - Assessing DBP's general method of calculating the capital base.
445. The opening capital base at the commencement of AA4 included only actual capital expenditure incurred for the regulated assets on the DBNGP up to the commencement of AA4, and did not include any estimated capital expenditure. The calculation of the opening capital base for AA5 in this draft decision therefore does not include an adjustment for any benefit or penalty associated with any difference between the estimated and actual capital expenditure for AA3, as would be required by rule 77(2)(a) of the NGR if such a benefit or penalty existed.
446. Rule 79(6) of the NGR provides for capital expenditure to be allocated between reference services, other covered pipeline services and other uncovered pipeline services (if any). In each case, the allocation must be made in accordance with rule 93.
447. As indicated at paragraphs 441 and 442, DBP confirmed that it allocates expenditure between the regulated and non-regulated business entities of AGIG in accordance with its operational accounting procedures. Where capital expenditure for non-reference services can be directly attributable to an individual shipper, those costs are allocated directly to that shipper.
448. DBP's proposal did not indicate any further allocation of capital expenditure between reference and non-reference services. Rather, DBP submitted that the allocation of all capital expenditure to reference services, other than costs directly attributable to

¹⁰⁴ DBP, *Response to information request ERA 29*, 21 July 2020. The combined value of the shared capital expenditure costs allocated to non-reference services was \$180,577 (real dollars as at 30 June 2019).

¹⁰⁵ Details of DBP's allocations of costs between regulated and unregulated assets were requested in information requests EMCa 47 (1 April 2020), ERA 27 (9 July 2020) and ERA 29 (17 July 2020).

¹⁰⁶ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, pp. 2-3.

non-reference services, was consistent with rule 94(3) of the NGR.¹⁰⁷ Rule 94(3) reads as follows:

94 Tariffs – distribution pipeline

...

- (3) For each tariff class, the revenue expected to be recovered should lie on or between:
- (a) an upper bound representing the stand alone cost of providing the reference service to customers who belong to that class; and
 - (b) a lower bound representing the avoidable cost of not providing the reference service to those customers.

449. The ERA considers that rule 94(3) of the NGR, which sets out the principles for determining tariff classes and tariff charges for *distribution pipelines*, is not relevant for determining the allocation of operating expenditure between reference services and other (non-reference) services. Rather, rules 79(6) and 93(2) of the NGR set out the relevant provisions, which require capital expenditure that is directly attributable to reference services or non-reference services to be allocated to those services. For other capital expenditure that cannot be directly attributed (that is, shared expenditure for the provision of both reference and non-reference services), this expenditure must be allocated on a basis determined or approved by the ERA.
450. The ERA considers that, apart from the capital expenditure identified and directly allocated by DBP (see paragraph 441), all other capital expenditure was shared expenditure between reference and non-reference services and that the apportionment of this expenditure should be made under rule 93 on a basis that is consistent with its allocation of total revenue. The ERA is satisfied that this approach is consistent with the Revenue Pricing Principles and the National Gas Objective and is the best basis for allocation in all the circumstances. The ERA has considered the allocation of total revenue at paragraph 1176 of this decision.
451. The ERA's assessment of DBP's proposed AA4 capital expenditure is detailed below for each business case.

Assessment of capital expenditure

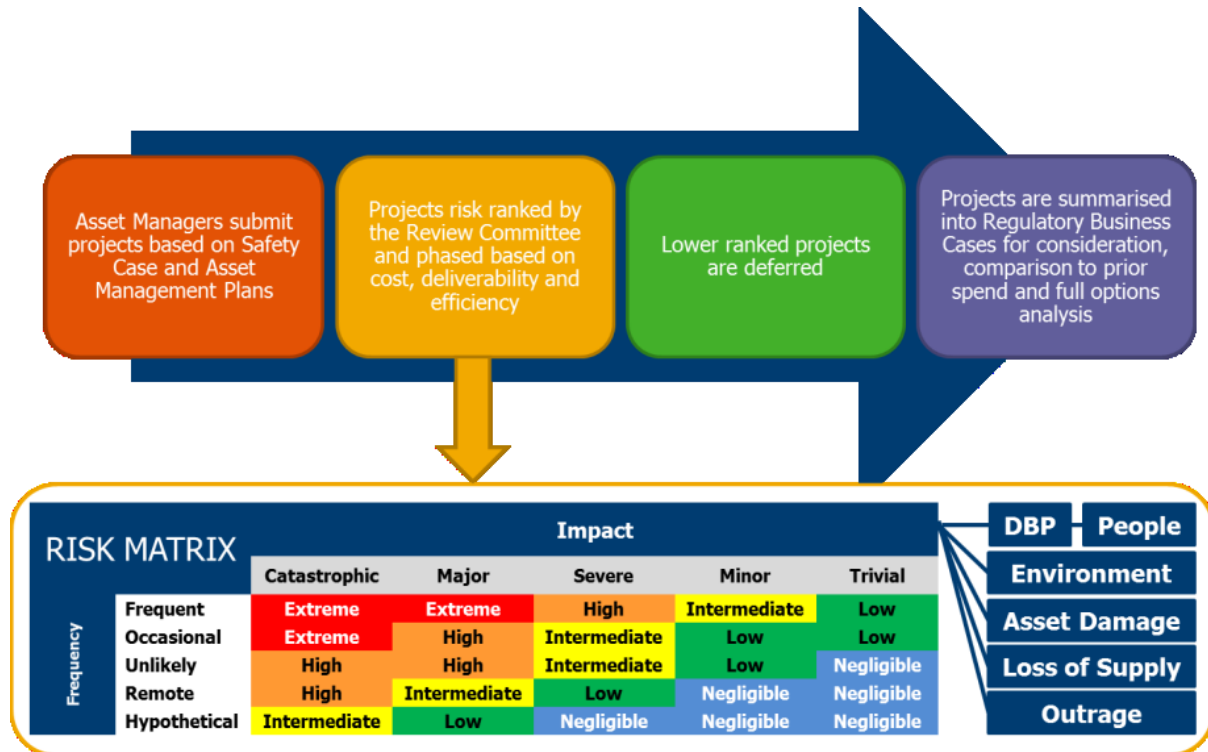
452. The ERA considers that by assessing DBP's proposed capital expenditure for AA4 according to the criteria for conforming capital expenditure in rule 79 of the NGR, it has addressed CPM's submission.¹⁰⁸
453. The ERA's assessment of the opening capital base also considered DBP's governance and investment management framework and assessed how DBP applied that framework to its AA4 capital expenditure. Specifically, the ERA considered the extent to which DBP's application of its governance and investment management framework supported its proposed AA4 capital expenditure as conforming capital expenditure set out in rule 79 of the NGR.
454. DBP advised that its capital expenditure project governance follows the process shown in Figure 4. Proposals for programs and projects to be included in DBP's capital expenditure plans are built up from its 'Safety Case' and 'Asset Management

¹⁰⁷ DBP, *Response to information request ERA 29*, 21 July 2020.

¹⁰⁸ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, pp. 2-3.

Plans'.¹⁰⁹ Proposed projects and programs are evaluated by DBP's 'Project and Procurement Review Committee', which gives consideration to the risk rankings, options analysis and optimal phasing of projects based on risk, cost deliverability and efficiency. Lower ranked projects are deferred while highly ranked projects are summarised into business case categories for consideration and comparison to DBP's prior spend.¹¹⁰

Figure 4: DBP capital expenditure planning process and operational risk matrix



Source: DBP, 2021-2025 Final Plan, January 2020, p. 74, Figure 8.2.

- 455. DBP's 'Project Management Methodology' outlines its approach to delivering projects and sets out the monitoring and control required throughout the project lifecycle. Any changes that occur to projects during project execution are managed through DBP's 'Project Management Methodology' project change request process. This is the process for governance around changes in scope and cost at all stages of the capital expenditure project lifecycle.¹¹¹ All procurement activities for capital expenditure projects are subject to DBP's procurement policy and purchasing procedure which DBP submits ensures that its procurement and purchasing is carried out in an efficient, cost effective, confidential and ethical manner.¹¹²
- 456. Energy Market Consulting associates (EMCa) provided technical advice to assist the ERA in its assessment of whether DBP's actual and proposed capital expenditure during AA4 was conforming capital expenditure that should be rolled into the opening capital base for AA5. EMCa also assisted the ERA to assess DBP's proposed

¹⁰⁹ The DBNGP safety case is the primary document that outlines how the operation of the DBNGP is conducted in compliance with DBP's legislative obligations under the *Petroleum Pipelines Act 1969* and the *Petroleum Pipelines Regulations 2010*. DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business cases (public), January 2020, p. 220.

¹¹⁰ DBP, 2021-2025 Final Plan (public), January 2020, p. 74.

¹¹¹ DBP, 2021-2025 Final Plan (public), January 2020, p. 83.

¹¹² DBP, 2021-2025 Final Plan (public), January 2020, p. 84. DBP's procurement policy and purchasing policy are provided in Attachments 8.9 and 8.10, respectively, to the Final Plan.

forecast capital expenditure for AA5. EMCa reviewed DBP's approach to investment governance and management systems, procedures and practices. EMCa found that while DBP's procurement practices are consistent with good industry practice and that DBP's risk ranking tool is a satisfactory means of prioritising and re-prioritising work, DBP's capital expenditure planning process for AA5 increased its total portfolio of work rather than decreasing it as would ordinarily be expected.¹¹³ This point is discussed in the assessment of DBP's projected capital base at paragraph 607.

457. The ERA considers that, in line with EMCa's technical advice, the following indicate an effective governance process:
- Consistency between forecast and actual expenditure at the portfolio level.
 - Satisfactory explanations of variance between actual and estimated expenditure at the project level.
 - Refinement of planned capital expenditure through a board-level challenge process that results in a smaller portfolio of work and/or expenditure.
 - Evidence that forecasting issues have been identified, forecasting processes have been improved accordingly, and the outcomes of forecasting processes are progressively improving.
 - Expected benefits from actual capital expenditure have been realised.¹¹⁴
458. While DBP's total proposed AA4 capital expenditure is 7.85 per cent higher than the AA4 final decision forecast capital expenditure as shown in Table 27, there is significant variance between DBP's proposed AA4 capital expenditure and the final decision forecast capital expenditure at a business case level for most of the business cases.
459. The ERA considers that the extent of the variance between DBP's estimated actual capital expenditure and forecast expenditure at the business case level raises doubt about the reliability of DBP's capital expenditure forecasts. The ERA has taken into account the variance between DBP's actual capital expenditure and forecasts during AA4 when evaluating the proposed capital expenditure for AA5. Specifically, the variance between actual capital expenditure and forecasts during AA4 has been taken into account in determining the efficient amount of capital expenditure for the 'Compressor stations', 'Pipeline and mainline valve', 'Meter stations' and 'IT sustaining infrastructure' business cases for AA5.
460. Similarly, EMCa stated that the variances between DBP's estimated actual capital expenditure for AA4 and the AA4 final decision forecasts at the business case level undermined EMCa's confidence in DBP's capital expenditure forecasting ability.¹¹⁵ However, EMCa found that, except for the work covered by DBP's capital expenditure for its 'IT sustaining applications' business case, information supplied by DBP was satisfactory to explain and support the reasonableness of the variations at the business case level and that in general most of the variations were due to scope changes.¹¹⁶

¹¹³ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 108.

¹¹⁴ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 67.

¹¹⁵ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraphs 75 to 76.

¹¹⁶ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraphs 77 to 78.

461. The ERA considered the information supplied by DBP to explain the variations between actual expenditure and forecast capital expenditure when evaluating whether the proposed AA4 capital expenditure satisfied the criteria for conforming capital expenditure under rule 79 of the NGR. In general, the information supplied by DBP demonstrated that the proposed AA4 capital expenditure satisfied the conforming capital expenditure criteria. The information relevant to the ERA's evaluations on this point is detailed for each business case below.
462. As stated at paragraph 438, DBP attributed much of the variance between its proposed capital expenditure and the AA4 final decision forecast at an asset class level to incidents which required it to reprioritise its capital expenditure towards metering assets and away from other asset classes. During AA4, DBP's capital expenditure within the 'Metering' asset class included expenditure from two business cases, 'Compressor station inspections' and 'Meter stations'. The ERA's evaluations of the 'Compressor station inspections' business case and the 'Meter stations' business case are detailed at paragraphs 501 to 503 and 507 to 509 respectively. The ERA concludes that the proposed capital expenditure for AA4 for both business cases satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR.
463. The ERA considers that some deviation will occur between the scope of capital expenditure work planned by a service provider and the scope of work undertaken over an access arrangement period. This view is supported by EMCA's technical advice, which was that it was not unusual over a five-year period for projects to be brought forward from future periods, unforeseen work undertaken and projects deferred or cancelled.¹¹⁷ The ERA's assessment of DBP's AA4 capital expenditure takes into account technical advice that DBP's ability to absorb the unforeseen variance to its 'Meter stations' capital expenditure and to introduce other unforeseen capital expenditure projects during AA4 indicates that the extent of risks for some projects were overstated and/or DBP could find cheaper ways of delivering some projects.¹¹⁸
464. DBP's system reliability has averaged close to 100 per cent in the AA4 period, with no curtailments.¹¹⁹ The ERA considers that this indicates that the expected benefits of DBP's AA4 capital expenditure, which was composed of projects directed towards maintaining reliability of the pipeline and delivering the requisite gas quantity, have been realised.

Compressor stations business case

465. DBP proposed \$25.81 million of conforming capital expenditure for the 'Compressor station' business case for AA4. This is \$17.65 million less than the amount included in the AA4 final decision forecast for this business case.
466. The work covered by the business case includes expenditure on 42 projects for preventative work and the replacement and upgrade of equipment at compressor stations on the DBNGP.¹²⁰ Due to a change in reporting structure the proposed

¹¹⁷ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 80.

¹¹⁸ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 82.

¹¹⁹ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 84.

¹²⁰ DBP, worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

capital expenditure also includes expenditure incurred for a single project undertaken for the 'Turbine exhaust replacement' business case.

467. DBP submitted that its actual AA4 capital expenditure for the 'Compressor station' business case was below the AA4 final decision forecast because DBP redirected its resources due to other priorities that emerged. Specifically, this included three incidents relating to 'Metering' assets which occurred during AA4 outlined at paragraph 508. In response to these incidents DBP made significant changes to its overall capital works program, including deferring some projects from the 'Compressor stations' program in order to accommodate the higher spend on metering. One significant project that it deferred was installation of fire suppressant systems at some of its compressor stations.¹²¹ The AA4 final decision capital expenditure forecast included \$2.57 million for this project.
468. EMCa considered that DBP's ability to defer a large portion of the planned 'Compressor stations' business case capital expenditure was indicative of an overstatement of the individual and collective risk of the AA4 'Compressor stations' projects and/or DBP proposed undertaking low risk projects unnecessarily.¹²² The ERA has taken this advice into account when evaluating DBP's proposed capital expenditure for the 'Compressor stations' business case for AA5.
469. The ERA is satisfied that the capital expenditure for the work covered by the 'Compressor stations' business case during AA4 was incurred efficiently and would have been incurred by a prudent service provider acting in accordance with accepted good industry practice and was necessary to maintain and improve the safety of services. DBP's deferral of a large portion of the planned work indicates that it reassessed the need to undertake the work covered by this business case due to competing capital expenditure priorities that emerged during AA4, particularly for assets within the 'Metering' asset class. The ERA considers that this is consistent with the actions of a prudent service provider. The ERA has taken into account EMCa's opinion that DBP's governance process means that this expenditure was likely incurred at reasonable cost and would likely have been undertaken by a prudent operator.¹²³
470. The proposed capital expenditure for the 'Compressor stations' business case is conforming capital expenditure according to rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 1.

Table 28: AA4 conforming capital expenditure – Compressor stations business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	5.53	7.32	3.92	4.60	4.44	25.81

Note: The conforming capital expenditure shown also includes the AA4 conforming capital expenditure for the 'Turbine exhaust' business case, as detailed at paragraphs 466 and 517 to 510.

¹²¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 12-13.

¹²² Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 108.

¹²³ EMCa bases this recommendation on its views that DBP's procurement practices are commensurate with good industry practice and that DBP's risk ranking tool is a satisfactory means of prioritising and re-prioritising work. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 108.

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Pipeline and mainline valves

471. DBP proposed \$6.22 million of conforming capital expenditure for the ‘Pipeline and mainline valves’ business case for AA4. This was \$1.09 million less than the amount included in the AA4 final decision forecast for this business case.
472. DBP incurred capital expenditure on 19 projects under the ‘Pipeline and mainline valves’ business case during AA4, while only nine projects were included in the AA4 final decision forecast. Projects accounting for a large portion of the proposed capital expenditure for this business case included:
- An extensive rectification program to manage pipeline interface corrosion identified during additional inspections.
 - The installation of fixed platforms at sites to comply with legislation.¹²⁴
473. DBP attributed the lower than forecast spend at the business case level to several efficiencies and prudent deferrals it identified during AA4, submitting that these efficiencies and deferrals enabled it to redeploy resources to undertake projects not included in the AA4 final decision forecast, for example:
- A project to address the poor performance of batteries was completed more efficiently than forecast by applying a technical solution not originally thought possible.
 - The replacement of solar panels due for replacement during AA4 was deferred because the performance of the existing solar panels continued to satisfy performance criteria.¹²⁵
474. The ERA considers that the work undertaken as part of the ‘Pipeline and mainline valves’ business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain the safety and integrity of services on the DBNGP and to comply with DBP’s regulatory obligations. The ERA’s conclusion is based on technical advice that the projects undertaken during AA4 were commensurate with good industry practice and DBP’s regulatory obligations and the costs incurred for the work were reasonable.¹²⁶ The proposed capital expenditure for the ‘Pipeline and mainline valves’ business case is considered conforming capital expenditure according to rule 79 of the NGR and has been included in DBP’s opening capital base for AA5 as shown in Table 29.

Table 29: AA4 conforming capital expenditure – Pipeline and mainline valves business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.62	1.74	1.36	1.15	1.35	6.22

Source: ERA draft decision AA4 capital expenditure model, August 2020

¹²⁴ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases, January 2020, p. 59. DBP, worksheet EMCa25_AA4 Capex_Confidential_Updated model for Asset Class, 13 March 2020.

¹²⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 12-13.

¹²⁶ Energy Market Consulting Associates, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, paragraphs 251, 261 and 268.

SCADA business case

475. DBP proposed \$1.85 million of conforming capital expenditure for its 'SCADA' business case for AA4. This is \$1.81 million above the amount included in the AA4 final decision forecast for this business case. The AA4 final decision capital expenditure forecast included only \$0.04 million for one project, 'Alarm management for compressor stations'.
476. The proposed capital expenditure for the 'SCADA' business case included expenditure for:
- Hardware replacement, including replacement of servers, firewall and switches. DBP submitted that this expenditure was driven by the vendor for this hardware upgrading their operating systems from 32-bit to 64-bit systems which consequently required all DBNGP servers to be replaced with 64-bit equivalents.
 - Master station security and resilience to protect the DBNGP from external disturbances. DBP submitted that it incurred this expenditure in response to audit findings on the resilience of its operational technology system.
 - Simulation hardware, which DBP submitted enabled the operation of compressors to be simulated and changes to be made without compromising the integrity of the DBNGP's operating systems. DBP stated that it adopted these simulation exercises as part of a process safety initiative.¹²⁷
477. The ERA considers that the work undertaken as part of the 'SCADA' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services, as well as maintain the integrity of services on the DBNGP. This view is based on technical advice that:
- DBP's upgrade of its existing servers to 64-bit servers was reasonable to undertake for the operational integrity of the SCADA system on the DBNGP given the untreated risk ranking of this work.
 - The AA4 expenditure on master station security and resilience was reasonable to undertake given the untreated risk ranking of this work. The audit findings which DBP cited as driving this expenditure indicated DBP has significant gaps when assessed against the Australian Energy Sector Cyber Security Framework, a globally-adopted industry standard which is an appropriate reference for DBP to evaluate its master station security.
 - The simulation hardware purchases were reasonable to undertake.¹²⁸
478. The ERA concludes that the proposed capital expenditure for the 'SCADA' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in DBP's opening capital base for AA5 as shown in Table 30.

¹²⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 88.

¹²⁸ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 108-109.

Table 30: AA4 conforming capital expenditure – SCADA business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2018	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.16	0.56	0.57	0.46	0.10	1.85

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Health, safety and environment business case

479. DBP proposed \$0.18 million of conforming capital expenditure for its 'Health, safety and environment' business case for AA4. This is \$0.44 million less than the amount included in the AA4 final decision forecast for this business case. DBP submitted that it set aside an amount every year to undertake reactive 'Health, safety and environment' projects and that during AA4 the full amount of the forecast 'Health, safety and environment' forecast capital expenditure was not used because fewer reactive projects came up than expected.¹²⁹
480. DBP submitted that the scope of the work covered by the proposed capital expenditure included the following initiatives:
- Marking up drawings to identify all confined space locations along the DBNGP.
 - The purchase of purpose-designed equipment for compressor stations, as well as the purchase of additional navigation devices.
 - Installation of the contractor training management system.
 - The completion of heat stress monitoring work.¹³⁰
481. The ERA considers that the work undertaken for the 'Health, safety and environment' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services on the DBNGP. The ERA's conclusion is based on information supplied by DBP describing the work undertaken and technical advice that the costs incurred were likely reasonable.¹³¹ The proposed capital expenditure for the 'Health, safety and environment' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 31.

Table 31: AA4 conforming capital expenditure – Health, safety and environment business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.00	0.10	0.06	0.02	0.00	0.18

Source: ERA draft decision AA4 capital expenditure model, August 2020.

¹²⁹ DBP, Response to information request EMCa 01, 13 February 2020.

¹³⁰ DBP, Response to information request ERA 21, 5 June 2020.

¹³¹ DBP, Response to information request ERA 21, 5 June 2020; Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 264.

Gas engine alternator control system replacement business case

482. DBP proposed \$0.47 million of conforming capital expenditure for its 'Gas engine alternator' business case for AA4. This is \$5.38 million less than the amount included in the AA4 final decision forecast for this business case. The proposed capital expenditure comprised the cost of one project where a gas engine alternator's performance was deteriorating and required replacement of critical components that could not be deferred.¹³²
483. DBP submitted that its actual AA4 capital expenditure for the 'Gas engine alternator' business case was below forecast because it reprioritised its resources according to needs which emerged in its other work programs and because it was able to prudently defer most of the gas engine alternator program during AA4. DBP stated that its decision to extend the life of the assets covered by the 'Gas engine alternator' business case was based on an assessment of the assets' performance during AA4.¹³³
484. The ERA considers that the work undertaken for the gas engine alternator business case during AA4 was undertaken efficiently and was necessary to maintain and improve the safety as well as maintain the integrity of services on the DBNGP. DBP's revisions to the original scope of the work demonstrated that DBP prudently deferred work where it identified this was possible and in line with good industry practice, and as a result DBP delivered the 'Gas engine alternator' business case for less than the forecast amount for AA4.¹³⁴ The ERA concludes that the proposed capital expenditure for the 'Gas engine alternator' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in the opening capital base for AA5 as shown in Table 32.

Table 32: AA4 conforming capital expenditure - Gas engine alternator business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.03	0.44	0.00	0.00	0.00	0.47

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Compressor station accommodation business case

485. DBP proposed \$2.47 million of conforming capital expenditure for its 'Compressor station accommodation' business case for AA4. This is \$7.09 million less than the amount included in the AA4 final decision forecast for this business case.
486. The proposed conforming capital expenditure for AA4 for the 'Compressor station accommodation' business case comprises the cost of refurbishing bathrooms and kitchens, replacing carpet, paint and curtains, and building, installing and equipping fitness rooms at compressor stations on the DBNGP.¹³⁵ The scope of work covered

¹³² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 103.

¹³³ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 102-103.

¹³⁴ The ERA's view on this point was supported by EMCA's technical advice that DBP's decision to defer most of the gas engine alternator program was consistent with the actions of a prudent operator. Energy Market Consulting Associates, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, paragraph 272.

¹³⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 123-124.

by the AA4 final decision capital expenditure forecast included shifting the existing compressor station accommodation on the DBNGP to outside of the compressor station facilities.¹³⁶ DBP submitted that the proposed capital expenditure for the project was below the AA4 final decision forecast because it did not shift the accommodation outside of the DBNGP's compressor station facilities due to the high cost of acquiring land for this purpose, which was far more costly than initially estimated. Additionally, DBP submitted that it undertook several initiatives to improve its compressor station accommodation which were more cost-effective than the work originally planned, including:

- Upgrading to newer technologies including silencing material such as mufflers, centralised air-conditioning and other heat mitigation projects.
- Introducing process safety projects for inspection of below-ground pipework and interface corrosion inspections within the DBNGP's compressor stations.¹³⁷

487. The ERA considers that the 'Compressor station accommodation' work undertaken during AA4 was in line with good industry practice and was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP and to comply with DBP's regulatory obligations for accommodation.¹³⁸ DBP's revisions to the original scope for the work demonstrated that it undertook to deliver the work efficiently, given available options and the changed circumstances which eventuated during AA4. The ERA concludes that the proposed capital expenditure for the 'Compressor station accommodation' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and included this in DBP's opening capital base for AA5 as shown in Table 33.

Table 33: AA4 conforming capital expenditure – Compressor station accommodation business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.21	0.13	1.02	0.80	0.32	2.47

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Compressor package control system replacement business case

488. DBP proposed \$6.47 million of conforming capital expenditure for its 'Compressor package control system replacement' business case for AA4. This is \$3.35 million more than the amount included in the AA4 final decision forecast for this business case. The work covered the design, procurement, installation and commissioning of control systems at [REDACTED] compressor stations, carried out in the years 2016 to 2019.¹³⁹ DBP submitted that its actual expenditure exceeded its forecast because:

¹³⁶ DBP, *Proposed Revision DBNGP Access Arrangement, Supporting Submission: 9, 2016 – 2020 Access Arrangement Period Forecast capital expenditure*, 31 December 2014, p. 69, Table 101.

¹³⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 123-124.

¹³⁸ The ERA's view on this point was supported by EMCa's technical advice, which was that the refurbishment work undertaken by DBP on the compressor station accommodation during AA4 was reasonable given the age and condition of the existing facilities, and that DBP acted prudently in refurbishing rather than relocating given updated commercial circumstances. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 232.

¹³⁹ DBP, Response to EMCa 13, 13 March 2020.

- █████ control systems were upgraded, which exceeded the █████ originally planned during AA4. One upgrade was brought forward due to its obsolete operating system being identified as posing a serious cybersecurity risk. Its components were no longer supported by the original equipment manufacturer and its obsolete software could not support recommended software changes.
 - The unit costs for replacements undertaken were higher than the unit rate included in the AA4 forecast.¹⁴⁰
489. The ERA considers that the compressor package control system work undertaken during AA4 was in line with good industry practice and was necessary to maintain the safety and integrity of services along the DBNGP. This view is based on technical advice that the untreated risk rankings of the work carried out were reasonable given the function of the control systems replaced and that these ratings warranted the remedial action taken.¹⁴¹
490. Based on information provided by DBP, the ERA considers that DBP delivered the replacements of the control systems undertaken during AA4 efficiently. DBP provided information showing that the unit cost increases for control system replacements were due to exchange rate fluctuations, manufacturer cost increases and an increase in the scope of works. The increase in the scope of works for the replacements is due to some units requiring more changes than others.¹⁴² This view also takes into account technical advice that the costs incurred for the control systems replacement were reasonable.¹⁴³
491. The ERA concludes that the proposed capital expenditure for the ‘Compressor package control system replacement’ business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and included this in DBP’s opening capital base for AA5 as shown in Table 34.

Table 34: AA4 conforming capital expenditure – Compressor package control system replacement business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	1.56	2.51	-0.08	2.47	0.00	6.47

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Jandakot site redevelopment

492. DBP proposed \$0.52 million of conforming capital expenditure for the ‘Jandakot site redevelopment’ business case for AA4. This is \$0.51 million more than the amount included in the AA4 final decision forecast for this business case.¹⁴⁴

¹⁴⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 165. DBP, Response to EMCa 09, 21 February 2020.

¹⁴¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases*, January 2020, p. 120. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 109.

¹⁴² DBP, Response to EMCa 34, 13 March 2020.

¹⁴³ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 110.

¹⁴⁴ In the business case document, the AA4 capital expenditure for this program was stated as \$0.28 million (real dollars as at 30 June 2019). DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases*

493. DBP submitted that the overspend on the ‘Jandakot site redevelopment’ was for urgent replacement of one of the demountable buildings on the site that arose during AA4 and was not foreseen when the forecast capital expenditure for the site was developed.¹⁴⁵
494. The ERA considers that the ‘Jandakot site redevelopment’ work undertaken during AA4 was necessary to improve the safety of services on the DBNGP. DBP’s revision to the original scope of the work demonstrated that DBP delivered the work efficiently and in line with good industry practice. This view takes into account technical advice that the condition of the refurbished accommodation was unacceptable based on safety, and that DBP’s procurement policy and practices were adequate to ensure that the capital expenditure incurred during AA4 reflected a competitive price for the work.¹⁴⁶ The ERA concludes that the proposed capital expenditure for the ‘Jandakot site redevelopment’ business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in DBP’s opening capital base for AA5 as shown in Table 35.

Table 35: AA4 conforming capital expenditure – Jandakot site redevelopment business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.00	0.52	0.00	0.00	0.00	0.52

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Maximo and DMZ

495. DBP proposed \$1.37 million of conforming capital expenditure for the ‘Maximo and DMZ’ business case for AA4. There was no capital expenditure included in the AA4 final decision capital expenditure forecast for this business case.
496. Maximo and DMZ are primary components of DBNGP’s operational technology. The capital expenditure DBP incurred for the ‘Maximo and DMZ’ business case during AA4 covered:
- upgrade of control room equipment
 - operational facilities upgrade
 - Maximo patching
 - refresh of the DMZ hardware
 - Maximo business process redesign
 - firewall installation.¹⁴⁷

(public), January 2020, p. 181. DBP confirmed that the correct amount was \$0.52 million. DBP, Response to information request ERA 21, 5 June 2020.

¹⁴⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 181.

¹⁴⁶ The ERA’s view on this point was supported by EMCa’s technical advice that the replacement of one of the demountable units was reasonable given the condition of the unit. Energy Market Consulting Associates, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, p. 110.

¹⁴⁷ DBP, Response to information request EMCa 01, 13 February 2020.

497. The ERA considers that the work undertaken as part of the 'Maximo and DMZ' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP. This view is based on information supplied by DBP and technical advice that DBP's approach to conducting the work, including a staged approach involving testing benefits realisation and project reconfiguration, and the results of testing benefits realisation from the project, demonstrate that the work has been carried out prudently and reasonably.¹⁴⁸ The ERA concludes that the proposed capital expenditure for the 'Maximo and DMZ' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in DBP's opening capital base for AA5 as shown in Table 36.

Table 36: AA4 conforming capital expenditure – Maximo and DMZ business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.22	0.07	0.25	0.32	0.51	1.37

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Safety case revisions

498. DBP proposed \$0.45 million of conforming capital expenditure for the 'Safety case revisions' business case for AA4. There was no capital expenditure included in the AA4 final decision forecast for this business case.
499. The DBNGP safety case is the primary document that outlines how the operation of the pipeline is conducted in compliance with DBP's obligations under the *Petroleum Pipelines Act 1969* and the *Petroleum Pipelines Regulations 2010*. A review and revision of the safety case is required every five years. DBP submitted that no capital expenditure was included in the AA4 final decision capital expenditure forecast because it only became necessary to reassess the safety case due to the requirements of another project in 2015, which was after the finalisation of the AA4 proposal.¹⁴⁹
500. The ERA considers that revising the DBNGP safety case in AA4 was necessary to comply with regulatory obligations and to maintain the integrity of DBP's services. The ERA also considers that the review and revision of DBNGP's safety case to keep it current is consistent with the actions of a prudent service provider maintaining good industry practice. This view takes into account technical advice that revising the DBNGP safety case is consistent with the actions of a prudent service provider acting efficiently.¹⁵⁰ The ERA concludes that the proposed capital expenditure for the 'Safety case revisions' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this amount in DBP's opening capital base for AA5 as shown in Table 37.

¹⁴⁸ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 110-111.

¹⁴⁹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 220.

¹⁵⁰ The ERA's view on this point was supported by EMCa's technical advice that revising the DBNGP safety case is consistent with a prudent service provider acting efficiently. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 264.

Table 37: AA4 conforming capital expenditure – Safety case revisions business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.45	0.00	0.00	0.00	0.00	0.45

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Compressor station inspection

501. DBP proposed \$2.59 million of conforming capital expenditure for the ‘Compressor station inspection’ business case for AA4. This is \$2.57 million more than the amount included in the AA4 final decision forecast for this business case.
502. The work covered by the ‘Compressor station inspection’ business case comprised five projects including:
- Inspection and preservation of compressor bundles in storage.
 - Inspection of pressure relief valves at compressor stations and meter stations on the DBNGP.
 - Inspection of pressure vessels, including at meter stations on the DBNGP.¹⁵¹
503. The ERA considers that the inspection work covered by the ‘Compressor station inspection’ business case was carried out efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services on the DBNGP. This view is based on technical advice that conducting compressor station inspections is consistent with good industry practice and the costs incurred for this work during AA4 were reasonable.¹⁵² The proposed capital expenditure for the ‘Compressor station inspection’ business case for AA4 therefore satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and is included in the DBP’s opening capital base for AA5 as shown in Table 38.

Table 38: AA4 conforming capital expenditure – Compressor station inspection business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.28	0.20	0.90	0.46	0.75	2.59

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Asset management

504. DBP proposed \$2.69 million of conforming capital expenditure for the ‘Asset management’ business case for AA4. This is \$0.21 million less than the amount included in the AA4 final decision forecast for this business case.
505. The proposed capital expenditure was for five projects, including:

¹⁵¹ DBP, Worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

¹⁵² Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraphs 233 and 255.

- A small amount of expenditure for completion of a project that commenced in 2015¹⁵³
 - Modifications to pipeline engineering information
 - Replacement of air conditioning in a server room
 - Reactive requirements to support the engineering and projects team
 - Implementation of minor engineering changes as part of normal operations.¹⁵⁴
506. The ERA considers that the work undertaken for the 'Asset management' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP. This view is based on information supplied by DBP describing the work undertaken and technical advice that the costs incurred were prudent and reasonable.¹⁵⁵ The proposed capital expenditure for the 'Asset management' business case for AA4 therefore satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 39.

Table 39: AA4 conforming capital expenditure – Asset management business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.74	0.58	0.26	0.68	0.43	2.69

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Meter stations

507. DBP proposed \$26.23 million of conforming capital expenditure for the 'Meter stations' business case for AA4. This is \$18.23 million more than the amount included in the AA4 final decision forecast for this business case.
508. DBP submitted that the work undertaken for the 'Meter stations' business case was primarily due to three unforeseen events that resulted in the reprioritisation of capital expenditure from other programs. These events were:
- An overpressure incident at a power station receiving gas from the DBNGP, which resulted in a reassessment of the risks associated with meter stations. Because of this reassessment, a new approved meterset design was rolled out to retrofit all relevant meter stations on the DBNGP to manage the risk of downstream over-pressurisation to an acceptable level. This work contributed \$11 million to the variance of the AA4 'Meter stations' capital expenditure above forecast.¹⁵⁶

¹⁵³ \$0.12 million. DBP, Worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

¹⁵⁴ DBP, Response to information request ERA 21, 5 June 2020.

¹⁵⁵ DBP, Response to information request ERA 21, 5 June 2020; Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 264.

¹⁵⁶ Dollars as at 30 June 2019. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 234-235.

- Identification of significant corrosion at a meter station facility. To prevent further similar failures DBP installed a revised piping layout. This work contributed approximately \$5 million to the variance of the AA4 'Meter stations' capital expenditure above forecast.¹⁵⁷
- Identification of unacceptable risks in the odorant system following odorant spills during AA4. Therefore, DBP undertook a design change of the odorant system. This work contributed approximately \$1 million to the variance of the AA4 'Meter stations' capital expenditure above forecast.¹⁵⁸

509. The ERA considers that the work undertaken for the 'Meter stations' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP. This view takes into account technical advice that the revised scope of the work for the meter stations business case in AA4, described at paragraph 508, was a reasonable and prudent response to address the unforeseen events cited as driving the capital expenditure incurred.¹⁵⁹ The proposed capital expenditure for the 'Meter stations' business case for AA4 therefore satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and the ERA has included this amount in DBP's opening capital base for AA5 as shown in Table 40.

Table 40: AA4 conforming capital expenditure – Meter stations business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	3.48	3.67	6.70	6.10	6.27	26.23

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Tools business case

510. DBP proposed \$1.23 million of conforming capital expenditure for the 'Tools' business case for AA4. This is \$0.09 million more than the amount included in the AA4 final decision forecast for this business case. The proposed expenditure included nine projects for the replacement of various tools used on the DBNGP, including transmission operations management tools, transmission asset management tools, borescope equipment and emergency response equipment. \$0.90 million of the proposed capital expenditure was for a single project for the replacement of transmission operations management tools.
511. The ERA is satisfied that the proposed capital expenditure for the 'Tools' business case was incurred efficiently and in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP. This view takes into account information supplied by DBP and technical advice that the tools were replaced based on their economic life in line with good industry practice and that the

¹⁵⁷ Dollars as at 30 June 2019. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 234-235.

¹⁵⁸ Dollars as at 30 June 2019. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 234-235.

¹⁵⁹ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 111.

incurred cost was reasonable.¹⁶⁰ The \$1.23 million of capital expenditure for the 'Tools' business case therefore satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 41.

Table 41: AA4 conforming capital expenditure – Tools business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.13	0.37	0.50	0.13	0.10	1.23

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Fleet and civil equipment business case

512. DBP proposed \$5.23 million of conforming capital expenditure for the 'Fleet and civil equipment' business case for AA4. This is \$1.39 million more than the amount included in the AA4 final decision forecast for this business case.

513. DBP attributed the expenditure above forecast to:

- The replacement of an average of one vehicle per year above the number of replacements planned. For the vehicles replaced, the average cost exceeded the expected cost by approximately \$5,000 on average (real dollars as at June 2019).
- The purchase of two additional maintenance vehicles due to an increase in the number of personnel on DBP's day teams roster resulting from DBP's optimisation review and restructure of its field workforce.
- The replacement of the canopy on one vehicle.
- The replacement of a transport odorant vessel in 2019, which DBP submitted was a matter of urgency due to major design faults being discovered which did not comply with the Dangerous Goods Code.¹⁶¹

514. The ERA considers that the fleet and civil equipment replaced by DBP in AA4 was replaced in line with good industry practice. This view is based on technical advice that:

- DBP's vehicle asset management practice is sound, as evidenced by the average mileage of vehicles at replacement.
- DBP's civil fleet asset management practices are commensurate with good industry practice and the urgent replacement of an odorant transport vessel in 2019, cited as the major driver of the cost increase for civil equipment, was reasonable.¹⁶²

515. The ERA is also satisfied that the replacement of fleet and civil equipment was necessary to maintain the integrity of services on the DBNGP and to maintain and improve safety on the DBNGP and that the replacements were carried out efficiently.

¹⁶⁰ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 234.

¹⁶¹ DBP, Response to information request EMCa 44, 31 March 2020.

¹⁶² Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 112.

The unit cost of fleet vehicle replacement was only slightly above the forecast unit cost. This conclusion also takes into account technical advice that DBP's procurement process and practices are commensurate with good industry practice.¹⁶³

516. Given the preceding conclusions, the proposed conforming capital expenditure for the 'Fleet and civil equipment' business case for AA4 is conforming capital expenditure and the ERA has included this amount in DBP's opening capital base for AA5 as shown in Table 42.

Table 42: AA4 conforming capital expenditure – Fleet and civil equipment business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	1.37	0.95	1.09	1.09	0.73	5.23

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Turbine exhaust replacement business case

517. DBP estimated that it incurred approximately \$0.4 million of capital expenditure for the 'Turbine exhaust replacement' business case during AA4.¹⁶⁴ This is below the AA4 final decision forecast amount for this business case of \$1.78 million.
518. The work completed during AA4 and covered by the proposed conforming capital expenditure includes the inspection and replacement of the turbine exhaust at one compressor station site and the repair of the turbine exhaust at another site.¹⁶⁵ DBP advised that it was able to defer the replacement of one turbine exhaust that was scheduled for AA4 by instead undertaking patchwork.¹⁶⁶
519. The ERA is satisfied that the work covered by the 'Turbine exhaust replacement' business case was carried out efficiently, as was demonstrated by DBP deferring work which it identified could be deferred without material risk and applying an alternative and lower-cost option (patchwork). The ERA also considers that the capital expenditure incurred for the work covered by the 'Turbine exhaust replacement' business case during AA4 would have been incurred by a prudent service provider acting in accordance with accepted good industry practice and was necessary to maintain and improve the safety of services. The ERA's conclusions take into account EMCa's opinion that DBP's governance process means that this expenditure was likely to have been incurred at reasonable cost and would likely have been undertaken by a prudent operator.¹⁶⁷
520. The ERA concludes that the proposed capital expenditure for the 'Turbine exhaust replacement' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and included this in DBP's opening capital

¹⁶³ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 22.

¹⁶⁴ The estimated capital expenditure is denominated in dollars as at 30 June 2019. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases*, January 2020, p. 281.

¹⁶⁵ DBP, Response to information request EMCa 14, 3 March 2020.

¹⁶⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 284.

¹⁶⁷ EMCa bases this recommendation on its views that DBP's procurement practices are commensurate with good industry practice and that DBP's risk ranking tool is a satisfactory means of prioritising and re-prioritising work. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 108.

base for AA5. As stated at paragraph 466, due to a change in reporting structure the AA4 capital expenditure for 'Turbine exhaust replacement' was included in the proposed capital expenditure for the 'Compressor stations' business case. The conforming AA4 capital expenditure for the 'Turbine exhaust replacement' business case is therefore included in the conforming AA4 capital expenditure for the 'Compressor stations' business case, shown in Table 28.

Pipeline mainline valve inspection business case

521. DBP proposed \$12.96 million of conforming capital expenditure for the 'Pipeline mainline valve inspection' business case for AA4. This is \$1.12 million more than the amount included in the AA4 final decision forecast for this business case.
522. The work completed during AA4 comprised four projects for in-line inspection and intelligent pigging of the DBNGP pipeline, laterals and loops. \$12.21 million of the proposed capital expenditure was for a single project for intelligent pigging of the DBNGP.¹⁶⁸ In-line inspections of the DBNGP's pipeline and mainline valves occur on an eight-year cycle and are conducted in accordance with Australian Standards AS 2885 and AS 3788.¹⁶⁹
523. DBP submitted that its actual expenditure for in-line inspection was above the AA4 final decision forecast for this work due to:
- An increase in the cost of carrying out the inspections due to the presence of radon gas embedded in debris which resulted in additional costs to manage radioactive contamination.
 - Additional inspection of piping at above and below ground interfaces, under insulation and within buried pits identified and prioritised through DBP's annual stay-in-business governance process.¹⁷⁰
524. The ERA considers that the work undertaken for the 'Pipeline and mainline valves inspections' business case during AA4 was necessary to maintain and improve the safety of services as well as maintain the integrity of services on the DBNGP.¹⁷¹ Based on the reasons supplied by DBP for the actual expenditure exceeding the AA4 final decision forecast for this work, the ERA is satisfied that the work was carried out efficiently. The ERA concludes that the proposed capital expenditure for the 'Pipeline and mainline valves' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and included this in DBP's opening capital base for AA5 as shown in Table 43.

Table 43: AA4 conforming capital expenditure – Pipeline and mainline valve inspection business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.30	0.39	3.84	4.96	3.47	12.96

Source: ERA draft decision AA4 capital expenditure model, August 2020.

¹⁶⁸ DBP, Worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

¹⁶⁹ DBP, *2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public)*, January 2020, pp. 66-67.

¹⁷⁰ DBP, *2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public)*, January 2020, p. 71.

¹⁷¹ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraphs 253 and 265.

Customer reporting system business case

525. DBP proposed \$0.84 million of conforming capital expenditure for the ‘Customer reporting system’ business case for AA4. This is \$0.08 million less than the amount included in the AA4 final decision forecast for this business case. The proposed capital expenditure comprises a single project to upgrade DBP’s customer reporting system.
526. DBP submitted that it expected to incur less capital expenditure for its customer relationship system enhancements and upgrades during AA4 because of delays due to the resourcing availability of the system vendor.¹⁷²
527. The ERA considers that the work undertaken for the ‘Customer reporting system’ business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP. This view is based on technical advice that the system enhancements and upgrades were reasonable initiatives to undertake to ensure the system continued to meet business and customer requirements, and the costs incurred were likely reasonable given the nature of the project.¹⁷³ The ERA concludes that the proposed capital expenditure for the ‘Customer reporting system’ business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and has included the expenditure in DBP’s opening capital base for AA5 as shown in Table 44.

Table 44: AA4 conforming capital expenditure – Customer reporting system business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	(0.06)	0.05	0.20	0.50	0.15	0.84

Source: ERA draft decision AA4 capital expenditure model, August 2020.

IT sustaining applications business case

528. DBP proposed \$6.58 million of conforming capital expenditure for the ‘IT sustaining applications’ business case for AA4, covering capital expenditure incurred for ten projects. This is \$3.68 million more than the amount included in the AA4 final decision forecast for this business case, which covered three projects.
529. DBP submitted that its increased capital expenditure during AA4, and planned increased expenditure during AA5 on IT projects generally, was due to a heightened IT threat environment, including increased cyber threats.¹⁷⁴
530. DBP submitted that the spend on ‘IT sustaining applications’ in excess of forecast in AA4 was due to the following:
- Microsoft Dynamics, DBP’s core financial system. DBP submitted that it incurred expenditure during AA4 to undertake critical updates to this system which were not included in the scope of work covered by the AA4 final decision forecast and would incur additional expenditure for a planned upgrade in 2020.

¹⁷² DBP, Response to information request EMCa 01, 13 February 2020.

¹⁷³ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 245.

¹⁷⁴ Meeting between DBP and the ERA, 6 March 2020.

- An e-mail system upgrade and other upgrades and updates.¹⁷⁵
531. DBP also advised that the spend in excess of forecast was “caused due to the *ad hoc* approach towards lifecycle management which will be corrected for under the proactive approach recommended in AA5.”¹⁷⁶
532. \$0.88 million was included in the AA4 final decision forecast for a project covering annual enhancements and maintenance for Microsoft Dynamics. DBP implemented the Microsoft Dynamics system in 2013 as a replacement to its previous SAP system, and experienced significant difficulty in the set-up, configuration and integration of the system with ancillary systems which could not be resolved, resulting in a sub-optimal outcome.¹⁷⁷ The proposed AA4 capital expenditure for the project to update and enhance Microsoft Dynamics is \$3.53 million, of which \$3.03 million is proposed to be incurred in 2020 to upgrade the current version of Microsoft Dynamics to an interim system which will be applied until it comes out of support at the end of 2021 when DBP will re-implement SAP.¹⁷⁸
533. The planned Microsoft Dynamics replacement, commencing in AA4 with the planned upgrade expenditure in 2020 and continuing into AA5, is described in AGIG’s IT initiative roadmap as being “subject to further investigation.”¹⁷⁹ The options analysis for the replacement work does not take into account the planned expenditure of \$3.53 million in 2020 and when this is corrected, the total capital expenditure for the replacement is higher than the alternative options considered.¹⁸⁰ The ERA is not satisfied on this basis that the planned work for this project would be undertaken by a service provider acting prudently and efficiently and in accordance with good industry practice.
534. DBP proposed \$3.05 million of capital expenditure for nine other ‘IT sustaining applications’ projects, of which two were included in the AA4 final decision forecast. The ERA agrees with technical advice received that this was indicative of poor IT asset management, which is supported by DBP’s statements regarding its *ad hoc* approach to IT application lifecycle maintenance which is ‘not consistent with industry standard practice’.¹⁸¹ DBP has not demonstrated that the capital expenditure incurred for the work covered by these nine projects in excess of the AA4 final decision forecast for projects other than the Microsoft Dynamics annual enhancement and maintenance would be incurred by a prudent service provider acting efficiently and in line with good industry practice.
535. Based on the conclusions at paragraphs 533 to 534, the ERA considers that only \$2.49 million of the proposed capital expenditure is conforming capital expenditure according to rule 79 of the NGR, as shown in Table 45. The conforming capital expenditure has been derived as the sum of the following:

¹⁷⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 323, 328.

¹⁷⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 328.

¹⁷⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 327-328. DBP, Response to information request EMCa 34, 1 April 2020.

¹⁷⁸ DBP, Worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases*, January 2020, pp. 328. DBP, Response to information request EMCa 34, 1 April 2020.

¹⁷⁹ AGIG IT Roadmap (Confidential), p. 2.

¹⁸⁰ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 113.

¹⁸¹ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 113. DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases*, January 2020, p. 326.

- The actual expenditure incurred by DBP in 2016 and 2017 for its upgrade to Microsoft Dynamics (\$0.49 million).
- The capital expenditure included in the AA4 final decision forecast for the other two projects included in that forecast (\$2.00 million).

Table 45: AA4 conforming capital expenditure – IT sustaining applications business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Proposed AA4 capital expenditure	1.43	1.82	(0.01)	0.08	3.25	6.58
Project adjustment	(0.89)	(0.73)	0.88	(0.08)	(3.25)	(4.08)
Conforming capital expenditure included in AA5 opening capital base	0.53	1.09	0.87	0.00	0.00	2.49

Source: ERA draft decision AA4 capital expenditure model, August 2020.

IT security business case

536. DBP proposed \$1.41 million of conforming capital expenditure for the 'IT security' business case for AA4. The AA4 final decision capital expenditure forecast did not include any capital expenditure for this business case.
537. The expenditure DBP expects to incur during AA4 for the 'IT security' business case covers two projects for:
- Developing and implementing DBP's cyber security framework.
 - Standardising rights and role-based access and implementing multifactor authentication.¹⁸²
538. As stated at paragraph 529, DBP attributed its increased IT expenditure during AA4 to a heightened IT threat environment, including increased cyber threats.¹⁸³ DBP also cited an increased focus by regulators and the public on how organisations manage their cyber risk as driving its increased IT expenditure.¹⁸⁴
539. In 2017, DBP conducted a maturity assessment against the Australian Energy Sector Cyber Security Framework. DBP targeted a maturity indicator level of three as measured by the Framework but DBP had not achieved this target at the time of the assessment. DBP commenced initiatives to achieve its targeted maturity level, including the work outlined at paragraph 537. DBP has also planned additional IT security initiatives to be conducted during AA5 to achieve its targeted maturity level against the Framework.¹⁸⁵ The planned AA5 initiatives are outlined and evaluated at paragraphs 738 to 741.
540. The ERA considers that the IT security initiatives DBP undertook during AA4 were prudent and in line with good industry practice given the risks associated with not

¹⁸² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 374.

¹⁸³ Meeting between DBP and the ERA, 6 March 2020.

¹⁸⁴ DBP, 2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public), January 2020, p. 372.

¹⁸⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 371-372.

undertaking initiatives to enhance the level of IT security on the DBNGP.¹⁸⁶ The ERA considers that these initiatives were conducted efficiently based on technical advice that:

- Supports DBP’s statement that the work undertaken during AA4 was reasonable in the context of the global and Australian energy sector emphasis on cybersecurity which has emerged over the last five years.
- The maturity assessment which DBP undertook against the Australian Energy Sector Cyber Security Framework, which was the precursor for the IT security initiatives undertaken during AA4, was consistent with good industry practice.
- The costs incurred for the IT security initiatives were reasonable.¹⁸⁷

541. The ERA concludes that the proposed capital expenditure for the ‘IT security’ business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and included this in DBP’s opening capital base for AA5 as shown in Table 46.

Table 46: AA4 conforming capital expenditure – IT security business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.06	0.14	0.80	0.42	0.00	1.41

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Process safety business case

542. DBP proposed \$0.04 million of conforming capital expenditure for the ‘Process safety’ business case for AA4. The AA4 final decision capital expenditure forecast did not include any capital expenditure for this business case.

543. The work covered by the proposed conforming capital expenditure is for a single project for process safety initiatives and compliance upgrades.¹⁸⁸ DBP submitted that the scope of work conducted during AA4 under the ‘Process safety’ business case commenced in 2017 due to regulatory changes driven by recent major incidents in the oil and gas industry. These regulatory changes require pipeline license holders to develop measurable key performance indicators to prevent the occurrence of ‘Major accident events’ which are defined by regulation as events that have the potential to cause more than one fatality. During AA4, DBP developed a process safety dashboard in consultation with the Department of Mines, Industry Regulation and Safety. This dashboard incorporates key performance indicators for the prevention and control of ‘Major accident events’.¹⁸⁹ Expenditure related to the implementation and continuous improvement of this system and training of staff on this system will be classified as operating expenditure during AA5.

¹⁸⁶ DBP assessed its overall untreated risk rating for IT security as high. DBP, *2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public)*, January 2020, p. 376.

¹⁸⁷ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 247 and p. 114.

¹⁸⁸ DBP, *Worksheet EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

¹⁸⁹ DBP, *2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public)*, January 2020, pp. 83-85.

544. DBP submitted that the work conducted during AA4 for the 'Process safety' business case was required to comply with DBP's regulatory obligations. Additionally, DBP considered that developing and maintaining key performance indicators such as those developed during AA4 has become standard industry practice and cited as support several other organisations which also implemented process safety systems to gather data on process safety type events. DBP stated that through the 'Process safety' business case work it has identified many issues that had the potential to escalate to major events, for example a better ability to identify and manage mitigations to corrosion as well as more effective deployment of safety critical systems.¹⁹⁰
545. Based on the information supplied by DBP, the ERA is satisfied that the work undertaken for the 'Process safety' business case during AA4 was necessary to maintain and improve the safety of services and to comply with DBP's regulatory obligations. The ERA considers that DBP's decision to initiate the work was in line with good industry practice, as supported by the development of the process safety dashboard in collaboration with the Department of Mines, Industry Regulation and Safety. Based on the amount of capital expenditure incurred for the work (\$0.04 million) the ERA is satisfied that the work was conducted efficiently. The ERA concludes that the proposed capital expenditure for the 'Process safety' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in DBP's opening capital base for AA5 as shown in Table 47.

Table 47: AA4 conforming capital expenditure – Process safety business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.01	0.03	0.00	0.00	0.00	0.04

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Decommissioning business case

546. DBP proposed \$0.15 million of conforming capital expenditure for the 'Decommissioning' business case for AA4. This is \$0.03 million more than the amount included in the AA4 final decision forecast for this business case.
547. The proposed capital expenditure covers two projects was for:
- the electrical and mechanical isolation of LM500 turbines on the DBNGP.
 - the decommissioning of the Jandakot gas engine alternator in 2016.
548. DBP submitted that the driver for the above forecast expenditure for this business case was that the actual cost of decommissioning the LM500 turbines was higher than forecast. The original scope was to isolate the gas system of these turbines, but this was extended during AA4 to include removal of the control system, which was integrated with operational station controls and therefore represented a scope of work that was more complex than originally planned.¹⁹¹

¹⁹⁰ DBP, 2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public), January 2020, p. 88.

¹⁹¹ DBP, 2021-2025 Final Plan, Attachment 7.2 OPEX Business cases (public), January 2020, p. 102.

549. Based on the nature of the work undertaken, the ERA is satisfied that the work conducted under the 'Decommissioning' business case during AA4 was in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP. Based on the reasons supplied by DBP for the amount of the capital expenditure incurred for this work during AA4 the ERA is also satisfied that this work was conducted efficiently. The ERA concludes that the proposed capital expenditure for the 'Decommissioning' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in DBP's opening capital base for AA5 as shown in Table 48.

Table 48: AA4 conforming capital expenditure – Decommissioning business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.02	0.13	0.00	0.00	0.00	0.15

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Communications business case

550. DBP proposed \$2.34 million of conforming capital expenditure for the 'Communications' business case for AA4. This is \$1.55 million more than the amount included in the AA4 final decision forecast for this business case. The proposed expenditure covers 10 projects for the replacement and upgrade of communications equipment on the DBNGP.¹⁹²
551. DBP attributed the spend in excess of the AA4 final decision forecast to undertaking unplanned activities including:
- Replacement of UHF radios. DBP submitted that this work became necessary due to changes in Australian Communications and Media Authority requirements.
 - Upgrade of network cabling and ethernet extenders at compressor stations. DBP submitted that this work was undertaken because the old cabling could no longer handle data transfer requirements.
 - Telecommunications resilience. DBP submitted that it undertook this work in response to communications outages experienced in 2017.¹⁹³
552. The ERA considers that the work undertaken for the 'Communications' business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP. This view is based on technical advice that the untreated risk ranking of each of the unplanned activities warranted the work undertaken and that the cost incurred for the work undertaken was reasonable.¹⁹⁴ The proposed capital expenditure for the 'Communications' business case for AA4 therefore satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 49.

¹⁹² DBP, Worksheet *EMCa25_AA4 Capex_Confidential_Updated model for Asset Class*, 13 March 2020.

¹⁹³ DBP, Response to information request EMCa 01, 13 February 2020.

¹⁹⁴ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, Final publication date, paragraph 275 and p. 114.

Table 49: AA4 conforming capital expenditure – Communications business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.29	0.29	0.00	0.81	0.95	2.34

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Office relocation business case

553. DBP proposed \$4.19 million of capital expenditure for its 'Office relocation' business case for AA4. The AA4 final decision capital expenditure forecast did not include any capital expenditure for this business case.
554. DBP submitted that the upcoming expiry of its current office lease on 31 July 2020 prompted it to assess the value of an early lease renewal against the value of a relocation in mid-2020. DBP undertook an options analysis which considered the costs and benefits of renegotiating an extension on its current lease against the costs and benefits of relocating to two alternative sites. DBP opted to relocate and fit out a new location as this provided better value than renewing its existing lease.¹⁹⁵
555. DBP submitted that the option of remaining at its current premises would result in a capital expenditure of \$5.46 million. This was \$1.27 million more than the expected capital expenditure for the option DBP selected, which was to relocate to new premises on St Georges Terrace. DBP expects to relocate to this new premises by mid-June 2020. DBP stated that remaining at its current premises would require carrying out refit works to ensure its current premises could continue to meet DBP's business requirements. Additionally, given the age of the existing fit out at its current office, DBP estimated that a refit of the current premises would involve more significant work than relocating and therefore be more costly than fitting out the new premises. DBP also considered that its current premises presented ongoing technology infrastructure challenges because the building was originally developed as a single tenant location, so DBP's connections were shared with other floors, limiting capacity and causing interruptions. Refitting the premises would not address these concerns. DBP submitted that it wanted to provide a CBD office with reliable network access, upgraded control and server rooms, a contemporary work environment and a variety of meeting facilities, and DBP considered that its new premises best met these requirements at the lowest cost.¹⁹⁶
556. The expenditure DBP expects to incur during AA4 for the 'Office relocation' business case covers expenditure for:
- The fit out of the selected new premises.
 - Vacating DBP's current premises at the end of the current lease and meeting the 'make good' requirements of the lease.

¹⁹⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 391-392, 395. DBP, Response to information request EMCa 23, 8 May 2020.

¹⁹⁶ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 392-399. DBP, Response to information request EMCa 23, 8 May 2020.

- Relocating DBP's control room, server room and office resources by mid-2020.¹⁹⁷
557. The \$4.19 million of proposed capital expenditure for the 'Office relocation' business case is based on actual costs incurred and the costs forecast to be incurred in 2020. The forecast costs were based on estimates provided by landlords and subject matter experts.¹⁹⁸
558. DBP submitted that the capital expenditure it would incur during AA4 to relocate its office and control room to new premises was necessary to maintain and improve the safety and integrity of DBP's services as the new premises would provide an open office space conducive to collaboration, remove the technology infrastructure risks of the current location, provide adequate meeting facilities, upgrade DBP's control room, information technology and operational technology server rooms, provide its staff modern amenities and thereby position DBP as an employer of choice in the oil, gas and utilities industry, as well as enable DBP to effectively manage and operate the DBNGP.¹⁹⁹
559. The ERA considers that the proposed capital expenditure for relocation of DBP's office to new premises during AA4 is in line with the cost that would be incurred by a service provider acting efficiently. This view is based on evaluation of DBP's cost estimate for the alternative option of remaining at its current premises, which shows that remaining at the current premises would incur a higher amount of capital expenditure than the option pursued of relocating to the selected new premises. The ERA has reviewed the cost assumptions underlying the cost estimates for both options and considers that they are reasonable and the estimates therefore provide a sound basis for comparing the cost of these two options.
560. The ERA considers that the office relocation undertaken during AA4 was in line with good industry practice and was necessary to maintain and improve the safety, as well as maintain the integrity of DBP's services. This conclusion is based on consideration of the non-cost benefits of relocating to the selected new premises outlined at paragraph 558 and the evaluation that relocating to the new premises would incur a lower cost than remaining at DBP's current premises. This conclusion also takes into account technical advice that the option of remaining at DBP's current premises and refitting it does not resolve the current operational risks to DBP's control room.²⁰⁰
561. Based on the conclusions in paragraphs 559 and 560, the proposed capital expenditure for the 'Office relocation' business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and is therefore included in DBP's opening capital base for AA5 as shown in Table 50.

¹⁹⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 391-392, 409.

¹⁹⁸ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 409.

¹⁹⁹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 392, 408.

²⁰⁰ The ERA's view on this point was supported by EMCa's technical advice that DBP's selected option of relocating its office and the associated costs were reasonable. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 115.

Table 50: AA4 conforming capital expenditure – Office relocation business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.04	0.01	0.11	0.49	3.54	4.19

Source: ERA draft decision AA4 capital expenditure model, August 2020.

Southern communications upgrade business case

562. DBP's proposed capital expenditure of \$6.91 million for the 'Southern communications upgrade' business case for AA4, which comprises a single project. This is \$4.86 million more than the amount included in the AA4 final decision forecast for this business case / project.

563. DBP submitted that during AA4 the circumstances surrounding the Southern communications upgrade project changed significantly. At the time of the AA4 access arrangement review, the scope of the project was based on replacing DBP communications equipment hosted on ██████████-owned shared infrastructure assets, including towers and land. Due to operational developments during AA4, DBP concluded that accessing and using these shared assets under existing arrangements in future would no longer be acceptable to DBP in terms of cost and its ongoing ability to manage the equipment.²⁰¹ DBP advised that:

██████████ signalled it was no longer willing to permit us to install our new equipment on the shared assets without significant upgrades to existing infrastructure. In some circumstances, ██████████ required us to build new infrastructure and gift it to them. While we considered this option, ██████████ stressed that this would not guarantee access to the assets or the continuation of this shared infrastructure arrangement.

██████████ also signalled it planned to sell its assets at Joel Terrace in East Perth. Our southern communications network currently connects to ██████████ shared infrastructure by fibre optic cable running between the Esplanade and Joel Terrace. Should the sale proceed, we would need to establish a new link between our system and ██████████ facility.

Given the uncertainty around ██████████ ongoing support, and the criticality of the southern communications network to DBP operations, we decided it would be prudent to install the new communications equipment on new DBP-owned assets (towers, poles and land). We also took steps to redesign the system configuration so that our southern communications network was no longer connected to East Perth, and established an alternative communication system to replace our shared use of the ██████████ pilot cable network in the Kwinana Industrial Area. This would remove our reliance on ██████████ altogether, and allow us full control over asset upgrade, maintenance and replacement in the future.²⁰²

564. ██████████ did not allow DBP to access one of its tower sites, Serpentine, where DBP had requested approval to install new communications equipment. A structural analysis of the tower had indicated that the tower would not be able to support DBP's communications equipment unless major reinforcement or reconstruction was

²⁰¹ DBP, Response to information request EMCa 24, 17 March 2020.

²⁰² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 416-417, 420.

conducted. [REDACTED] advised that DBP would be required to bear these costs.²⁰³

565. While [REDACTED] approved DBP's request to upgrade DBP's communications equipment on three other sites, the terms of the licence agreements for these three sites were not acceptable to DBP in terms of cost and the scope they allowed for DBP to manage the equipment. The revised annual fees proposed by [REDACTED] for the three new sites were considerably higher than previous annual costs. DBP assessed that the cost of building new DBP-owned towers on these three sites would have an estimated payback period of five to eight years. Taking into account the cost of building DBP-owned towers and the additional costs that would be required to reinforce the Serpentine tower DBP concluded it would be more efficient to build, own and maintain its own towers going forward. Additionally, DBP considered that building and maintaining its own towers would have additional benefits including:
- Eliminating the uncertainty of obtaining approvals for upgrading equipment hosted on shared infrastructure and the costs associated with time delays due to delays in approval processes.
 - Enabling ready site access to communications equipment for DBP staff.
 - Eliminating the risks of losing access to communications equipment hosted on shared infrastructure due to shared infrastructure retirements or cancellation of licence agreements.²⁰⁴
566. As a result of the changes in access to infrastructure which occurred during AA4, DBP revised the project scope to include the construction of new DBP-owned infrastructure including:
- new communications towers
 - upgraded data centres and rectifiers
 - installing fibre optic cable to form a new standalone microwave backbone.²⁰⁵
567. DBP submitted that the proposed capital expenditure for the 'Southern communications upgrade' was necessary to maintain and improve the safety of services, to maintain the integrity of services and to comply with DBP's regulatory obligations and requirements. Given the change in operating circumstances which occurred during AA4, DBP considered that the expansion of the scope of the project to include moving to a DBP-owned and operated, standalone southern communications network was necessary to maintain the long-term performance and reliability of DBP's communications network and to enable the continued operation of the pipeline by providing visibility of the network to DBP's operations and field staff and allowing access to important data across the DBNGP.²⁰⁶
568. The ERA is satisfied that the capital expenditure DBP incurred for the 'Southern communications upgrade' during AA4 was incurred efficiently. DBP supplied information that demonstrated that constructing its own towers would be more cost effective than continuing to use shared towers.²⁰⁷ The ERA's conclusion on the efficiency of the costs incurred is also supported by technical advice that the costs

²⁰³ DBP, Response to information request EMCa 24, 17 March 2020.

²⁰⁴ DBP, Response to information request EMCa 24, 17 March 2020.

²⁰⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 425.

²⁰⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 417-418.

²⁰⁷ DBP, Response to information request EMCa 24, 17 March 2020.

incurred are likely to be reasonable as DBP's procurement process and practices are commensurate with good industry practice.²⁰⁸

569. The ERA considers that the 'Southern communications upgrade' work DBP undertook in AA4 was in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP and to comply with DBP's regulatory obligations and requirements. This view is based on technical advice that whilst the restrictions on DBP's access to its communications assets hosted on shared infrastructure cited by DBP as driving the increased project scope were not a major impediment to operating those assets, having stand-alone infrastructure will be more operationally efficient for DBP.²⁰⁹
570. As the ERA considers that DBP's AA4 capital expenditure for the 'Southern communications upgrade' was in line with good industry practice, was incurred efficiently and was necessary to maintain the integrity of services on the DBNGP, this expenditure is conforming capital expenditure according to rule 79 of the NGR. This capital expenditure has therefore been included in DBP's opening capital base for AA5 as shown in Table 51.

Table 51: AA4 conforming capital expenditure – Southern communications upgrade business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	1.14	0.83	0.38	1.52	3.03	6.91

Source: ERA draft decision AA4 capital expenditure model, August 2020.

CS1 compressor re-wheeling business case

571. DBP proposed \$1.26 million for the 'CS1 compressor re-wheeling' business case for AA4. This is \$4.95 million less than the amount included in the AA4 final decision forecast for this business case.
572. DBP submitted that its actual AA4 capital expenditure for the 'CS1 compressor re-wheeling' business case is below the AA4 final decision forecast because DBP re-wheeled only one compressor rather than the two that were budgeted for in the forecast. As part of DBP's revised AA4 submission, DBP proposed to re-wheel the two CS1 compressors because changing pipeline hydraulics resulted in the flow of gas through CS1 over time reducing to approximately half of the design flow, which imposed safety risks and inefficiencies as the impellers (or wheels) were too large to operate safely and efficiently under the new, low flow operating conditions. However, a front-end engineering study undertaken by DBP in 2016 with the equipment manufacturer, [REDACTED], identified that only one of the two compressors needed re-wheeling due to the low utilisation of compressor station 1 at that time. DBP determined that the re-wheeling of the second compressor could be deferred without material risk.²¹⁰

²⁰⁸ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 116.

²⁰⁹ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 116.

²¹⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 430, 432-433.

573. DBP submitted that the proposed expenditure to re-wheel the compressor was necessary to maintain and improve the safety and integrity of services along the DBNGP because it would ensure safe and efficient operation of the compressors at CS1 at the lower levels of flow which eventuated during AA4.²¹¹
574. The ERA considers that the proposed expenditure for the 'CS1 compressor re-wheeling' business case was necessary to maintain and improve the safety and integrity of services along the DBNGP and was incurred in line with good industry practice. This conclusion was based on technical advice that the work undertaken, including the front-end engineering study outlined at paragraph 572 which identified the potential for deferral of re-wheeling of one compressor, accords with good industry practice.²¹²
575. The ERA is satisfied that the work covered by the business case was carried out efficiently, as was demonstrated by DBP deferring a large proportion of the work because it identified that a portion of the work could be deferred without material risk. This conclusion is supported by technical advice that the cost of the work carried out was reasonable.²¹³
576. Based on the conclusions in paragraphs 574 and 575, the proposed capital expenditure for the 'CS1 compressor re-wheeling' business case is conforming capital expenditure according to rule 79 of the NGR and has been included in DBP's opening capital base for AA5 as shown in Table 52.

Table 52: AA4 conforming capital expenditure – CS1 compressor re-wheeling business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.03	1.33	-0.09	0.00	0.00	1.26

Source: ERA draft decision AA4 capital expenditure model, August 2020.

IT sustaining infrastructure business case

577. DBP proposed \$1.81 million for the 'IT sustaining infrastructure' business case for AA4. This is \$0.74 million more than the amount included in the AA4 final decision forecast for this business case.
578. DBP attributed the expenditure in excess of the AA4 final decision forecast to undertaking:
- An office re-fit and audiovisual upgrade.
 - A transition to virtual servers due to encountering physical server issues during AA4 which raised the risk of server outages.
 - Additional hardware renewal for end-of-life user equipment.²¹⁴

²¹¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 431.

²¹² Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 236.

²¹³ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 236.

²¹⁴ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 452.

579. The ERA considers that the work undertaken for the IT sustaining infrastructure business case during AA4 was undertaken efficiently and in line with good industry practice and was necessary to maintain the integrity of services on the DBNGP. This view is based on technical advice that:
- The office re-fit and audiovisual upgrade undertaken were a reasonable decision at the time this work was undertaken (financial year 2016/17).
 - DBP's transition to virtual servers is consistent with industry IT trends.
 - DBP's expenditure for hardware renewal was based on reasonable end-user equipment renewal criteria.²¹⁵
580. The ERA concludes that the proposed capital expenditure for the IT sustaining infrastructure business case for AA4 satisfies the criteria for conforming capital expenditure set out in rule 79(1) of the NGR and included this in DBP's opening capital base for AA5 as shown in Table 53.

Table 53: AA4 conforming capital expenditure – IT sustaining infrastructure business case (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Conforming capital expenditure included in AA5 opening capital base	0.21	0.39	0.63	0.43	0.15	1.81

Source: ERA draft decision AA4 capital expenditure model, August 2020

Draft decision conclusion

581. Based on the considerations outlined at paragraphs 465 to 579, the ERA concludes that DBP incurred \$118.19 million of conforming capital expenditure during AA4. The draft decision conforming capital expenditure for AA4 is shown in Table 54. The 2016, 2017 and 2018 conforming capital expenditure has been determined based on actual expenditure and the 2019 and 2020 conforming capital expenditure has been based on estimates.

²¹⁵ Energy Market Consulting Associates, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), Final publication date, p. 117.

Table 54: AA4 draft decision conforming capital expenditure by asset class (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020	AA4 total
Compression	2.53	4.76	2.88	1.99	2.51	14.67
Computers and motor vehicles	2.58	2.51	3.84	3.01	1.55	13.47
Cathodic protection	0.88	1.57	4.90	7.50	4.32	19.16
Metering	3.48	3.65	6.88	6.16	6.81	26.98
Other	2.38	4.96	1.77	2.48	5.17	16.76
Pipeline	-	-	0.09	0.01	0.24	0.33
SCADA, electrical, control and instrumentation and communications	5.49	6.42	2.91	6.27	5.71	26.81
Total	17.34	23.85	23.27	27.41	26.31	118.19

Source: ERA draft decision AA4 capital expenditure model, August 2020.

582. Table 55 shows the ERA's draft decision values for calculating the opening capital base for DBP's fifth access arrangement period. The ERA requires that the opening capital base at 1 January 2021 be amended to \$3,327.39 million (real dollars).

Table 55: Draft decision – Opening capital base at 1 January 2021 (\$ million real as at 31 December 2019)

	2016	2017	2018	2019	2020
Opening capital base AA4	3,726.32	3,638.30	3,554.14	3,468.66	3,393.65
Plus: Conforming capital expenditure	17.34	23.85	23.27	27.41	26.31
Less: Depreciation	(105.35)	(108.01)	(108.75)	(102.42)	(92.58)
Less: Asset disposals	-	-	-	-	-
Opening capital base for AA5	3,638.30	3,554.14	3,468.66	3,393.65	3,327.39

Source: ERA, August 2020, Draft Decision tariff model

Some numbers may not add due to rounding

Required Amendment 10

DBP must amend the opening capital base at 1 January 2021 to \$3,327.39 million (real as at 31 December 2019). The calculation of the opening capital base is set out in Table 55 of this draft decision.

Projected capital base

583. Rule 78 of the NGR establishes how to determine the projected capital base for a particular period:

78 Projected capital base

The projected capital base for a particular period is:

- (a) the opening capital base;
- plus:
- (b) forecast conforming capital expenditure for the period;
- less:
- (c) forecast depreciation for the period; and
- (d) the forecast value of pipeline assets to be disposed of in the course of the period.

584. Rule 79 of the NGR sets out the new capital expenditure criteria:

79 New capital expenditure criteria

- (1) Conforming capital expenditure is capital expenditure that conforms with the following criteria:
 - (a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services; and
 - (b) the capital expenditure must be justifiable on a ground stated in subrule (2); and
 - (c) the capital expenditure must be for expenditure that is properly allocated in accordance with the requirements of subrule (6).
- (2) Capital expenditure is justifiable if:
 - (a) the overall economic value of the expenditure is positive; or
 - (b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or
 - (c) the capital expenditure is necessary:
 - (i) to maintain and improve the safety of services; or
 - (ii) to maintain the integrity of services; or
 - (iii) to comply with a regulatory obligation or requirement; or
 - (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
 - (d) the capital expenditure is an aggregate amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to at paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).
- (3) In deciding whether the overall economic value of capital expenditure is positive, consideration is to be given only to economic value directly accruing to the service provider, gas producers, users and end users.

- (4) In determining the present value of expected incremental revenue:
 - (a) a tariff will be assumed for incremental services based on (or extrapolated from) prevailing reference tariffs or an estimate of the reference tariffs that would have been set for comparable services if those services had been reference services; and
 - (b) incremental revenue will be taken to be the gross revenue to be derived from the incremental services less incremental operating expenditure for the incremental services; and
 - (c) a discount rate is to be used equal to the rate of return implicit in the reference tariff.
- (5) If capital expenditure made during an access arrangement period conforms, in part, with the criteria laid down in this rule, the capital expenditure is, to that extent, to be regarded as conforming capital expenditure.
- (6) Conforming capital expenditure that is included in an access arrangement revision proposal must be for expenditure that is allocated between:
 - (a) reference services;
 - (b) other services provided by means of the covered pipeline; and
 - (c) other services provided by means of uncovered parts (if any) of the pipeline,
 in accordance with rule 93.

585. Rule 93(2) of the NGR sets out the method for allocating costs between reference and other services:

93 Allocation of total revenue and costs

...

- (2) Costs are to be allocated between reference and other services as follows:
 - (a) costs directly attributable to reference services are to be allocated to those services; and
 - (b) costs directly attributable to pipeline services that are not reference services are to be allocated to those services; and
 - (c) other costs are to be allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].

586. Rule 74 of the NGR contains specific requirements for the provision of forecasts and estimates:

74 Forecasts and estimates

- (1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.
- (2) A forecast or estimate:
 - (a) must be arrived at on a reasonable basis; and
 - (b) must represent the best forecast or estimate possible in the circumstances

587. All dollar amounts in this section are expressed in real dollars as at 31 December 2019 unless otherwise stated. The ERA has converted amounts supplied by DBP in real dollars as at 31 December 2020 using the inflation figures supplied by DBP. Where DBP has provided amounts in real dollars as at 30 June 2019, the ERA has used the eight capital city weighted average Consumer

Price Index published by the Australian Bureau of Statistics to convert to real dollars as at 31 December 2019.

DBP's Proposal

588. DBP's proposed forecast capital base for AA5 is shown in Table 56.

Table 56: Proposed forecast capital base for AA5 (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025
Opening capital base	3,329.03	3,232.27	3,139.39	3,029.20	2,925.42
Capital expenditure	40.92	35.80	22.19	30.74	28.93
Depreciation	(137.68)	(128.68)	(132.38)	(134.53)	(137.74)
Asset disposals	0.00	0.00	0.00	0.00	0.00
Closing capital base	3,232.27	3,139.39	3,029.20	2,925.42	2,816.61

* SCADA is supervisory control and data acquisition.

Source: DBP, AA5 tariff model Final Plan with Demand updated 28 May 2020, 28 May 2020.

589. DBP proposed a forecast of \$158.58 million for conforming capital expenditure for AA5. This is 29.70 per cent higher than DBP's proposed capital expenditure for AA4. DBP submitted that more replacements of the pipeline assets are due during AA5 than during AA4, leading to the proposed increase in capital expenditure.
590. DBP reclassified six business cases that were treated as capital expenditure during AA4 as operating expenditure for AA5. These business cases are 'Health, safety and environment', 'Compressor station inspection', 'Asset management', 'Pipeline mainline valve inspection', 'Process safety' and 'Decommissioning'. The work covered by these business cases has been developed as a specific forecast as part of the proposed AA5 operating expenditure forecast. These specific forecasts are outlined at paragraphs 317 to 391.
591. The distribution of the proposed forecast capital expenditure between the asset classes DBP proposed to be in effect during AA5 is shown in Table 57. DBP submitted that all forecast capital expenditure was for maintaining or improving its ability to deliver current reference services.

Table 57: Proposed AA5 forecast capital expenditure for AA5 by asset class (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Pipeline	0.00	0.00	0.00	0.00	0.00	0.00
Compression	6.14	3.44	4.01	3.81	4.54	21.94
Metering	1.76	1.20	1.41	1.21	1.39	6.97
Other depreciable	2.67	1.34	1.13	4.97	4.77	14.88
Computers and motor vehicles	7.37	5.23	3.94	5.68	3.67	25.89
Cathodic/corrosion protection	3.43	2.88	3.11	2.91	2.40	14.73
SCADA, electrical, control & instrumentation and communications	19.54	21.72	8.59	12.16	12.14	74.15
Non-depreciable	0.00	0.00	0.00	0.00	0.00	0.00
Total	40.92	35.80	22.19	30.74	28.93	158.58

Source: DBP, AA5 tariff model Final Plan with Demand updated 28 May 2020, 28 May 2020.

592. DBP's proposal includes business cases for the projects comprising its forecast AA5 capital expenditure.²¹⁶

²¹⁶ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases, January 2020, p. 62.

Table 58: Proposed forecast capital expenditure by business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Compressor stations	9.63	5.23	5.87	7.37	8.26	36.35
Pipeline and mainline valves	2.04	1.68	2.40	1.94	1.56	9.61
SCADA	0.13	0.13	0.13	1.16	0.35	1.92
Gas engine alternator	0.92	-	1.38	3.23	2.77	8.30
Compressor stations accommodation	1.02	1.02	1.02	1.02	1.03	5.11
Northern communications system	15.25	15.29	-	-	-	30.54
Compressor package control systems replacement	-	4.69	4.70	4.71	4.73	18.84
Jandakot site redevelopment	0.53	-	-	4.10	3.91	8.53
Maximo and DMZ	1.52	0.16	0.16	0.30	0.16	2.30
Safety Case	0.51	-	-	-	-	0.51
Meter Stations	1.94	1.39	1.59	1.39	1.58	7.89
Tools	0.38	0.28	0.28	0.28	0.46	1.68
Fleet and civil equipment replacement	1.03	0.83	1.03	0.83	1.04	4.75
Turbine exhaust replacement	1.21	1.12	0.87	0.87	0.87	4.94
Customer reporting system	0.61	0.25	0.15	1.68	0.15	2.85
IT sustaining applications	1.59	0.84	0.42	0.36	0.17	3.38
IT enabling	1.48	1.28	1.35	0.56	0.57	5.25
IT security	0.39	0.57	0.36	0.23	0.23	1.78
IT sustaining infrastructure	0.75	1.04	0.46	0.70	1.09	4.05
Total	40.92	35.80	22.19	30.74	28.93	158.58

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex forecast model 2021-25 (public), January 2020, p. 73.

593. DBP submitted that the work it planned to carry out during AA5 was driven by stay-in-business requirements that focussed on maintaining or improving its ability to deliver current reference services through the DBNGP.²¹⁷

²¹⁷ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, January 2020, p. 73.

594. DBP's proposed AA5 capital expenditure forecast includes real labour cost escalation of 0.69 per cent. This has been calculated as outlined at paragraphs 263 to 269.
595. As stated at paragraph 441, DBP advised that most of its expenditure is directly allocated to either pipeline services or unregulated services through its accounting system and DBP incurs few capital costs which are shared between pipeline services and unregulated services. DBP advised that, of its capital expenditure for pipeline services, where it is possible for capital expenditure for non-reference services to be directly attributed to an individual shipper, those costs are allocated directly to that shipper. DBP did not supply information which showed that it had made any allocation of shared capital expenditure for pipeline services for its proposed AA5 forecast between reference and non-reference services.²¹⁸

Submissions

596. The ERA received seven submissions in response to its issues paper. Three submissions referred to DBP's forecast of capital expenditure for AA5.
597. Gas Trading Australia Pty Ltd's (gasTrading's) submission included comments on DBP's IT investment plan broadly and specific comments on DBP's 'Customer reporting system' business case.²¹⁹
598. gasTrading stated that it was broadly in support of DBP's IT investment plan, and that it supported DBP's 'Customer reporting system' business case, provided that DBP "engages with its customers and stakeholders to efficiently manage the transition of systems and interface with other parties' systems." However, gasTrading did not consider that the costs of upgrading systems to enable DBP's parent company Australian Gas Infrastructure Group (AGIG) to manage its portfolio of businesses on a common system should be included in the AA5 capital expenditure forecast. gasTrading considered that AGIG acquired DBP and the costs related to integrating the DBNGP with their other assets were not costs the DBNGP's customers should contribute to unless there was a business case for the customer.²²⁰
599. CITIC Pacific Mining Management Pty Ltd (CPM) submitted that the ERA should evaluate DBP's capital expenditure to ensure that it was spent "wisely, efficiently and delivers soundly evaluated economic benefits" for both AGIG and the shippers that use the DBNGP. CPM requested that the ERA take into account that there were always ways to optimise capital expenditure while "maintaining performance outcomes and delivering improved commercial outcomes". CPM also requested that the revised access arrangement include some capital expenditure improvement targets to ensure alignment of DBP's capital expenditure with business drivers and thereby ensure the efficient use of shippers' capital and that benefits will be delivered to both AGIG and shippers.²²¹

²¹⁸ Details of DBP's allocations of costs between regulated and unregulated assets were requested in information requests EMCa 47 (1 April 2020), ERA 27 (9 July 2020) and ERA 29 (17 July 2020).

²¹⁹ DBP's IT investment plan was submitted as Attachment 8.4, DBP IT Investment Plan 2021-25, to the Final Plan. The 'Customer reporting system' business case is found at pages 297 to 322 of Attachment 8.5, Capex Business Cases, to the Final Plan,

²²⁰ GasTrading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 11.

²²¹ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, pp. 2-3.

600. CPM also requested that the ERA take into account the changes in the global economic climate and in Western Australia, which have taken place since DBP's initial proposal was submitted. CPM's view was that an economic downturn was in progress and many businesses would have their returns reduced for several years to come. Additionally, CPM considered that inflation was slowing and the costs of labour, parts, steel and pipe were expected to fall over the coming years. CPM requested that the ERA take into account these factors when evaluating DBP's capital expenditure.²²²
601. Wesfarmers Limited (WesCEF) submitted that it considered that DBP had not tested the benefit of maintaining an under-utilised pipeline to 100 per cent reliability. WesCEF referred to rule 79(2) of the NGR which states that capital expenditure is allowed where it is to "maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred." WesCEF suggested that DBP should provide further clarification to help WesCEF to understand the impact of maintaining the under-utilised portion of the pipeline and related compressor and meter stations at 100 per cent reliability. WesCEF supported a 100 per cent service level and considered that it was important to understand the cost of maintaining redundant equipment, and whether the service level was to address throughput, contracted capacity or pipeline capacity.²²³

Draft decision

602. The ERA has assessed DBP's proposed capital expenditure for AA5 in accordance with the NGR using a four-step framework:
- Consider whether the expenditure satisfies the prudent service provider test set out in rule 79(1)(a) of the NGR.
 - Evaluate whether the expenditure is justifiable on the grounds set out in rule 79(2) of the NGR as required by rule 79(1)(b). Rule 79(2) states that capital expenditure is justifiable if:
 - (a) the overall economic value of the expenditure is positive; or
 - (b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or
 - (c) the capital expenditure is necessary:
 - (i) to maintain and improve the safety of services; or
 - (ii) to maintain the integrity of services; or
 - (iii) to comply with a regulatory obligation or requirement; or
 - (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
 - (d) the capital expenditure is an aggregate amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to at paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).

²²² CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, pp. 3-4.

²²³ Wesfarmers Chemical Energy and Fertilisers, *Submission to the ERA issues paper*, 30 March 2020, p. 9.

- Assess whether the forecasts and estimates comply with rule 74(2) of the NGR.
 - Ensure that only capital expenditure for the covered pipeline, is included as conforming capital expenditure (rule 79(6) of the NGR).
603. Consistent with the reasoning outlined at paragraphs 446 to 451, the ERA considers that, apart from capital expenditure that is identified and directly allocated to individual shippers by DBP (see paragraph 441), all other capital expenditure during AA5 will be shared expenditure and the apportionment of this expenditure should be made under rule 93 on a basis consistent with its allocation of total revenue. The ERA has considered the allocation of total revenue at paragraph 1176 of this decision.
604. As required by rule 78(c) of the NGR, the ERA's assessment of DBP's proposed projected capital base for AA5 also included assessing DBP's forecast depreciation for AA5. At paragraph 948 of this draft decision the ERA assesses whether the following complied with the depreciation criteria set out at rule 89 of the NGR:
- DBP's proposed asset lives.
 - DBP's proposed asset classes.
 - DBP's proposed reallocation of assets from its existing asset classes to the new asset classes it proposed to take effect in AA5.

Assessment of capital expenditure

605. As stated at paragraph 445, the ERA's assessment of DBP's proposed forecast capital expenditure for AA5 also considered DBP's governance and investment management framework.
606. As stated at paragraph 459, based on reviewing DBP's proposed AA4 capital expenditure, the ERA considers that the extent of the variance between DBP's estimated actual capital expenditure and forecast expenditure at the business case level raises doubt about the reliability of DBP's capital expenditure forecasts. The variance between actual capital expenditure and forecasts during AA4 has been taken into account in determining the efficient amount of capital expenditure for the 'Compressor stations', 'Pipeline and mainline valve', 'Meter stations' and 'IT sustaining infrastructure' business cases for AA5, further discussed below.
607. DBP's project management and investment governance framework is described at paragraphs 454 and 455. DBP supplied information regarding the execution of its capital expenditure planning process (pictured in Figure 4) for its AA5 capital expenditure. DBP's project and procurement review committee, consisting of the DBP executive management team, reviewed a preliminary list of AA5 capital expenditure projects of approximately \$148 million in total in June 2018.²²⁴ On review, the committee increased the forecast cost of this list to approximately \$159 million.²²⁵ This forecast cost remained approximately stable through three subsequent reviews until DBP's fifth access arrangement revision proposal was finalised. EMCa considered that effective, risk-based top-down challenges of proposed project lists should result in a final list with fewer projects and lower expenditure, and not more as occurred with DBP's AA5 capital expenditure planning process.²²⁶ The expansion of the project list through the AA5 capital expenditure

²²⁴ Dollars real as at June 2018. DBP, Response to EMCa 30, p. 2.

²²⁵ Dollars real as at June 2018. DBP, Response to EMCa 30, p. 2.

²²⁶ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 71.

planning process is not indicative that the final proposed AA5 capital expenditure is prudent.

608. As stated at paragraph 274, the ERA considers that the best forecast or estimate possible for real labour escalation for the AA5 period is 0.30 per cent. In the assessment of forecast capital expenditure for each business case outlined below, the ERA has adjusted the labour escalation to 0.30 per cent of the un-escalated capital expenditure.
609. The ERA considers that, by assessing DBP's proposed capital expenditure forecast for AA5 according to the criteria for conforming capital expenditure in rule 79 of the NGR, it has addressed CPM's submission.
610. Similarly, by assessing DBP's proposed capital expenditure forecast for AA5 according to rule 79 of the NGR, the ERA has addressed WesCEF's submission. In evaluating the capital expenditure that is necessary to maintain the DBNGP, including the integrity of services on the DBNGP, the ERA has considered which asset replacements are prudent to undertake, and whether the proposed timings of those replacements are efficient and aligned with good industry practice. The ERA has also considered the drivers for forecast operating expenditure for maintaining and running those assets, including run-hours and maintenance costs, in its evaluation of DBP's proposed operating expenditure forecast.

Compressor stations business case

611. DBP proposed \$36.65 million of forecast capital expenditure for the compressor station business case for AA5. The forecast expenditure covers 34 projects as shown in Table 59.

Table 59: Proposed AA5 forecast capital expenditure – Compressor stations business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Hazardous area inspection and rectification	0.41	0.20	-	0.20	0.41	1.23
24VDC batteries & charger replacement	0.17	-	-	-	-	0.17
Upgrade of ██████████ HMI software to latest Windows version	-	0.25	-	-	0.26	0.51
Replacement of air conditioning at compressor stations	0.39	0.39	0.39	-	-	1.18
Measurement of earthing grid resistance to remote earth in compressor No 7	0.10	-	-	-	-	0.10
Refurbishment of below ground pipework	1.32	1.33	1.33	1.33	1.34	6.64
Upgrade of station & unit F&G monitoring system at CSs (Inc SESD & MLESD)	0.36	-	-	-	-	0.36
Installation of fire suppression system on stage 3A units	0.43	0.43	0.56	0.56	-	1.99
Loadbank control panel redesign and replacement program	0.25	0.13	0.13	0.13	0.13	0.77

Project	2021	2022	2023	2024	2025	AA5 total
Solar compressor package dynamic vibration data visibility annual upgrade	0.06	0.06	0.06	0.06	0.06	0.31
Compressor units online dynamic data vibration monitoring system - Server based	0.09	0.09	0.09	0.09	0.09	0.46
Compressor station CP visibility	0.20	0.20	-	-	-	0.41
As-build of CP equipment at compressor stations	0.13	-	-	-	-	0.13
Replacement of corroded exhaust flange at CS10U3	0.13	-	-	-	-	0.13
Upgrade of fuel gas pressure control loop for CS01/U1, CS03/U1, CS05/U1 & U2, CS08/U2	0.14	-	0.14	-	-	0.29
Solar turbines TT4000 V5 software upgrade/licensing	0.57	-	-	-	-	0.57
Painting of aboveground facility	0.51	0.51	1.02	1.02	0.51	3.58
Unit isolation valve replacement	0.31	0.31	0.31	0.31	0.31	1.53
Station isolation valve replacement	0.51	-	0.51	-	0.51	1.53
Recycle valve replacement/overhaul	0.20	0.20	0.20	0.20	0.21	1.02
CS unit F&G monitoring system replacement (ACS)	-	-	-	0.92	0.92	1.85
CS unit F&G control system replacement (Stage 2)	-	-	-	-	0.31	0.31
CS unit F&G control system replacement (Stage 4)	-	-	-	1.23	1.23	2.46
UPS system 110v	0.08	-	-	0.08	0.31	0.46
UPS system 24v	0.04	-	-	0.10	0.33	0.47
Dry gas seal replacement	0.41	0.41	0.41	0.41	0.41	2.04
Turbine combustion air inlet filter system replacement	0.92	-	-	-	-	0.92
Electrical protection integrity testing	0.11	0.11	0.11	0.11	0.11	0.56
Station PLC replacement	0.31	0.31	0.31	0.31	0.31	1.53
Refurbishment of underground oil sump tanks	0.08	0.08	0.08	0.08	0.08	0.41
Instrument air system replacement	0.09	-	-	-	-	0.09
Relocate unit piping to above ground at CS3	0.30	-	-	-	-	0.30

Project	2021	2022	2023	2024	2025	AA5 total
Compressor sites cladding removal	0.81	-	-	-	-	0.81
Fuel gas heater	0.20	0.20	0.20	0.20	0.41	1.23
Total	9.63	5.23	5.87	7.37	8.26	36.35

Source: Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: ACS – Additional compressor stations; CP - cathodic protection; CS – compressor station; F&G - fire and gas; HMI – human machine interface; MLESD – main line emergency shut down; PLC – programmable logic controller; SESD – station emergency shut down; UPS – uninterruptable power supply; VDC – volt direct current.

612. The 'Compressor stations' business case covers ongoing capital works for maintaining the performance of compressor station assets. DBP submitted that the works were necessary to maintain the safety and integrity of services along the DBNGP.²²⁷
613. The program includes projects within three categories, being end-of-life asset replacement, upgrades and pro-active works. The proposed forecast AA5 'Compressor stations' capital expenditure is divided between these categories as shown in Table 60. The difference between the program totals shown in Table 59 and Table 60 is labour escalation, which is not included in the total shown in Table 60.

Table 60: Proposed AA5 forecast capital expenditure – Compressor stations business case costs excluding labour escalation, by category (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Replacement	4.69	1.60	2.11	3.52	4.78	16.70
Proactive	2.82	2.22	2.52	2.72	2.42	12.69
Upgrade	2.07	1.37	1.18	1.04	0.94	6.59
Program total	9.58	5.19	5.81	7.28	8.13	35.99

Source: DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 7, Table 0.5.

614. DBP proposed \$25.81 million of conforming capital expenditure for the 'Compressor station' business case for AA4. DBP submitted that the proposed AA5 capital expenditure for the compressor stations business case represented a larger volume of works than undertaken during AA4 because a significant number of the assets would reach the end of their useful life during AA5.
615. Approximately \$7.54 million of the difference between the proposed AA4 capital expenditure and the AA5 forecast is due to end-of-life replacement expenditure. The volume of end-of-life asset replacements scheduled during AA5 is higher than that scheduled during AA4, which DBP attributed to the need to replace various electrical controls instrumentation, rotating and mechanical equipment at compressor stations due to these assets reaching their 15-year and 30-year replacement cycles during AA5.

²²⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 3.

616. The upgrades component of the 'Compressor stations' forecast covers the upgrade of equipment and software items that are either obsolete or will become obsolete or unsupported during AA5. DBP submitted that the main projects driving the increase in forecast upgrades expenditure compared to AA4 were the 'Installation of Fire Suppression System on Stage 3A Units' and the 'Fuel gas heater' projects, shown in Table 59 as costing \$2.01 million and \$1.24 million respectively. DBP submitted that these projects were critical due to the integrity risks these assets entailed in their current condition.²²⁸
617. The capital expenditure included in the proposed 'Compressor stations' forecast for proactive works is approximately consistent with what DBP incurred during AA4. Proactive works are activities which are necessary to repair and maintain assets that are not due for end-of-life replacement or do not have identified obsolescence/upgrade issues. The largest proactive works project included in the 'Compressor stations' program for AA5 is 'Refurbishment of below ground pipework', which is forecast to require \$6.64 million as shown in Table 59.
618. The ERA accepts that some level of increase in 'Compressor stations' expenditure will be required during AA5 compared to AA4 to maintain the safety and integrity of services. DBP deferred a large portion of its 'Compressor stations' work scheduled during AA4, and the ERA accepts that some of the deferred work will be carried out during AA5. Additionally, this conclusion is based on technical advice that DBP's explanation that the driver for the increase in the AA5 capital expenditure (the timing of replacement cycles) is reasonable.²²⁹
619. However, the ERA is not satisfied that the proposed capital expenditure for the 'Compressor stations' business case for AA5 is consistent with the amount a prudent service provider acting efficiently would incur. This view is based on technical advice that:
- DBP's pipeline supply performance reliability of 100 per cent for the last two years indicates that there is some scope for reducing investment in the 'Compressor stations' program and still satisfying the 100 per cent reliability target.
 - DBP has demonstrated in previous access arrangement periods its ability to deliver a portion of its planned work for less than the amount forecast, including due to finding that the condition of assets was sufficient to allow deferral and integrating proposed projects with other, related projects at a lower combined cost.²³⁰
620. The ERA considers that DBP is likely to be able to deliver the work comprising this business case at less than DBP's proposed cost by deferring some of its planned work to the next access arrangement period or by delivering the work at a lower cost than allowed for in the preliminary cost estimate. The ERA has therefore adjusted the proposed capital expenditure for the 'Compressor stations' business case by 20 per cent. This reflects the ERA's view, stated at paragraphs 459 and 606, that the variance between DBP's estimated actual capital expenditure and forecast expenditure at the business case level during AA4 raises doubt about the reliability of DBP's capital expenditure forecasts for AA5. DBP estimated it will incur 40.60 per cent less capital expenditure during AA4 than was included in the AA4 final decision

²²⁸ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 9-10.

²²⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 119.

²³⁰ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 119.

forecast for the 'Compressor stations' business case. The 20 per cent adjustment is based on technical advice that DBP can prudently defer some of its planned AA5 'Compressor stations' work at no material risk to the DBNGP's performance reliability or attainment of its asset management objectives and a 20 per cent reduction is reasonable. This is supported by information supplied by DBP that the replacement of some of its compressor station assets is conducted based on condition, rather than age, which provides scope for deferral of replacement of some assets.²³¹ Additionally, 42.99 per cent of DBP's forecast 'Compressor stations' expenditure is scheduled for 2024 and 2025, and any deferral of work which is identified from the schedule for these years will likely delay the expenditure until the sixth access arrangement period.

621. The ERA requires that the capital expenditure forecast for AA5 be amended to reflect a total forecast of \$28.91 million for the 'Compressor stations' business case. This amount has been derived by:
- Applying the adjustment outlined at paragraph 620.
 - Adjusting the labour escalation included in the business case forecast to include a real labour cost escalation rate of 0.30 per cent as outlined at paragraph 608.
622. The ERA considers that \$28.91 million is the best estimate of the efficient cost of this work program during AA5 and therefore satisfies rule 74 of the NGR. This amount is included in the draft decision capital expenditure forecast as shown in Table 61.

Table 61: Draft decision AA5 capital expenditure forecast – Compressor stations business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	9.63	5.23	5.87	7.37	8.26	36.35
Project adjustment	(1.92)	(1.04)	(1.16)	(1.45)	(1.63)	(7.19)
Labour cost escalation adjustment	(0.03)	(0.03)	(0.04)	(0.06)	(0.08)	(0.25)
Draft decision capital expenditure	7.68	4.16	4.67	5.85	6.55	28.91

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020.

Pipeline and mainline valves business case

623. DBP proposed \$9.61 million of forecast capital expenditure for the 'Pipeline and main line valves' business case for AA5. The forecast expenditure covers 14 projects as shown in Table 62.

²³¹ DBP, *Response to information request EMCa 10*, 11 March 2020, p. 1.

Table 62: Proposed AA5 forecast capital expenditure - Pipeline and mainline valves business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Annual dig up program based on Runcom results	0.15	0.00	0.00	0.00	0.00	0.15
CP visibility on non-visible sites	0.12	0.00	0.00	0.00	0.00	0.12
TRU replacement	0.06	0.08	0.06	0.06	0.06	0.33
DC power upgrade MLV6	0.07	0.00	0.00	0.00	0.00	0.07
Replacement of original DBNGP signage	0.46	0.46	0.46	0.38	0.00	1.76
Piping interface wrap removal	0.42	0.27	0.20	0.00	0.00	0.90
Long range ultrasonic or dig up of unpiggable pipes at facilities	0.10	0.20	0.20	0.20	0.21	0.92
Impressed current ground beds replacement	0.10	0.10	0.10	0.10	0.10	0.51
Replacement of solar panels	0.00	0.00	0.51	0.00	0.00	0.51
MLV redesign for closing operation	0.26	0.27	0.00	0.00	0.00	0.53
Pig barrel isolation valve replacement	0.00	0.00	0.31	0.61	0.62	1.54
Lister GEA control system replacement	0.00	0.00	0.20	0.22	0.22	0.63
RTU replacement	0.00	0.00	0.35	0.36	0.36	1.07
Replace batteries at MLV and meter stations	0.29	0.30	0.00	0.00	0.00	0.59
Business case total	2.04	1.68	2.40	1.94	1.56	9.61

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: DC – direct current; MLV – mainline valve.

624. The proposed AA5 capital expenditure for the 'Pipeline and mainline valves' business case is 54.68 per cent higher than the proposed capital expenditure for AA4. DBP attributes the increase to:

- More assets reaching the end of their design life during AA5.
- Increasing corrosion prevention measures on ageing assets to maintain the assets' integrity.
- Valve installations to facilitate ongoing in-line inspection compliance.²³²

²³² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 55.

625. The 14 projects covered by the 'Pipeline and main line valves' business case fall under three broad categories and the scope of the works covered by these projects include:
- Replacement of end of life electrical control and instrumentation equipment – replacement of the gas engine control systems, remote terminal units, solar panels, as well as the replacement of batteries at main line valves and meter stations, which will reach the end of their design and useful lives during AA5. An additional project that falls under this category is the data centre power upgrade at mainline valve six, which is scheduled for 2021.
 - Replacement of end of life mechanical equipment – replacement of DBNGP signage along the pipeline which is no longer legible and the replacement of pig barrel isolation valves to accommodate pig launch and retrieval during the inline inspection program.
 - Preventative works to protect pipeline and main line valve assets from corrosion – the annual dig up program designed to test the adequacy of the cathodic protection system, the replacement of 47 transformer rectifier units that have reached the end of their design lives, the replacement of two ground beds, the installation of cathodic protection visibility in non-visible sites to ensure reliability of the cathodic protection system, the removal of piping interface wrap to remove the risk of creating a corrosive environment underneath the tape, and the implementation of the long-range ultrasonic tool at unpiggable sites to enable assessment of areas that are unpiggable.²³³
626. DBP considers that its proposed forecast capital expenditure for the 'Pipeline and main line valves' business case is necessary to maintain the safety and integrity of services along the DBNGP. Specifically, DBP submitted that the renewal of electrical control and instrumentation equipment and mechanical equipment, as well as the proactive works undertaken to protect from corrosion and safety hazards and maintain performance, would ensure the continued operation of the pipeline and the main line valves, and minimise the likelihood of leakage or explosion on the DBNGP.²³⁴ Additionally DBP considered that the planned AA5 'Pipeline and main line valves' work program would contribute to enabling the DBNGP to operate with minimal direct and costly repair or replacement of the pipeline itself, thereby maximising the DBNGP's design life.
627. Where possible, DBP derived its proposed forecast costs for the pipeline and main line valves business case by multiplying the proposed volume of activities by estimated unit rates.
628. DBP submitted that it based the proposed volume of activities for the 'Pipeline and main line valves' business case on all factors that, in its knowledge, drove replacement including asset age, equipment obsolescence, original equipment manufacturer product life cycle and condition monitoring.²³⁵
629. The estimated unit rates used to derive the forecast cost for the business case were based on:
- The three-year average actual cost incurred in AA4, where this was possible.

²³³ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 54, 76-82.

²³⁴ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 55, 72.

²³⁵ DBP, *Response to information request EMCa 01*, 26 February 2020, pp. 1-2.

- Where this was not possible, the cost of activities was estimated based on other historical costs for the same or similar programs of work, which generally were determined through a competitive tender process.²³⁶
630. The ERA accepts that the 'Pipeline and mainline valves' work program DBP proposed would contribute to maintaining the safety and integrity of services on the DBNGP and that replacing pipeline and mainline valve assets at the end of their design life is commensurate with good industry practice.²³⁷
631. The ERA is not, however, satisfied that the amount of expenditure proposed for AA5 is a reasonable estimate of the amount that a prudent service provider operating efficiently would incur for the program. The ERA's conclusion is based on:
- DBP's 'Pipeline and mainline valves' business case expenditure for AA4. Specifically, as outlined at paragraph 473, DBP's proposed AA4 expenditure was 14.90 per cent below the AA4 final decision forecast for this business case, which DBP attributed to finding efficiencies and possibilities to defer work during AA4. The ERA therefore considers that DBP has scope to find efficiencies and possibilities to defer work in its planned program of work for AA5.²³⁸
 - Technical advice that the DBNGP's pipeline supply performance reliability of 100 per cent for the last two years indicates that there is some scope for reducing investment in the proposed program of work and still satisfying the target.²³⁹
 - The inclusion of two projects with a risk-ranking of 'Low' in the AA5 forecast for this business case.²⁴⁰ According to DBP's risk ranking framework, 'Low' risks are tolerable.²⁴¹ The combined proposed capital expenditure for these two business cases is \$1.70 million, or 17.64 per cent of the total proposed expenditure for this business case. DBP has not demonstrated how it accounts for the risk rankings of projects to determine the projects and expenditure included in its AA5 proposal.
 - Technical advice that the 'Pig barrel isolation valve replacement' project can be prudently deferred by two years because the valve replacement work can be undertaken in the year prior to the scheduled inline inspections.²⁴²
632. The ERA considers that \$6.67 million is the best estimate of the prudent and efficient amount of capital expenditure for the 'Pipeline and mainline valves' business case for

²³⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 73.

²³⁷ The ERA's view takes into account technical advice that DBP's stated driver for the increase in capital expenditure for the 'Pipeline and mainline valves' business case compared to AA4 (that a significant number of pipeline and mainline valve assets will reach the end of their design life during AA5) is commensurate with good industry practice. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 120.

²³⁸ That the ERA has taken this into account in determining the AA5 forecast is supported by technical advice that DBP demonstrated in the AA4 period that it is able to prudently defer or deliver work for pipeline and mainline valve assets for less than the regulatory forecast. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 120.

²³⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 120.

²⁴⁰ These projects are 'Lister GEA control system replacement' and 'RTU replacement'. DBP, response to EMCa30, *EMCa30-4_DBNGP AA5 Capex Plan 14 January 2019*, 27 April 2020.

²⁴¹ DBP, *2021-2025 Final Plan, Attachment 8.8 Operational Risk Management Framework (Confidential)*, January 2020, p. 2.

²⁴² EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 120.

AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by reducing the proposed forecast capital expenditure by:

- Assuming the 'Pig barrel isolation valve replacement' commences in 2025, rather than 2023 as currently scheduled.
- Reducing the proposed capital expenditure remaining after taking into account the reduction from assuming the 'Pig barrel isolation valve replacement' commences in 2025 by 20 per cent.
- Adjusting the real labour cost escalation rate included in the forecast to 0.30 per cent, as outlined at paragraph 608.

633. The draft decision capital expenditure forecast includes capital expenditure for the 'Pipeline and mainline valves' business case as shown in Table 63.

Table 63: Draft decision AA5 capital expenditure forecast – Pipeline and mainline valves business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	2.04	1.68	2.40	1.94	1.56	9.61
Project adjustment	(0.41)	(0.33)	(0.72)	(0.87)	(0.55)	(2.87)
Labour cost escalation adjustment	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.07)
Draft decision capital expenditure	1.63	1.33	1.66	1.05	0.99	6.67

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020.

SCADA business case

634. DBP proposed \$1.92 million of forecast capital expenditure for the SCADA business case for AA5. The forecast expenditure covers two projects as shown in Table 64.

Table 64: Proposed AA5 forecast capital expenditure - SCADA business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
SCADA hardware upgrade	0.13	0.13	0.13	0.14	0.35	0.89
SCADA software upgrade	0.00	0.00	0.00	1.02	0.00	1.02
Business case total	0.13	0.13	0.13	1.16	0.35	1.92

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25, January 2020.

635. The hardware upgrade component of the SCADA business case covers the replacement of server and switch hardware in line with the standard warranty by the hardware manufacturers. The software upgrade component of the SCADA business case covers a full software upgrade of the DBNGP's SCADA assets to avoid obsolescence and ensure integration and alignment with other assets used on the DBNGP.

636. DBP based the proposed forecast capital expenditure for the software upgrade on a quote provided by the software provider and similarly the proposed expenditure for

the server hardware was based on the lowest-priced quotes by vendors for each server identified as needing replacement during AA5.

637. DBP submitted that its proposed forecast expenditure for the SCADA business case was necessary to maintain and improve the safety and integrity of services on the DBNGP. DBP submitted that the proposed work covered by the expenditure would maintain and improve the safety and integrity of services because SCADA assets feed information from the DBNGP's assets back to its control centre and thereby supported safe and reliable pipeline control and monitoring.²⁴³
638. The ERA considers that the proposed upgrades to be undertaken as part of the SCADA business case are necessary to maintain and improve the safety and integrity of services on the DBNGP, are in line with good industry practice and the proposed costs are those that would be incurred by a prudent service provider acting efficiently. This view is based on technical advice that:
- It is necessary to keep SCADA hardware and software current to avoid failure of the SCADA hardware and software, which can lead to the loss of visibility of DBNGP's assets and materially impact on the safety and efficiency of the affected assets.
 - DBP's proposed costs for the SCADA software and hardware upgrades are based on current and reasonable estimates and DBP's replacement schedule for the servers and switches aligns with good industry practice.
 - DBP's decision to use [REDACTED] instead of [REDACTED], for any required professional services is prudent as it reduces the cost of the software upgrade.²⁴⁴
639. The ERA concludes that capital expenditure of \$1.90 million for the SCADA business case satisfies the requirements for conforming capital expenditure and forecasts set out in rules 79 and 74 of the NGR and has included this in the draft decision capital expenditure forecast for AA5 as shown in Table 65. This capital expenditure includes labour cost escalation of 0.30 per cent, as outlined at paragraph 608.²⁴⁵

Table 65: Draft decision for AA5 capital expenditure forecast – SCADA business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.13	0.13	0.14	1.16	0.35	1.92
Labour cost escalation adjustment	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)
Draft decision capital expenditure	0.13	0.13	0.13	1.15	0.35	1.90

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020.

²⁴³ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 84.

²⁴⁴ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 120-121.

²⁴⁵ The amount of capital expenditure included in the draft decision forecast appears unchanged due to rounding in the text and Table 65. The labour cost escalation adjustment to the SCADA business case forecast is \$437, to the nearest dollar.

Gas engine alternator business case

640. DBP proposed \$8.30 million of forecast capital expenditure for the gas engine alternator control system replacement business case for AA5. The proposed expenditure, distributed over AA5 as shown in Table 66, comprises the estimated cost for replacement of [REDACTED] gas engine alternator and diesel engine alternator control systems and the transition to a standardised power management system for all gas engine alternator control systems on the DBNGP. There are four different brands of gas engine alternator control systems used on the DBNGP, and all brands require replacement approximately every 15 years according to DBP's asset management plan and manufacturer recommendations. The forecast cost of replacing the control systems identified for replacement during AA5 covers four projects as shown in Table 66, with each project covering the costs of replacing control systems using one brand.

Table 66: Proposed AA5 forecast capital expenditure - Gas engine alternator control system replacement business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
GEA control system replacement [REDACTED]	0.92	-	-	-	-	0.92
GEA control system replacement [REDACTED]	-	-	-	0.92	0.92	1.85
GEA control system replacement [REDACTED]	-	-	0.46	0.92	1.39	2.77
GEA control system replacement [REDACTED]	-	-	0.92	1.38	0.46	2.77
Business case total	0.92	0.00	1.38	3.23	2.77	8.30

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

641. DBP submitted that the current gas engine alternator control systems use obsolete control system hardware and the architecture of those systems restricted effective integration into the DBNGP's compressor station control system. This restriction led to a loss of event history and other data required for failure analysis. An independent front-end engineering and design study, conducted by a consultant in 2012, recommended that the DBNGP's gas engine alternator power management systems be standardised.²⁴⁶ DBP therefore considered that the proposed expenditure for the gas engine alternator control systems business case is required to maintain and improve the safety and integrity of services on the DBNGP.²⁴⁷

642. The forecast cost of the gas engine alternator control system replacement business case is based on the cost of the most recent replacement conducted on the DBNGP.²⁴⁸

²⁴⁶ The reasons given for this recommendation were to simplify and optimise the DBNGP's control and system stability, allow DBP to monitor gas engine alternator performance more closely and identify when proactive intervention is required, and to save fuel and reduce emissions. DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 98.

²⁴⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 99, 102, 112.

²⁴⁸ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 113.

643. The ERA considers that, while some of the proposed control system replacements are necessary to maintain the integrity of services on the DBNGP, the full program of [REDACTED] replacements would not be undertaken by a prudent service provider acting efficiently. This is based on technical advice that DBP has demonstrated its ability to defer most of its planned control system replacements at no material risk in AA4, and that DBP can prudently defer the replacement of [REDACTED] control systems to the next access arrangement period.²⁴⁹ DBP's proposed schedule of gas engine alternator control system replacements for AA5 shows that the average age of the control systems at replacement would be 14.7 years, which is less than the control systems' technical design lives of 15 years and that [REDACTED] control systems are scheduled to be replaced at less than the technical design life. Deferring the replacement of [REDACTED] control systems to AA6, with no control systems replaced at less than 15 years, would increase the average replacement age to 15.2 years but at minimal risk to the DBNGP's operations.²⁵⁰ The ERA concludes that it would be prudent and consistent with good industry practice to replace [REDACTED] control systems instead of the proposed [REDACTED] in AA5.

644. The ERA considers that a service provider acting efficiently would incur \$6.41 million for the replacement of [REDACTED] gas engine alternator control systems on the DBNGP during AA5. This amount has been derived by:

- Applying DBNGP's cost estimate reduced by the estimated cost of the [REDACTED] replacements that can be deferred to AA6.
- Adjusting the labour cost escalation included in the forecast to reflect a rate of 0.30 per cent as outlined at paragraph 608.

The ERA has included \$6.41 million in the draft decision capital expenditure forecast for the 'Gas engine alternator' business case as shown in Table 67. The ERA considers that \$6.41 million is the best estimate possible of the capital expenditure that will be necessary for this program of work during AA5, as required by rule 74 of the NGR.

Table 67: Draft decision AA5 capital expenditure forecast – Gas engine alternator business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.92	0.00	1.38	3.23	2.77	8.30
Project adjustment	0.00	0.00	(0.91)	(1.37)	0.46	(1.82)
Labour cost escalation adjustment	(0.00)	0.00	(0.01)	(0.03)	(0.02)	(0.07)
Draft decision capital expenditure	0.91	0.00	0.46	1.83	3.21	6.41

**The positive adjustment in 2025 reflects that the GEAs scheduled for replacement in 2023 are deferred to 2025. The capital expenditure for the GEAs scheduled for replacement in 2024 is deferred to the sixth access arrangement revision period.*

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

²⁴⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 376. As stated in paragraphs 482 and 483, DBP deferred most of the gas engine alternator program scheduled for AA4 based on an assessment of the assets' performance during AA4.

²⁵⁰ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 121.

Compressor stations accommodation business case

645. DBP proposed \$5.11 million of forecast capital expenditure for the compressor stations accommodation business case for AA5. The proposed expenditure, which is distributed over AA5 as shown in Table 68, comprises the forecast cost for the refurbishment of accommodation within the nine compressor station compounds along the DBNGP, including:

- Building reinforcement in cyclone-prone areas and demountable building refurbishment.
- Improving amenity at the accommodation consistent with the recommendations and findings of the 2015 Inquiry into mental health impacts of fly-in, fly-out work arrangements.²⁵¹
- Improving the standard of living conditions at the compressor station compounds by making the kitchen, bathroom and bedroom areas more contemporary, functional and private.²⁵²

Table 68: Proposed AA5 forecast capital expenditure - Compressor stations accommodation business case (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Refurbishment of compressor station accommodation/control room buildings and replacement of beds	1.02	1.02	1.02	1.02	1.03	5.11
Business case total	1.02	1.02	1.02	1.02	1.03	5.11

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

646. DBP submitted that its proposed refurbishment of compressor station accommodation during AA5 was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP and to assist DBP to comply with regulatory obligations.²⁵³ DBP considered that refurbishment of accommodation along the DBNGP would improve the overall safety of the DBNGP by enhancing the accommodation so it provides protection from excessive noise and heat conditions and withstands the prevailing environmental conditions. DBP considered that these improvements were necessary to fulfil its obligations under the *Petroleum Pipeline Act 1969 (WA)* and the *Mines Safety and Inspection Act 1994* regarding accommodation provided to employees.²⁵⁴

647. The ERA considers that the scope of work covered by the 'Compressor stations accommodation' business case is necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP and would be undertaken by a prudent operator acting in line with good industry practice.²⁵⁵ The

²⁵¹ Western Australia Parliament Legislative Assembly, Education and Health Standing Committee, *The impact of FIFO work practices on mental health: Final Report*, 18 June 2015, cited in DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 120.

²⁵² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 128.

²⁵³ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 117.

²⁵⁴ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 118-120.

²⁵⁵ The ERA's view on this point was supported by EMCa's technical advice, which was that the compressor stations accommodation refurbishment planned by DBP for AA5 is necessary due to the condition of the assets. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 122.

ERA does not, however, consider that the proposed expenditure would be incurred by a service provider acting efficiently.

648. DBP based the proposed forecast capital expenditure for the compressor stations accommodation business case on:

- Actual costs it incurred during AA4 for the refurbishment of kitchens, replacement of carpet, paint and curtains, being \$0.4 million per site.
- Replacement costs for air-conditioning units for noise and heat mitigation and building reinforcement work.²⁵⁶

649. The estimated cost of each activity covered by the proposed forecast capital expenditure during AA5 was as shown in Table 69.

Table 69: Accommodation refurbishment – Cost by activity, not including labour escalation (\$ million real as at 30 June 2019)

Activity	AA5 total
Noise & heat mitigation on the accommodation units	1.00
Building reinforcement in cyclone prone areas and demountable refurbishment	2.70
Finish kitchen, carpets, curtains, painting and any outstanding bathroom issues	1.60
Total	5.00

Source: DBP, 2021-2015 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 128, Table 0.13.

650. DBP submitted that the proposed capital expenditure for the compressor station accommodation business case for AA5 covered the refurbishment of kitchens, carpets, curtains and paint at three compressor station sites.²⁵⁷ For one of those compressor station sites, the refurbishment of the kitchens, carpets, curtains and paint would be carried out over 2020 and 2021 and therefore only a portion of the work would be conducted during AA5. Multiplying the stated cost assumption of \$0.4 million per site for this work by the three sites scheduled for refurbishment of kitchens, carpets, curtains and paint gives \$1.2 million, which does not reconcile to the \$1.6 million which DBP included in its AA5 forecast for this work.²⁵⁸

651. The ERA considers that \$4.68 million is the best estimate of the efficient cost of the 'Compressor stations accommodation' scope of work for AA5, as is required by rule 74 of the NGR. This amount has been derived by adjusting the proposed expenditure to:

- Include capital expenditure of \$0.25 million, on average, for each of the kitchen refurbishments to be conducted during 2021, and \$0.3 million for the kitchen refurbishment to be conducted during 2022. The average unit costs for the kitchen refurbishments is based on technical advice that these unit costs are

²⁵⁶ The cost per site for refurbishment of kitchens and replacement of carpet, paint and curtains is denominated in real dollars as at 30 June 2019. DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 133.

²⁵⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 123, Table 0.5.

²⁵⁸ Real dollars as at 30 June 2019.

reasonable.²⁵⁹ Additionally, for the refurbishment at compressor station 4, some of the work will be conducted during 2020 and therefore part of the costs will not be incurred during 2021.

- Reflect the ERA's estimate of the real labour escalation rate for AA5 (0.30 per cent) as stated at paragraph 608.

652. The \$4.68 million for the 'Compressor stations accommodation' business case has been included in the draft decision forecast capital expenditure as shown in Table 70.

Table 70: Draft decision AA5 capital expenditure forecast – Compressor stations accommodation business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.02	1.02	1.02	1.02	1.03	5.11
Project adjustment	(0.30)	(0.10)	0.00	0.00	0.00	(0.40)
Labour cost escalation adjustment	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)
Draft decision capital expenditure	0.71	0.91	1.02	1.02	1.02	4.68

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020.

Northern communications system business case

653. DBP proposed \$30.54 million of forecast capital expenditure for the 'Northern communications system' business case for AA5. The proposed expenditure covers the replacement of telecommunications infrastructure on the northern section of the DBNGP, which covers approximately 1,500 kilometres of pipeline between Perth and Dampier. The scope of work for the business case includes the replacement of equipment at 42 repeater sites and the replacement of the existing copper cables used to connect communications repeater sites to nine compressor stations with optic fibre. The proposed expenditure is distributed over AA5 as shown in Table 71.

Table 71: Proposed AA5 forecast capital expenditure - Replacement of northern communications system business case (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Replacement of northern communications system	15.25	15.29	-	-	-	30.54
Business case total	15.25	15.29	0.00	0.00	0.00	30.54

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

654. DBP submitted that the communications equipment it proposed to replace was at the end of its design life, with many of the equipment manufacturers no longer offering product and system support or supplying spare parts. DBP considered that the technological obsolescence of this equipment meant that the reliability of DBNGP's communications network had deteriorated, and therefore the proposed capital expenditure for the northern communications system was necessary to maintain the

²⁵⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 122.

long-term performance and reliability of the DBNGP's communications network, the continued operation of the pipeline and the safety and integrity of services.²⁶⁰

655. DBP based its estimate of the costs of the proposed northern communications system replacements on an estimate provided by independent consultant, [REDACTED], which DBP engaged to provide an estimate of the costs for replacing failing and obsolete communications equipment on the DBNGP. DBP's forecast expenditure of \$30.54 million for the northern communications system replacements is lower than its consultant's estimate, reflecting adjustments where DBP considered it was possible to prudently and safely defer certain capital works, for example voice communications network upgrades.²⁶¹ DBP submitted that, while the number of sites addressed by the northern communications system business case was higher than the number addressed by the southern communications system business case (evaluated at paragraphs 562 to 570) during AA4, the cost per location was expected to be approximately 40 per cent lower due to the use of existing tower structures and economies of scale in procurement.²⁶²
656. The ERA considers that the proposed replacement of the northern communications system is necessary to maintain the safety and integrity of services along the DBNGP and is in line with good industry practice. This view is based on technical advice that:
- Replacing the northern communications system is justified and required given its deteriorating reliability, lack of available spare parts, technological obsolescence of the equipment and other condition-related issues which increase the risk of failure of the northern communications system, which is a critical asset for DBNGP's operations.
 - The planned scope and timing of the work proposed is consistent with the undertakings of a prudent operator.²⁶³
657. The ERA also considers that the proposed capital expenditure for the replacement of the northern communications system, excluding the labour cost escalation component, reflects an amount that would be incurred by a service provider acting efficiently. This view is based on the support for the cost estimates provided by [REDACTED] and that DBP has identified opportunities to defer work where prudent by further refining [REDACTED] cost estimate. The ERA's view is also supported by technical advice that DBP's replacement options for the major components were selected based on cost and benefit analyses which apply reasonable estimates.²⁶⁴
658. The ERA concludes that capital expenditure of \$30.54 million for the 'Northern communications system' business case satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR and includes this in the draft decision capital expenditure forecast for AA5 as shown in Table 72. This capital expenditure includes labour cost escalation of 0.30 per cent, as outlined at paragraph 608.

²⁶⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 137-138, 157.

²⁶¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 138, 151.

²⁶² DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 138.

²⁶³ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 122-123.

²⁶⁴ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 122-123.

Table 72: Draft decision AA5 capital expenditure forecast – Northern communications system business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	15.25	15.29	0.00	0.00	0.00	30.54
Labour cost escalation adjustment	(0.05)	(0.07)	(0.00)	(0.00)	(0.00)	(0.11)
Draft decision capital expenditure	15.20	15.22	0.00	0.00	0.00	30.43

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020 Compressor package control system replacement business case

Compressor package control system replacement business case

659. DBP proposed \$18.84 million of forecast capital expenditure for the ‘Compressor package control system replacement’ business case for AA5. The proposed expenditure covers the replacement of [REDACTED] turbine compressor package control systems during AA5 at the end of their technical design lives. The proposed expenditure is distributed over AA5 as shown in Table 73.

Table 73: Proposed AA5 forecast capital expenditure - Compressor package control system replacement business case (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Compressor unit control system replacement (Stage 3 & Stage 4 Units)	-	4.69	4.70	4.71	4.73	18.84
Business case total	-	4.69	4.70	4.71	4.73	18.84

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 PUBLIC, January 2020.

660. DBP submitted that the replacement of turbine compressor package control systems as planned in its ‘Compressor package control system replacement’ business case was necessary to ensure the continued operation of compressors to maintain the safety and integrity of services along the DBNGP.²⁶⁵ DBP stated that turbine unit control systems that were not replaced at the end of their technical design lives and for which there was minimal or no support were classified as high risk under its internal risk rating system.²⁶⁶

661. The proposed forecast for the compressor package control system business case is based on a forecast unit rate multiplied by the number of units scheduled for replacement during AA5. The unit rate includes the internal labour, external labour and materials and other costs necessary to complete the replacements. This unit rate is based on historical actual costs for similar replacements and has been tested against a formal quote from the vendor of one type of the control systems.²⁶⁷

662. The ERA has received technical advice that age is not the sole determinant of the prudent replacement date of the control systems. DBP’s proposed schedule of turbine unit control system replacements for AA5 has an average replacement age

²⁶⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 161.

²⁶⁶ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 167.

²⁶⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 176.

of 17.5 years, which is less than the control system's technical design life of 18 years. [REDACTED] control systems are planned to be replaced at less than 18 years. Based on the technical advice received, the ERA concludes that DBP can defer the replacement of [REDACTED] control systems to AA6 by employing the life extension strategy which it adopted during AA4 (cannibalising spare parts from replaced units), which would increase the average replacement age of the systems to 18.5 years at minimal risk.²⁶⁸

663. The ERA requires that the capital expenditure forecast for AA5 be amended to reflect a total forecast of \$14.04 million for the 'Compressor package control system replacement' business case as shown in Table 74.²⁶⁹ The ERA considers that this amount satisfies the criteria for conforming capital expenditure set out in rule 79 of the NGR. This amount has been derived by:

- Applying the adjustment to the proposed capital expenditure outlined at paragraph 662.
- Adjusting the labour cost escalation included in the forecast to reflect a real labour cost escalation rate of 0.30 per cent as outlined at paragraph 608.

Table 74: Draft decision AA5 capital expenditure forecast – Compressor package control system replacement business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.00	4.69	4.70	4.71	4.73	18.84
Project adjustment	0.00	(4.65)	0.00	0.00	0.00	(4.65)
Labour cost escalation adjustment	0.00	(0.04)	(0.03)	(0.03)	(0.04)	(0.14)
Draft decision capital expenditure	0.00	0.00	4.67	4.68	4.69	14.04

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020.

Jandakot site redevelopment business case

664. DBP proposed \$8.53 million of forecast capital expenditure for the 'Jandakot site redevelopment' business case for AA5. The forecast capital expenditure is split between two projects as shown in Table 75. Together, these projects cover:

- Residual work in 2021 from the work on the site undertaken in AA4 (outlined at paragraphs 492 to 494). This includes construction of a facility to provide office space, a workshop, storage area and test environment lab for DBP's industrial automation control systems team by converting an existing space and completion of a program of minor upgrades, including upgraded security fencing.²⁷⁰
- The redevelopment of the DBNGP's Jandakot depot during AA5 including the construction of additional new office and warehouse facilities.

²⁶⁸ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 376 and p. 124.

²⁶⁹ The revised forecast was derived by reducing the proposed business case capital expenditure by the amount of proposed capital expenditure for 2022.

²⁷⁰ DBP, *Response to information request EMCa 24*, 8 July 2020.

Table 75: Proposed AA5 capital expenditure - Jandakot site redevelopment business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Jandakot upgrade completion	0.29	0.00	0.00	4.10	3.91	8.29
IACS office/workshop/test lab	0.24	0.00	0.00	0.00	0.00	0.24
Business case total	0.53	0.00	0.00	4.10	3.91	8.53

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: IACS – industrial automation control systems team.

665. The Jandakot depot was constructed in the late 1980s and DBP submitted that its use has expanded from the uses originally planned for the site when it was constructed. Consequently, the accommodation and warehouse facilities are now functioning beyond their capacity and giving rise to risks. These risks include health and safety risks, security risks, stock loss risks and growing safety incident risks.²⁷¹ DBP therefore considered that incurring the proposed capital expenditure to redevelop the Jandakot depot was necessary to improve the safety of services on the DBNGP and to comply with DBP's regulatory obligations and requirements.²⁷²
666. The forecast cost submitted for the redevelopment of the Jandakot depot is an estimate. DBP stated that a formal procurement process would be undertaken before commencing the work.²⁷³
667. The ERA accepts that the proposed redevelopment of the Jandakot site is necessary to improve the safety of services on the DBNGP and to comply with DBP's regulatory obligations. This view is based on technical advice that:
- The current facilities on the site will need to be improved to offset the constraints and risk presented by the state of the current facilities outlined at paragraph 665.²⁷⁴
 - DBP considered some alternatives to the planned redevelopment and concluded these alternatives were not sustainable long-term options and this conclusion is reasonable. The alternatives included leasing warehouse and training facilities and changing staff rosters to reduce the need for hotel accommodation for staff attending training.²⁷⁵
668. The ERA is not, however, satisfied that the amount of expenditure proposed for AA5 is a reasonable estimate of the amount that a prudent service provider operating efficiently would incur for the site redevelopment. This view is based on technical advice that one of the options considered by DBP in its options analysis for the redevelopment, which DBP did not select to pursue, would deliver the same outcome

²⁷¹ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 181-182.

²⁷² DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 188, 198-199.

²⁷³ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 199.

²⁷⁴ EMCa, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, p. 125.

²⁷⁵ EMCa, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, p. 125. DBP's reason for not pursuing these alternatives was supplied in DBP, Response to EMCa 19, 3 March 2020.

as the planned redevelopment.²⁷⁶ This option is to pursue the redevelopment in stages, with the office and traffic management issues being addressed in AA5 and the construction of the warehouse facility being deferred until the AA6 period.²⁷⁷ Effectively, this option involves the same scope of work, however, defers the timing of the work by one year, resulting in a lower net present cost for the work.

669. The ERA considers that delays to the work compared to the planned schedule may occur in any case based on technical advice that the work is likely to be delayed compared to the schedule due to the prevailing on-site conditions.²⁷⁸ DBP's work schedule allows six months for the approvals process for environmental, heritage and class A water mound approvals to be secured. The ERA has taken into account technical advice that DBP has not demonstrated that it has adequately considered the likelihood of a more protracted approvals process, which is typical with projects of this nature.²⁷⁹
670. Based on the reasoning and conclusions at paragraphs 668 to 669, the ERA considers that \$4.60 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'Jandakot site redevelopment' business case for AA5 and therefore satisfies rule 74 of the NGR. This amount has been derived by:
- Reducing the proposed forecast capital expenditure by assuming the site redevelopment work program is deferred by one year.
 - Adjusting the labour cost escalation included in the forecast to reflect a real labour cost escalation rate of 0.30 per cent as outlined at paragraph 608.
671. The draft decision capital expenditure forecast therefore includes capital expenditure for the 'Jandakot site redevelopment' business case as shown in Table 76.

Table 76: Draft decision AA5 capital expenditure forecast – Jandakot site redevelopment business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.53	0.00	0.00	4.10	3.91	8.53
Project adjustment	0.00	0.00	0.00	(4.05)	0.20	(3.84)
Labour cost escalation adjustment	(0.00)	0.00	0.00	(0.05)	(0.03)	(0.09)
Draft decision capital expenditure	0.52	0.00	0.00	0.00	4.07	4.60

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

²⁷⁶ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 125.

²⁷⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 197.

²⁷⁸ The development site is on a class A water mound with limits on development which may constrain DBP's proposed redevelopment.

²⁷⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 125.

Maximo and DMZ business case

672. DBP proposed \$2.30 million of forecast capital expenditure for the ‘Maximo and DMZ’ business case for AA5. The forecast capital expenditure covers four projects as shown in Table 77.

Table 77: Proposed AA5 forecast capital expenditure - Maximo and DMZ business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
CSN Cisco firewall and server replacement	0.16	0.00	0.00	0.00	0.00	0.16
Maximo annual patching	0.00	0.11	0.11	0.11	0.11	0.43
DMZ upgrade	0.17	0.05	0.05	0.19	0.05	0.52
Maximo business process redesign	1.19	0.00	0.00	0.00	0.00	1.19
Business case total	1.52	0.16	0.16	0.30	0.16	2.30

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: CSN – control system network.

673. ‘Maximo’ and ‘DMZ’ are primary components of DBNGP’s operational technology, which directly support the safe and reliable operations and control of the DBNGP. DBP submitted that the ‘CSN Cisco firewall and server replacement’ project was a standard end of life replacement. The Maximo annual patching project covers the application of patches to the Maximo software, which DBP applies annually in line with vendor guidelines, to maintain the system’s reliability and performance. The ‘DMZ upgrade’ project also covers regularly conducted upgrades, which are required to ensure the environment remains robust and to maintain system-based security within the DBNGP. The Maximo business process redesign is a continuing project commenced in AA4 which is forecast to be completed in 2021, designed to realign asset and maintenance activity structures in Maximo with DBP’s asset management plans and introduce additional functionality to track safety elements.

674. DBP based the proposed forecast capital expenditure for the end of life replacement and annual patching work on historical actual information. DBP based the proposed forecast capital expenditure for the DMZ upgrade and Maximo business process redesign projects on the respective manufacturers’ guidance on cost and supplied details of this guidance.²⁸⁰

675. DBP submitted that its proposed forecast expenditure for the ‘Maximo and DMZ’ business case was necessary to maintain the integrity of services on the DBNGP. DBP submitted that the proposed work covered by the expenditure maintained the integrity of services because DMZ and Maximo were critical operational technology tools and the management and maintenance of these tools ensured its systems and data accuracy were reliable.²⁸¹

676. The ERA considers that the proposed projects to be undertaken as part of the ‘Maximo and DMZ’ business case during AA5 are necessary to maintain the integrity

²⁸⁰ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 202. DBP, Response to EMCa 21, 20 March 2020.

²⁸¹ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 212.

of services on the DBNGP and that the proposed capital expenditure, which is driven by standard end-of-life replacements, standard maintenance investment and the continuation of an improvement project, is in line with good industry practice.²⁸²

677. Based on review of the cost estimates supplied for the work and technical advice received that the proposed costs are based on reasonable estimates, the ERA also considers that the proposed expenditure is consistent with the amount that would be incurred by a prudent service provider acting efficiently, excluding the labour cost escalation component.²⁸³ The ERA has adjusted the labour cost escalation included in the forecast to reflect a real rate of 0.30 per cent as outlined at paragraph 608 and concludes that \$2.29 million for the 'Maximo and DMZ' business case satisfies the requirements for conforming capital expenditure and forecasts set out in rules 79 and 74 of the NGR. \$2.29 million has therefore been included in the draft decision capital expenditure forecast for AA5 as shown in Table 78.²⁸⁴

Table 78: Draft decision AA5 capital expenditure forecast – Maximo and DMZ business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.52	0.16	0.16	0.30	0.16	2.30
Labour cost escalation adjustment	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Draft decision capital expenditure	1.52	0.16	0.16	0.30	0.16	2.29

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Safety case revisions business case

678. DBP proposed \$0.51 million of forecast capital expenditure for the 'Safety case revisions' business case for AA5. The forecast expenditure covers one project as shown in Table 79.

Table 79: Proposed AA5 forecast capital expenditure - Safety case revisions business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Safety case revision and remaining life review	0.51	-	-	-	-	0.51
Business case total	0.51	-	-	-	-	0.51

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

679. The DBNGP safety case is the primary document that outlines how the operation of the pipeline is conducted in compliance with DBP's legislative obligations under the

²⁸² The ERA's view on this point is supported by EMCa's technical advice that it is prudent for DBP to undertake the proposed activities for the 'Maximo and DMZ' business case. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 126.

²⁸³ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 126.

²⁸⁴ The amount of capital expenditure included in the draft decision forecast appears unchanged due to rounding in the text and Table 78.

Petroleum Pipelines Act 1969 and the Petroleum Pipelines (Management of Safety of Pipeline Operations) Regulations 2010. A comprehensive review and revision of the safety case is required every five years. As the most recent review occurred in 2016, DBP is required to submit a revised safety case in 2021. The proposed forecast capital expenditure for AA5 covers the cost for the required review and revision of the DBNGP safety case.

680. DBP submitted that its proposed forecast expenditure for the ‘Safety case revisions’ business case was necessary to comply with regulatory obligations and to maintain the integrity of services by maintaining good industry practice by keeping the DBNGP’s safety case current.²⁸⁵
681. DBP based the proposed forecast capital expenditure for the ‘Safety case revisions’ business case on the historical costs of previous safety case reviews and revisions.²⁸⁶ DBP submitted that it incurred \$0.65 million in total for the last revision of its safety case, with \$0.21 million of this being incurred in 2015 and the remainder incurred in 2016.
682. The ERA considers that DBP’s proposed capital expenditure for the ‘Safety case revisions’ business case is not consistent with the amount that a prudent service provider acting efficiently would incur. This is based on technical advice that the revision of the safety case should be straightforward given the incremental nature of the work.²⁸⁷
683. \$0.31 million of capital expenditure for the ‘Safety case revisions’ business case has been included in the draft decision capital expenditure forecast, as shown in Table 80. This amount has been derived based on technical advice that an amount of \$0.31 million is a reasonable amount for updating DBP’s safety case in AA5. The ERA considers that this amount is the best estimate possible of the capital expenditure that will be necessary for the safety case revision taking place during AA5, as required by rule 74 of the NGR. This amount includes real labour escalation of 0.30 per cent as outlined at paragraph 608.

Table 80: Draft decision AA5 capital expenditure forecast – Safety case revisions business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.51	0.00	0.00	0.00	0.00	0.51
Project adjustment	(0.20)	0.00	0.00	0.00	0.00	(0.20)
Labour cost escalation adjustment	(0.00)	0.00	0.00	0.00	0.00	(0.00)
Draft decision capital expenditure	0.31	0.00	0.00	0.00	0.00	0.31

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

²⁸⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 217, 226.

²⁸⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 227.

²⁸⁷ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 126.

Meter stations business case

684. DBP proposed \$7.89 million of forecast capital expenditure for the 'Meter stations' business case for AA5. The forecast expenditure covers 10 projects as shown in Table 81. The proposed AA5 expenditure is significantly lower than the proposed capital expenditure for this business case (\$26.23 million) for AA4. This is because the work undertaken for the 'Meter stations' business case in AA4 was driven by unforeseen events, outlined at paragraph 508.

Table 81: Proposed AA5 forecast capital expenditure - Meter stations business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Flow computer replacement	-	-	-	-	0.15	0.15
Meter station valves and control valves overhauls	0.94	0.75	0.76	0.76	0.76	3.97
Upgrade of gas chromatographs	0.13	-	-	-	-	0.13
Coriolis meter replacement	0.16	-	-	-	-	0.16
Cockburn power station and PEPL flow meter	0.29	-	-	-	-	0.29
Earthing replacement and AC mitigation of facilities	0.10	0.10	0.10	0.10	0.10	0.51
Turbine meter replacement	-	-	-	-	0.23	0.23
Water bath heater replacement at meter stations	0.24	0.24	0.25	0.25	0.25	1.23
MLV and meter station hazardous area inspection and rectification works	-	0.20	0.41	0.20	-	0.82
Meter station piping repair due to corrosion	0.08	0.08	0.08	0.08	0.08	0.41
Business case total	1.94	1.39	1.59	1.39	1.58	7.89

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: AC – alternating current; PEPL – Pilbara extension pipeline.

685. The scope of works covered by the 10 projects that comprise the meter stations business case include:

- The replacement or refurbishment of end of life measurement equipment.
- The replacement of end of life gas quality analysis equipment.
- The replacement and refurbishment of gas heating equipment and associated utilities.
- The replacement and refurbishment of pressure, temperature and flow control equipment.

- The replacement and refurbishment of electrical and instrumentation equipment required to monitor and control the field equipment.²⁸⁸
686. DBP submitted that its proposed forecast expenditure for the meter stations business case was necessary to maintain and improve the safety and integrity of services on the DBNGP, as well as to comply with its regulatory obligations including obligations specified by DBP's commercial agreements and legislation including the *Petroleum Pipelines Act 1969* and *Petroleum Pipelines (Management of Safety of Pipeline Operations) Regulations 2010* and Australian Standards 2885, 3000 and 60079.²⁸⁹
687. Where possible, DBP derived its proposed forecast costs for the meter stations business case by multiplying the proposed volume of activities by estimated unit rates that have been based on three-year actual average costs incurred in AA4. Where this was not possible, due to infrequent or new activities identified for AA5, DBP based its proposed forecast costs for the meter stations business case on tender contract values that were determined through a competitive tender process.²⁹⁰
688. The proposed volume of activities and the schedule for those activities aligns with the volume and schedule of activities specified in DBP's pipeline and mainline valves asset management plan.²⁹¹
689. The ERA accepts that the 'Meter stations' work program DBP proposed would contribute to maintaining the safety and integrity of services on the DBNGP, as well as complying with DBP's regulatory obligations. This is based on technical advice that good industry practice for meter stations assets is for preventative management of the assets rather than reactive management. DBP's proposed schedule of activities reflects a preventative management approach.
690. However, the ERA is not satisfied that the amount of expenditure proposed for AA5 is a reasonable estimate of the amount that a prudent service provider operating efficiently would incur. This conclusion is based on technical advice that, of the 10 projects proposed for AA5, based on historical expenditure, DBP is likely to be able to prudently reduce its expenditure on five of these due to these being either recurring annual expenditures or having high annual capital costs and/or rounded-up estimates.²⁹²
691. The ERA considers that \$7.06 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'Meter stations' business case for AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by:
- Reducing the un-escalated costs included in the proposed forecast by 10 per cent
 - Adjusting the labour cost escalation included in the forecast to reflect a real rate of 0.30 per cent as outlined at paragraph 608.
692. The adjustment to the un-escalated costs has been made based on DBP's demonstrated ability during the AA4 period to identify opportunities to prudently defer

²⁸⁸ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 233.

²⁸⁹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 229-230.

²⁹⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 246-247.

²⁹¹ DBP, *Asset Management Plan Metering Facilities (Confidential)*, 2 January 2020.

²⁹² These projects are 'Earthing replacement and AC mitigation of facilities', 'Meter station valves and control valves overhauls', 'Water gas heater fuel train replacement at meter stations', 'Mainline valve and meter station hazardous area inspection and rectification works' and 'Meter station piping repair due to corrosion'. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 127.

planned work or identify efficiencies in executing that work for other business cases, and technical advice that a reduction of 10 per cent is likely to result in a reasonable amount for the 'Meter stations' work.²⁹³ The draft decision capital expenditure forecast includes capital expenditure for the 'Meter stations' business case as shown in Table 82.

Table 82: Draft decision AA5 capital expenditure forecast – Meter stations business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.94	1.39	1.59	1.39	1.58	7.89
Project adjustment	(0.19)	(0.14)	(0.16)	(0.14)	(0.16)	(0.78)
Labour cost escalation adjustment	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.05)
Draft decision capital expenditure	1.74	1.24	1.43	1.25	1.41	7.06

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Tools business case

693. DBP proposed \$1.68 million of forecast capital expenditure for the 'Tools' business case for AA5. This is 45.21 per cent higher than the capital expenditure for this business case for AA4. The forecast expenditure covers four projects as shown in Table 83.

Table 83: Proposed AA5 forecast capital expenditure - Tools business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
TAM tools	0.08	0.08	0.08	0.08	0.08	0.38
TOM tools	0.20	0.20	0.20	0.20	0.21	1.02
Borescope replacement	0.10	-	-	-	0.10	0.20
Emergency response equipment replacement	-	-	-	-	0.07	0.07
Business case total	0.38	0.28	0.28	0.28	0.46	1.68

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

Note: * Abbreviations: TAM - transmission asset management; TOM - transmission operations management.

694. The four projects together cover the regular inspection and periodic, proactive replacement of the tools and equipment required by DBP's technicians, tradespeople and engineers to perform their work in a safe manner.

²⁹³ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 127.

695. DBP derived the proposed forecast capital expenditure for the 'Tools' business case by multiplying the proposed volume of activities, which was based on historical average volumes, by estimated unit rates for materials and labour.²⁹⁴
696. DBP attributed the increase in the forecast 'Tools' capital expenditure for AA5 compared to AA4 to:
- An increase in replacement for borescope equipment, which is required every four years and occurs twice in AA5 (2021 and 2025 as shown in Table 83) and was only required once during AA4.
 - A change to its reporting structure whereby part of the cost of transmission asset management ('TAM') tools was previously captured under another business case.
 - An increase in the number of tools required.
697. DBP submitted that its proposed forecast expenditure for the 'Tools' business case was necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP, as well as to comply with a regulatory obligation because the provision of appropriate tools to its employees and contractors provides a safe working environment, and thereby ensured the tools could be used to deliver safe and reliable supply.²⁹⁵
698. The ERA accepts that the regular inspection and periodic replacement of the tools and equipment used to perform work on the DBNGP is necessary to maintain and improve the safety of services and maintain the integrity of services on the DBNGP, as well as to comply with DBP's regulatory obligations, and would therefore be undertaken by a prudent service provider acting consistently with good industry practice.²⁹⁶
699. The increase in the expected costs for the 'Tools' program of work, however, has not been adequately explained and therefore the ERA is not satisfied that the forecast capital expenditure for the business case is consistent with an efficient amount.
700. DBP cited its historical AA4 cost for one borescope replacement cycle as [REDACTED], however, its forecast cost for the business case effectively applied a unit cost of [REDACTED].²⁹⁷
701. The ERA has also received technical advice that the increase in expenditure for transmission operations management ('TOM') and transmission asset management tools appears to relate at least in part to the addition of un-regulated assets.²⁹⁸
702. The ERA considers that \$1.33 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'Tools' business case for AA5, and

²⁹⁴ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 261. The historical actual volume of borescope equipment was adjusted for an expected increased frequency of replacement for borescope equipment during AA5.

²⁹⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 250.

²⁹⁶ This view is supported by technical advice that replacing operational tools on failure is not consistent with good industry practice. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 128.

²⁹⁷ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 255.

²⁹⁸ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 128.

therefore satisfies rule 74 of the NGR. This amount has been derived by reducing the proposed forecast capital expenditure by:

- Applying the AA4 unit rate for borescope replacement and assuming two replacements will take place during AA5.
- Setting the forecast expenditure for transmission asset management and transmission operations management tools equal to the AA4 expenditure for these tools.
- Adjusting the labour cost escalation included in the forecast to reflect a real rate of 0.30 per cent as outlined at paragraph 608.

703. The draft decision capital expenditure forecast includes capital expenditure for the 'Tools' business case as shown in Table 84.

Table 84: Draft decision AA5 capital expenditure forecast – Tools business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.38	0.28	0.28	0.28	0.46	1.68
Project adjustment	(0.07)	(0.06)	(0.06)	(0.06)	(0.07)	(0.34)
Labour cost escalation adjustment	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Draft decision capital expenditure	0.31	0.21	0.21	0.21	0.38	1.33

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Fleet and civil equipment replacement business case

704. DBP proposed \$4.75 million of forecast capital expenditure for the fleet and civil equipment business case for AA5. The forecast expenditure covers two projects as shown in Table 85.

Table 85: Proposed AA5 forecast capital expenditure - Fleet and civil equipment business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Annual replacement of DBNGP fleet vehicles	0.82	0.83	0.83	0.83	0.83	4.14
Replacement of civil equipment - truck, grader and tractor	0.20	0.00	0.20	0.00	0.21	0.61
Business case total	1.03	0.83	1.03	0.83	1.04	4.75

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

705. Together, the two projects included in the fleet and civil equipment business case cover the replacement of fleet vehicles and civil equipment on the DBNGP. The civil equipment DBP proposed to replace during AA5 includes trailers, plant, heavy vehicles and equipment. DBP considered that its proposed forecast expenditure for

the fleet and civil business case was necessary to maintain and improve the safety and integrity of services on the DBNGP.²⁹⁹

706. DBP submitted that it based the proposed forecast capital expenditure for the fleet and civil business case on recent historical actual costs for the vehicles and equipment scheduled for replacement.
707. The ERA considers that the forecast AA5 cost for civil equipment replacements would be incurred by a service provider acting efficiently and in line with good industry practice. This view is based on technical advice that the rate of replacement activity assumed for civil equipment for AA5, which aligns with historical replacement activity, is reasonable.³⁰⁰
708. For the fleet vehicle replacement, DBP applied an annual replacement rate of [REDACTED] vehicles, which was not consistent with the average replacement rate for AA4 of [REDACTED] vehicles per year, and did not account for the increase in number of replacements.³⁰¹ While the ERA accepts that DBP will be required to incur some expenditure during AA5 for fleet vehicle replacement, without further information, the ERA is not satisfied that a prudent operator acting efficiently would increase its rate of vehicle replacement.
709. The ERA considers that \$4.27 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'Fleet and civil equipment replacement' business case for AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by:
- Adjusting the proposed capital expenditure for this business case by \$0.46 million to reflect a replacement rate for fleet vehicles of [REDACTED] per year in AA5, rather than [REDACTED], at the same unit cost as incurred by DBP during AA4.
 - Adjusting the proposed capital expenditure to reflect the ERA's estimate of the real labour escalation rate for AA5 (0.30 per cent) as stated at paragraph 608.
710. The \$4.27 million for the 'Fleet and civil equipment replacement' business case has been included in the draft decision forecast capital expenditure as shown in Table 86.

Table 86: Draft decision AA5 capital expenditure forecast – Fleet and civil equipment replacement business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.03	0.83	1.03	0.83	1.04	4.75
Project adjustment	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.46)
Labour cost escalation adjustment	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)
Draft decision capital expenditure	0.93	0.73	0.93	0.73	0.94	4.27

Numbers may not add due to rounding.

²⁹⁹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 265.

³⁰⁰ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 129.

³⁰¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 264; DBP, *Response to information request EMCa 44*, 31 March 2020.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Turbine exhaust replacement business case

711. DBP proposed \$4.94 million of forecast capital expenditure for the 'Turbine exhaust replacement' business case for AA5. The proposed expenditure covers the replacement of [REDACTED] turbine exhaust systems during AA5 at the end of their recommended useful lives and the cost of inspection of patchwork previously undertaken on one system. The proposed expenditure for the 'Turbine exhaust replacement' business case is distributed over AA5 as shown in Table 87.

Table 87: Proposed AA5 forecast capital expenditure - Turbine exhaust replacement business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Turbine exhaust replacement	1.21	1.12	0.87	0.87	0.87	4.94
Business case total	1.21	1.12	0.87	0.87	0.87	4.94

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020

712. DBP incurred significantly lower capital expenditure (\$0.4 million) for this business case during AA4.³⁰² As stated at paragraph 518, the work completed during AA4 comprised the inspection and replacement of the turbine exhaust at one compressor station site and the repair of the turbine exhaust at another site, whereas seven replacements and inspection of one system are scheduled for AA5.³⁰³ During AA4 DBP was able to defer one planned replacement by applying patchwork instead.³⁰⁴
713. DBP submitted that the replacement of turbine exhaust systems as outlined in its 'Turbine exhaust replacement' business case was necessary to maintain the integrity of services along the DBNGP as turbine exhaust systems were critical in maintaining the performance and ensuring the safe operation of compressor units at compressor stations on the DBNGP. In addition, DBP also submitted that the replacement of turbine exhaust systems was necessary to comply with regulatory obligations as the proactive replacement of turbine exhaust systems enabled DBNGP assets to deliver the gas requirements of its customers.³⁰⁵
714. DBP's forecast costs for the turbine exhaust replacements include internal labour, external labour, materials, travel and other costs. Where possible, DBP based its forecast costs on three-year average actual costs incurred in AA4. Where was not possible, DBP based its forecast expenditure for turbine exhaust replacements on tender contract values that were determined through a competitive tender process.³⁰⁶
715. The ERA is not satisfied that the entirety of the planned program of replacement work for AA5 would be undertaken by a prudent operator acting efficiently. While proactive replacement of the turbine exhaust systems is consistent with good industry practice,

³⁰² The estimated capital expenditure is denominated in dollars as at 30 June 2019. DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 281.

³⁰³ DBP, Response to information request EMCa 14, 3 March 2020.

³⁰⁴ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 284.

³⁰⁵ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 281.

³⁰⁶ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 293-294.

based on technical advice the ERA considers that the following work would not be conducted by a prudent service provider during AA5:

- The planned replacements at CS5/1 and CS5/2, which can be prudently deferred until AA6. DBP's proposed schedule would replace these units at less than 35 years old, which based on technical advice is overly conservative.
- The planned inspection work for the CS6/2 exhaust in 2021 prior to its replacement.³⁰⁷ Based on technical advice, inspection of this unit would not be prudent to undertake at the scheduled timing in 2021 because by that date the unit would be seven years past its useful life.³⁰⁸

716. The ERA considers that \$3.10 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'Turbine exhaust replacement' business case for AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by:

- Reducing the un-escalated costs included in the proposed forecast by \$1.81 million, which is the amount DBP included in its forecast for the work which would not be prudent to undertake during AA5 identified at paragraph 715.
- Adding labour cost escalation of 0.30 per cent to the remaining expenditure, in line with the ERA's estimate of the real labour escalation rate for AA5 as stated at paragraph 608.

717. The draft decision capital expenditure forecast includes capital expenditure for the 'Turbine exhaust replacement' business case as shown in Table 88.

Table 88: Draft decision AA5 capital expenditure forecast – Turbine exhaust replacement business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.21	1.12	0.87	0.87	0.87	4.94
Project adjustment	(0.09)	0.00	0.00	(0.86)	(0.86)	(1.81)
Labour cost escalation adjustment	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.04)
Draft decision capital expenditure	1.12	1.12	0.86	(0.00)	(0.00)	3.10

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Customer reporting system business case

718. DBP proposed \$2.85 million of forecast capital expenditure for the 'Customer reporting system' (CRS) business case for AA5. The business case covers one project, with the proposed capital expenditure for the project distributed over AA5 as shown in Table 89.

³⁰⁷ These are the two turbine exhaust replacements planned for CS5/1 and CS5/2. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 130.

³⁰⁸ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 130.

Table 89: Proposed AA5 forecast capital expenditure - Customer reporting system business case (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Customer reporting system upgrade	0.61	0.25	0.15	1.68	0.15	2.85
Business case total	0.61	0.25	0.15	1.68	0.15	2.85

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

719. CRS is the contract management and gas accounting system used on the DBNGP to manage gas transportation and gas storage contracts and is also the key customer interface for billing and gas nominations for the DBNGP. The proposed capital expenditure for AA5 covers the cost for rebuilding the user interface for the system and the cost of subsequent enhanced support arrangements during AA5.
720. DBP submitted that the proposed upgrade of the CRS is necessary to maintain the integrity of services on the DBNGP and to comply with regulatory obligations.³⁰⁹
721. DBP's forecast costs for the CRS upgrade comprise internal labour, external labour, materials, travel and other costs. Where possible DBP based its forecast costs on three-year average actual costs incurred in AA4. Otherwise DBP based the cost forecast on:
- Estimates from vendors and prospective vendors.
 - The historic cost of similar programs of work.
 - Consultation with internal stakeholders, DBP's IT support partner and external market specialists to determine the most likely implementation approaches and effort requirements to implement the program.³¹⁰
722. DBP conducted an options analysis which considered the values of the project covered by the proposed AA5 capital expenditure for the 'Customer reporting system' business case and two other alternatives. 'Option 3', which DBP did not select to pursue, was to continue with its existing customer reporting system but move to a new vendor with enhanced support and a different technology platform.³¹¹ The ERA considers that some enhancement of the CRS will be necessary to maintain the integrity of services on the DBNGP and to comply with DBP's regulatory obligations during AA5, however, the ERA considers that an operator acting prudently and efficiently would have selected 'Option 3' rather than the selected option based on the following:
- 'Option 3' has a lower net present cost than the option DBP selected.³¹²
 - Technical advice that 'Option 3' is likely to achieve the same or better outcomes as the option selected.³¹³

³⁰⁹ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (EMCa), January 2020, pp. 297-298.

³¹⁰ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (EMCa), January 2020, p. 314.

³¹¹ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (EMCa), January 2020, p. 307.

³¹² The net present cost analyses for the options considered were supplied by DBP, Response to EMCa 08, workbook EMCa08-1_DBP20.01_NPC analysis, 21 February 2020.

³¹³ EMCa, Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5), August 2020, p. 131.

723. As stated at paragraph 598, gasTrading submitted that it was broadly in support of DBP’s ‘Customer reporting system’ business case, provided that DBP “engages with its customers and stakeholders to efficiently manage the transition of systems and interface with other parties’ systems.”³¹⁴ DBP submitted that its stakeholder engagement identified that the DBNGP’s shippers considered that billing could be simplified and modernised, which the proposed ‘Customer reporting system’ program proposed to do. The new CRS program would allow shippers to access the system on mobile devices, while also providing for greater flexibility for upgrades and enhancements in line with business and customer needs.³¹⁵ Under ‘Option 3’ an upgraded user interface would also be delivered that was suitable for mobile use, with the user interface being implemented in 2021 and ‘business as usual’ annual modifications to meet changing business and customer needs being carried out over 2021 to 2025. DBP stated that ‘Option 3’ would support its vision objectives of delivering for customers in terms of reliability and customer service.³¹⁶
724. The ERA considers that \$2.27 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the ‘Customer reporting system’ business case for AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by:
- Setting the proposed forecast capital expenditure equal to the forecast un-escalated costs for ‘Option 3’.
 - Adjusting the labour cost escalation included in the proposed forecast to reflect a real rate of 0.30 per cent as outlined at paragraph 608.

The ERA has included \$2.27 million in the draft decision capital expenditure forecast for the ‘Customer reporting system’ business case as shown in Table 90.

Table 90: Draft decision AA5 capital expenditure forecast – Customer reporting system business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.61	0.25	0.15	1.68	0.15	2.85
Project adjustment	0.95	0.00	0.00	(1.50)	0.00	(0.55)
Labour cost escalation adjustment	0.00	(0.00)	(0.00)	(0.02)	(0.00)	(0.02)
Draft decision capital expenditure	1.56	0.25	0.15	0.15	0.15	2.27

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

IT sustaining applications business case

725. DBP proposed \$3.38 million of forecast capital expenditure for the ‘IT sustaining applications’ business case for AA5. The business case is comprised of six projects which DBP considers are necessary to maintain the security and integrity of its IT applications. The proposed capital expenditure for this business case is distributed over AA5 as shown in Table 91.

³¹⁴ GasTrading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 11.

³¹⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 298.

³¹⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 307.

Table 91: Proposed AA5 forecast capital expenditure - IT sustaining applications business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Microsoft Dynamics AX Annual Enhancements/Maintenance	1.02	0.51	0.26	0.26	-	2.04
I-02 Maximo Upgrade	0.17	-	-	-	-	0.17
I-05 Other Core Systems	0.20	0.07	0.15	0.07	0.15	0.64
I-04 Customer Support/Service Desk	0.02	0.10	-	-	-	0.13
I-01 CRS Billing Revenue Management System upgrade	0.10	-	-	-	-	0.10
IT Program & Change Management Apps Component	0.09	0.15	0.02	0.03	0.02	0.31
Business case total	1.59	0.84	0.42	0.36	0.17	3.38

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

726. DBP submitted that the scope of the IT sustaining applications projects planned for AA5 reflected a shift from the *ad hoc* approach to IT application maintenance previously applied, to a pro-active approach, which DBP considered was aligned with good industry practice.³¹⁷ The projects cover:

- The implementation of an upgrade of DBP's core finance management system, Microsoft Dynamics AX, and maintenance of the existing system in parallel for a period of three months. This is the largest component of the proposed expenditure for the IT sustaining applications business case, with an estimated cost of \$2.04 million (60.29 per cent of proposed business case expenditure) over AA5.
- A project to enhance the functionality of Maximo, DBP's core asset management system. The project is planned to enhance Maximo's procurement, works program management and reporting functions and integrate Maximo with DBP's proposed new finance management system (described above) and other ancillary applications.
- Enhancements, software version upgrades and patches for other core systems used by DBP and software license and support costs for the DBP website and document management systems.
- An upgrade to DBP's customer support and service desk applications and processes and implementation of an IT asset management capability.
- A project to enhance DBP's customer reporting system functionality and provision of software version upgrades and patches including development, testing and deployment of these upgrades and patches.³¹⁸

727. DBP considered that the proposed expenditure for the IT sustaining applications business case was necessary to maintain the integrity of services on the DBNGP and comply with its regulatory obligations because current, supported and fit-for-purpose

³¹⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 328.

³¹⁸ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 327-328.

IT applications would enable DBP to manage technology risks and prevent outages.³¹⁹

728. Where possible, DBP based its forecast costs for the IT sustaining applications projects on three-year average actual costs incurred in AA4. Otherwise, DBP based the cost forecast on:
- estimates from vendors and prospective vendors
 - the historic cost of similar programs of work
 - input from IT strategy development experts
 - input from market specialists
 - where projects will require new products, at least two vendor quotes.³²⁰
729. The ERA considers that the proposed work for the IT sustaining applications business case is in line with good industry practice and is justified to maintain the integrity of services on the DBNGP, and the proposed costs are those that would be incurred by a prudent service provider acting efficiently. This is informed by technical advice that the scope of the work for the 'IT sustaining applications' business case for AA5 includes initiatives that are in line with good industry practice and are necessary to maintain the integrity of services on the DBNGP.³²¹
730. However, as outlined at paragraph 608, the ERA considers that the best estimate of the real labour cost escalation rate for AA5 is 0.30 per cent. While the ERA considers that DBP's un-escalated cost estimates are reasonable, it has adjusted the labour cost escalation included in the proposed forecast to reflect a real labour cost escalation rate of 0.30 per cent.³²²
731. The ERA has therefore included capital expenditure of \$3.37 million for the 'IT sustaining applications' business case in the revised capital expenditure forecast for AA5 as shown in Table 92. The ERA considers that \$3.37 million is the best estimate possible for the cost of the 'IT sustaining applications' business case for AA5, as required by rule 74, which would be incurred by a service provider acting efficiently as required by rule 79 of the NGR.

³¹⁹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 339.

³²⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 340-341.

³²¹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 131-132.

³²² The ERA's view on this point is supported by EMCa's technical advice that DBP's proposed expenditure is consistent with what a prudent operator would incur, and the estimated costs are reasonable. Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 131-132.

Table 92: Draft decision AA5 capital expenditure forecast – IT sustaining applications business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.59	0.84	0.42	0.36	0.17	3.38
Labour cost escalation adjustment	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)
Draft decision capital expenditure	1.59	0.83	0.42	0.36	0.17	3.37

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

IT enabling business case

732. DBP proposed \$5.25 million of forecast capital expenditure for the 'IT enabling' business case for AA5. The business case is comprised of a single project, which is comprised of three initiatives. The proposed capital expenditure for this business case is distributed over AA5 as shown in Table 93.

Table 93: Proposed AA5 forecast capital expenditure- IT enabling business case (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
IT Enabling	1.48	1.28	1.35	0.56	0.57	5.25
Business case total	1.48	1.28	1.35	0.56	0.57	5.25

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

733. DBP considered that the work covered by the proposed IT enabling business case capital expenditure for AA5 would implement systems and processes to enable decision-making based on more accurate and timely information. This would translate into cost efficiencies and therefore lower future gas prices. The scopes of the three initiatives comprising the 'IT enabling' business case are:

- Business intelligence initiative – define a master data model, consolidate data from a variety of sources, introduce a data governance framework, identify and implement an enterprise business intelligence platform with models, toolsets and dashboards for reporting and migration of current reporting to the new platform where viable.
- Data analytics – extend the business intelligence platform and people skills to incorporate data analytics and machine learning to enable predictive analytics.
- Digital transformation – implement fit-for-purpose document management solutions and establish process automation capabilities to automate repetitive manual processes between DBP's operational technology systems.³²³

734. DBP considered that the overall economic value of the proposed capital expenditure for the IT enabling business case in AA5 would be positive. DBP submitted a net present value analysis of the 'IT enabling' business case initiatives, which estimated that investing in this capital expenditure would yield a total net benefit of

³²³ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 350.

\$0.49 million.³²⁴ DBP also considered that the capital expenditure would yield additional benefits not captured by this net benefit for the stakeholders of the DBNGP, including improved safety, customer services, information management, data quality, asset integrity and reliability.³²⁵

735. The proposed capital expenditure for the IT enabling business case was based, where possible, on a three-year average actual cost based on actual cost data incurred by DBP in AA4. Where this was not possible, due to infrequent or new activities planned during AA5, the cost estimates applied were based on one of or a combination of the following:

- the historical cost of similar programs of work
- input from IT strategy development experts
- where initiatives will need new products, a minimum of two vendor quotes
- consultation with market specialists.³²⁶

736. Based on information provided by DBP about the net present value analysis of its proposed initiatives and technical advice received, the ERA considers that DBP did not adequately demonstrate that the benefits of the proposed initiatives are likely to be sufficient to justify DBP's proposed capital expenditure for the 'IT enabling' business case for AA5.³²⁷ This view takes into account technical advice regarding the proposed initiatives which included the following:

- The benefits and costs of the proposed initiatives are preliminary given it is still in the early stages of planning.
- DBP's approach and the resulting benefits are based on Australian Gas Network's distribution experience and 'rule of thumb' assumptions of the benefits (costs avoided) of pursuing the planned initiatives, which in EMCa's view, do not translate to management of a linear transmission pipeline.³²⁸
- 60 per cent of DBP's proposed \$0.5 million net present value is derived from the business intelligence initiatives based on the rule of thumb benefit, but given the number of customers DBP has, it is questionable how much benefit the business intelligence initiative will convey.
- The net benefit is marginal and the project would likely not be viable under a range of cost-benefit scenarios.³²⁹

737. The ERA has not included any forecast capital expenditure for the IT enabling business case in the draft decision capital expenditure forecast. The ERA was not satisfied that the planned work covered by the business case would be undertaken by a prudent operator acting in accordance with good industry practice. Moreover, for the reasons outlined at paragraph 736 the ERA was not satisfied that the work would convey any benefit to gas consumers. The draft decision AA5 capital

³²⁴ Real dollars as at 30 June 2019. The net present cost analyses for the options considered were supplied by DBP, *Response to EMCa 08, workbook EMCa08-1_DBP20.01_1_NPV analysis*, 21 February 2020.

³²⁵ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 365.

³²⁶ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 3.

³²⁷ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 349.

³²⁸ These assumptions include the average percentage savings on workforce costs due to productivity efficiencies based on a reported average for the document management industry and the cost savings on operating expenditure based on a reported average for the business intelligence industry.

³²⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, pp. 132-133.

expenditure forecast therefore includes no expenditure for the 'IT enabling' business case as shown in Table 94.

Table 94: Draft decision AA5 capital expenditure forecast – IT enabling business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	1.48	1.28	1.35	0.56	0.57	5.25
Project adjustment	(1.48)	(1.27)	(1.34)	(0.55)	(0.56)	(5.20)
Labour cost escalation adjustment	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.05)
Draft decision capital expenditure	0.00	0.00	0.00	0.00	0.00	0.00

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

IT security business case

738. DBP proposed \$1.78 million of forecast capital expenditure for the 'IT security' business case for AA5. The business case covers three projects as shown in Table 95.

Table 95: Proposed AA5 forecast capital expenditure - IT security business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Cyber resilience	0.17	0.32	0.33	0.23	0.23	1.27
Technology governance and automation	0.03	0.07	0.03	-	-	0.13
Data protection and privacy	0.19	0.19	-	-	-	0.37
Business case total	0.39	0.57	0.36	0.23	0.23	1.78

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

739. DBP considered that the work covered by the proposed IT security business case would ensure that its systems were resilient and robust with security measures commensurate with the cyber risks affecting DBP's business. The work would also align DBP's cyber risk management approach to a more contemporary approach and contribute to an increased level of cyber maturity. The scopes of the three projects comprising the IT security business case are:

- Cyber resilience – development of an approach that ensures all systems implemented for DBP are secure by design, establishment of a multi-audience approach to ensure the right messages reach the right people at the right frequency, extension of DBP's supply chain's capability to facilitate informed decisions about a supplier's potential cyber impact and enable them to work with relevant third parties during a cyber-crisis, fine tuning of DBP's business continuity approach, introduction of a threat intelligence capability and implementation of a security incident and event management service.

- Technology governance – definition and establishment of appropriate network architectures and processes to enable the effective management of IT, internet of things and operational technology devices.
 - Data protection and privacy – identification of all information pools, definition of a classification policy and process that allocates responsibility to information owners and design and implementation of a solution that enables the enforcement of the information classification policy.³³⁰
740. DBP stated that the confidentiality, integrity and availability of information and information technology systems was critical to ensure the DBNGP’s services can be delivered effectively and in line with applicable regulatory obligations. DBP therefore considered that the proposed forecast capital expenditure for its IT security business case was necessary to comply with regulatory obligations and to maintain the integrity of services on the DBNGP because it would ensure that DBP’s systems were secure and remained resilient to external threats.³³¹
741. The proposed capital expenditure for the IT security business case was based, where possible, on a three-year average actual cost incurred by DBP in AA4. Where this was not possible, due to infrequent or new activities planned during AA5, the cost estimates applied have been based on one of or a combination of the following:
- the historical costs of similar programs of work
 - input from IT strategy development experts
 - where initiatives will need new products, a minimum of two vendor quotes
 - consultation with market specialists.³³²
742. The ERA accepts that DBP needs to continue to improve its cybersecurity maturity, however, it is not satisfied that the capital expenditure proposed for the ‘IT security’ business case for AA5 would be undertaken by a prudent service provider. This view is based on technical advice that:
- DBP has not provided sufficient support for the risk rating of ‘High’ it has concluded for cyber security risk on the DBNGP.³³³
 - DBP has proposed capital expenditure for IT software and hardware projects under multiple business cases in AA5, which like the projects proposed in the ‘IT security’ business case, all contribute to improving DBP’s cyber security, and a large number of which appear to be ‘business as usual’ activities or closely related to work undertaken in AA4.³³⁴
743. Given the lack of support for the level of expenditure proposed for the ‘IT security’ business case for AA5, the ERA considers that \$1.46 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the ‘IT security’ business case for AA5, and therefore satisfies rules 74 and 79 of the NGR. \$1.46 million has therefore been included in the AA5 draft decision capital expenditure forecast for this business case as shown in Table 96. This adjusted amount has been based on:

³³⁰ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 373-374.

³³¹ DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, pp. 371, 285.

³³² DBP, *2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public)*, January 2020, p. 386.

³³³ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 133.

³³⁴ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, paragraph 352.

- Technical advice that the cost of one of the alternative options considered by DBP in its options analysis for the business case but not pursued represents a reasonable amount that would be required by a prudent operator.³³⁵ Under this alternative option DBP would attain a maturity level indicator of three in 2026. As stated at paragraph 539, DBP targets a maturity indicator level of three as measured by the Australian Energy Sector Cyber Security Framework.
- The amount aligning approximately with the level of expenditure incurred for the same business case during AA4 (\$1.41 million).
- A real labour cost escalation rate of 0.30 per cent, as outlined at paragraph 608.

744. The draft decision capital expenditure forecast includes \$1.46 million for the 'IT security' business case as shown in Table 96.

Table 96: Draft decision AA5 capital expenditure forecast – IT security business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.39	0.57	0.36	0.23	0.23	1.78
Project adjustment	0.00	(0.22)	(0.03)	(0.03)	(0.03)	(0.31)
Labour cost escalation adjustment	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Draft decision capital expenditure	0.39	0.35	0.33	0.19	0.19	1.46

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

IT sustaining infrastructure business case

745. DBP proposed \$4.05 million of forecast capital expenditure for the 'IT sustaining infrastructure' business case for AA5. This is 123.57 per cent more than DBP incurred for this business case in AA4. The proposed capital expenditure for AA5 covers two projects as shown in Table 97.

Table 97: Proposed AA5 forecast capital expenditure - IT sustaining infrastructure business case, by project (\$ million real as at 31 December 2019)

Project	2021	2022	2023	2024	2025	AA5 total
Annual IT Asset Renewal	0.75	0.78	0.46	0.44	1.09	3.52
Citrix Virtual Servers Upgrade	-	0.27	-	0.27	-	0.53
Business case total	0.75	1.04	0.46	0.70	1.09	4.05

Source: DBP, 2021-2025 Final Plan, Attachment 8.6 Capex Forecast Model 2021-25 (public), January 2020.

746. The projects comprising the IT sustaining infrastructure business case cover the following scope:

³³⁵ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 134.

- Refreshment of key IT infrastructure and assets in line with DBP’s lifecycle management plan, incorporating the office relocation where necessary. This IT infrastructure and assets includes servers, switches, routers, internet service provider connections, wi-fi networks, telephony and meeting room technologies, laptops, tables and desktop computers.
- Continuing the refresh of virtual IT infrastructure (including servers) and associated operating software.
- Whole of group services integration.³³⁶

747. DBP provided another breakdown of the proposed expenditure as shown in Table 98. The difference between the total shown in Table 98 and the total shown in Table 97 is the labour escalation component of the proposed capital expenditure.

Table 98: Breakdown of proposed AA5 capital expenditure, excluding labour escalation – IT sustaining infrastructure (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
IT asset renewal (lifecycle management)	0.05	0.00	0.03	0.00	0.64	0.72
IT asset renewal (end-user compute)	0.43	0.43	0.43	0.43	0.43	2.16
IT asset renewal (virtual servers)	0.00	0.26	0.00	0.26	0.00	0.53
Group services (introduction program)	0.26	0.34	0.00	0.00	0.00	0.60
Total	0.74	1.03	0.46	0.69	1.07	4.00

Source: DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 459, Table 0.14

748. DBP submitted that the proposed capital expenditure for the IT sustaining infrastructure business case is required to maintain the integrity of services on the DBP through current, vendor-supported and fit-for-purpose IT infrastructure which it considers will assist the management of technology risks and prevent material outages.³³⁷

749. The proposed capital expenditure for the IT sustaining infrastructure business case was based, where possible, on a three-year average actual cost using actual cost data incurred by DBP in AA4. Where this was not possible, due to infrequent or new activities planned during AA5, the cost estimates applied have been based on one or a combination of the following:

- the historical cost of similar programs of work
- input from IT strategy development experts
- where initiatives will need new products, a minimum of two vendor quotes
- consultation with market specialists.³³⁸

750. While the ERA accepts that the replacement of IT infrastructure is aligned with good industry practice, the ERA does not consider that the full program of work proposed

³³⁶ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 451.

³³⁷ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, p. 465.

³³⁸ DBP, 2021-2025 Final Plan, Attachment 8.5 Capex Business Cases (public), January 2020, pp. 465-466.

for the 'IT sustaining infrastructure' business case would be undertaken by a prudent service provider acting efficiently. Specifically, the ERA considers that DBP:

- Has not demonstrated that the proposed capital expenditure for the group services introduction program will yield net benefits for consumers.
- Has not justified the level of expenditure proposed for the proposed IT asset renewals.³³⁹

751. DBP submitted that the group services introduction program will:

- Support the implementation of AGIG-wide end user devices, standardised environment management, citrix consolidation and active directory consolidation and change the managed operating environment approach.
- Deliver end-user design and user acceptance testing to support the rollout of Office 365 collaboration.³⁴⁰

752. The ERA is not satisfied that the group services introduction program would be undertaken by a prudent service provider acting efficiently. The costs of the program appear to be comprised of costs for integration into AGIG's systems. DBP has not demonstrated that there will be sufficient net benefit to DBP and the DBNGP's customers to justify undertaking this work. This evaluation aligns with gasTrading's view that the costs related to integrating DBP's and AGIG's systems should not be included in the capital expenditure forecast unless there is a business case for the customer.³⁴¹

753. For the asset renewal initiatives DBP has not adequately supported the reasons for the full amount of the proposed increase for asset renewal tasks compared to AA4.

754. The ERA considers that \$3.08 million is the best estimate possible of the prudent and efficient amount of capital expenditure for the 'IT sustaining infrastructure' business case for AA5, and therefore satisfies rule 74 of the NGR. This amount has been derived by reducing the proposed expenditure by:

- Subtracting the proposed costs of the group services introduction program.
- Subtracting 10 per cent of the remainder of the proposed expenditure. This adjustment has been made because, while the ERA is satisfied based on technical advice that an increase in IT expenditure is required to manage DBP's technology risks, DBP has demonstrated that it is able to prudently defer the replacement of assets, allowing for longer replacement intervals which result in cost deferrals with minimal increased risk.³⁴²
- Adjusting the labour cost escalation included in the proposed expenditure remaining after the above two adjustments to reflect a real rate of 0.30 per cent, as outlined at paragraph 608.

³³⁹ This view is supported by technical advice that the replacement of IT infrastructure to maintain a stable technology environment is aligned with good industry practices and that, on the basis of information supplied by DBP, it cannot be verified that there are net benefits from the group services introduction program. EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 134.

³⁴⁰ DBP, *Response to EMCa20*, 20 March 2020, pp. 1-2.

³⁴¹ GasTrading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 11.

³⁴² EMCa, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 135.

755. As a result, \$3.08 million has been included in the draft decision capital expenditure forecast as shown in Table 91.

Table 99: Draft decision AA5 capital expenditure forecast - IT sustaining infrastructure business case (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	AA5 total
Proposed capital expenditure	0.75	1.04	0.46	0.70	1.09	4.05
Project adjustment	(0.31)	(0.41)	(0.05)	(0.07)	(0.11)	(0.94)
Labour cost escalation adjustment	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)
Draft decision capital expenditure	0.44	0.63	0.41	0.63	0.97	3.08

Numbers may not add due to rounding.

Source: ERA draft decision AA5 capital expenditure model, August 2020

Equity raising cost

756. Equity raising costs reflect the direct transaction costs of raising equity. Equity is assumed to be raised to fund a capital investment program and is used to maintain the benchmark gearing assumption adopted.

757. The ERA has provided an allowance for equity raising costs in the capital expenditure building block. Equity raising costs are capitalised and incorporated into capital expenditure allowances, which are then recovered over time. Equity raising costs do not form part of the rate of return.³⁴³

758. DBP proposed that its equity raising costs for AA5 be based on the following assumptions:

- Retained earnings of 30 per cent of after-tax profits will be available to increase equity at zero cost.
- Dividends will be assumed to be paid at the benchmark payout ratio of 70 per cent of after-tax profits.
- 25 per cent of dividends paid out will be treated as being reinvested through dividend reinvestment plans, with an equity raising cost allowance of 1 per cent.
- Any further required equity is raised at the seasoned equity offering cost of 3 per cent.

759. DBP proposed that equity raising costs are capitalised into the regulatory asset base and recovered over the weighted average life of the assets in its regulatory asset base (62.19) years.

760. To determine whether equity funding is required the formula below is used. If the equity required is less than zero then equity raising is not required.

$$\text{Equity required} = \text{capital expenditure} - \text{debt component of the capital expenditure} - (\text{retained cash flow} - \text{dividend payout} + \text{dividend reinvestment})$$

³⁴³ ERA, *Final Rate of Return Guidelines*, 18 December 2020, Paragraph 218; ERA, *Final Gas Rate of Return Explanatory Statement*, 18 December 2018, paragraph 1543.

761. The equity raising cost is the sum of external equity raising cost and dividend reinvestment cost. When equity raising costs are greater than zero they are capitalised.
762. The ERA accepts the proposed method and assumptions for calculating equity raising costs in AA5. The method and assumptions applied are the same as those applied for the most recent access arrangement revisions for the Mid-West and South-West Gas Distribution Systems and the Goldfields Gas Pipeline.

Draft decision conclusion

763. Based on the conclusions presented at paragraphs 611 to 755, the ERA considers that \$126.17 million is the best estimate possible for DBP's capital expenditure for its business cases during AA5. The draft decision AA5 capital expenditure forecast is shown in Table 100 for the business cases. The ERA considers that the best estimate of the equity raising costs DBP will incur during AA5 is \$5.77 million, and has included this amount in the AA5 capital expenditure forecast as shown in Table 101, where the forecast capital expenditure is shown by asset class.

Table 100: Draft decision AA5 capital expenditure forecast by business case (\$ million real as at 31 December 2019)

Business case	Proposed capital expenditure	Project adjustment	Labour cost adjustment	Draft decision AA5 capital expenditure forecast
Compressor stations	36.35	(7.19)	(0.25)	28.91
Pipeline and mainline valves	9.61	(2.87)	(0.07)	6.67
SCADA	1.92	0.00	(0.01)	1.90
Gas engine alternator	8.30	(1.82)	(0.07)	6.41
Compressor stations accommodation	5.11	(0.40)	(0.03)	4.68
Northern communications system	30.54	0.00	(0.11)	30.43
Compressor package control system replacement	18.84	(4.65)	(0.14)	14.04
Jandakot site redevelopment	8.53	(3.84)	(0.09)	4.60
Maximo and DMZ	2.30	0.00	(0.01)	2.29
Safety case revisions	0.51	(0.20)	(0.00)	0.31
Meter stations	7.89	(0.78)	(0.05)	7.06
Tools	1.68	(0.34)	(0.01)	1.33
Fleet and civil equipment	4.75	(0.46)	(0.03)	4.27
Turbine exhaust replacement	4.94	(1.81)	(0.04)	3.10

Business case	Proposed capital expenditure	Project adjustment	Labour cost adjustment	Draft decision AA5 capital expenditure forecast
Customer reporting system	2.85	(0.55)	(0.02)	2.27
IT sustaining applications	3.38	0.00	(0.02)	3.37
IT enabling	5.25	(5.20)	(0.05)	0.00
IT security	1.78	(0.31)	(0.01)	1.46
IT sustaining infrastructure	4.05	(0.94)	(0.03)	3.08
Total	158.58	(31.37)	(1.04)	126.17

Source: ERA draft decision AA5 capital expenditure model, August 2020

Table 101: Draft decision AA5 capital expenditure forecast by asset class (\$ million real as at 31 December 2019)

Asset class	2021	2022	2023	2024	2025	AA5 total
Compression	4.95	3.06	3.32	2.05	2.87	16.25
Computers & motor vehicles	6.42	3.16	2.41	3.38	2.79	18.16
Cathodic protection	2.75	2.31	2.49	2.33	1.93	11.81
Metering	1.58	1.08	1.26	1.08	1.24	6.24
Other	2.14	1.05	0.89	0.68	4.78	9.55
Pipeline	-	-	-	-	-	-
SCADA, electrical, control & instrumentation and communications	18.84	16.63	7.15	9.89	11.64	64.15
Cost of raising equity	1.27	1.13	1.05	1.10	1.21	5.77
Total	37.95	28.43	18.58	20.51	26.46	131.93

Source: ERA draft decision AA5 capital expenditure model, August 2020

764. Table 102 shows the draft decision values for calculating DBP's projected capital base for AA5 in real dollars. Table 103 shows the draft decision values for calculating DBP's projected capital base for AA5 in nominal dollars.

Table 102: Draft decision projected AA5 capital base (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025
Opening capital base AA5	3,327.39	3,241.40	3,161.66	3,071.41	2,983.22
Plus: Forecast capital expenditure	37.95	28.43	18.58	20.51	26.46
Less: Depreciation	(123.94)	(108.17)	(108.83)	(108.70)	(109.45)
Less: Asset disposals	-	-	-	-	-
Closing capital base	3,241.40	3,161.66	3,071.41	2,983.22	2,900.23

Source: ERA draft decision tariff model, August 2020

Table 103: Draft decision projected AA5 capital base (\$ million nominal)

	2021	2022	2023	2024	2025
Opening capital base	3,370.31	3,325.57	3,285.60	3,232.98	3,180.67
Inflation	43.48	42.90	42.38	41.71	41.03
Opening capital base (end of period)	3,413.79	3,368.47	3,327.98	3,274.69	3,221.70
Plus: Forecast capital expenditure	38.94	29.54	19.56	21.87	28.58
Less: Depreciation	(127.16)	(112.41)	(114.56)	(115.89)	(118.20)
Less: Asset disposals	-	-	-	-	-
Closing capital base	3,325.57	3,285.60	3,232.98	3,180.67	3,132.07

Source: ERA draft decision tariff model, August 2020

Required Amendment 11

DBP must amend the projected capital base to reflect the values set out in Table 103 of this draft decision so that the closing capital base as at 31 December 2025 will be \$3,132.07 million.

Return on the regulatory capital base

Rate of return

765. The rate of return, based on the Weighted Average Cost of Capital (WACC), provides for a return on the regulatory asset base. Rule 87 of the NGR states the formula for calculating the rate of return:

87 Rate of return

The return on the projected capital base for a service provider for a regulatory year of an access arrangement period for an applicable access arrangement (RPCB_t) is to be calculated using the following formula:

$$RPCB_t = a_t \times v_t$$

where:

a_t is the allowed rate of return for the regulatory year; and

v_t is the value, as at the beginning of the regulatory year, of the projected capital base for the regulatory year (as established under rule 78 and subject to rule 82(3)).

766. Sections 30A and 30D of the National Gas Law require the ERA to make and publish a rate of return instrument. The instrument must set out:

- The methods that the ERA proposes to use to estimate the allowed rate of return.
- The estimation methods, financial models, market data and other evidence the ERA proposes to take into account to estimate the return on equity, the return on debt and the value of imputation credits.

30A—Definitions

In this Division—

consumer reference group, for making a rate of return instrument, see section 30H(1)(a);

explanatory information, for a rate of return instrument, means information about the content of the instrument, including (but not limited to) information explaining—

- (a) the reasons for the rate of return on capital or the value of imputation credits under the instrument; and
- (b) how the stated value, or the way to calculate the rate or value, was decided; and
- (c) if the instrument replaces another instrument—
 - (i) the differences (if any) between the instrument and the replaced instrument; and
 - (ii) the reasons for any differences; and,
- (d) why the [ERA] is satisfied the instrument will, or is most likely to, contribute to the achievement of the national gas objective to the greatest degree; and
- (e) how the [ERA] had regard to the following in making the instrument:
 - (i) the revenue and pricing principles;
 - (ii) the matters mentioned in section 30G;
 - (iii) estimation methods, financial models, market data and other evidence relevant to making the instrument;
 - (iv) prevailing conditions in the market for equity funds;
 - (v) the interrelationships between financial parameters used, or to be used, in relation to deciding the rate or value.

30D—[ERA] to make rate of return instrument

- (1) This section applies if a rate of return on capital or the value of imputation credits is required for performing or exercising an [ERA] economic regulatory function or power.
- (2) The [ERA] must make an instrument (a rate of return instrument) stating—
 - (a) for a rate of return on capital—the way to calculate the rate; and
 - (b) for the value of imputation credits—the value or the way to calculate the value.

- (3) The [ERA] may make an instrument only if satisfied the instrument will, or is most likely to, contribute to the achievement of the national gas objective to the greatest degree.
 - (4) Subject to subsection (3), the way to calculate a rate of return on capital must include a weighted average of an allowed return on equity and an allowed return on debt.
 - (5) In making an instrument, the [ERA] must have regard to—
 - (a) the revenue and pricing principles; and
 - (b) other information the [ERA] considers appropriate.
767. On 18 December 2018, the ERA published its rate of return guideline, specifying its approach for determining the rate of return.
768. In April 2019, the Western Australian Government adopted binding rate of return legislation and, at that time, the rate of return guideline became a binding instrument.
769. The binding gas rate of return instrument sets out the approach for determining each WACC parameter and forms the basis for determining the rate of return for the five-year gas access arrangement.
770. The ERA and DBP cannot depart from the binding instrument when reviewing the access arrangement for the DBNGP.
771. Further information about the rate of return instrument and the relevant documents can be found on the ERA's website.³⁴⁴

DBP's proposal

772. DBP used the ERA's rate of return instrument to estimate the rate of return in its AA5 proposal.
773. DBP's proposed estimate of the rate of return was 4.31 per cent (vanilla nominal after tax).
774. To prepare this estimate, DBP used market data for 20 trading days to 29 October 2019 as a placeholder.
775. Table 104 details the individual rate of return components estimated by DBP for AA5 compared to the existing rate of return components approved in the final decision for AA4.³⁴⁵

³⁴⁴ ERA, *Final Rate of Return Guidelines (2018) dated 18 December 2018* ([online](#)) (accessed May 2020).

³⁴⁵ DBP, 2 January 2020, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline: 2021-2025 Final Plan*, pp. 99, 104-106.

Table 104: DBP's rate of return estimate

Component	AA4 actual*	AA5 proposed
Return on debt (%)		
5-year interest rate swap (effective yield)	2.10	1.11
Debt risk premium (10-year average)	2.339	2.280
Debt issuing cost + hedging cost	0.239	0.214
<i>Nominal return on debt</i>	<i>4.68</i>	<i>3.61</i>
Return on equity		
Nominal risk free rate (%)	1.80	0.96
Market risk premium (%)	7.40	6.00
Equity Beta	0.7	0.7
<i>Nominal return on equity (%)</i>	<i>6.98</i>	<i>5.16</i>
Other parameters		
Debt proportion (%)	60	55
Inflation rate (%)	1.43	1.19
Corporate tax rate (%)	30	30
Franking credits	0.4	0.5
Nominal after-tax WACC (%)	5.60	4.31
Real after-tax WACC (%)	4.11	3.08

*Based on 2019 debt risk premium values.

Source: DBP, 2 January 2020, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline: 2021-2025 Final Plan*, pp.99; 104-106. ERA tariff model, August 2020.

Draft decision

776. The ERA's considerations of the rate of return can be found in the ERA's rate of return guidelines explanatory statement. Under the National Gas Law, the rate of return guidelines is a binding instrument in Western Australia.³⁴⁶

777. This draft decision is consistent with the ERA's gas rate of return guidelines.

Overall rate of return approach

778. The rate of return, based on a WACC, provides a service provider with a return on the capital it has invested in its business.

³⁴⁶ WA Gazette, 5 April 2019 at 1007.

779. The ERA's gas rate of return instrument requires that the ERA adopts a nominal vanilla WACC to develop the rate of return for the benchmark efficient entity.
780. A vanilla WACC does not include any adjustment for tax impacts, such as the effect of imputation credits on the rate of return. The impact of tax on the returns must be accounted for separately, as an explicit deduction from the relevant cash flows. A vanilla WACC is therefore a post-tax framework.
781. The ERA adopts a WACC for a benchmark efficient entity in its simplest 'vanilla' form, expressed as:

$$WACC_{vanilla} = E(r_e) \frac{E}{V} + E(r_d) \frac{D}{V}$$

where:

$E(r_e)$ is the expected return on equity

$E(r_d)$ is the expected return on debt

$\frac{E}{V}$ is the proportion of equity in total financing (comprising equity and debt)

$\frac{D}{V}$ is the proportion of debt in total financing.

Return on debt approach

782. The ERA estimates the return on debt based on a risk premium over and above the risk free rate, combined with an additional margin for administrative costs.³⁴⁷

Return on debt = risk free rate + debt risk premium + debt raising costs + hedging costs

Risk free rate (debt)

783. The risk free rate is the return an investor would expect when investing in an asset with no risk.
784. The interbank rate can represent a risk free rate for the purposes of debt financing. Though interbank lending has a cost above that of Commonwealth Government Securities used to calculate the cost of equity, the use of the interbank rate is equivalent to using a Government Security and separately adjusting the debt risk premium. For the purposes of determining the cost of debt the use of the interbank rate is more convenient for businesses and regulators. The ERA considers the five-year bank bill swap rate as a proxy for the risk free rate when calculating the cost of debt.
785. The ERA has used the 20-day averaging period to 28 February 2020 as a placeholder for the calculation of the risk free rate. The final decision will be updated for DBP's final averaging period.

³⁴⁷ ERA, *Final Gas Rate of Return Guidelines Explanatory Statement*, 18 December 2018, p. 83.

786. For this draft decision, the ERA estimates a risk free rate for the cost of debt of 0.84 per cent for the 20-day averaging period to 28 February 2020.

Debt risk premium

787. The debt risk premium is the return above the risk free rate that lenders require to compensate for the risk of providing debt funding to a benchmark business. The debt risk premium compensates holders of debt securities for the possibility of default by the issuer.

788. The ERA uses the revised bond yield approach to determine the debt risk premium at a point in time by taking the following steps³⁴⁸:

- Step 1: Determining the benchmark sample – identifying a sample of relevant corporate bonds that reflect the credit rating of the benchmark efficient entity.
- Step 2: Collecting data and converting yields to Australian dollar equivalents – converting the bond yields from the sample into hedged Australian dollar equivalent yields inclusive of Australian swap rates.
- Step 3: Averaging yields over the averaging period - calculating an average Australian dollar equivalent bond yield for each bond across the averaging period.
- Step 4: Estimating curves - estimating yield curves on the bond data by applying the Gaussian Kernel, Nelson-Siegel and Nelson-Siegel-Svensson techniques.
- Step 5: Estimating cost of debt – calculating the simple average of the three yield curves' 10-year cost of debt to arrive at a market estimate of the 10-year cost of debt.
- Step 6: Calculating the debt risk premium - calculating the debt risk premium by subtracting the 10-year interest rate swap rate from the 10-year cost of debt.

789. The ERA's revised bond yield approach uses international and domestic BBB+ bonds identified by Bloomberg as having Australia as their country of risk to estimate the cost of debt each year.

790. To determine the debt risk premium used to calculate the rate of return, the ERA constructs a 10-year trailing average debt risk premium. This consists of a debt risk premium for the current year and a debt risk premium for each of the nine prior years. The 10-year trailing average debt risk premium is updated each year.

791. The detailed process for the debt risk premium is provided in the 2018 gas rate of return guidelines explanatory statement.³⁴⁹

792. Table 105 details DBP's trailing average debt risk premium. Historical annual debt risk premium estimates are unchanged. The debt risk premium for the 2021 calendar year was updated for the 20-day averaging period to 28 February 2020, as a placeholder. This debt risk premium is used to determine the 10-year (annualised) trailing average debt risk premium for the AA5 draft decision.

³⁴⁸ ERA, *Final Rate of Return Guidelines (2018)*, 18 December 2018, p. 23.

³⁴⁹ ERA, *Final Gas Rate of Return Guidelines Explanatory Statement*, 18 December 2018, Chapter 10.

Table 105: ERA estimated trailing average debt risk premium for DBP AA5 draft decision

Year	Debt risk premium (%)
2012	3.168
2013	3.043
2014	2.251
2015	2.070
2016	2.612
2017	2.274
2018	1.756
2019	1.712
2020	1.995
2021	1.515
Trailing average debt risk premium	2.240

793. For the draft decision, the ERA estimates a placeholder value for the trailing average debt risk premium of 2.240 per cent.

Debt raising and hedging costs

794. Debt raising costs and hedging costs are the administrative costs and other charges incurred by businesses when obtaining and hedging finance.

795. Consistent with the 2018 gas rate of return guidelines, the ERA determined an allowance of 0.100 per cent for debt raising costs.

796. The ERA also provides for the recovery of an annual swap allowance of 0.114 per cent to compensate for the cost of conducting hedging for exposure to movements in the risk free rate.

Return on equity approach

797. The return on equity is the return that investors require from a firm to compensate them for the risk they take by investing their capital.

798. There are no readily observable proxies for the expected return on equity. While estimates of the cost of debt can be obtained by observing debt instruments, financial markets do not provide a directly observable proxy for the cost of equity, for either individual firms or for the whole market.

799. Estimating a forward-looking return on equity that is sufficient to enable regulated firms to recoup their prevailing equity financing costs requires the use of models. Generally, these models seek to explain the required return on equity through a relationship with some portfolio of risk factors, or else in terms of the present value of the expected stream of future cash flows.

800. The model most used by Australian regulators for quantifying the return on equity and associated risk has been the Sharpe Lintner Capital Asset Pricing Model (CAPM).
801. The ERA uses the Sharpe Lintner CAPM to determine a single point estimate for the return on equity:

$$R_i = R_f + \beta_i (R_m - R_f)$$

Where:

R_i is the required rate of return on equity for the asset, firm or industry in question

R_f is the risk free rate.

β_i is the equity beta that describes how a particular portfolio i will follow the market which is defined as $\beta_i = \text{cov}(R_i, R_m) / \text{var}(R_m)$

$(R_m - R_f)$ is the market risk premium.

Risk free rate (equity)

802. The ERA uses observed yields from the five-year Commonwealth Government Security bonds as the best proxy for risk free assets in Australia to estimate the risk free rate of return for the purpose of estimating the return on equity.
803. For this draft decision the ERA estimates a risk free rate for the cost of equity of 0.74 per cent for the 20-day averaging period to 28 February 2020.

Market risk premium

804. The market risk premium is the expected rate of return over and above the risk free rate that investors require to invest in a fully-diversified portfolio.
805. The market risk premium compensates an investor for the systematic risk of investing in a fully diversified portfolio. Systematic risk is risk that cannot be diversified away by investors because it affects all firms in the market.³⁵⁰ Therefore, the market risk premium represents an investor's required expected return, over and above the risk free rate of return, on a fully diversified portfolio of assets. This is a forward-looking concept.
806. Consistent with the 2018 gas rate of return guidelines, the ERA determined a market risk premium of 6.0 per cent.

Equity beta

807. Equity beta is the 'slope' parameter β^i in the Sharpe Lintner CAPM. The slope parameter β^i correlates the return on the specific asset, in excess of the risk free rate of return, to the rise and fall of the return on the market portfolio.

³⁵⁰ The foundation of the Sharpe Lintner CAPM is the proposition that adding an asset to a portfolio reduces risk via the diversification effect but not beyond the risks that the assets in a portfolio share, that is, their systematic risk. At the limit, when one has invested in all available assets in the market portfolio, there is only systematic risk left. An important assumption of the CAPM is that assets are priced as though it is only their systematic risk that is relevant to investors.

808. The equity beta is a parameter that measures the systematic risk of a security or a portfolio in comparison to the market.
809. Consistent with the 2018 gas rate of return guidelines, the ERA determined an equity beta of 0.7.

Gearing

810. Gearing is the proportion of a business's assets assumed to be financed by debt and equity. Gearing is defined as the ratio of the value of debt to total capital (that is, including debt and equity) and so is generally expressed as follows:

$$\text{Gearing} = \frac{\text{Debt}}{\text{Debt} + \text{Equity}}$$

811. The gearing ratio is used to weight the costs of debt and equity when the regulated WACC is determined.
812. The ERA considers the allowed rate of return for a regulatory year should be a weighted average of the return on equity for the access arrangement period in which that year occurs and the return on debt for that year.
813. Consistent with the 2018 gas rate of return guidelines, the ERA determined a gearing of 55 per cent.

Inflation

814. Inflation is the rate of change in the general level of prices of goods and services. Forecast inflation can also be used to translate the nominal post-tax WACC to a real post-tax WACC.
815. A nominal rate of return incorporates the real rate of return, compounded with a rate that reflects expectations of inflation. In line with the gas rate of return instrument, the ERA uses a nominal vanilla rate of return for its decisions.
816. The ERA estimates the expected inflation rate using the Treasury bond implied inflation approach.
817. This approach uses the Fisher equation and the observed yields of:
- Five-year Commonwealth Government Securities, which reflect a market-based estimate of the nominal risk free rate.
 - Five-year indexed Treasury bonds, which reflect a market-based estimate of a real risk free rate.
818. The Fisher equation can be expressed in the equation below:

$$1 + i = (1 + r)(1 + \pi^e)$$

where:

- i is the nominal interest rate
- r is the real interest rate
- π^e is the expected inflation rate.

819. The ERA estimates the expected inflation rate consistent with the estimate of the risk free rate by adopting an averaging period of 20 trading days to 28 February 2020.

820. The approach uses linear interpolation to derive the daily point estimates of both the nominal five-year risk free rate and the real five-year risk free rate, for use in the Fisher equation.³⁵¹ The term of the resulting average expected inflation rate is five years, consistent with the length of the access arrangement period.
821. For the draft decision, the ERA estimates a forecast inflation of 1.29 per cent for the 20-day averaging period to 28 February 2020.

Value of imputation credits (gamma)

822. The imputation tax system prevents corporate profits from being taxed twice. Under the Australian imputation tax system, franking credits are distributed to investors at the time that dividends are paid and provide an offset to those investors' taxation liabilities.
823. The gamma parameter accounts for the reduction in the effective corporate taxation that arises from the distribution of franking credits to investors. Generally, investors who are able to use franking credits will accept a lower required rate of return, before personal tax, on an investment that has franking credits, compared with an investment that has similar risk and no franking credits.
824. The ERA estimates gamma through the Monkhouse formula as the product of the distribution rate and utilisation rate. The distribution rate and utilisation rate are separately estimated.
825. The distribution rate represents the proportion of imputation credits generated by a benchmark efficient entity that is expected to be distributed to investors. The ERA considers that the distribution rate is a firm-specific rather than a market-wide parameter.
826. In estimating the distribution rate, the ERA relies on 0.9 for the distribution rate from financial reports of the 50 largest firms listed on the Australian Securities Exchange (ASX).³⁵²
827. The utilisation rate is the weighted average of the utilisation rates of individual investors, with investors able to fully use the credits having a rate of one and those unable to use them having a rate of zero. The ERA considers that the utilisation rate is a market-wide rather than a firm-specific parameter.
828. To estimate the utilisation rate, the ERA relies on the equity ownership approach to determine the percentage of domestic investors in the Australian equity market. The ERA relies on 0.60 for the utilisation rate, which is estimated for all Australian equity from the national accounts of the Australian Bureau of Statistics.
829. Consistent with the 2018 gas rate of return guidelines, the ERA estimates gamma as the product of the distribution rate and the utilisation rate to provide a gamma of 0.5 for energy entities.

³⁵¹ It is not common to observe a Commonwealth Government Security bond with an expiry date that exactly matches that of the regulatory period end. To overcome this, two bonds are selected that fall on either side of the end day of the regulatory period. The dates on these bonds are referred to as the 'straddle' dates. Linear interpolation estimates the yields on the regulatory period end date by assuming a linear increase in yields between the straddle dates on the two bonds observed.

³⁵² Lally, M., October 2018, *Estimating the Distribution Rate for Imputation Credits for the Top 50 ASX Companies*, p. 4.

Weighted average cost of capital

830. Based on the 2018 gas rate of return guidelines and above assessments, the ERA has determined the point estimates for each of the parameters (see Table 106).
831. The ERA considers the estimates to be consistent with the National Gas Law, National Gas Rules and national gas objective.
- The ERA estimates that the nominal after tax cost of equity is 4.94 per cent.
 - The ERA estimates that the nominal cost of debt is 3.29 per cent.
 - The ERA's rate of return estimate is 4.03 per cent.
832. The ERA uses a 20-day averaging period to 28 February 2020 for the five-year interest rate swap, debt risk premium, risk free rate and inflation, as a placeholder. The final decision will be updated for DBP's final nominated averaging period.

Table 106: ERA's draft decision rate of return estimate for AA5

Component	DBP proposed	Draft decision
<i>Averaging period</i>	<i>29 October 2019</i>	<i>28 February 2020</i>
Return on debt (%)		
5-year interest rate swap (effective yield)	1.11	0.84
Debt risk premium (10-year average)	2.280	2.240
Debt issuing cost + hedging cost	0.214	0.214
<i>Nominal return on debt</i>	<i>3.61</i>	<i>3.29</i>
Return on equity		
Nominal risk free rate (%)	0.96	0.74
Market risk premium (%)	6.00	6.00
Equity Beta	0.7	0.7
<i>Nominal return on equity (%)</i>	<i>5.16</i>	<i>4.94</i>
Other parameters		
Debt proportion (%)	55	55
Inflation (%)	1.19	1.29
Corporate tax rate (%)	30	30
Franking credit	0.5	0.5
Nominal after-tax WACC (%)	4.31	4.03
Real after-tax WACC (%)	3.08	2.71

Source: DBP, January 2020, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline 2021-2025 Final Plan*, pp. 104-106.

833. Consistent with the gas rate of return guidelines, the return on debt will be updated annually, by updating the debt risk premium (which is estimated as a historical trailing average), and the reference tariff will be automatically updated.

Required Amendment 12

Subject to the nomination of a final averaging period, DBP must amend its rate of return to be 4.03 per cent (vanilla nominal after-tax).

Depreciation

834. Depreciation on the projected capital base comprises a separate building block in the determination of total revenue under rule 76(b) of the NGR.

835. Rule 88 of the NGR requires pipeline assets constituting the capital base to be depreciated according to a depreciation schedule, which may consist of separate schedules for a particular asset or class of assets:

88 Depreciation schedule

- (1) The depreciation schedule sets out the basis on which the pipeline assets constituting the capital base are to be depreciated for the purpose of determining a reference tariff.
- (2) The depreciation schedule may consist of a number of separate schedules, each relating to a particular asset or class of assets.

836. The depreciation schedule should be designed according to criteria specified in rule 89 of the NGR:

89 Depreciation criteria

- (1) The depreciation schedule should be designed:
 - (a) so that reference tariffs will vary, over time, in a way that promotes efficient growth in the market for reference services; and
 - (b) so that each asset or group of assets is depreciated over the economic life of that asset or group of assets; and
 - (c) so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets; and
 - (d) so that (subject to the rules about capital redundancy), an asset is depreciated only once (ie that the amount by which the asset is depreciated over its economic life does not exceed the value of the asset at the time of its inclusion in the capital base (adjusted, if the accounting method approved by the AER permits, for inflation)); and
 - (e) so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.
- (2) Compliance with subrule (1)(a) may involve deferral of a substantial proportion of the depreciation, particularly where:
 - (a) the present market for pipeline services is relatively immature; and
 - (b) the reference tariffs have been calculated on the assumption of significant market growth; and

- (c) the pipeline has been designed and constructed so as to accommodate future growth in demand.
837. Rule 90 of the NGR specifies that an access arrangement must contain provisions for the calculation of depreciation when rolling forward the capital base to the next access arrangement period:

90 Calculation of depreciation for rolling forward capital base from one access arrangement period to the next

- (1) A full access arrangement must contain provisions governing the calculation of depreciation for establishing the opening capital base for the next access arrangement period after the one to which the access arrangement currently relates.
- (2) The provisions must resolve whether depreciation of the capital base is to be based on forecast or actual capital expenditure.
838. Rule 85 of the NGR allows for the inclusion of a mechanism to remove redundant capital from the capital base:

85 Capital redundancy

- (1) A full access arrangement may include (and the AER may require it to include) a mechanism to ensure that assets that cease to contribute in any way to the delivery of pipeline services (redundant assets) are removed from the capital base.
- (2) A reduction of the capital base in accordance with such a mechanism may only take effect from the commencement of the first access arrangement period to follow the inclusion of the mechanism in the access arrangement or the commencement of a later access arrangement period.
- (3) An applicable access arrangement may include a mechanism for sharing costs associated with a decline in demand for pipeline services between the service provider and users.
- (4) Before requiring or approving a mechanism under this rule, the AER must take into account the uncertainty such a mechanism would cause and the effect the uncertainty would have on the service provider, users and prospective users.

DBP's proposal

839. Consistent with the ERA's final decision for AA4, DBP calculated its forecast regulatory depreciation for AA5 using the current cost accounting approach.³⁵³ The current cost accounting approach indexes the written-down value of the previous year's asset base each year to account for inflation, thereby maintaining the written-down historic value in real terms. Annual depreciation is then calculated on the current cost, given the effective life of the asset.
840. DBP's projected capital base for AA5 includes total forecast depreciation of \$671.00 million. DBP's proposed forecast regulatory depreciation for AA5 is shown in Table 107.

³⁵³ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, 30 June 2016, p. 213.

Table 107: DBP's proposed forecast regulatory depreciation for AA5 (\$ million at 31 December 2019)

	2021	2022	2023	2024	2025	Total
Pipeline	73.86	73.86	73.86	73.86	73.86	369.32
Compression	17.95	18.15	18.27	18.40	18.53	91.30
Metering*	14.64	1.51	1.55	1.60	1.64	20.95
Other	10.14	10.40	10.54	10.65	11.15	52.88
Computers and motor vehicles	6.32	7.80	8.84	9.63	10.77	43.35
Cathodic/corrosion protection	3.88	4.11	4.30	4.51	4.71	21.52
SCADA, electrical, control & instrumentation and communications	10.38	12.34	14.51	15.37	16.58	69.18
BEP lease	0.50	0.50	0.50	0.50	0.50	2.51
Forecast regulatory depreciation	137.68	128.68	132.38	134.53	137.74	671.00

Source: DBNGP DBP AA5 May 2020 tariff model (confidential); ERA converted numbers into \$ million as at 31 December 2019.

* DBP fully writes down its initial capital base value for Metering in 2021 (\$13.16 million), as it reduces the economic life of existing metering assets by 20 years.

841. DBP proposed a total revenue requirement of \$1,644.43 million for AA5, which is \$243.98 million lower than AA4.³⁵⁴ Total revenue includes \$671.00 million for the depreciation allowance.
842. DBP's proposed forecast regulatory depreciation increased from a total of \$516.83 million in AA4 to \$671.00 million in AA5.³⁵⁵ The \$154.17 million increase in DBP's forecast revenue over AA5 is due to DBP's proposed revised depreciation schedule.
843. DBP proposed the following amendments to its depreciation schedule in AA5:
- The capping of the economic life of the pipeline to 2059.
 - The reduction of the economic lives of the existing 'Metering' and 'Other' asset categories.
 - The introduction of three additional asset classes: 'Cathodic/corrosion protection assets', 'SCADA, electrical, control & instrumentation and communications', and 'Computers and motor vehicles'.
 - The re-categorisation of existing assets to the new asset categories.
844. DBP submitted advice from Incenta Economic Consulting on the suitability of the proposed:

³⁵⁴ \$ million real as at 31 December 2019.

³⁵⁵ DBNGP DBP AA5 May 2020 tariff model (confidential); ERA converted numbers into \$ million as at 31 December 2019.

- Economic lives of the new asset categories.
- Re-categorisation and calculation of past capital expenditure that was transferred to new asset categories.³⁵⁶

845. Table 108 shows the economic lives used in AA4 and DBP's proposed economic lives for its asset categories in AA5.

Table 108: DBP's proposed economic lives for its asset categories for AA5

Asset category	AA4 economic life	AA5 economic life
Pipeline	70	70 ³⁵⁷
Compression	30	30
Metering	50	30
Other	30	10
Computers and motor vehicles	-	5
Cathodic/corrosion protection	-	15
SCADA, electrical, control & instrumentation and communications	-	10

Source: DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications, December 2019, pp. 5-6.*

Submissions

846. The ERA received submissions from Wesfarmers Chemicals, Energy and Fertilisers Limited (WesCEF), Gas Trading Australia Pty Ltd (gasTrading), CITIC Pacific Mining Management Pty Ltd (CPM), Perth Energy Pty Ltd and Australian Gas Infrastructure Group (AGIG) addressing the end of the economic life of the pipeline.

Wesfarmers Chemicals, Energy and Fertilisers

847. WesCEF expressed concern with DBP parent company AGIG's proposed access arrangement and the effect it would have on reference tariffs:

Although WesCEF is concerned with AGIG's proposed AA5 and the impact it has on the reference tariffs being proposed, it is understood that AGIG should achieve adequate returns but in an efficient and cost reflective manner with appropriate risk allocation.³⁵⁸

848. WesCEF agreed with AGIG that a shift towards renewable electricity sources was affecting the use and operation of the DBNGP. However, WesCEF stated that natural gas transmission and storage would have a growing role in meeting the long-term strategic energy needs of Western Australia and lower emission targets. WesCEF referred to the ongoing development of additional gas fields connected to the

³⁵⁶ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, pp. 4-5.

³⁵⁷ DBP has proposed an economic life cap for the entire DBNGP with all assets to be fully depreciated by 2059. While DBP has not proposed the addition of any 'pipeline' assets in AA5, if it had, the life of these assets would be less than 70 years.

³⁵⁸ Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, p. 2.

DBNGP, and the Prime Minister's statement on 31 January 2020 in which he referred to natural gas as an important transition fuel:

Generally, WesCEF believes that natural gas, and therefore natural gas transmission and storage, will have a growing role to play in the long term strategic orientation of the State's energy needs and decarbonisation targets. WesCEF's view is supported on a number of fronts, including the ongoing development of additional gas fields whose gas is to be processed using infrastructure that is already connected to the DBNGP and also recent comments by government. As an example, on 31 January 2020, the Prime Minister of Australia stated that:

There is no credible plan to lower emissions and keep electricity price[s] down that does not involve the greater use of gas as an important transition fuel.³⁵⁹

849. Specifically, WesCEF considered that, as the energy market continued to evolve, intra-day gas demand would become increasingly volatile, such that past demand would be an unsuitable indicator of future demand.

850. Overall, WesCEF considered that:

- Reducing the standard asset lives of the pipeline seemed premature and not consistent with the depreciation criteria required by the NGR.
- Tariffs should reflect the various uses of the pipeline and costs likely to be incurred by the service provider.
- Gas demand in future may require increasing spot supply and less reliance on firm contracts.
- A lower average demand should drive increased cost scrutiny.

851. On the economic life of the pipeline, WesCEF considered that AGIG had not considered alternative scenarios in which the DBNGP would play a significant role in future energy supply:

AGIG has fairly described a future where renewables and hydrogen take a growing share of supply of the State's energy requirements. WesCEF recognises that AGIG has adequately assessed cases of slower or faster penetration of these technologies. Equally though, and simply by way of an example, an outlook of WA's energy landscape could include other prevailing technologies or simply sharing with those technologies suggested by AGIG such as the large-scale development of carbon capture and storage capability which would, in this case, have the effect of significantly altering AGIG's view of the DBNGP's economic life. Furthermore, there is nothing to suggest that the DBNGP would not be a key asset involved in a future state involving hydrogen.³⁶⁰

852. WesCEF submitted that AGIG had not presented any evidence on how its proposal would contribute to reference tariffs being set in a way that promotes efficient growth in the market, as required by the NGR:

It is also important to note that the NGR requires the depreciation schedule to lead to tariffs varying, over time, in a way that promotes efficient growth in the market for reference services. WesCEF has not been able to find any evidence in AGIG's proposal or its supporting submissions to the effect that the acceleration of depreciation resulting from the proposed shorter standard asset lives and the consequent increase in reference tariffs that would occur would result in reference tariffs for the DBNGP being set in a way that promotes the efficient growth in the market for pipeline services during

³⁵⁹ Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, p. 2.

³⁶⁰ Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, p. 3.

AA5. To the extent that the asset lives being proposed do not reflect the expected economic life of the DBNGP (which is WesCEF's view as highlighted above), the resultant reference tariffs are being set at a level that is above the efficient cost for providing reference tariffs in the access arrangement period. It follows therefore that these inefficient tariffs could potentially result in inefficient utilisation, investment and asset management incentives.³⁶¹

853. WesCEF also submitted that:

- AGIG had not considered the cost of delaying a decision to shorten asset lives for depreciation purposes to the AA6 period.
- AGIG had presented insufficient evidence to reasonably conclude that use of the DBNGP would decline significantly prior to its technical life, which did not meet the NGR's requirements for forecasts to represent the best possible forecast or estimate

854. In summary, WesCEF submitted that AGIG's proposed depreciation schedule did not meet the criteria required by the NGR or the National Gas Objective.

855. WesCEF noted that, even if AGIG was to provide forecasts supporting a shorter economic life for the DBNGP, WesCEF was still unsure whether the depreciation schedule should be set such that the pipeline should be fully depreciated in anticipation of (indirect) competition:

Private industry is commonly making investment decisions on a horizon of 20, if not 40, years in the case of the oil and gas industry. WesCEF does not believe that it is reasonable to aim for a full depreciation of the pipeline when determining the economic life of the asset as it causes an unfair contribution by users towards the de-risking of this asset.

It is not the case that the NGL or NGR require that the total revenue and reference tariffs be set so as to guarantee the service provider a return on and return of its capital investment. To the contrary, the NGL provides that the "service provider should [only] be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in providing reference services". Consistent with this, rule 85(3) also notes that, in the case of capital redundancy, costs may be shared with, not transferred to, the users.³⁶²

856. WesCEF considered that DBP's proposed economic lives would not result in a depreciation schedule that meets the depreciation criteria in the NGR nor complies with the National Gas Objective. WesCEF noted that the NGR requires that forecasts or estimates must be arrived at on a reasonable basis and must represent the best forecast or estimate possible. WesCEF considered that there is too much uncertainty to change the standard economic lives now, with DBP's forecasts being at best speculative at present and not been adequately grounded by evidence.

857. WesCEF stated that DBP has not considered the cost to users and DBP of delaying a decision on economic lives to AA6 or beyond to allow a more informed decision. In the DBP submission, WesCEF could not find any evidence to the effect that the acceleration of depreciation and the consequent increase in reference tariffs would result in reference tariffs that would promote the efficient growth in the market for pipeline services. Even if DBP was able to provide evidence-based forecasts that lead to a conclusion that there is likely to be a shorter economic life of the DBNGP, WesCEF questioned that it should be set such that the pipeline is fully depreciated in

³⁶¹ Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, p. 4.

³⁶² Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, pp. 4-5.

anticipation of (indirect) competition. WesCEF considered that this would cause an unfair contribution by users towards the de-risking of this asset. In its submission, WesCEF considered that it was not the case that the National Gas Law and National Gas Rules require that the total revenue and reference tariffs be set to guarantee the service provider a return on and return of its capital investment. WesCEF also noted the capital redundancy provisions require that costs may be shared with, not transferred to, the users.

Gas Trading Australia Pty Ltd

858. gasTrading expressed concern with the lack of robust modelling undertaken by AGIG:

In fact, the modelling appears to be promoting the use of hydrogen rather than natural gas which is surely not consistent for a natural gas monopoly asset owner that is critical to the state's economy and household's energy needs. The natural gas pricing scenarios conducted by ACIL Allen should consider a significantly broader range of prices, at least at current gas prices!³⁶³

859. gasTrading also questioned why the owner of DBP would be seeking to devalue its asset within two years of acquisition. gasTrading also considered that the underlying risk of the asset was already reflected in the rate of return.

The Access Arrangement, through the rate of return mechanism, already considers the market's view of the risk of similar assets to the DBNGP being displaced by new energy business models by comparing the cost of equity.³⁶⁴

860. gasTrading's concerns included:

- DBP's gas price assumptions were narrow and did not include current long-term contract or spot market prices, and did not anticipate break-even price scenarios.
- DBP's comparison of forecast intermittent renewable prices against dispatchable fossil fuel prices was not valid.
- Despite the absence of any climate change policy, DBP was seeking to impair its assets when it was not yet certain that gas would be displaced by hydrogen.

CITIC Pacific Mining Management

861. CPM submitted that its Sino Iron project was expected to require gas through the DBNGP until 2070. While it accepted that accelerating depreciation may be applicable in the general sense, CPM considered that it was too early to adopt such an arrangement for AA5 as its own operations expected a gas supply through the DBNGP well beyond the timeline of 2059 in DBP's proposal.

Perth Energy

862. Perth Energy submitted that the risk of stranded assets was not an issue unique to the gas industry, transport assets or the DBNGP. Perth Energy noted that future domestic demand for and supply of gas in 40 years' time was not easy to forecast and therefore the usefulness of gas was uncertain. While Perth Energy did not support DBP's proposal to accelerate depreciation on its primary pipeline assets, Perth Energy noted that the 40-year transition period proposed by DBP should be

³⁶³ Gas Trading Australia Pty Ltd, *Submission to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25 Issues Paper*, 30 March 2020.

³⁶⁴ Gas Trading Australia Pty Ltd, *Submission to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25 Issues Paper*, 30 March 2020.

sufficient for DBP to adjust or expand its operating models and adapt to changing conditions in the future.

Australian Gas Infrastructure Group

863. AGIG, owner of DBP, noted that it reviewed the economic life of the DBNGP in the context of the requirements of the NGR. It noted that DBP's proposal would recover its investment in the DBNGP over its economic life and, more specifically, ensure adjustment for changes in its economic life.
864. In response to the ERA's issues paper, AGIG sought to clarify several points in DBP's proposal:
- Although its revenues would increase during AA5 because of the change to the economic life, DBP was not seeking to recover more revenue over the economic lives of its assets. DBP was merely seeking to recover the same revenue over a shorter number of years.
 - AGIG noted that the NGR did not expect the economic lives of assets to be fixed, but instead required a consideration of an asset's economic life. Since assets were recovered over their economic life, there was no transfer of risk, rather DBP's proposal ensured it would be in a position to provide the services its customers sought in the future.
 - AGIG noted that within the model, the economic life for the asset as a whole extended to 2059. DBP's main concern was the point in time at which competitive alternatives would equal its regulated price, which was expected to occur before 2059.
 - AGIG reiterated that the substantial changes occurring in the energy sector required a change in the approach to considering economic lives.

Draft decision

865. Rule 90(1) of the NGR requires an access arrangement to "contain provisions governing the calculation of depreciation for establishing the opening capital base for the next access arrangement period after the one to which the access arrangement currently relates." DBP's current access arrangement does this in section 9.2:³⁶⁵

As part of the formula for establishing the Opening Capital Base for the Next Access Arrangement Period, the Operator will use the sum of the values of depreciation determined for the purpose of determining the Total Revenue for the Current Access Arrangement Period.

866. DBP's approach complies with rule 90(1) and section 9.2 of its current access arrangement as the opening capital base for AA5 (1 January 2021) uses the sum of the values of depreciation used for the purpose of determining the total revenue for the AA4 period.
867. In its final decision for AA4, the ERA required forecast regulatory depreciation to be calculated using the current cost accounting approach. The current cost accounting approach is consistent with rule 89(1) of the NGR and complies with the NGL, in particular the national gas objective, because it:
- Promotes efficient growth in the market for reference services by allowing for efficient use of the DBP.

³⁶⁵ DBP, *DBNGP Access Arrangement 2021-25*, clause 9.2, p. 17.

- Encourages efficient production and investment decisions by the service provider, thereby contributing to efficient growth in the market for reference services.
 - Avoids price shocks for consumers when major assets reach the end of their effective life and are replaced.
 - Ensures outcomes that are in the long-term interest of consumers of natural gas with respect to price.
868. The ERA has considered the following components of DBP's proposed forecast of regulatory depreciation for AA5:
- DBP's proposal to cap the economic life of the DBNGP to 2059.
 - Reduction of the economic lives of the existing 'Metering' and 'Other' asset categories.
 - Introduction of additional asset categories.
 - Re-categorisation of existing assets to three new additional asset categories.

Economic life of the pipeline

869. Subject to rule 89(1) of the NGR, DBP proposed to reconsider and adjust the economic life of the pipeline as a whole, such that all of the component assets would be fully depreciated by 2059.
870. DBP considered that rapid and fundamental changes in technology and government policy are creating significant uncertainty in the energy sector, such that its business model was being challenged in a way that was not contemplated when the economic lives of its assets were established, or at the previous access arrangement review (AA4).³⁶⁶
871. DBP incorporated forecast scenarios into a Window of Opportunities Passed (WOOPS) model developed originally by Crew and Kleindorfer (1992) to derive a midpoint estimate of the year in which it expected regulated tariffs for natural gas would achieve parity with alternative technologies.³⁶⁷ DBP considered that 2059 represented an appropriate economic life of the pipeline.³⁶⁸

The analysis demonstrates that the current implied economic life of the DBNGP as a whole is too long, and that a life up to 2059 is more appropriate. The analysis also shows what this means in the real sense of how we compete with renewable energy in the future as we shift from a binding regulatory constraint to a competitive marketplace; the 2059 end date is not a declaration of when the pipeline will be switched off. Rather, it is a date to use in the ERA model which will allow the DBNGP to make the switch to a competitive market efficiently and at lowest cost to our customers.

872. Under rule 89(1)(b) of the NGR, each asset or group of assets must be depreciated over the economic life of that asset or group of assets. Rule 89(1)(c) of the NGR allows reasonably practicable adjustments to the depreciation schedule reflecting changes in the expected economic life of a particular asset or group of assets.

³⁶⁶ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, Attachment 9.2, Assessment of the Economic Life of the DBNGP, January 2020, p. 2.

³⁶⁷ Crew, M and Kleindorfer, P, 1992, Economic Depreciation and the Regulated Firm under Competition and Technological Change, Journal of Regulatory Economics, 4(1), 1992, 51-61.

³⁶⁸ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, Attachment 9.2, Assessment of the Economic Life of the DBNGP, January 2020, p. 1.

873. Economic life is not defined within the NGR or NGL, so must be interpreted according to its ordinary meaning or commonly understood technical definition within the context of the national gas objective.
874. DBP's proposal to fully depreciate the pipeline by 2059 was considered with reference to similar concepts and definitions of economic life in the following standards, law, and guidelines:
- Australian Accounting Standards
 - The *Income Tax Assessment Act 1997*
 - Recent regulatory interpretations

Australian Accounting Standards

875. Under Australian Accounting Standard AASB 116 (Property, Plant and Equipment), the depreciable amount of an asset, determined as the difference between its cost and residual value, must be allocated systematically over its useful life. Useful life is defined as the period in which the asset is expected to be available for use by an entity, or as a cumulative number of production units obtained from the asset by an entity:³⁶⁹

Useful life is:

- a) the period over which an asset is expected to be available for use by an entity; or
 - b) the number of production or similar units expected to be obtained from the asset by an entity.
876. The depreciation of an asset over its useful life implies that the asset may have a residual or economic value beyond its useful life:³⁷⁰

The useful life of an asset is defined in terms of the asset's expected utility to the entity. The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Therefore, the useful life of an asset may be shorter than its economic life. The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.

877. Economic life is defined in Australian Accounting Standard AASB 117 (Leases) as the period in which an asset is expected to be economically usable, or a certain number of production units expected to be obtained from the asset by any number of users:³⁷¹

Economic life is either:

- a) the period over which an asset is expected to be economically usable by one or more users; or
 - b) the number of production or similar units expected to be obtained from the asset by one or more users.
878. Useful life is entity-specific and is applied for the purpose of depreciation, while economic life attaches to the asset which may have residual or economic value in alternative uses to other entities.

³⁶⁹ Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019.

³⁷⁰ Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019.

³⁷¹ Australian Accounting Standards Board, Australian Accounting Standard AASB 117 Leases, August 2015.

879. Depreciation of an asset ceases when the asset is held for sale, or when it is 'derecognised'. Derecognition of an asset occurs on disposal, or when no future economic benefits are expected from its use or disposal.³⁷² Depreciation and hence useful life does not cease when the asset becomes idle or is retired from active use, unless the asset is fully depreciated.³⁷³
880. In determining the useful life of an asset, an entity must consider all of the following factors that may affect the entity's ability to obtain future economic benefits from the asset:
- Expected usage of the asset, assessed by reference to the asset's expected capacity or physical output.
 - Expected physical condition and deterioration of the asset.
 - Technical or commercial obsolescence.
 - Legal or other restrictions on the use of the asset.³⁷⁴
881. The accounting standards recognise that, in practice, the residual value of an asset to an entity may be insignificant or immaterial.³⁷⁵ In this case, the useful life of an asset may coincide with its economic life as defined under the Australian Accounting Standards.

Income Tax Assessment Act 1997

882. The *Income Tax Assessment Act 1997* permits a deduction of an amount equal to the decline in value of a depreciating asset held during the income year (section 40-25(1)). The Act defines a depreciating asset as one that has a limited effective life and can reasonably be expected to decline in value over the time it is used (section 40-30(1)).
883. The effective life of an asset may be estimated by the Commissioner for Taxation (under section 40-100(5)) or self-assessed (under section 40-105(1A)) as the period the asset can be used by any entity for a taxable or other purpose specified in the Act:
- Effective life:** Generally, the effective life of a depreciating asset is how long it can be used by any entity for a taxable purpose or for the purpose of producing exempt income or non-assessable non-exempt income:
- having regard to the wear and tear from your expected circumstances of use
 - assuming it will be maintained in reasonably good order and condition, and
 - having regard to the period within which it is likely to be scrapped, sold for no more than scrap value or abandoned.³⁷⁶
884. The Commissioner will consider several factors in determining an asset's effective life, including historical information and future expectations. For instance, if an asset

³⁷² Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019, clause 67.

³⁷³ Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019, clause 55.

³⁷⁴ Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019, clause 56.

³⁷⁵ Australian Accounting Standards Board, Australian Accounting Standard AASB 116 Property, Plant and Equipment, Compilation No. 3, 31 December 2019, clause 53.

³⁷⁶ Australian Taxation Office, *Guide to depreciating assets 2020*, June 2020, p. 40.

is retired from use, its effective life ends when the asset is retired even if the asset is retained by the entity for a non-specified purpose (as described within the Act):³⁷⁷

An effective life determination is an estimate of the period the asset can be used by any entity for a specified purpose. Often an asset is not used for a specified purpose for the whole of its physical life. For example, an asset may be retired from use for a specified purpose but be retained as a source of spare parts. In this instance, the effective life ends when the asset is retired.

885. However, effective life does not end if the asset can be used by any taxpayer for a specified purpose, regardless of the retention period.³⁷⁸

The effective life of an asset is the total period it can be used by any entity for a specified purpose. The retention period is the time a particular taxpayer expects to hold a depreciating asset for any purpose. For example, it is common practice in some businesses to dispose of a car after it has been driven a pre-determined number of kilometres. That would be the retention period for that taxpayer. The effective life of the car, however, would end only when the car cannot be used by any taxpayer for a specified purpose.

886. The Commissioner will also consider commercial or technological obsolescence of an asset, which may occur before the asset is physically retired or disposed. In considering asset obsolescence, the Commissioner will only take account of predicted obsolescence if it is expected with a high level of certainty across a majority of users. A superseded asset's effective life does not end if the asset is still in use:³⁷⁹

Commercial obsolescence may occur if demand for the goods produced by the asset stops because consumers choose not to buy them, or Government regulation affects market demand. It may also occur if the raw material the asset processes becomes unavailable.

Technological obsolescence may occur when technology advances and another asset becomes better suited for the relevant purpose for which an existing asset is used. Even so, an asset's effective life does not necessarily end with each technological advance. A taxpayer can still use an asset for a specified purpose even though a newer model exists.

There are two types of commercial and technological obsolescence - one can be predicted at the time the asset is first used and one is unpredictable and emerges later. Unpredictable obsolescence cannot be taken into account when estimating effective life. Predicted obsolescence would only be taken into account if it is expected with a high level of certainty across a majority of users.

887. The Commissioner will presume that an asset that is scrapped or abandoned can no longer be used by anyone for a specified purpose:³⁸⁰

Once a taxpayer has scrapped or abandoned an asset, it is presumed it can no longer be used by anyone for a specified purpose. The scrapping of an asset can demonstrate that the asset is either physically exhausted or obsolete. The abandonment of an asset can demonstrate that it is too difficult or costly to remove it from its place of operation.

888. The Commissioner's determination of the effective life of gas transmission pipelines under section 40-100 of the Act is 50 years. Under section 40-102, a depreciating

³⁷⁷ Australian Taxation Office, Taxation Ruling TR2020/3, Income tax: effective life of depreciating assets (applicable from 1 July 2020), para. 25.

³⁷⁸ Australian Taxation Office, Taxation Ruling TR2020/3, Income tax: effective life of depreciating assets (applicable from 1 July 2020), para. 34.

³⁷⁹ Australian Taxation Office, Taxation Ruling TR2020/3, Income tax: effective life of depreciating assets (applicable from 1 July 2020), paras. 37-9.

³⁸⁰ Australian Taxation Office, Taxation Ruling TR2020/3, Income tax: effective life of depreciating assets (applicable from 1 July 2020), para. 41.

asset may also be subject to a capped life, less than the effective life of the asset. Gas transmission pipelines are subject to a capped life of 20 years.

Regulatory interpretations

889. The interpretation of economic life in a regulatory context has been previously considered in a legal judgment on capital costs of rail access infrastructure. Economic life was described as the period over which an asset is productive in the sense of delivering access services and earning access revenues.³⁸¹

The concept of economic life is therefore an estimate of the period over which assets are productive, in the sense of delivering access services and earning access revenues.

890. The question at law in this case was in the distinction between the economic life and technical or physical life of an asset. In the case of natural monopoly infrastructure, Edelman J. noted that the economic life of an asset may be constrained by the expected duration of the customers served by the asset:³⁸²

Technical life involves an estimate of how long the assets will be physically capable of doing the task for which they were intended. Naturally, the economic life of assets cannot exceed their technical life because an asset that is physically incapable of doing its intended task will not be economically productive.

The effect of this approach is that an economic life can be shorter than a technical life. For instance, suppose railway infrastructure has a technical life of 50 years but the mine that its exclusive purpose is to service will only be economically productive for 20 years. Although the technical life of the railway infrastructure is 50 years, its economic life will only be 20 years. In summary, the economic life required to be used by the Code will never be more than the technical life of railway infrastructure, but it might be less.

891. In more recent guidance, the AER defined an asset's economic life in the context of asset planning to be the time at which the asset is no longer the lowest long run cost alternative to supplying services:³⁸³

The end of economic life of an asset is reached when the total cost of providing the service provided by the asset no longer represents the lowest long run cost to consumers, considering alternatives.

892. The AER considered a service provider must demonstrate the asset to be at the end of its economic life as a principle of asset retirement. The AER considered an asset's technical end of life may trigger an assessment of the end of an asset's economic life. New or emerging technologies and innovative alternatives may also foreshorten an asset's economic life. Critical to the AER's definition and application of economic life is the actual retirement of the asset at the end of its economic life:³⁸⁴

An important trigger for assessing whether an asset is at the end of its economic life is an assessment that the asset is at or near the end of its technical life. However, asset retirement may be triggered by economically preferable alternatives to retaining the current asset in service. New or emerging technologies and innovative alternatives may render it economically preferable to retire an existing asset before its technical end-of-life or before a more traditional assessment would have deemed the asset to be at economic end-of-life.

³⁸¹ Edelman J, *Pilbara Infrastructure Pty Ltd v ERA*, [2014] WASC 346 at 13.

³⁸² Edelman J, *Pilbara Infrastructure Pty Ltd v ERA*, [2014] WASC 346 at 13.

³⁸³ Australian Energy Regulator, Industry practice application note, Asset replacement planning, January 2019, p. 11.

³⁸⁴ Australian Energy Regulator, Industry practice application note, Asset replacement planning, January 2019, p. 11.

DBP's interpretation and application of economic life

893. DBP has stated that, while 2059 represents the mid-point estimate at which it expected regulated tariffs would be constrained by competing alternatives, it did not expect to retire the pipeline at that time.³⁸⁵

The 2059 end date is not a declaration of when the pipeline will be switched off. Rather, it is a date to use in the ERA model which will allow the DBNGP to make the switch to a competitive market efficiently and at lowest cost to our customers.

894. AGIG, owner of DBP, also reiterated in its submission to the ERA's issues paper that, although it had modelled the economic life of the pipeline to end at 2059, it expected to continue its operations beyond 2059.³⁸⁶

Within the model, the economic life for the asset as a whole extends to 2059. However, as a business, our main concern is the point in time at which competitive alternatives equal our regulated price, which occurs before 2059. We are not suggesting we will be out of business by 2059, but rather that we will be constrained by competitive market prices rather than regulation before that date.

895. DBP's customers also indicated that they expect to be supplied with natural gas through the pipeline beyond 2059. WesCEF and gasTrading considered that plausible scenarios included the pipeline as a key asset in the state's future energy supply.

896. CPM specifically stated that it expected to be supplied with natural gas "way beyond" the economic life of the pipeline proposed by DBP and that a realistic target economic life would be 2070.³⁸⁷

Depreciation – whilst it is accepted that an accelerated depreciation may be applicable in the general sense, CPM believe that it is too early to adopt such for AA5 on the basis that our operations are expecting a gas supply will be available from the DBNGP for the long term way beyond that proposed by AGIG, therefore CPM request the Authority to consider a 2070 timeline for depreciation to apply for AA5 and for the acceleration to again be considered in the next review in AA6.

...

CPM submits that a middle position should be taken by ERA in its opting for a depreciation regime that sees a more realistic position be taken by ERA in its review, one where a target economic life of the pipeline ending in 2070.

Conclusion

897. Given the ordinary and equivalent definitions of economic life as applied under accounting standards and regulatory interpretations, the ERA considers:
- In the case of natural monopoly infrastructure, typically having limited alternative usefulness or transferability to other entities, the definitions of useful life and economic life under accounting standards and regulatory guidelines are similar in practice. In ordinary circumstances, an asset that remains in productive use will not be fully depreciated.

³⁸⁵ Dampier Bunbury Pipeline, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, Attachment 9.2, Assessment of the Economic Life of the DBNGP, January 2020, p. 1.

³⁸⁶ Australian Gas Infrastructure Group, *Submission on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Issues Paper, Attachment A – Responses to the ERA's Issues Paper*, 31 March 2020.

³⁸⁷ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*.

- Consistency with the national gas objective implies that an appropriate interpretation of economic life, for the purpose of depreciation under the NGR, includes the actual or expected retirement of the asset from productive use at the end of its economic life. An asset may be retired due to technical, economic or other obsolescence.
- DBP does not expect to retire the pipeline assets in 2059. DBP and its customers expect the pipeline to continue supplying natural gas beyond 2059.
- DBP's interpretation of the economic life of the pipeline as the time at which it will be constrained by competitive market prices, rather than regulated tariffs, does not represent the pipeline's economic life for the purpose of rules 89(1)(b) and (c) of the NGR and is inconsistent with the national gas objective.

Reduction in economic lives for 'Metering' and 'Other' asset categories

898. From the commencement of AA5, DBP proposed to reduce the economic life of:

- 'Metering' assets from 50 years to 30 years
- 'Other' assets from 30 years to 10 years.

899. The opening regulatory asset base of these assets will be unchanged. However, DBP proposed that the remaining economic lives of these assets be adjusted from the commencement of AA5.³⁸⁸

Metering

900. DBP noted that its proposed shorter economic life for 'Metering' was consistent with the economic life applied in the ERA's AA4 final decision on the Goldfields Gas Pipeline. DBP considered that the Goldfields Gas Pipeline was its closest comparator amongst Australian regulated pipelines. DBP noted that its 'Metering' asset is essentially the same as the assets in the 'Receipt and Delivery Point' facilities for the Goldfields Gas Pipeline.³⁸⁹

901. The ERA has reviewed DBP's proposed revision to the economic life of 'Metering' and the economic lives applied by other comparable pipelines (Table 109).

Table 109: DBP's proposed 'Metering' economic life and other comparable examples

Pipeline	Asset category	Economic life
Dampier to Bunbury Natural Gas Pipeline	Metering	30 years
Goldfield Gas Pipeline	Receipt and delivery point facilities	30 years
Victorian Transmission System	Meters and regulators	30 years
Non-scheme pipelines (transmission)	Metering	30-50 years

Source: ERA analysis; and Non-Scheme Pipelines – Financial Reporting Guideline version 1, Appendix 1, 23 May 2018.

³⁸⁸ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 1.

³⁸⁹ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 4.

902. The Goldfields Gas Pipeline is a transmission pipeline that receives natural gas from offshore fields in the North West of Western Australia. In the AA4 final decision, Goldfields Gas Transmission Pty Ltd used an economic life of 30 years for 'Receipt and delivery point facilities'. The ERA considered that Goldfields Gas Transmission's proposed asset lives met the requirements of rule 88 of the NGR and the depreciation criteria set by rule 89.³⁹⁰
903. The Victorian Transmission System is a gas transmission network that supplies the Melbourne metropolitan area, most regional areas of Victoria and the Albury and Murray regions in New South Wales.³⁹¹ In the final decision on its access arrangement for 2018 to 2022, the Australian Energy Regulator (AER) considered that the proposed economic life of 30 years for the 'Meters and regulators' met the requirements of rule 89(1) of the NGR.³⁹²
904. Under Part 23 of the NGR, service providers for non-scheme pipelines are required to publish specific information, including financial information and weighted average price information. Service providers are also required to disclose the economic life of an asset based on a range of standard lives for asset classes set out in the ERA's 'Non-Scheme Pipelines – Financial Reporting Guideline'. For a non-scheme transmission pipeline, the economic life range for 'Metering' is between 30 and 50 years.
905. The ERA considers that there is a reasonable range for the economic life of metering assets of between 30 years and 50 years. As a result, the ERA considers that DBP's proposed economic life for new assets in the 'Metering' asset category reflects the expected economic life of the assets and meets the requirements of rule 88 of the NGR and the depreciation criteria set by rule 89. Reducing the economic life of 'Metering' assets from 50 years to 30 years is consistent with regulatory precedent.

'Other' asset category

906. DBP has an 'Other' asset category that incorporates many disparate assets such as, for example, furniture, administrative buildings, large generators and inlet scrubbers (as shown in the mapping section of DBP's 'Asset Restructure Model').³⁹³ This differs to the approach taken by other pipeline service providers where a broader range of categories are used to classify assets so that an 'other' category is not needed.
907. The assessment of the economic life for the 'Other' asset category is more complicated than assessing a single asset such as 'Metering' due to the range of disparate assets in the 'Other' category. The ERA considers that the comparison of DBP's proposed life of the 'Other' asset category and the economic lives applied to other pipelines is not practical, as the assessment of the economic life depends on the type and function of the assets that are classified into this 'Other' asset category.
908. The ERA has reviewed DBP's 'Asset Restructure Model', which shows the alignment of capital expenditure with the 'Other' asset category from 2005 to 2020. For AA2 and AA3 (from 2005 to 2015), DBP provided information about the assets, tools or names of projects that were categorised as 'Other' assets. For AA4, the 'Asset

³⁹⁰ ERA, *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, 19 December 2019, p. 157.

³⁹¹ AER, *Fact Sheet – Final Decision on Victorian Gas Access Arrangement Reviews*, November 2017.

³⁹² AER, *Attachment 5 – Regulatory Depreciation – November 2017, Final Decision on APA Victorian Transmission System – Access Arrangement 2018-2022*.

³⁹³ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 3.

Restructure Model' does not have any additional information about the relevant assets in the 'Other' asset category.

909. The ERA also notes an issue identified by DBP's consultant Incenta about the suitability of assets in the existing asset categories. Incenta noted that capital expenditure in the 'Other' asset category comprised expenditure for office fit-outs, furniture, staff amenities, tools, new maintenance and administrative buildings. Incenta considered that it was reasonable to assign a 10-year economic life to these assets. Incenta's view of assigning 10-year economic life to administrative buildings is largely due to the small amount of capital expenditure on these assets, and the desirability of keeping regulatory calculations simple.³⁹⁴
910. However, Incenta considered that a series of large generators and inlet scrubbers, which were categorised as 'Other' assets in 2010, should be classified as compression assets.³⁹⁵ As compression and other assets had been assigned an economic life of 30 years consistent with the economic life of assets in the category at the time, there was no effect on depreciation of a misallocation of assets. However, DBP has proposed that the whole 'Other' asset category should have an economic life of 10 years.
911. EMCa provided the ERA with technical advice on whether DBP's proposed change to the economic life of the 'Other' assets' life from 30 years to 10 years is reasonable and likely to meet the requirement under the NGR. Consistent with Incenta's advice to DBP, EMCa considered that it is not reasonable to assign a 10-year economic life to large generators and inlet scrubbers, and that these assets should be assigned to an asset category with an economic life of 30 years.³⁹⁶
912. EMCa also considered it more reasonable to assign an economic life of at least 50 years to administrative buildings rather than 10 years. EMCa noted that an economic life of 50 years for administrative buildings was consistent with regulatory economic lives applied to buildings and depots in other regulatory decisions, such as for the Goldfields Gas Pipeline.³⁹⁷
913. The ERA considers that DBP's proposed economic life for the 'Other' asset category does not reflect the expected economic lives of assets including large generators, inlet scrubbers and administrative buildings and does not meet the requirements of rule 88 of the NGR and the criteria set by rule 89. As a result, the ERA has not accepted DBP's proposed change and the economic life for the 'Other' asset category remains at 30 years.

Introduction of additional asset categories

914. In the past four access arrangement periods, DBP classified its initial regulatory asset base and capital expenditure into four categories: 'Pipelines' (economic life of 70 years), 'Compression' (30 years), 'Metering' (50 years) and 'Other' (30 years).

³⁹⁴ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, pp. 10-11.

³⁹⁵ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 11.

³⁹⁶ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, August 2020, p. 94.

³⁹⁷ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, June 2020, p. 94.

915. The provision of DBP's gas transmission services also required secondary or supporting assets, which have much shorter economic lives than principal assets with long technical lives such as pipelines. These secondary assets include:
- Electrical instrumentation for, and equipment to monitor and control, the principal gas transmission assets and to detect fire and gas leaks.
 - Communications infrastructure to support monitoring, control and maintenance activities.
 - Electrical equipment that supplies power to the principal gas transmission assets.
 - Corrosion protection equipment and activities.
 - Computers and software and associated implementation activities to support the operation of the key pipeline assets, maintenance activities and corporate functions.
 - Motor vehicles required for operation and maintenance activities and administration.
 - Office fittings, furniture and equipment, tools and other low value items.³⁹⁸
916. In past access arrangements, DBP did not separately record these secondary assets, and instead recorded these assets in either the principal assets (that is, 'Pipeline', 'Compression' and 'Metering'), or in the 'Other' asset category. For example, DBP classified computers (including software) and motor vehicles to the 'Other' asset category, with an economic life of 30 years.³⁹⁹
917. Given the different economic lives of principal and secondary assets, DBP proposed to add three new asset categories with shorter economic lives to better record its short-lived assets for AA5:
- Computers and motor vehicles (economic life of five years).
 - Cathodic/corrosion protection assets (economic life of 15 years).
 - SCADA, electrical, control & instrumentation and communications (economic life of 10 years).
918. DBP considered that the proposed economic lives of the three new asset categories were consistent with its technical knowledge and other regulatory decisions, including the ERA's AA4 final decision for the Goldfields Gas Pipeline.⁴⁰⁰
919. Table 110 notes DBP's proposed economic lives for the new asset categories and the economic lives that were used and approved for other comparable gas transmission pipelines.

³⁹⁸ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 5.

³⁹⁹ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 1.

⁴⁰⁰ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 4.

Table 110: DBP's proposed economic lives (years) for new asset categories and comparable examples

DBP's new asset category	DBP's proposed economic life for AA5	Goldfields Gas Pipeline	Roma to Brisbane Pipeline ⁴⁰¹	Victorian transmission system ⁴⁰²	Non-scheme pipelines ⁴⁰³
Computers and motor vehicle	5	n/a	5	5	5 (IT systems)
Cathodic/corrosion protection	15	15	n/a	n/a	n/a
SCADA, electrical, control & instrumentation and communications	10	10	15	n/a	15

Source: ERA analysis; DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 9.

920. DBP proposed to apply an economic life of five years to the assets that would be re-categorised as 'Computers and motor vehicles'. The capital expenditure for computers (including software) and motor vehicles was largely allocated to 'Compression' or 'Other' asset categories in AA4.⁴⁰⁴ The proposed change to the economic life is consistent with the Roma to Brisbane Pipeline, the Victorian transmission system and the ERA's economic life principles applied to non-scheme transmission pipelines in Western Australia.
921. DBP proposed that an economic life of 15 years should be applied to 'Cathodic/corrosion protection' assets. The capital expenditure for these assets was largely classified as 'Pipeline', 'Compression' or 'Metering' asset categories, with the economic lives ranging from 30 to 70 years in AA4.⁴⁰⁵
922. DBP submitted that applying an economic life of 15 years to 'Cathodic/corrosion protection' assets is consistent with the Goldfields Gas Pipeline and DBP's technical knowledge. This was reflected in DBP's asset management plans and with the substantial capital expenditure undertaken in this asset category. For example, around half of the capital expenditure between 2005 and 2020 categorised as 'Cathodic/corrosion protection' comprised intelligent pig runs, which were undertaken every five or 10 years in accordance with the DBP's asset management plan.⁴⁰⁶
923. DBP proposed to apply an economic life of 10 years to the 'SCADA, electrical, control & instrumentation and communications' asset class. The capital expenditure of these

⁴⁰¹ Roma to Brisbane Pipeline applied an economic life of five years to its 'Group IT' and 'Other' category.

⁴⁰² Similar assets are categorised into the 'Other' category, which has an economic life of five years.

⁴⁰³ ERA, *Non-scheme Pipelines – Financial Reporting Guideline version 1*, Appendix 1, 23 May 2018. Note that the economic lives in the table applied to transmission pipelines.

⁴⁰⁴ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 18.

⁴⁰⁵ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 18.

⁴⁰⁶ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP's proposed asset reclassifications*, December 2019, p. 10.

assets was largely allocated to ‘Pipeline’, ‘Compression’ or ‘Other’ asset categories in AA4.⁴⁰⁷

924. The proposed economic life applied to ‘SCADA, electrical, control & instrumentation and communications’ is consistent with the Goldfields Gas Pipeline, the ERA’s economic life principles applied to the non-scheme transmission pipelines and DBP’s asset management plans.
925. The ERA considers that the proposed economic lives for the new asset categories are either consistent with the lives of similar assets approved by the ERA or correspond with those used and approved for other gas transmission pipelines within Australia.⁴⁰⁸
926. Under rule 89(1)(c) of the NGR, the depreciation schedule should be designed “so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets.” DBP’s additional asset categories allow the depreciation of the DBNGP’s assets to more appropriately reflect their economic lives. Depreciation is only allowed once and the same amount of capital is returned to DBP.
927. As a result, the ERA considers that DBP’s proposed additional asset categories and their associated economic lives meet the requirements of rule 88 of the NGR and the criteria set by rule 89.
928. The ERA’s view was supported by EMCa, which considered that the introduction of the new asset categories would result in regulatory depreciation of these assets that reflected more closely their economic lives.
929. The ERA considers how this should affect the existing ‘Computers and motor vehicles’; ‘Cathodic/corrosion protection’ assets; and ‘SCADA, electrical, control & instrumentation and communications’ assets below.

Re-categorisation of existing assets to additional asset categories

930. DBP proposed to re-categorise assets from the existing four asset categories to the three new asset categories for the period of 2005 to 2020. DBP’s approach does not alter the opening capital base for the AA5 period but adjusts the opening asset values in each of the seven asset categories. As a result, the new additional categories do not start from a zero balance and the existing asset categories have a matching reduction to the opening asset values for AA5.

DBP’s approach to re-categorisation

931. For the existing capital base as at December 2020, DBP used a proportional approach to re-categorise its existing capital base. DBP adjusted capital expenditure, depreciation and redundant assets by the proportion of the spending from each of the existing asset categories of capital expenditure and reallocated the proportional spending on the re-classified assets to each of the seven asset categories.⁴⁰⁹ The proportions are based upon approved actual capital expenditure from 2005 to 2015,

⁴⁰⁷ DBP, *Final Plan Attachment 9.4 – Incenta Economic Consulting – Review of DBP’s proposed asset reclassifications*, December 2019, p. 18.

⁴⁰⁸ Energy Market Consulting Associates, *Review of Technical Aspects of the Proposed Access Arrangement for 2021 to 2025 (AA5)*, June 2020, p. 95.

⁴⁰⁹ That is, the principal assets ‘Pipeline’, ‘Compression’, ‘Metering’ and the ‘Other’ asset categories, and the three new additional asset categories for secondary assets: ‘Computers and motor vehicles’, ‘Cathodic/corrosion protection’ assets, and ‘SCADA, electrical, control & instrumentation and communications’.

proposed conforming actual capital expenditure from 2016 to 2019, and forecast capital expenditure for 2020.⁴¹⁰

932. DBP provided a detailed mapping of the transfer of assets from existing asset categories to the three new asset categories for the period 2005 to 2020 in its 'Asset restructure model'. DBP applied the economic lives of the new categories to the written-down value of these re-categorised assets from 1 January 2021. However, the written-down value as at 1 January 2021 was based on depreciation of these assets from the asset category the assets were previously in. For example, computers in the 'Other' asset category would have a written-down value based on a 30-year life up to 31 December 2021 and then the written-down value would be depreciated for five years (the economic life of computers) from 1 January 2021. As a result, a computer purchased in 2005 would have been depreciated for 15 years out of 30 years up to 31 December 2020 and have half its original value remaining at the beginning of AA5 before being depreciated in full over five years.
933. The capital base from year to year is the summation of the opening capital base and actual capital expenditure (subject to the ERA's assessment of actual capital expenditure for the AA4 period) less forecast depreciation and redundant assets. In the absence of the proportion approach proposed, DBP considered the whole re-categorisation process would be more complicated without additional clarity, as each regulatory decision would need to be reviewed to determine what forecast depreciation the ERA might have considered reasonable in its final decision if the proposed asset categorisation had been used for each of these regulatory decisions for AA2, AA3 and AA4.⁴¹¹
934. DBP did not propose any changes between the existing asset categories of its capital base. For example, DBP did not review whether it would be more appropriate to allocate some existing 'Pipeline' assets to 'Compression'.⁴¹²
935. As noted above, the depreciation value in aggregate from 2005 to 2020 and the opening regulatory asset base at the start of AA5 would remain unchanged.
936. The ERA considers that the re-categorisation process of the existing capital base as shown in DBP's 'Asset restructure model' is consistent with the description in DBP's 'Attachment 9.1: Categorisation of our Capital Base (public)' document. DBP used the same process to adjust the regulatory asset base for each year from 2005 to 2020 under the original and new asset categories and applied the same proportions (that is, the proportions that applied to the asset re-categorisation) to the depreciation amount for the individual years between 2005 and 2020.

Application of the DBP's proportional approach and proposed economic lives for the asset categories to the tariff model

937. DBP used the re-categorised capital expenditure and depreciation numbers for each year from 2005 to 2020 in the tariff model based on the seven asset categories. DBP applied its proposed economic lives to the new asset categories from 1 January 2021 and depreciated these new assets by their relevant new economic life.
938. DBP's tariff model also showed that after re-categorising past capital expenditure, there could be some assets in the new categories that had a material value in the

⁴¹⁰ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 5.

⁴¹¹ DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 5.

⁴¹² DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, p. 5.

regulatory asset base, but the actual remaining economic life of these assets was either zero (should be fully written-down as these assets no longer exist) or would be less than DBP's approach of applying the full economic life for the assets as if they were purchased in 2020. In other words, DBP did not apply the new economic life to the new assets from the day these assets (for example, computers) were installed. Instead, the new economic life for 'Computers and motor vehicles' was applied from 2021 to the opening asset value for these assets in 2021.

Assessment of DBP's approach to re-categorisation

939. The ERA has assessed DBP's proposed approach to re-categorisation against rules 88 and 89 of the NGR.
940. DBP's re-categorisation approach would result in reference tariffs that would be significantly higher in AA5 than would otherwise be the case. The ERA considers this would not meet rule 89(1)(a) of the NGR that requires tariffs to vary over time in a way that promotes the efficient growth in the market for reference services. The ERA is also concerned that DBP's approach would distort signals for efficient investment (section 24(6) of the NGL). DBP proposed that reference tariffs would increase by 9.9 per cent in 2021. The ERA has proposed an approach, described below, that results in tariffs that vary over time in a way that promotes the efficient growth in the market for reference services and meets rule 89(1)(a) of the NGR, the revenue and pricing principles and the national gas objective. Taking account of the ERA's approach to the recategorisation of assets alone results in reference tariffs that increase by 5.8 per cent in 2021, a reduction of 4.1 percentage points compared to DBP's proposal.
941. Rule 88 of the NGR is forward-looking in applying a depreciation schedule for the access arrangement period and not for previous access arrangement periods. Rule 89(1)(b) of the NGR requires the depreciation schedule to be designed "so that each asset or group of assets is depreciated over the economic life of that asset or group of assets". While the actual economic life for the additional asset categories may be shorter than those used in previous access arrangement periods, this does not invalidate the previous depreciation schedule in aggregate. In aggregate, the historic depreciation schedule should remain the same maintaining the written-down historic value in real terms at the commencement of AA5.
942. Furthermore, DBP's approach to reallocating the historic depreciation does not recognise the principle of rule 89(1)(b) as the approach includes values for assets in the projected capital base for AA5, such as computers and motor vehicles, that have ceased to provide any service. Most of these assets would no longer be in service and should not be depreciated going forward as these assets have an economic life of zero.
943. The ERA considers that the depreciation schedule for AA5 should reflect those assets that are still usefully employed in providing services. For example, computers and motor vehicles purchased in 2005, having a proposed economic life of 5 years, should no longer be reflected in the opening value of the capital base in AA5. Assets purchased between 2005 and 2020 transferred to the new asset categories would have practically been depreciated using the same economic lives as now being

proposed by DBP for AA5 for those categories.⁴¹³ Rule 89(1)(c) allows adjustments going forward to reflect changes in the expected economic life.⁴¹⁴

944. The ERA does not propose that these assets be written off and no compensation for depreciation be provided. The ERA requires DBP to apply the economic life of the new asset categories to the similar assets between 2005 and 2020 while maintaining the existing depreciation allowance over the period. Where the value of an asset category is reduced below the value that results from using the existing depreciation method, the amount of the extra reduction is reallocated to the values of the other asset categories. The ERA's approach and DBP's approach will result in the same opening asset value in aggregate for AA5, as shown in Table 111. However, the assets that are no longer in service will not continue to be depreciated. The ERA's approach would also ensure that the opening asset values for each of the proposed seven asset categories at the start of AA5 would reflect those assets that continue to contribute to the provision of services.
945. The opening capital base of each of the existing four asset categories were adjusted to allow appropriate depreciation of the capital expenditure allocated to new asset categories between 2005 to 2015 so that in aggregate the approved total depreciation prior to 2016 remains the same. This ensures the shorter life asset categories are depreciated consistent with their shorter asset lives.

Table 111: Opening asset value by asset category on 1 January 2021 (\$ million real at 31 December 2019)

	DBP proposal	ERA Draft Decision
Pipeline	2,632.81	2,657.21
Compression	314.65	342.89
Metering	48.76	52.22
Other depreciable	101.80	145.15
Computers and motor vehicles	27.62	13.49
Cathodic/corrosion protection	58.38	37.45
SCADA, electrical, control & instrumentation and communications	104.02	39.64
Non-Depreciable	20.27	20.27
Cost of raising equity	0.00	0.00
BEP lease	19.06	19.06
Opening asset value	3,327.39	3,327.39

Source: ERA, August 2020, Draft Decision tariff model

⁴¹³ The ERA approved DBP's proposed asset lives for the new categories as set out in Table 110.

⁴¹⁴ The proposed asset lives of five years for 'Computers and motor vehicles', 10 years for SCADA and 15 years for corrosion protection are not dissimilar for the asset lives that were accepted by the ERA or the AER during the 2005-2020 period. The Roma to Brisbane Pipeline used a 5-year asset life for computers. In the second access arrangement period for the Goldfields Gas Pipeline, 10 years was used for SCADA and 15 years for corrosion protection.

Some numbers may not add due to rounding

946. DBP considered that the whole re-categorisation process would be more complicated without additional clarity if it needed to determine what forecast depreciation the ERA might have considered reasonable at the time of the AA2, AA3 and AA4 final decisions. The ERA considers its approach of using the asset lives proposed for the new categories for AA5 better meets the requirements of the rules.
947. The ERA considers that its reallocation of depreciation across the asset categories ensures that the depreciation values remain consistent with the aggregate depreciation used in the total revenue calculation for the respective access arrangement periods and therefore meets the depreciation criteria of rule 89(1) of the NGR and the national gas objective.

Forecast depreciation

948. Consistent with the required amendments in this draft decision, the ERA has recalculated total forecast depreciation for AA5 as \$559.09 million (Table 112).

Table 112: ERA's draft decision forecast depreciation (\$ million real at 31 December 2019)

	2021	2022	2023	2024	2025	Total
Pipeline	61.72	62.13	62.13	62.13	62.13	310.23
Compression	19.49	19.66	19.76	19.87	19.94	98.71
Metering	14.84	1.66	1.70	1.74	1.78	21.72
Other depreciable	6.98	7.05	7.08	7.11	7.14	35.35
Computers and motor vehicles	6.17	4.88	4.26	3.46	3.38	22.15
Cathodic/corrosion protection	4.42	4.61	4.76	4.92	5.08	23.78
SCADA, electrical, control & instrumentation and communications	9.93	7.77	8.71	9.02	9.55	44.98
Cost of raising equity	0.00	0.02	0.04	0.06	0.07	0.19
BEP lease	0.40	0.40	0.40	0.40	0.40	1.99
Forecast depreciation	123.94	108.17	108.83	108.70	109.45	559.09

Source: ERA, August 2020, Draft Decision tariff model

Required Amendment 13

DBP must amend the forecast depreciation of the capital base for AA5 to \$559.09 million (real as at 31 December 2019). The yearly values for each year of the access arrangement period are set out in Table 112 of this draft decision.

Taxation

949. Rule 76(c) of the NGR establishes the estimated cost of corporate income tax as a separate building block for the determination of total revenue.

76 Total revenue

Total revenue is to be determined for each regulatory year of the *access arrangement period* using the building block approach in which the building blocks are:

...

- (c) the estimated cost of corporate income tax for the year (See Division 5A); and...

950. Rule 87A of the NGR sets out the formula for calculating the estimated cost of corporate income tax for each regulatory year.

87A Estimated cost of corporate income tax

- (1) The estimated cost of corporate income tax of a service provider for each regulatory year of an access arrangement period (ETC_t) is to be estimated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1-\nu)$$

Where

ETI_t is an estimate of the taxable income for that regulatory year that would be earned by a benchmark efficient entity as a result of the provision of reference services if such an entity, rather than the service provider, operated the business of the service provider;

r_t is the expected statutory income tax rate for that regulatory year as determined by the [ERA]; and

ν is the allowed imputation credits for the regulatory year.

DBP's proposal

951. DBP used the formula in rule 87A of the NGR to calculate the estimated cost of corporate income tax for each regulatory year in AA5.
952. DBP applied a value for the expected statutory income tax rate of 30 per cent, equal to the statutory corporate income tax rate.⁴¹⁵
953. DBP applied a value for allowed imputation credits of 0.5, as required under the ERA's binding rate of return guidelines.^{416, 417}
954. DBP calculated the estimated taxable income for each regulatory year in AA5 as the revenue that would be earned by a benchmark efficient service provider using the covered pipeline to provide reference services, less deductions for allowable taxation expenses that would be incurred by such an entity in the provision of those services.

⁴¹⁵ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 105.

⁴¹⁶ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 105.

⁴¹⁷ Economic Regulation Authority, *Final Rate of Return Guidelines (2018) Meeting the requirements of the National Gas Rules*, 18 December 2018, pp. 39-40.

955. In its Final Plan, DBP determined taxable income as total revenue (excluding the cost of tax) less operating expenditure, tax depreciation and interest expense where:
- Total revenue — is the sum of all of its costs (or building blocks) aside from the cost of tax.
 - Operating expenditure — is a specific building block reflecting its efficient operating expenses that is used to determine total revenue.
 - Tax depreciation — is based on the calculation of the tax asset base in any particular year.
 - Interest expense — is determined by multiplying the cost of debt (3.61 per cent) by 55 per cent of its capital base in each year, reflecting the debt funded proportion of the total capital base.⁴¹⁸
956. For AA5, DBP amended its method of determining tax depreciation compared to AA4. DBP proposed to use a diminishing value method (rather than a straight-line method) to calculate tax depreciation for new assets only.⁴¹⁹

Estimating taxable income

957. As noted above, DBP stated that its total revenue was estimated as the sum of all of its costs (or building blocks) aside from the cost of tax.⁴²⁰
958. In its proposed tariff model, DBP used smoothed tariff revenue as the basis for calculating the estimated taxable income earned by a benchmark efficient entity in each regulatory year of AA5.
959. The method that DBP used in its proposed tariff model was:⁴²¹
- Smoothed tariff revenue:
- minus** approved forecast operating expenditure
- minus** depreciation of the tax asset base, calculated using the straight-line method for assets purchased before 1 January 2021 and the diminishing value method for assets purchased on or after 1 January 2021
- minus** debt servicing costs
- add** tax losses carried forward
- equals** estimated taxable income.
960. The use of smoothed tariff revenue as the basis for calculating the estimated taxable income that would be earned by a benchmark efficient entity in each regulatory year is consistent with the method accepted by the ERA in the AA4 final decision.⁴²²

⁴¹⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 105.

⁴¹⁹ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 106.

⁴²⁰ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 105.

⁴²¹ DBP, *Revised Tariff Model 2021-25*, May 2020.

⁴²² Economic Regulation Authority, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, June 2016, p. 237.

Tax asset lives

961. DBP's tax asset lives have changed compared to previous access arrangements.
962. The tax lives for asset classes proposed by DBP for the purpose of calculating the tax asset base in AA5 are set out in Table 113.

Table 113: DBP's proposed AA5 tax asset lives (years)

Asset categories	Tax lives approved by the ERA in AA4	AA5 proposed tax lives for capital assets purchased prior to 1 January 2021	AA5 proposed tax lives for capital assets purchased on or after 1 January 2021
Pipeline	20	20	20
Compression	20	20	20
Metering	15	15	15
Other depreciable	20	20	10
<i>Computers and motor vehicles</i>			5
<i>Cathodic/corrosion protection</i>			15
<i>SCADA, electrical, control & instrumentation and communications</i>			10
Cost of raising equity	5	5	5
BEP lease	20	20	20

Source: DBP, Revised Tariff Model 2021-25, May 2020

963. The tax asset lives for capital assets purchased prior to 1 January 2021 are unchanged from the tax depreciation schedule approved by the ERA in the AA4 final decision.
964. In DBP's tariff model, DBP reduced the tax lives of 'Other depreciable' capital assets purchased on or after 1 January 2020 from 20 years to 10 years. DBP had also proposed changes to economic lives for calculating regulatory depreciation. The tax lives of 'Other depreciable' capital assets purchased before 1 January 2020 remain unchanged.
965. DBP added new asset classes in AA5 for 'Computers and motor vehicles', 'Cathodic/corrosion protection' and 'SCADA, electrical, control & instrumentation and communications'. DBP's tariff model included new tax asset classes to reflect the new asset classes. The tax asset lives for these new asset classes are consistent with their proposed economic lives.
966. Beyond the information submitted on DBP's re-categorisation of assets in the regulatory asset base, the Final Plan provided no information that would assist the ERA to assess:

- The reduction in the tax asset life for capital categorised as ‘Other depreciable’ from 20 to 10 years.
- The tax asset lives for the new asset categories applied to capital purchased on or after 1 January 2020.

Tax depreciation method

967. DBP amended its tax depreciation method from the straight-line method used to depreciate existing and new capital assets in the AA4 final decision.
968. In AA5, DBP proposed to use:
- The straight-line method to depreciate capital assets purchased prior to 1 January 2021, as included in the actual tax asset base for AA4.
 - The diminishing value method to depreciate capital assets purchased on or after 1 January 2021, as included in the forecast tax asset base proposed for AA5.
969. DBP’s proposal only changed the depreciation method for new assets. DBP noted that Australian tax law does not allow for changes in depreciation approaches mid-stream.⁴²³
970. DBP stated that this change in depreciation method was a result of the ERA’s final decision for ATCO Gas Australia, published on 15 November 2019. In that decision, the ERA used a diminishing value method (rather than a straight-line method) to calculate tax depreciation.⁴²⁴
971. In its proposed tariff model, DBP used the following formula to calculate tax depreciation on capital expenditure for each regulatory year in AA5:

$$\text{Tax Depreciation} = \text{Base value} \times (\text{days held} / 365) \times \left(\frac{200\%}{\text{asset's remaining life}} \right)$$

Tax asset base

972. DBP used the roll forward method to establish the opening value of the tax asset base for each regulatory year in AA4.
973. The actual tax asset base proposed by DBP for each regulatory year in AA4 is set out in Table 114.

⁴²³ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 106.

⁴²⁴ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 106.

Table 114: DBP's proposed actual tax asset base for AA4 (\$ million nominal)

	2016	2017	2018	2019	2020
Opening tax asset base	1,319.47	1,240.26	1,166.59	1,089.96	1,017.46
Capital expenditure	17.14	23.56	21.85	27.18	29.82
Asset disposals	-	-	-	-	-
Tax depreciation	(96.35)	(97.24)	(98.47)	(99.68)	(101.03)
Closing value	1,240.26	1,166.59	1,089.96	1,017.46	946.24

Source: DBP, Revised Tariff Model 2021-25, May 2020

974. The opening tax asset base for the first regulatory year in AA5 (in 2021) was calculated by rolling forward the closing value of the actual tax asset base for AA4, adjusted for updates to the amounts of capital expenditure and tax depreciation that the ERA approved in its final decision for AA4.
975. The opening tax asset base for the remaining regulatory years in AA5 (in 2021 to 2024) was calculated by rolling forward the closing value of the tax asset base in the previous regulatory year, adjusted to reflect forecast capital expenditure and depreciation proposed by DBP for each regulatory year in the AA5 period.
976. The forecast tax asset base proposed by DBP for each regulatory year in AA5 is set out in Table 115.

Table 115: DBP's proposed forecast tax asset base for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025
Opening tax asset base	946.24	884.65	809.53	714.19	625.94
Capital expenditure	41.76	36.96	23.19	32.51	30.95
Asset disposals	-	-	-	-	-
Tax depreciation	(103.34)	(112.08)	(118.54)	(120.75)	(124.51)
Closing value	884.65	809.53	714.19	625.94	532.38

Source: DBP, Revised Tariff Model 2021-25, May 2020

Estimated cost of corporate income tax

977. DBP's calculation of the estimated cost of corporate income tax for each regulatory year in AA5 is set out in Table 116.

Table 116: DBP's proposed calculation of estimated corporate income tax for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025
Tariff revenue	346.261	344.12	344.56	341.64	341.34
Tax expenses					
- Operating expenditure, System use gas	(19.44)	(19.22)	(19.21)	(19.34)	(19.26)
- Operating expenditure, Other Expenses	(73.51)	(72.87)	(74.23)	(71.93)	(70.30)
- Tax depreciation	(103.34)	(112.08)	(118.54)	(120.75)	(124.51)
- Interest on debt	(66.62)	(65.45)	(64.33)	(62.81)	(61.38)
Total tax expenses	(262.91)	(269.62)	(276.36)	(274.83)	(275.45)
Estimated taxable income	83.35	74.50	68.20	66.80	65.88
Tax loss carried forward	-	-	-	-	-
Estimated taxable income (Net of tax loss)	83.35	74.50	68.20	66.80	65.88
Estimated cost of tax (tax rate=30 per cent)	25.00	22.35	20.46	20.04	19.76
Value of imputation credits ($v=0.5$)	(12.50)	(11.17)	(10.23)	(10.02)	(9.88)
DBP proposed cost of corporate income tax net of imputation credits	12.50	11.17	10.23	10.02	9.88

Source: DBP, Revised Tariff Model 2021-25, May 2020

Submissions

978. In response to the issues paper, the ERA received no submissions that addressed taxation.

Draft decision

979. The ERA assessed DBP's estimated cost of corporate income tax for each regulatory year in AA5 against the requirements in rule 87A of the NGR.

980. The ERA accepts the value that DBP has used for:

- The expected statutory income tax rate for each regulatory year in AA5 of 30 per cent. This value is consistent with current expectations for the statutory company tax rate over the AA5 period.

- Allowed imputation credits of 0.50. This value conforms with the binding rate of return guidelines.⁴²⁵
981. The ERA has assessed DBP's calculation of the estimated taxable income to ensure that it is the best forecast of taxable income that would be earned by a benchmark efficient entity, if such an entity delivered services by means of the covered transmission pipeline.
982. For reasons outlined in the following sections, the ERA does not accept DBP's proposed cost of corporate income tax as being the best forecast of corporate income tax as required by rule 74 of the NGR.

Estimating taxable income

983. As noted at paragraph 959, the method that DBP used in the proposed tariff model⁴²⁶ was:

Smoothed tariff revenue:

minus approved forecast operating expenditure

minus depreciation of the tax asset base, calculated using the straight-line method for assets purchased before 1 January 2021 and the diminishing value method for assets purchased on or after 1 January 2021

minus debt servicing costs

add tax losses carried forward

equals estimated taxable income.

984. In 2019, the ERA reviewed the method for calculating estimated taxable income in response to:
- The Australian Energy Regulator's (AER) review of the regulatory tax approach.⁴²⁷
 - The ERA's consideration and decision on ATCO Gas Australia's proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024.⁴²⁸
 - The ERA's consideration and decision on Goldfields Gas Transmission's proposed revisions to the Goldfields Gas Pipeline access arrangement for 2020 to 2024.⁴²⁹
985. The ERA amended the method used to calculate estimated taxable income for the Mid-West and South-West Gas Distribution Systems and the Goldfields Gas Pipeline

⁴²⁵ Economic Regulation Authority, *Final Rate of Return Guidelines (2018) Meeting the requirements of the National Gas Rules*, 18 December 2018, pp. 39–40.

⁴²⁶ DBP, *Revised Tariff Model 2021-25*, May 2020.

⁴²⁷ Australian Energy Regulator, *Final Report: Regulatory tax approach, December 2018* ([online](#)) (accessed June 2021).

⁴²⁸ Economic Regulation Authority, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024*, November 2019.

⁴²⁹ Economic Regulation Authority, *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, December 2019.

access arrangements.^{430,431} Consistent with rules 76 and 92 of the NGR, the ERA considered that the calculation of estimated taxable income should be based on total revenue (unsmoothed) rather than tariff revenue (smoothed). This is because:

- Under rule 76(c) of the NGR, the estimated cost of corporate income tax is established as a separate building block for the determination of total (unsmoothed) revenue.
- Under rule 92(2) of the NGR, the tariff variation mechanism, used to determine the reference tariff profile over the course of an access arrangement, must be designed to equalise the net present values of forecast revenue from reference services for the access arrangement period with the portion of total revenue (unsmoothed) allocated to reference services for the access arrangement period.

986. The method the ERA has used to calculate estimated taxable income in this draft decision is:

Unsmoothed tariff revenue

minus approved forecast operating expenditure

minus depreciation of the tax asset base, calculated using the straight-line method for assets purchased before 1 January 2021 and the diminishing value method for assets purchased on or after 1 January 2021

minus debt servicing costs, calculated by multiplying the debt portion of the opening regulatory asset base by the debt to equity ratio (assumed at 55 per cent) and the ERA's determined nominal cost of debt based on the rate of return chapter of this draft decision

equals estimated taxable income.

Tax asset lives

987. The ERA has reviewed DBP's proposed tax asset lives, as detailed in Table 113.

988. The ERA accepts maintaining the existing tax asset lives for capital assets purchased prior to 1 January 2021 as they are still reasonable and consistent with Australian Taxation Office schedules.

DBP's new tax asset classes

989. DBP proposed tax asset lives equal to their economic lives. Although DBP did not specifically justify these tax lives, DBP considered that the proposed economic lives of the three new asset categories were consistent with other regulatory decisions for other pipelines, including the ERA's regulatory decision for the Goldfields Gas Pipeline.⁴³²

990. The ERA considers that the proposed economic lives for the new asset categories are either consistent with the lives of similar assets approved by the ERA or correspond with those used and approved for other gas transmission pipelines within

⁴³⁰ Economic Regulation Authority, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024*, November 2019, p. 334.

⁴³¹ Economic Regulation Authority, *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, December 2019, p. 174.

⁴³² DBP, *Final Plan Attachment 9.1 – Categorisation of our Capital Base*, January 2020, pp. 3-4.

Australia. On this basis, the ERA considers that the proposed economic lives for the new categories are reasonable.

991. The ERA further considered DBP's proposed tax asset lives for the new tax asset classes. The ERA confirms that the tax asset lives for the tax asset classes proposed by DBP are consistent either with relevant sections in the *Income Tax Assessment Act 1997* or the Commissioner of Taxation's Ruling for the gas supply industry (TR2020/3).
992. The ERA also confirms that DBP has used the 20-year statutory cap that applies to some asset classes, as identified in TR2020/3.⁴³³
993. The ERA considers that the application of the 20-year statutory cap on asset classes, as identified in TR2020/3, would be an efficient regulatory benchmark. That is, in taking this approach, an entity would increase the net present value of depreciation deductions calculated for taxation purposes and, therefore, minimise the net present value of its corporate tax expense and maximise the net present value of its investment.
994. DBP has proposed a change to the tax asset life for 'Other depreciable' from 20 years to 10 years for new capital purchased on or after 1 January 2020. The ERA does not support the proposed change. DBP's proposed tax life for the 'Other depreciable' asset category does not reflect the tax lives of assets included in this category, such as large generators, inlet scrubbers and administrative buildings and does not meet the requirements of rule 88 of the NGR and the criteria set by rule 89. As a result, a 20-year tax asset life for DBP's 'Other depreciable' is used in the calculation of tax depreciation.
995. The ERA considers that the tax asset lives for the other existing asset categories ('Pipeline', 'Compression' and 'Metering') which remain the same are consistent with the *Income Tax Assessment Act 1997* or TR2020/3.
996. The tax asset lives used by the ERA to determine tax depreciation are detailed in Table 117.

⁴³³ Australian Taxation Office, *Income tax: effective life of depreciating assets*, Taxation Ruling (TR2020/3), 1 July 2020.

Table 117: ERA's draft decision tax asset lives (years)

Asset categories	Tax lives approved by the ERA in AA4	Tax lives for capital assets purchased prior to 1 January 2021	Tax lives for capital assets purchased on or after 1 January 2021
Pipeline	20	20	20
Compression	20	20	20
Metering	15	15	15
Other depreciable	20	20	20
<i>Computers and motor vehicles</i>			5
<i>Cathodic/corrosion protection</i>			15
<i>SCADA, electrical, control & instrumentation and communications</i>			10
Cost of raising equity	5	5	5
BEP lease	20	20	20

Tax depreciation method

997. In AA5, DBP proposed to use:

- The straight-line method to depreciate capital assets purchased prior to 1 January 2021, as included in the actual tax asset based for AA4.
- The diminishing value method to depreciate capital assets purchased on or after 1 January 2021, as included in the forecast tax asset base proposed for AA5.

998. The ERA examined the reports and submissions published by the AER through its 2018 review of the regulatory tax approach, including the expert opinions of the AER's consultants Dr Martin Lally and PricewaterhouseCoopers.^{434, 435, 436}

999. The AER concluded that it would maintain the current regulatory tax depreciation method of straight-line for existing assets and apply the diminishing value method to all new assets and capital expenditure with the exception of assets qualified under section 40.72 of the *Income Tax Assessment Act 1997*, which are required to be depreciated using the straight-line method.

1000. The AER considered that it was reasonable to assume that a benchmark efficient entity would select the diminishing value tax depreciation approach because the faster depreciation under the diminishing value method meant that the regulated entity received more in net present value terms after accounting for the cost of capital. A worked example by the AER in its discussion paper showed that the net present

⁴³⁴ Economic Regulation Authority, *Draft Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, 31 July 2019, p. 130.

⁴³⁵ Australian Energy Regulator, *Review of regulatory tax approach*, including stakeholder submission to Issues Paper (May 2018), Initial Report (June 2018), Discussion Paper (November 2018), and Final Report (December 2018).

⁴³⁶ Lally, M., *Tax Payments versus the AER's Allowances*, 16 June 2018.

value of the tax depreciation over the life of a hypothetical asset was higher under the diminishing value method than the straight-line method when a rate was applied to reflect inflation and the time value of money (that is, the weighted average cost of capital).

1001. Similarly, Lally supported the use of the diminishing value method because it was consistent with the Net Present Value (NPV) = 0 principle. This principle requires that the present value of the revenue earned from an asset in a regulated environment in which output prices are set or capped must be equal to the initial investment to ensure that the total costs incurred are recovered.

In respect of the use of Diminishing Value (DV) depreciation by businesses rather than the Straight Line (SL) method used by the AER, the former is superior in present value terms for any asset life and discount rate because it front-loads the depreciation and this always raises the present value. So, adoption of this approach by the AER would reduce the allowed revenues of businesses to the level consistent with the NPV = 0 principle, which is in the long-term interests of consumers. Furthermore, the effect is material, there are no adverse incentive effects on businesses from doing so, and it is as simple for the AER to use DV as it is to use SL. So, there is a clear case for the AER to use DV for all firms.

1002. The AER also found that use of the diminishing value method was consistent with the actual practice of regulated entities that are not subject to the National Tax Equivalent Regime (known as non-NTER entities). Analysis by PwC of the tax fixed asset registers of network service providers found that non-NTER entities used the diminishing value approach for 60 per cent of assets by value.
1003. The ERA considers that the diminishing value method should be applied as the benchmark practice in AA5 because it is consistent with the principle of setting NPV = 0 and will ensure that regulated entities cannot over-recover revenue. The ERA considers that the diminishing value method best meets the long-term interests of consumers as required by the NGO.
1004. Sections 40 to 130 of the *Income Tax Assessment Act 1997* prevents asset owners from switching between depreciation methods for a given asset.
1005. While the ERA considers that the benchmark efficient entity would now apply the diminishing value method for tax purposes to its new assets (except for buildings which are required to be depreciated using straight-line depreciation), it has not applied this to the existing assets. This treatment is consistent with the AER's approach. It is also consistent with the ERA's final decision on the Goldfields Gas Pipeline access arrangement for 2020 to 2024.⁴³⁷
1006. Under Section 40.65 of the *Income Tax Assessment Act 1997*, an entity generally has a choice between the straight-line and diminishing value method to depreciate new assets.⁴³⁸ The ERA considers that the benchmark efficient entity would choose to adopt the straight-line method (over the diminishing value method) to:
- Maximise the benefits of the tax shield against assessable income in future years.
 - Reduce risks from the preservation of accrued tax losses.

⁴³⁷ Economic Regulation Authority, *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, December 2019, p. 174.

⁴³⁸ Compared to, for example, under Section 40.72 and Division 43 of the *Income Tax Assessment Act 1997*, where an entity is required to use the straight-line method to calculate tax depreciation on intangible assets and capital works.

1007. For the DBP draft decision, the ERA accepts:
- The straight-line method to depreciate capital assets purchased prior to 1 January 2021, as included in the actual tax asset based for AA4.
 - The diminishing value method to depreciate capital assets purchased on or after 1 January 2021, as included in the forecast tax asset based proposed for AA5 (except for buildings which are required to be depreciated using straight-line depreciation).
1008. DBP does not separately categorise building assets and therefore uses the diminishing value method for all capital assets purchased on or after 1 January 2021.
1009. The ERA requires that DBP separately identify any building assets from its tax assets purchased on or after 1 January 2021. Building assets purchased on or after 1 January 2021 should be depreciated using straight-line depreciation for tax purposes.
1010. In reviewing DBP's Tariff Model and the application of the diminishing value method, the ERA notes that the diminishing value formula used by DBP to calculate tax depreciation on capital expenditure for each regulatory year in AA5 was:

$$\text{Tax Depreciation} = \text{Base value} \times (\text{days held} / 365) \times \left(\frac{200\%}{\text{asset's remaining life}} \right)$$

1011. The ERA notes that the diminishing value method uses an asset's effective life to calculate depreciation and not the asset's remaining life which reduces each year. The asset's effective life should equal the respective tax lives in Table 117 for each year regulatory year.⁴³⁹
1012. For the draft decision, the ERA calculates depreciation using the diminishing value method through the following formula was:

$$\text{Tax Depreciation} = \text{Base value} \times (\text{days held} / 365) \times \left(\frac{200\%}{\text{asset's effective life}} \right)$$

1013. The ERA requires that DBP amend its formula for the diminishing value method to use an asset's effective life.

Immediate expensing of refurbishment capital expenditure

1014. The AER found in its 2018 review of the regulatory tax approach that it may be possible for an entity to include refurbishment capital expenditure in its calculation of the tax asset base for regulatory purposes while immediately expensing this expenditure in actual tax returns.⁴⁴⁰
1015. Further, the AER proposed to adopt immediate expensing of refurbishment capital expenditure in its regulatory models and considered that this approach would be in the long-term interests of consumers.⁴⁴¹

⁴³⁹ Australian Taxation Office, *Prime cost (straight line) and diminishing value methods*, ([online](#)) (accessed June 2020).

⁴⁴⁰ Economic Regulation Authority, *Draft Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, 31 July 2019, p. 131.

⁴⁴¹ Australian Energy Regulator, *Final Report: Review of regulatory tax approach (Final Report)*, 17 December 2018, p. 64.

1016. The ERA considered the immediate expensing of refurbishment capital expenditure for the Mid-West and South-West Gas Distribution Systems and Goldfields Gas Pipeline access arrangements.^{442 443}
1017. The ERA considers that refurbishment expenditure can be immediately expensed as an operating expense, provided that the refurbishment activity does not improve the efficiency or effective life of the asset.
1018. The ERA considers that DBP will need to:
- Detail refurbishment capital expenditure in its access arrangements that is to be included in forecast operating expenditure and, hence, immediately expensed.
 - Identify refurbishment capital expenditure in its access arrangements and explain how refurbishment activities submitted as a capital expense improve the efficiency or effective life of the asset.

Tax asset base

1019. Consistent with DBP's proposal, the ERA uses the roll forward method to establish the opening value of the forecast tax asset base for AA5.
1020. The opening tax asset base for the first regulatory year of AA5 (2021) was calculated by rolling forward the closing value of the tax asset base for AA4, adjusted for updates to capital expenditure approved by the ERA, asset disposals and actual tax depreciation for each regulatory year in AA4.
1021. The ERA calculates the roll-forward tax asset base for AA4 using the method that was determined in the final decision for AA4.
1022. Specifically:
- Opening value at 1 January 2016
- plus** actual capital expenditure (net of capital contributions) incurred in AA4
- less** depreciation based on actual capital expenditure incurred in (using the straight-line method)
- less** any asset disposals during AA4.
1023. The tax asset base calculated by the ERA for each regulatory year in AA4 is set out in Table 118.

⁴⁴² Economic Regulation Authority, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024*, November 2019, p. 337.

⁴⁴³ Economic Regulation Authority, *Final Decision on Proposed Revisions to the Goldfields Gas Pipeline Access Arrangement for 2020 to 2024*, December 2019, p. 175.

Table 118: ERA's draft decision actual tax asset base for AA4 (\$ million nominal)

	2016	2017	2018	2019	2020
Opening tax asset base	1,319.47	1,239.53	1,165.76	1,091.14	1,020.39
Capital expenditure	16.41	23.01	22.85	27.41	26.65
Asset disposals	-	-	-	-	-
Tax depreciation	(96.35)	(96.78)	(97.48)	(98.16)	(98.69)
Closing value	1,239.53	1,165.76	1,091.14	1,020.39	948.35

1024. The ERA calculates the closing value for the forecast tax asset base for each regulatory year in AA5 using the following method:

Opening value (equal to the closing value for the previous regulatory year)

plus forecast expenditure (net of capital contributions) incurred in the regulatory year

less depreciation based on forecast capital expenditure incurred in (using the straight-line method for capital purchased prior to 1 January 2021 and diminishing value on capital purchased on or after 1 January 2021)

less forecast asset disposals during AA4.

1025. The forecast tax asset base calculated by the ERA in its draft decision for each regulatory year in AA5 is set out in Table 119.

Table 119: ERA's draft decision forecast tax asset base for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025
Opening tax asset base	948.35	887.74	809.53	717.43	626.78
Capital expenditure	38.94	29.54	19.56	21.87	28.58
Asset disposals	-	-	-	-	-
Tax depreciation	(99.55)	(107.75)	(111.66)	(112.53)	(114.10)
Closing value	887.74	809.53	717.43	626.78	541.25

Estimated cost of corporate income tax

1026. The ERA's draft decision calculation of the estimated cost of corporate income tax (net of imputation credits) for each regulatory year in AA5 is set out in Table 120.⁴⁴⁴

⁴⁴⁴ These calculations will be revised annually as part of the tariff variation process that includes an update to the debt risk premium.

Table 120: ERA's draft decision calculation of the estimated cost of corporate income tax for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025
Unsmooth revenue	326.16	305.96	308.36	306.56	306.03
Tax expenses					
- Operating expenditure, System use gas	24.32	25.10	25.89	26.47	26.75
- Operating expenditure, Other Expenses	71.75	70.88	71.81	69.55	67.81
- Tax depreciation	99.55	107.75	111.66	112.53	114.10
- Interest on debt	61.06	60.25	59.53	58.57	57.62
Total tax expenses	256.68	263.98	268.89	267.12	266.29
Estimated taxable income	69.48	41.98	39.47	39.45	39.74
Tax loss carried forward	0.00	0.00	0.00	0.00	0.00
Estimated taxable income (Net of tax loss)	69.48	41.98	39.47	39.45	39.74
Estimated cost of tax (tax rate=30 per cent)	20.84	12.60	11.84	11.83	11.92
Value of imputation credits ($v=0.5$)	(10.42)	(6.30)	(5.92)	(5.92)	(5.96)
Cost of corporate income tax net of imputation credits	10.42	6.30	5.92	5.92	5.96

Required Amendment 14

DBP must amend the calculation of income tax as follows:

- Amend the approach to use unsmoothed revenue to determine taxable income.
- Amend the approach to maintain a 20-year tax asset life for the tax asset class 'Other depreciable' assets.
- Separately identify any building assets from its tax assets purchased on or after 1 January 2021, which should be depreciated using straight-line depreciation for tax purposes.
- Separately identify any refurbishment capital expenditure in its access arrangements that is to be included in forecast operating expenditure and capital expenditure.
- Amend the formula for the diminishing value method to use an asset's effective life.
- Amend the estimate cost of corporate income tax in accordance with the values set out in Table 120 of this draft decision.

Incentive mechanism

1027. Rule 98 of the NGR permits the ERA to approve or require the inclusion of an incentive mechanism in a full access arrangement to encourage efficiency in the provision of pipeline services by the service provider:

98 Incentive mechanism

- (1) A full access arrangement may include (and the [ERA] may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.
- (2) An incentive mechanism may provide for carrying over increments for efficiency gains and decrements for losses of efficiency from one access arrangement to the next.
- (3) An incentive mechanism must be consistent with the revenue and pricing principles.

1028. The revenue and pricing principles in section 24 of the NGL require that a service provider should be provided with effective incentives to promote economic efficiency in the provision of reference services, including efficient investment in a pipeline in which reference services are provided, efficient provision of pipeline services, and efficient use of the pipeline.

1029. Increments or decrements resulting from the operation of an incentive mechanism are included as a separate building block in the determination of total revenue under rule 76(d) of the NGR.

1030. Rule 91(1) of the NGR requires forecast operating expenditure to be consistent with that which would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

1031. Under rule 71 of the NGR, the ERA may infer that capital or operating expenditure is efficient and complies with other criteria prescribed in the rules from the operation of an incentive mechanism. The ERA must, however, consider and give appropriate weight to submissions and comments received on an access arrangement proposal through public consultation.

1032. Rule 72(1)(l) of the NGR requires the access arrangement information for a full access arrangement proposal to include the service provider's rationale for any proposed incentive mechanism. Rule 42 requires the included information to be that which is reasonably necessary for users and prospective users to understand the background, basis and derivation of the various elements of the proposal.

1033. Rule 100 of the NGR also requires the provisions of an access arrangement to be consistent with the national gas objective. The objective of the NGL is to promote efficient investment in, operation and use of natural gas services for the long-term interests of consumers with respect to price, quality, safety, reliability and security of supply.

1034. The ERA is also required under section 28 of the NGL to perform its regulatory functions in a manner that will or is likely to contribute to the achievement of the national gas objective.

DBP's proposal

1035. DBP proposed to introduce the Efficiency Factor (E Factor) scheme as an operating expenditure efficiency carryover mechanism, commencing in AA5.⁴⁴⁵
1036. Under the proposed scheme, DBP would carry forward incremental operating expenditure savings (or decremental overspending) in non-excluded cost categories for five years following the year in which the efficiency gain (or loss) occurred.
1037. The amounts carried forward under the scheme would comprise a separate building block in DBP's total revenue allowance in the next access arrangement period (AA6) in accordance with rules 76(d) and 98(2) of the NGR.
1038. The operation of the E Factor scheme is described in clause 15.2 of the proposed revised access arrangement.⁴⁴⁶
- 15.2 The E Factor Scheme operates in the following way:
- (a) the Operator will retain the benefit of actual operating expenditure being lower, or incur the cost of actual operating expenditure being higher, than forecast operating expenditure included in the total revenue in each year of the access arrangement period;
 - (b) the mechanism carries forward the Operator's incremental efficiency gains (or losses) relative to the E Factor benchmark approved by the ERA for five years from the year those gains (or losses) occur;
 - (c) the E Factor benchmark is the total operating expenditure forecast approved by the ERA, less the E Factor exclusions listed in clause (16.11) below;
 - (d) the incremental efficiency gains (or losses) are referred to as E Factor incentives;
 - (e) annual E Factor carryover amounts accrue in each year of the subsequent access arrangement period as the summation of the E Factor incentives in the immediately prior access arrangement period that are carried forward for five years or less into the relevant year;
 - (f) the E Factor carryover amounts are added to the Operator's total revenue in each year of the subsequent access arrangement period; and
 - (g) if necessary, the annual E Factor carryover amount is carried forward into the access arrangement period commencing 1 January 2026 until it has been retained by the Operator for a period of five years.
1039. The proposed E Factor benchmark comprised the approved total annual operating expenditure forecast, less excluded expenditure categories listed in clause 15.11 of the revised proposed access arrangement:
- 15.11 The annual E Factor benchmark is the total annual operating expenditure forecast approved by the ERA, less the following E Factor exclusions:
- (a) movement in provisions;
 - (b) any operating expenditure sub-category not forecast using a top-down, revealed cost approach. These costs may include, but are not limited to, operating costs incurred by the Operator relating to:

⁴⁴⁵ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 116.

⁴⁴⁶ The ERA notes a typographical error in clause 15.2(c) of the proposed revised access arrangement. The reference to "clause (16.11)" should be a reference to "clause 15.11". This error is addressed at paragraph 1174 of this decision.)

- (i) system use gas; and
 - (ii) non-recurrent operating expenditure;
- (c) any operating expenditure sub-category not reasonably within the control of the Operator. These costs may include, but are not limited to, operating costs incurred by the Operator relating to:
- (i) permits;
 - (ii) licence fees;
 - (iii) ERA costs; and
 - (iv) rates and taxes;
- (d) any operating expenditure amount not included in the ERA approved operating expenditure forecast, but that meets the requirements of Rule 91(1) and was incurred for the purpose of reducing capital expenditure;
- (e) any ERA approved operating expenditure amount arising from cost pass through events which apply in respect of that year; and
- (f) any other operating expenditure amount that the Operator and the ERA agree to exclude from the E Factor benchmark.
1040. DBP also proposed to adjust the E Factor benchmark to be consistent with capitalisation policy changes that may occur during the access arrangement period, under clause 15.12 of the proposed revised access arrangement:
- 15.12 Where the Operator changes its approach to classifying costs as either capital expenditure or operating expenditure during the access arrangement period, the Operator will adjust the E Factor benchmark to be consistent with the capitalisation policy changes.
1041. DBP also proposed to index carry forward efficiency gains, consistent with forecast operating expenditure, under clause 15.9 of the proposed revised access arrangement:
- 15.9 The E Factor incentives are carried over from year to year in real dollars to ensure that these gains (or losses) are not eroded by inflation. The price index or indices used in this calculation are to be consistent with those used to forecast operating expenditure for the access arrangement period.
1042. DBP's proposed operating expenditure, E Factor exclusions and E Factor benchmarks for the AA5 period are shown in Table 121, below.

Table 121: Proposed operating expenditure categories, E Factor benchmarks and excluded cost categories, 2021 to 2025 (\$million real at 31 December 2020)

Operating expenditure category	2021	2022	2023	2024	2025
Wages and salaries	27.7	27.9	28.1	28.3	28.5
Field expenses	11.2	11.2	11.2	11.2	11.2
Non-field expenses	11.9	11.9	11.9	11.9	12.0
Reactive maintenance	1.9	1.9	1.9	1.9	1.9
Capex to opex	2.3	1.9	2.2	2.2	1.9
Government charges	4.5	4.5	4.5	4.5	4.5
E Factor benchmark	59.4	59.2	59.7	60.0	59.9
<i>Less: excluded costs</i>					
Government charges	4.3	4.3	4.3	4.3	4.3
System use gas	20.6	20.9	21.2	22.2	22.5
GEA/turbine overhauls	8.9	7.6	7.6	4.4	2.1
Total forecast opex	93.2	92.1	92.9	90.8	88.8

Source: DBP, 2021-2025 Final Plan – Attachment 7.1: Opex forecast model, January 2020.

Submissions

1043. The ERA identified the E Factor scheme as a principal issue for consideration in its issues paper on DBP's proposed revisions to the access arrangement.⁴⁴⁷ The ERA sought submissions from stakeholders and interested parties addressing the following matters:

- Whether the proposed E Factor scheme promotes efficient use of DBP's pipeline assets, and efficient investment in and provision of pipeline services.
- Whether the efficient provision of pipeline services can be achieved without an efficiency carryover mechanism such as the E Factor scheme.
- Whether the E Factor exclusions proposed by DBP to calculate the E Factor benchmarks are reasonable.
- Whether the length of the proposed carryover period and proportional allocation of benefits (or costs) between DBP and customers is reasonable.
- Whether contractual obligations and operating licence conditions, including financial penalties, are sufficient to ensure that efficiency gains achieved under the E Factor scheme would not lead to a decline in service reliability.
- Whether additional mechanisms or provisions are required to offset DBP's incentives to incur or defer capital expenditure, or allow service performance to decline under the E Factor scheme.

⁴⁴⁷ ERA, *Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025, Issues Paper*, 17 March 2020, p. 23.

1044. Five of the seven submissions to the issues paper referred to DBP's proposed E Factor scheme. DBP's parent entity, Australian Gas Infrastructure Group (AGIG), affirmed its support for the mechanism, while Wesfarmers Chemicals, Energy & Fertilisers (WesCEF), gasTrading Australia Pty Ltd, and CITIC Pacific Mining Management Pty Ltd (CPM) expressed neutral opinions in general, subject to particular concerns. Perth Energy considered that a portion of the carryover benefits should be allowed to be allocated to an arrangement such as a Network Innovation Scheme.

Australian Gas Infrastructure Group

1045. AGIG owns and operates the DBNGP through its subsidiary, DBP. AGIG considered the E Factor scheme would strengthen its incentive to increase operating expenditure efficiencies in the long-term interests of customers and noted that stakeholders had been generally supportive of the principles of the scheme.⁴⁴⁸

We believe the proposed E-Factor will be a valuable addition to the regulatory framework, and that strengthening the incentive for DBP to increase operating expenditure efficiencies – and share these efficiencies with customers – is in the long term interests of our customers with respect to price, reliability and security of supply.

During the stakeholder engagement on our Final Plan, shippers were generally supportive of the E Factor design principles and saw value in increasing the incentive for DBP to reduce operating costs where practicable.

Wesfarmers Chemicals, Energy and Fertilisers

1046. WesCEF remained neutral on the concept of the incentive mechanism, subject to further consideration of baseline operating expenditure estimates and excluded cost categories.⁴⁴⁹

WesCEF remains neutral on the concept of an incentive mechanism on opex. WesCEF observes that AGIG has somewhat had the incentive to outperform in AA4 its opex allowance (excl. SUG) in 2019, the penultimate year of the current Access Arrangement, without an incentive scheme in place. In all cases, WesCEF believes such a system must be calibrated properly, and in this respect queries the following:

Baseline reference and basis of cost estimates: WesCEF would suggest that AGIG's base year 2019 assumption is benchmarked to the expenditure targeted in the acquisition model of its new shareholders for the AA5 period. WesCEF is concerned about using this single year as a reference when AGIG points to an update of its actuals through the end of September 2019 from its Draft plan assessment to cause the single largest impact to its AA5 opex. WesCEF, like the ERA, is concerned about an unexplained increase in excess of 30 per cent of its estimates of government charges in AA5. Finally, WesCEF would seek clarification on the profile of its opex estimate (excl. SUG), as this points to a year-on-year increase of \$5-7 million in 2021 and a slow decline of \$5 million across AA5 (in real terms).

Exclusions: WesCEF understands the necessity to exclude from an incentive mechanism the costs which may be out of AGIG's control. According to AGIG, these include Turbine and GEA overhauls. WesCEF notes AGIG's comment in its OPEX business case review that it has efficiently managed its cost of turbine overhauls throughout AA4, reporting that "a number of assets were additionally "swapped out", moving gas turbines which had lower run hours to compressor stations with higher utilisation, in order to extend the useful life of all assets and prudently defer overhaul".

⁴⁴⁸ DBP, *Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Issues Paper, Attachment A: Responses to the ERA Issues Paper*, 31 March 2020, p. 3.

⁴⁴⁹ Wesfarmers Chemicals, Energy & Fertilisers, *Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025)*, 30 March 2020, p. 11.

In WesCEF's view, this comment shows cost control in this matter, of which AGIG's customers would be pleased to share the upside in AA5.

Gas Trading Australia Pty Limited

1047. gasTrading had no comment on the incentive mechanism except to note that the mechanism should apply only to efficiency savings that were attributable to management, and the owner's use of technology, ingenuity and skill, rather than under-utilisation of the pipeline:⁴⁵⁰

gasTrading has no comment on the Incentive Mechanism, other than any Incentive should be applied to savings that are directly a result of DBP's management, rather than savings that result from lower than forecast utilisation which leads to savings in maintenance, System Use Gas or overhauls. Incentives should benefit the Pipeline Owner due to the Pipeline Owner's use of technology, ingenuity and skill.

CITIC Pacific Mining Management Pty Ltd

1048. CPM stated that it would be comfortable with DBP's proposed incentive mechanism, subject to the ERA's consideration and adoption of CPM's proposed adjustments to capital and operating expenditure:⁴⁵¹

Incentive Mechanism – provided that ERA take into consideration and adopt the adjustments to capex and opex as requested by CPM in this submission, CPM submit that they would be comfortable with ERA accepting the proposed Incentive mechanism. CPM holds a view that a prudent operator of a major statewide pipeline will have conducted a detailed opportunity assessment on what such an incentive scheme would/could deliver their business through AA5 and accordingly have submitted this component of the Proposed Revisions fully aware of their expected outcomes. With that in mind AGIG's corporate business drivers can therefore be deemed to be aligned with the Proposed Revisions which may be somewhat misaligned with their customers (considering customers are the Owners of our pipeline), however, with the requested driver alignment adjustment requested in this submission the business drivers across both shippers and AGIG become better aligned and therefore a supporting position can be taken on the proposed incentive scheme.

Perth Energy

1049. Perth Energy suggested that DBP should be provided with incentives to mitigate the risk of stranded assets by investing in new technologies. Perth Energy considered that DBP be allowed to allocate a portion of the carryover benefits derived under the E Factor scheme towards an arrangement such as a Network Innovation Scheme:⁴⁵²

We consider those businesses fundamental to the gas supply chain, such as DBP, are the parties best able to control costs and adapt to changing conditions. We therefore recommend that, the ERA incentivises DBP to invest in its assets in a way that mitigates this risk without transferring it to end-use customers.

End-use customers are price-takers and therefore unable to act against the associated increase in prices except to reduce their demand. This would in fact result in the exact scenario DBP is seeking to prevent.

Perth Energy consider a more appropriate, measured response would be to:

⁴⁵⁰ GasTrading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 9.

⁴⁵¹ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 31 March 2020, p. 7.

⁴⁵² Perth Energy, *Response to Issues Paper: Proposed Revisions to the Access Arrangement for the, Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025*, 14 April 2020.

- allow a small amount of regulated revenue or any incentive payments retained under its proposed E-Factor Scheme to be spent on innovation through an arrangement such as proposed by DBP under the 'Network Innovation Scheme' in its Draft Plan; and
- provide flexibility in DBP's access arrangement that would allow DBP to trial new services and encourage it to expand its offering over this and future access arrangement periods.

Draft decision

1050. The purpose of the E Factor scheme is to provide DBP with time-neutral incentives to implement efficiency gains in each year of the access arrangement period.
1051. DBP's incentives to implement efficiency gains during the access arrangement period are distorted due to the periodic nature of the regulatory review process and the base year revealed cost method of forecasting efficient operating expenditure in the next access arrangement period.
1052. Without an efficiency carryover mechanism, DBP would retain the benefit (or bear the cost) of an efficiency gain (or loss) until it accrues to customers through a revised total revenue allowance and real tariff adjustment in the next access arrangement period. DBP could maximise the retention period of an efficiency gain by deferring discretionary savings until after its forecast efficient costs have been assessed for the next regulatory period.
1053. DBP could also influence its operating expenditure forecast in the next access arrangement period by inefficiently manipulating base year costs.
1054. Incentives that encourage a service provider to act contrary to achieving the lowest sustainable cost of providing reference services are not in the long-term interests of customers and are not consistent with the revenue and pricing principles and the national gas objective.
1055. To the extent that the proposed E Factor scheme is an operating expenditure incentive mechanism that encourages efficiency in the provision of services and provides for carrying over increments for efficiency gains and decrements for efficiency losses from one access arrangement period to the next, the E Factor scheme complies with rules 98(1) and (2) of the NGR.
1056. The ERA considered the following matters to determine the consistency of the E Factor scheme with the revenue and pricing principles of the NGL (rule 98(3) of the NGR) and the national gas objective:
- DBP's proposed carryover period length and proportional allocation of benefits or costs between DBP and customers.
 - The symmetrical operation of the E Factor scheme, specifically the application of carry forward decrements in the operator's total revenue allowance.
 - The operating expenditure categories DBP proposed to exclude from the E Factor benchmark.
 - DBP's incentives to ensure operating expenditure efficiencies do not lead to a decline in service performance.
 - DBP's incentives to achieve efficiency gains by substituting operating expenditure for capital expenditure.

- DBP's proposal to index carry forward efficiency gains or losses.

1057. The ERA also considered Perth Energy's proposal to allow DBP to allocate a portion of efficiency benefits towards an arrangement such as a Network Innovation Scheme.

Length of proposed carryover period

1058. DBP proposed to carry forward incremental efficiency gains or decremental losses, referred to as E Factor incentives, for five years from the year in which the gain or loss occurred (clause 15.2(b) of the revised proposed access arrangement).

1059. DBP stated that the five-year carryover period ensures that its incentive to outperform its operating expenditure benchmark is constant in each year of the access arrangement period:⁴⁵³

To ensure the incentive to outperform the opex benchmark is even in each year of an access arrangement period (and spans between periods), the incremental efficiency gains or losses are carried forward for five years.

1060. The carryover period length also determines the proportional allocation of benefits (or costs) between DBP and customers since the benefit (or cost) of an efficiency gain (or overspend) does not accrue to customers through a sustained real tariff reduction (or increase) until the expiration of the carryover period.

1061. DBP noted that it would retain approximately 30 per cent of the total benefit (or cost) of a recurrent efficiency gain (or loss) when future benefits (or costs) are discounted at a real rate of 6.0 per cent over 30 years:

Each year, if we are able to outperform the benchmark (spend less than the target), we will then be allowed to retain approximately 30% of the saving (referred to as an efficiency gain), with the other 70% returned to customers via a tariff revenue adjustment in AA6.⁴⁵⁴

1062. A carryover period length corresponding to the length of the access arrangement period eliminates the cyclical distortion in incentives to implement or defer efficiency gains. It also enables the service provider to retain the maximum share of an efficiency gain that it could have achieved without a carryover mechanism.

1063. A carryover period length less than the access arrangement period reduces but does not eliminate the cyclical distortion in incentives to implement or defer efficiency gains.

1064. A carryover period length greater than the access arrangement period allocates a greater proportion of the total efficiency gain (or loss) to the service provider with no further reduction in the timing distortion of incentives to implement efficiency gains.

1065. As DBP's proposed access arrangement revision commencement date of 1 January 2026 is consistent with rule 50(2) of the NGR (paragraph 57), a carryover period length of five years is necessary and sufficient to achieve the incentive smoothing objectives of the scheme in AA5.

1066. DBP did not propose, and no submissions suggested, that the proportional allocation of benefits or costs between DBP and customers under the E Factor scheme resulted

⁴⁵³ DBP, *2021-2025 Final Plan, p.118 and Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 1.

⁴⁵⁴ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 1.

in DBP having an insufficient or excessive incentive to achieve efficiency gains in any year.

1067. The ERA considers the proposed five-year carryover period is consistent with the revenue and pricing principles and the national gas objective and should not be adjusted to increase or decrease the proportional allocation of benefits (or costs) between DBP and customers.

Symmetry of the E Factor scheme

1068. Clause 15.2 of DBP's proposed revised access arrangement stated that DBP would retain the benefit of an efficiency gain as a carry forward increment where actual operating expenditure was less than the approved forecast, or incur a loss as a carry forward decrement where actual operating expenditure exceeded forecast operating expenditure in non-excluded cost categories.
1069. Clause 15.2(f) of the proposed revised access arrangement and rules 76(d) and 98(2) of the NGR state that cumulative incremental efficiency gains or decremental losses will be included as building blocks in the operator's total revenue allowance in each year of the subsequent access arrangement period.
1070. Under Rule 76(e) of the NGR, the service provider's approved operating expenditure forecast is included as a separate building block in its total revenue allowance in each regulatory year. Rule 91(1) requires operating expenditure to be consistent with that which would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.
1071. Rule 98(3) of the NGR also requires an incentive mechanism to comply with the revenue and pricing principles in section 24 of the NGL. Section 24(2) of the NGL stipulates that a service provider should be provided with a reasonable opportunity to recover its efficient costs incurred in providing reference services and complying with regulatory obligations (paragraph 18).
1072. Section 24(5) of the NGL states that a reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing related reference services. Regard should also be had to the economic costs and risks of potential for under or over investment (section 24(6)) and under or over utilisation of a pipeline with which a service provider provides pipeline services (section 24(7)).
1073. Rules 76(d) (Total revenue) and 98(2) (Incentive mechanisms) of the NGR both anticipate and permit the inclusion of decrements in the service provider's total revenue allowance in each regulatory year. Since a decrement to a service provider's total revenue allowance may affect its ability to recover its forecast efficient costs (section 24(2) of the NGL) or to earn a return commensurate with the regulatory or commercial risks of providing related reference services (section 24(5) of the NGL) in a particular year, the revenue and pricing principles are interpreted to apply across a relevant but indeterminate period, rather than in each particular year.
1074. DBP will only derive a carry forward loss under the E Factor scheme if it has incurred operating expenditure in excess of its forecast efficient costs in non-excluded categories in a particular year, or if it has failed to sustain an efficiency gain achieved in a prior year. In each case, DBP has not been deprived of the reasonable opportunity to recover at least its efficient costs, nor denied the ability to earn a return commensurate with the regulatory and commercial risks of providing reference

services during the period in which relevant costs were incurred and subsequent carryover period.

1075. Having regard to the economic costs and risks of under or over investment, or under or over utilisation of the pipeline, the ERA considers the risk that DBP would incur substantial or sustained carry forward losses due to the operation of the E Factor scheme is low for the following reasons:

- Rule 91(1) of the NGR requires DBP's operating expenditure forecast to be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing reference services.
- The E Factor scheme enhances pre-existing, although irregular, incentives implicit in the regulatory framework for DBP to incur efficient costs.
- The carry forward of efficiency losses for the duration of the carryover period comprises an additional strong incentive for DBP to not incur operating expenditure in excess of its forecast efficient costs.
- DBP has the opportunity to mitigate the risk of unforeseen costs not included in its total revenue allowance through a cost pass through variation.

1076. The symmetrical application of the E Factor scheme is also consistent with the operation of the Efficiency Benefit Sharing Scheme (EBSS) administered by the AER. The AER considered an appropriate penalty for overspending operating expenditure was fundamental to mitigating the network service providers' (NSPs) incentives to inflate base year costs:⁴⁵⁵

A strong penalty for overspending is a fundamental feature of the current EBSS. Without an appropriate penalty for overspending, NSPs have an incentive to shift expenditure into the base year.

1077. DBP also previously operated under an asymmetric incentive scheme in the AA2 period, in which only efficiency gains were carried forward. The ERA noted in its draft decision for the AA3 period that the asymmetric nature of the scheme provided inappropriate incentives for DBP to shift costs across the access arrangement period and did not increase the ERA's confidence that DBP's revealed costs were efficient:⁴⁵⁶

Under the incentive mechanism applying under the access arrangement for the 2005 to 2010 [AA2] access arrangement period, the Authority is concerned that DBP has had an incentive to shift costs from early to later in the access arrangement period and that this may have been at least partly responsible for the trend of increasing operating costs over the period. In this case, the potential outworking of the incentive mechanism is a benefit to DBP of approximately \$20 million, but there is no obvious benefit to users of the DBNGP through sustained efficiency gains in operating costs. Moreover, the incentive mechanism has not served to increase the confidence of the Authority in interpreting the actual costs for the latter years of this period as a benchmark of efficient costs.

⁴⁵⁵ AER, *Expenditure incentives guidelines for electricity network service providers, Issues paper*, March 2013, p. 30.

⁴⁵⁶ ERA, *Draft Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 14 March 2011, p. 203.

1078. The ERA considered in its final decision for the AA3 period that the problems with the asymmetric mechanism could be resolved by ensuring DBP was exposed to penalties for efficiency losses as well as rewards for efficiency gains:⁴⁵⁷

The problems with the incentive mechanism of the current access arrangement could be resolved by changing the mechanism so that the service provider is exposed to penalties for efficiency losses (actual costs exceeding forecast costs) as well as rewards for efficiency gains.

1079. DBP also stated in its proposed access arrangement information that customers had sought assurance that the E Factor scheme would be applied symmetrically:⁴⁵⁸

Customers sought assurance that the proposed scheme would include both rewards and penalties.

1080. The ERA considers the symmetrical application of the E Factor scheme is consistent with the revenue and pricing principles in section 24 of the NGL and hence rule 98(3) of the NGR, and the national gas objective.

E Factor exclusions

1081. As a general principle, DBP proposed to include in the E Factor benchmark only those costs estimated by the top-down, roll-forward method and that were reasonably within its control:⁴⁵⁹

As a general principle, the costs that make up the opex benchmark in the E Factor are those:

- calculated using a top-down, roll-forward method; and
- reasonably within our control.

1082. DBP proposed to exclude the specific cost categories from the E Factor benchmark, called E Factor exclusions, listed in clause 15.11 of the proposed revised access arrangement:

- Movements in provisions (clause 15.11(a)).
- Any operating expenditure sub-categories not forecast using a top-down, revealed cost approach, including system use gas and non-recurrent operating expenditure (clause 15.11(b)).
- Operating expenditure sub-categories not reasonably within DBP's control (clause 15.11(c)).
- Operating expenditure not included in the approved operating expenditure forecast, but that meets the requirements of Rule 91(1) and was incurred for the purpose of reducing capital expenditure (clause 15.11(d)).
- Any approved operating expenditure amount arising from cost pass through events which apply in respect of that year (clause 15.11(e)).
- Any other operating expenditure amount that the Operator and the ERA agree to exclude from the E Factor benchmark (clause 15.11(f)).

⁴⁵⁷ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 31 October 2011, p. 168.

⁴⁵⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 119.

⁴⁵⁹ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 6.

1083. DBP also proposed to adjust the E Factor benchmark to be consistent with capitalisation policy changes during the access arrangement period (clause 15.12).

Movements in provisions

1084. DBP proposed to exclude movements in provisions from the E Factor benchmark (clause 15.11(a)). Provisional expenses are future liabilities having uncertain timing or amount.
1085. DBP did not propose an amount of movements in provisions to be excluded from the E Factor benchmark in the AA5 period.
1086. To the extent that carryover benefits (or costs) achieved under the E Factor scheme should be derived from actual operating expenditure savings (or costs) incurred by the service provider relative to its forecast efficient costs, the ERA considers the exclusion of movements in provisions from the E Factor benchmark to be consistent with the revenue and pricing principles and the national gas objective.

Costs not forecast using a top-down, roll-forward method

1087. DBP proposed to exclude cost categories not forecast using the top-down, roll-forward method as a general principle of the E Factor scheme. DBP specifically proposed to exclude system use gas and non-recurrent expenditure on GEAs and turbine overhauls during the AA5 period (clause 15.11(b) of the proposed revised access arrangement).⁴⁶⁰

Exclusion of costs not forecast using the top-down, roll-forward method as a general principle

1088. DBP considered the volatility of expenditure in cost categories estimated by bottom-up build resulted in insufficient forecast certainty, such that DBP could earn carry forward gains (or losses) under the E Factor scheme in excess of the actual benefit (or overspend):⁴⁶¹

Cost categories estimated via bottom-up build are typically non-recurrent or simply too volatile and exogenous to forecast with sufficient certainty. As a result, any efficiency gains or losses in respect of these costs tend to be based on changes in recurrent expenditure.

It is not appropriate to carryover non-recurrent efficiency gains, as there is the risk DBP could retain more than 100% of the benefit, resulting in windfall gain. These categories are GEA and turbine overhauls, insurance and SUG.

1089. Under the E Factor scheme, DBP would retain the benefit of an efficiency saving by carrying forward incremental gains for the duration of the carryover period. Customers then benefit through a lower efficient cost forecast and revenue allowance at the expiration of the carryover period.
1090. When forecasting efficient costs in the next access arrangement period, DBP typically applies a top-down roll-forward method, alternatively called the base year revealed cost method. The base year revealed cost method of forecasting efficient operating expenditure relies on the following general assumptions:

⁴⁶⁰ DBP, DBNGP ACCESS ARRANGEMENT, 2021-25 Access Arrangement Period, Access Arrangement Document, January 2020, p. 28.

⁴⁶¹ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 6.

- The relative consistency and predictability of operating expenditure, such that historical costs in the nominated base year are a reasonable expectation of future costs.
 - The effectiveness of incentives available to the service provider to achieve the lowest sustainable cost of providing reference services, such that revealed costs are a reliable indicator of efficient costs.
1091. If costs not forecast using the base year revealed cost method are included in the E Factor benchmark, DBP could derive a carryover benefit from a non-recurrent efficiency gain, but customers would not benefit through a lower efficient cost forecast in future periods.
1092. In its review of the EBSS, the AER also considered that electricity network service providers (NSPs) could retain a disproportionate benefit if non-recurrent cost categories not forecast using a single year revealed cost approach were not excluded from the scheme:⁴⁶²

The EBSS will reward the NSP as if the efficiency gains were ongoing. However, the opex forecast could treat the efficiency gain as non-recurrent. In this scenario the NSP could retain more than 100 per cent of the non-recurrent efficiency gain. For this reason, we should exclude the expenditure categories not forecast using a single year revealed cost forecasting method from the EBSS to prevent network users being worse off from a non-recurrent efficiency gain.

1093. The AER subsequently implemented the revised provisions of the EBSS in the equivalent efficiency carryover mechanism applied to gas distribution and transmission networks, including Jemena Gas Networks (JGN) and APA Victorian Transmission System:⁴⁶³

If we subject costs to the ECM that are not forecast using a revealed cost approach, a business would in theory receive a reward for efficiency gains through the ECM (at a cost to consumers), but consumers would not benefit through a lower revealed cost forecast in the subsequent access arrangement period. Therefore, we typically exclude costs that we do not forecast using a single year revealed cost forecasting approach.⁴⁶⁴

Service providers may have a number of reasons to propose alternative forecasting approaches. However, the benefit sharing allowance may not share efficiency gains consistently when a single year revealed cost approach is not used to forecast opex. If such an approach is not used, there is a risk the benefit sharing allowance may provide windfall gains or losses to a service provider. For this reason we will exclude from the actual opex amounts used to calculate the benefit sharing allowance, any cost category that is not forecast using a single year revealed cost approach in the following access arrangement period.

1094. The exclusion of costs not forecast using the base year revealed cost method is also consistent with the position expressed by gasTrading in its submission to the ERA's issues paper. gasTrading considered that the scheme should apply to efficiency savings attributable to management and exclude those that result from lower than forecast utilisation of the pipeline.

⁴⁶² AER, *Explanatory Statement, Efficiency Benefit Sharing Scheme for Electricity Network Service Providers*, November 2013, p. 13.

⁴⁶³ AER, *DRAFT DECISION, APA VTS Australia Gas access arrangement 2018 to 2022, Attachment 9 – Opex incentive mechanism*, July 2017, p. 9-9.

⁴⁶⁴ AER, *DRAFT DECISION, Jemena Gas Networks (NSW) Ltd Access Arrangement 2020 to 2025, Attachment 8 Efficiency carryover mechanism*, November 2019, p. 10.

1095. As a general principle, the ERA considers the exclusion of costs not forecast using a base year revealed cost method from the E Factor benchmark to be consistent with the revenue and pricing principles and the national gas objective.

System use gas

1096. DBP proposed to exclude system use gas from the E Factor benchmark in the AA5 period (clause 15.11(b) of the proposed revised access arrangement).⁴⁶⁵
1097. “System Use Gas” on the DBNGP is defined at clause 16 of the proposed revised access arrangement to include gas consumed, lost or vented from the pipeline during normal operations or abnormal circumstances:

System Use Gas means Gas used by the Operator for the following purposes:

- (a) replacing Gas consumed in the operation of the DBNGP (including, but not limited to:
 - (i) compressor fuel;
 - (ii) gas engine alternator fuel;
 - (iii) heater fuel; and
 - (iv) increases to linepack, other than:
 - (A) when caused by or for the purposes of a supply of linepack gas to a third party under a balancing or back up service arrangement; or
 - (B) repacking the linepack of the DBNGP after an Expansion which involves looping of the pipeline); and
 - (b) replacing gas which leaks or otherwise escapes from the DBNGP (whether in normal operational circumstances or due to any rupture or other abnormal leakage) and Gas vented as part of the normal operation of the DBNGP.
1098. DBP projected system use gas expenditure to total \$144 million in AA4, which compares with its approved forecast of \$190 million.⁴⁶⁶
1099. DBP attributed the lower than forecast system use gas costs in AA4 to a lower Full Haul throughput and a lower average actual price than forecast. DBP stated that the price variance resulted primarily from timing differences between forecast and actual system use gas expenditure.⁴⁶⁷
1100. In its Final Plan for AA5, DBP forecast system use gas costs of \$107 million in AA5, comprising around 24 per cent of total forecast operating expenditure.⁴⁶⁸ DBP subsequently updated its gas throughput forecast which resulted in a revised forecast system use gas cost of \$93 million in AA5.⁴⁶⁹
1101. DBP forecasts system use gas costs as a product of forecast quantities and forecast prices. Quantity forecasts are derived from compressor fuel and operational

⁴⁶⁵ DBP, DBNGP ACCESS ARRANGEMENT, 2021-25 Access Arrangement Period, Access Arrangement Document, January 2020, p. 28.

⁴⁶⁶ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 65.

⁴⁶⁷ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 66.

⁴⁶⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 62.

⁴⁶⁹ DBP, *Email – Demand and Service Update*, 22 May 2020.

requirements, including in GEAs and vented during normal operation and maintenance activities.⁴⁷⁰

1102. Since system use gas expenditure is forecast on a bottom-up basis and savings achieved in system use gas costs do not reflect recurrent efficiency savings, the ERA considers the exclusion of system use gas costs from the E Factor scheme to be consistent with the general principle that costs not forecast using a base year revealed cost approach be excluded from the scheme.

Gas engine alternators and turbine overhauls

1103. GEAs generate electricity for operational requirements including remote facilities and compressor stations north of Perth. Gas turbines maintain pressure in the pipeline.
1104. GEAs are serviced at regular intervals based on run hours. Since power requirements at each site include a base load component, gas engine alternator run hours are not significantly related to throughput.
1105. Gas turbines are also overhauled in line with manufacturer specifications, based on run hours and probability of failure. Gas turbine run hours are directly related to throughput.
1106. DBP forecast \$31 million in gas engine alternator and turbine overhauls in AA5, including 20 gas engine alternator overhauls at an average cost of \$1 million per year.
1107. In comparison, DBP performed 16 gas engine alternator overhauls and six turbine overhauls in the AA4 period at a total projected cost of \$28 million.⁴⁷¹ DBP's forecast efficient allowance in AA4 was \$33 million.⁴⁷²
1108. DBP's turbine overhauls expenditure in AA4 included two premature failures and two turbine swaps. The lower expenditure in the AA4 period resulted from a managed strategy of spreading run hours between turbines at each compressor station such that individual units remained below the 30,000 hour overhaul threshold. As a result, DBP forecast seven turbine overhauls in AA5 based on unit run hours and use rates, with one contingent overhaul in the event of a premature failure. DBP's forecast includes two overhauls each year for the first three years of the AA5 period, with one each in the last two years, at an average cost of \$6 million per year.
1109. Since GEAs and turbine overhaul costs are also forecast on a bottom-up basis, the ERA also considers the exclusion of GEAs and turbine overhauls from the E Factor scheme to be consistent with the general principle that costs not forecast using a base year revealed cost approach be excluded from the scheme.

Capital expenditure to operating expenditure

1110. DBP included \$10.5 million in reclassified operating expenditure categories in AA5, previously classified as capital expenditure and forecast on a bottom-up basis. The 'Capex to opex' category includes works related to asset inspections, minor pipeline

⁴⁷⁰ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 62.

⁴⁷¹ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 63.

⁴⁷² DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 66.

works, and health and process safety initiatives which are ongoing and operational in nature.⁴⁷³

1111. DBP has not sought to exclude the ‘Capex to opex’ transitional category from the E Factor benchmark since those costs are reflected in the operating expenditure forecasts.
1112. The ERA requires an amendment to clause 15.11(b) of the proposed revised access arrangement to clarify that recurrent ‘Capex to opex’ forecast on a bottom-up basis is not subject to exclusion under this clause.

Required Amendment 15

DBP must amend clause 15.11(b) of the proposed revised access arrangement to read as follows:

- (b) any operating expenditure sub-category not forecast using a top-down, revealed cost approach. These costs:
- (i) may include, but are not limited to, operating costs incurred by the Operator relating to:
 - A. system use gas; and
 - B. non-recurrent operating expenditure.
 - (ii) must not include operating expenditure previously classified as capital expenditure that was forecast on a bottom-up basis.

Costs not reasonably within DBP’s control

1113. DBP also proposed, as a general principle, to exclude costs not reasonably within its control from the E Factor benchmark.
1114. Within the category of costs not reasonably within its control, DBP proposed to exclude costs of permits, licence fees, ERA costs, and rates and taxes.⁴⁷⁴

Exclusion of costs not within DBP’s control as a general principle

1115. DBP stated that the exclusion of costs not within its control from the E Factor benchmark would avoid windfall gains or losses accruing under the scheme that were driven by external factors.⁴⁷⁵

Key features of the E Factor:

...

only includes opex costs that are within DBP’s control to avoid windfall gains/losses; ...

1116. In its review of the EBSS in 2013, the AER considered the following matters in its decision to disallow the previously permitted exclusion of costs deemed not reasonably within electricity network service providers’ control:⁴⁷⁶

⁴⁷³ DBP, *2021-2025 Final Plan – Attachment 7.4: Expenditure Reclassification Review*, January 2020, p. 6.

⁴⁷⁴ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 6.

⁴⁷⁵ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 5.

⁴⁷⁶ AER, *Better Regulation, Explanatory statement, Efficiency Benefit Sharing Scheme*, August 2013, p. 27.

- There was no compelling reason that the forecasting risk associated with uncontrollable operating expenditure be shared differently between service providers and customers when compared with operating expenditure categories forecast using a base year revealed cost method.
- Service providers could apply for a significant cost variation due to an external event to be recognised as a pass through variation.
- Relevant provisions of the National Electricity Rules did not differentiate between controllable and uncontrollable expenditure when determining efficiency gains or losses.

1117. The AER also noted that electricity network service providers usually had some degree of control in their response to costs associated with external events and that excluding those costs from the scheme would reduce the service providers' incentive to manage their response to those events.⁴⁷⁷

We acknowledge the EBSS will reward or penalise NSPs for some forecasting error associated with uncontrollable events. However, on the whole, the risk of uncontrollable events presents both upside and downside risk to NSPs. Relevantly, any material risks can be managed through pass-through events and contingent projects. We do not think there is a compelling argument to share the cost of uncontrollable events differently to all other costs facing NSPs.

While some events may be uncontrollable, NSPs usually have some control over the costs associated with such events. Allowing exclusions would reduce the incentive to respond to such events efficiently.

1118. DBP also stated that the exclusion of uncontrollable costs from the E Factor scheme was consistent with the operation of the gain sharing mechanism applied to Western Power under the *Electricity Networks Access Code 2004*.^{478, 479}

While elements of the E Factor are similar to the AER's EBSS, the design of the scheme, including the various inclusions and exclusions, is more akin to the ERA's GSM.

Excluding these costs is consistent with the operation of Western Power's GSM, where these uncontrollable items (such as the Energy Safety levy, ERA costs and licence fees) are adjusted for in the efficiency and innovation benchmarks.

1119. The ERA considers the E Factor scheme is not comparable to the gain sharing mechanism as applied to Western Power under the *Electricity Networks Access Code*. Specifically, section 6.26 of the Access Code states that an above-benchmark surplus does not exist to the extent that a service provider has achieved efficiency gains by failing to maintain prescribed minimum service standards:

6.26 An above-benchmark surplus does not exist to the extent that a service provider achieved efficiency gains or innovation in excess of the efficiency and innovation benchmarks during the previous access arrangement period by failing to comply with section 11.1.

{Note: Section 11.1 requires a service provider to maintain a service standard at least equivalent to the service standard benchmarks set out in the access arrangement or access contract.}

⁴⁷⁷ AER, *Better Regulation, Explanatory statement, Efficiency Benefit Sharing Scheme*, November 2013, p. 19.

⁴⁷⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 117.

⁴⁷⁹ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 6.

1120. DBP also stated that the E Factor scheme would more closely align its incentive framework with AGIG's other infrastructure businesses:⁴⁸⁰

We are introducing the E Factor for AA5 to help sharpen our focus on improving operating practices and maximising the efficiency of our pipeline services. By operating under an efficiency scheme, DBP will also be more closely aligned with AGIG's other infrastructure businesses, as well as the continuous improvement and knowledge sharing culture across the Group.

1121. As noted at paragraph 1116, the EBSS or equivalent efficiency carryover mechanism administered by the AER that applies to AGIG's other infrastructure businesses does not permit the exclusion of costs not reasonably within the control of the operator.
1122. Given the inconsistency in the exclusions proposed by DBP with those permitted under the schemes administered by AER, and the lack of comparability of the E Factor scheme with the gain sharing mechanism as applied to Western Power, the ERA considers DBP has provided insufficient information to support its rationale for excluding cost categories not reasonably within its control from the E Factor benchmark as a general principle. In the circumstances, the ERA considers DBP's proposal to exclude cost categories not within its control from the E Factor benchmark to be inconsistent with the national gas objective.

Permits, licence fees, ERA costs and taxes

1123. DBP proposed to exclude costs associated with permits, licence fees, ERA costs, and rates and taxes from the E Factor benchmark as these costs were not reasonably within its control (clause 15.11(c) of the proposed revised access arrangement).⁴⁸¹

The only E Factor opex exclusions forecast using the top-down, roll-forward method are permits, licence fees, rates and taxes.

We propose these costs be excluded because they are driven by external factors and are not reasonably within our control.

1124. DBP forecast approximately \$33.1 million (nominal at December 2020) in actual expenditure on 'Government charges' in the AA4 period, including costs associated with permits, licence fees, ERA costs, and rates and taxes. This expenditure compares with its forecast efficient allowance of \$36.5 million.
1125. DBP forecast costs associated with 'Government charges' of approximately \$43.8 million (nominal at December 2020) in the AA5 period, of which \$21.5 million comprised permits, licence fees, ERA costs and rates and taxes which DBP proposed to exclude from the E Factor benchmark as it considered these costs were not reasonably within its control.
1126. Consistent with matters previously considered (at paragraph 1122), DBP has not submitted sufficient information to satisfy the ERA that its rationale for excluding costs of permits, licence fees, ERA costs and taxes from the E Factor scheme meets the requirements of rules 42(1) and 72(1)(l) of the NGR and is consistent with the national gas objective. Accordingly, DBP must remove clause 15.11(c) from the proposed revised access arrangement.

⁴⁸⁰ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 4.

⁴⁸¹ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 6.

Required Amendment 16

DBP must remove clause 15.11(c) from the proposed revised access arrangement.

Operating expenditure not included in the approved operating expenditure forecast incurred for the purpose of reducing capital expenditure

1127. DBP proposed to exclude from the E Factor benchmark operating expenditure not included in the approved operating expenditure forecast, but that met the requirements of Rule 91(1) and was incurred for the purpose of reducing capital expenditure (clause 15.11(d)).
1128. Under rule 91(1) of the NGR, operating expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services (see paragraph 206).
1129. DBP stated the exclusion of operating expenditure incurred in place of capital expenditure from the E Factor benchmark would ensure that it had an ongoing incentive and flexibility to deliver the most efficient outcome.⁴⁸²
- We also propose that if during the access arrangement period we identify a more efficient opex-based solution that can be adopted in place of capex, this opex is excluded from the E Factor benchmark. This means we will have an ongoing incentive to deliver the most efficient solution – whether opex or capex – and have the flexibility in-period to substitute capex for opex (or vice versa) where efficient to do so.
1130. DBP did not propose an amount to be excluded from the E Factor benchmark under clause 15.11(d) of the proposed revised access arrangement for the AA5 period. DBP may propose amounts to be excluded under clause 15.11(d) in retrospect at the next access arrangement review.
1131. The ERA considers the exclusion of costs not included in the operating expenditure forecast, but that meet the requirements of rule 91(1) of the NGR and were incurred for the purpose of reducing capital expenditure, to be consistent with the revenue and pricing principles and the national gas objective.

Any approved operating expenditure amount arising from cost pass through variation

1132. DBP proposed to exclude from the E Factor benchmark any approved operating expenditure amount arising from cost pass through variation which applied in respect of that year (clause 15.11(e) of the proposed revised access arrangement).
1133. Cost pass through variations are described in clause 11.5 of the proposed revised access arrangement as a reference tariff variation mechanism:

New Costs Pass Through Variation

- 11.5 New Costs Pass Through Variation means the following mechanism:
- (a) The Operator may recover certain expenses it or its Related Bodies Corporate incur or are to incur if (but only if) the expenses:

⁴⁸² DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 4.

- (i) are or will be incurred as a result of circumstances beyond the control of the Operator or the relevant Related Body Corporate;
 - (ii) satisfy the criteria in NGR 91(1) for operating expenditure;
 - (iii) were not included in the Operators' forecast operating expenditure at the time at the revisions to the Access Arrangement were approved;
 - (iv) were not included in the Total Revenue for one or more years of the Current Access Arrangement.
1134. Under clauses 11.5(d) and (g) of the proposed revised access arrangement, DBP must notify the ERA of its intention to increase its operating expenditure that is used to calculate total revenue in each year of the current access arrangement period and may not vary the reference tariff unless the ERA has issued written approval of the variation.
1135. The ERA considered the following matters to determine that cost pass through events should not be excluded from the E Factor benchmark
- Cost pass through variations may be approved *ex ante* or *ex post*.
 - If a cost pass through variation is approved *ex ante*, the approved costs should be subject to incentives to achieve efficiency gains similar to costs which have been included in the approved forecast operating expenditure.
 - If a cost pass through variation is approved *ex post*, the retroactive inclusion of the associated cost in the E Factor benchmark and the approved operating expenditure forecast will result in a neutral outcome under the E Factor scheme.
1136. In these circumstances, the ERA considers the exclusion of cost pass through variations from the E Factor scheme would not be consistent with the revenue and pricing principles and the national gas objective. Accordingly, DBP must remove clause 15.11(e) from the proposed revised access arrangement.

Required Amendment 17

DBP must remove clause 15.11(e) from the proposed revised access arrangement.

Any other operating expenditure amount

1137. DBP proposed to exclude from the E Factor benchmark any other operating expenditure amount agreed between DBP and the ERA (clause 15.11(f)).
1138. DBP did not propose any amounts or categories of expenditure that may be excluded from the E Factor scheme under clause 15.11(f) for the AA5 period.
1139. In exercising its regulatory functions or powers under the NGL, the ERA is bound by the efficiency objectives of the revenue and pricing principles and the national gas objective.
1140. Section 24 of the NGL states that a service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides.
1141. Section 28 of the NGL requires the ERA to perform or exercise its regulatory functions or powers in a manner that will or is likely to contribute to the achievement of efficient

investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

1142. To the extent that DBP's commercial objectives may not align with the long term interests of consumers of natural gas, the ERA considers the pipeline operator's agreement as a condition to the exclusion of other costs from the E Factor benchmark to be inconsistent with the revenue and pricing principles and the national gas objective.
1143. DBP must amend clause 15.11(f) of the proposed revised access arrangement to remove the pipeline operator's agreement as a precondition to the exclusion of other costs from the E Factor benchmark.

Required Amendment 18

DBP must amend clause 15.11(f) of the proposed revised access arrangement to read as follows:

(f) any other operating expenditure amount that the ERA notifies the Operator is required by the ERA to exclude from the E Factor benchmark.

Capitalisation policy changes

1144. DBP also proposed to adjust the E Factor benchmark to be consistent with any capitalisation policy changes during the access arrangement period (clause 15.12 of the revised proposed access arrangement).
1145. The adjustment of the E Factor benchmark to reflect capitalisation policy changes ensures that DBP is not rewarded or penalised for variances in operating expenditure attributable to capitalisation policy decisions. The adjustment is also consistent with the approach required by the AER in its recent decision on the APA Victorian Transmission System:⁴⁸³
- We also require the forecast opex amounts used to calculate the benefit sharing allowance reflect any capitalisation policy changes. This will ensure that APA is not rewarded or penalised for opex changes due entirely to change in APA's capitalisation policy.
1146. The ERA considers the adjustment of the E Factor benchmark to account for capitalisation policy changes during the access arrangement period to be consistent with the revenue and pricing principles and the national gas objective subject to a clarifying amendment to the effect that outcomes under the efficiency mechanism will be unaffected by the change in capitalisation policy.

⁴⁸³ AER, DRAFT DECISION, APA VTS Australia, Gas access arrangement, 2018 to 2022, Attachment 9 – Opex incentive mechanism, July 2017, p. 9-9.

Required Amendment 19

DBP must amend clause 15.12 of the proposed revised access arrangement to read as follows:

Where the Operator changes its approach to classifying costs as either capital expenditure or operating expenditure during the access arrangement period, the Operator will adjust the E Factor benchmark to be consistent with the capitalisation policy changes to the effect that outcomes under the efficiency mechanism are not affected by the change in capitalisation policy.

Other incentive schemes

1147. DBP identified two potential consequences of the E Factor scheme:

- Operating expenditure savings may be achieved by allowing service reliability to decline.
- Operating expenditure savings may be reported by shifting expenditure from operating to capital accounts.

1148. Perth Energy also proposed in its submission to the ERA's issues paper that DBP be allowed to spend a portion of the benefits derived from the E Factor scheme on innovation through an arrangement such as a Network Innovation Scheme.

Incentives to maintain service reliability

1149. DBP stated in its proposed access arrangement information that it was subject to strict conditions in shipper contracts and its operating licence, including financial penalties, such that any penalties for deterioration in service performance would be likely to offset any benefits derived under the E Factor scheme:⁴⁸⁴

It is also worth noting that the current regulatory and contractual arrangements at DBP mean that opex underspends cannot be achieved at the expense of service performance.

There are strict conditions in our shipper contracts and operating licence that require us to maintain public safety, ensure a reliable supply, and to deliver a high quality of service. Deterioration in any of these conditions would result in financial penalties, which would likely offset any potential benefits to DBP under the E Factor.

1150. DBP also noted that it had a competitive incentive to ensure reliability of supply:⁴⁸⁵

We also note that, unlike electricity, gas is a discretionary commodity, typically regulated under a price cap form of regulation in Western Australia. It is therefore in our interests to maintain a high level of service, safety and credibility to ensure shippers and end customers continue to choose to use natural gas (and our pipelines).

1151. DBP's standard shipper contract requires it to use its best endeavours to minimise the magnitude and expected duration of any curtailment in supply (clause 17.1(a) of the Standard Shipper Contract), including *force majeure* events, major works, planned maintenance, or in circumstances where the operator, acting as a reasonable and prudent person, determines for any reason that a curtailment is desirable (clause 17.2).

⁴⁸⁴ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 4.

⁴⁸⁵ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 4.

1152. DBP's reference service contracts provide for a refund to curtailed shippers of the Capacity Reservation Charge in circumstances where the curtailment was for a reason other than *force majeure* (affecting the shipper), or because the operator had a right under the contract to refuse to receive or deliver gas. The refund is payable when the Permissible Curtailment Limit of two per cent in the relevant gas year (which applies to certain aggregated curtailments) is exceeded.
1153. Shippers are also entitled to direct damages if the Permissible Curtailment limit is exceeded or if DBP is found to have breached its contractual requirement to exercise its best endeavours to minimise the magnitude and expected duration of any type of curtailment (including *force majeure* events).
1154. DBP also noted that shippers not on a reference service contract would be entitled to similar recourse for damages for curtailment of supply, although there would be no entitlement to a refund of capacity reservation charges for curtailment due to major works.
1155. DBP also referred to its licence conditions which require it to ensure a continuous operation of the pipeline, subject to exempted circumstances and a penalty for non-compliance. Section 35 of the *Petroleum Pipelines Act 1969* states:

35. Pipelines to be operated continuously

- 1) Except with the consent in writing of the Minister and subject to compliance with such conditions, if any, as are specified in the instrument of consent, a licensee shall operate continuously the pipeline specified in his licence.
Penalty: a fine of \$50 000 or imprisonment for 5 years, or both.
 - 2) It is not an offence against subsection (1) if the failure of the licensee to operate the pipeline continuously —
 - a) was in the ordinary course of operating the pipeline; or
 - b) was for the purpose of repairing or maintaining the pipeline; or
 - c) was in an emergency in which there was a likelihood of loss or injury.
1156. The ERA also took account of DBP's past performance and outlook, and shippers' expressed preferences.
1157. DBP reported in its Final Plan that it delivered near 100 per cent system reliability throughout the AA3 and AA4 periods.⁴⁸⁶ DBP also stated that it intended to maintain that standard of service reliability, despite challenges in the energy sector:⁴⁸⁷

Our customers expect strong reliability from our services, which is more challenging as the energy sector changes. Increasing penetration of renewable electricity into the SWIS is changing the way the DBNGP is used. We expect more volatility as we respond to the demands of gas-fired generation in the SWIS being used to offset the peaks and troughs of renewable electricity production. This makes achieving 100% reliability more challenging than it has been in the past. Our plans respond to these developments to ensure we continue to meet customer expectations for reliability.

⁴⁸⁶ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 22.

⁴⁸⁷ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 26.

During the AA5 period we will deliver for our customers with lower prices while maintaining service standards:

...

maintaining the reliability of the DBNGP at or near 100%; ...

1158. DBP also stated that customers did not support the introduction of a customer service incentive scheme:⁴⁸⁸

Our customers recognised a capex, innovation and customer service incentive could both facilitate better outcomes over the long term. However, it was clear that they did not support the introduction of a dedicated scheme for capex, innovation or customer service for our business in AA5.

1159. In its issues paper, the ERA sought submissions from customers and interested stakeholders specifically addressing the adequacy of DBP's incentives to maintain service reliability under an operating expenditure efficiency carryover mechanism.⁴⁸⁹
1160. The ERA did not receive any submissions that considered whether DBP's contractual obligations and operating licence conditions provide inadequate incentives for it to maintain service performance and supply reliability.
1161. The ERA considers that DBP is not required to implement a service performance incentive scheme or contingency payment factor attached to E Factor incentives for the AA5 period.

Incentives to substitute capital expenditure for operating expenditure

1162. DBP did not propose to introduce a capital expenditure efficiency scheme. DBP stated that customers did not support a proposed capital expenditure scheme and the incentives under such a scheme were unlikely to be significant:⁴⁹⁰

During the development of our Draft Plan and this Final Plan, we considered adopting a capex efficiency scheme similar to that recently introduced by the AER. However, customers did not support this on the basis that our annual stay-in-business capex is relatively small – around 1% of the total value of our capital base – therefore any capex gain or loss would be minimal. A capex efficiency scheme is therefore unlikely to significantly increase incentives above those that already exist.

1163. DBP also stated that its incentive to achieve operating expenditure efficiency gains by substituting capital expenditure was unlikely to be significant. DBP noted that its actual capital expenditure was subject to internal and regulatory review, and proposed to exclude any operating expenditure incurred as a more efficient alternative to capital expenditure from the E Factor benchmark:⁴⁹¹

With regard to the potential for reducing opex spend simply by incurring more capex, this is unlikely to be a significant risk at DBP. Our typical capex forecast is relatively low, with the majority of business activities relating to operating and maintaining our long-established pipeline assets. Our actual capex is also tested internally (and

⁴⁸⁸ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 120.

⁴⁸⁹ ERA, *Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025, Issues Paper*, 17 March 2020.

⁴⁹⁰ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 116.

⁴⁹¹ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 4.

externally by the ERA) for prudence and efficiency before it can be rolled into the capital base.

We also propose that if during the access arrangement period we identify a more efficient opex-based solution that can be adopted in place of capex, this opex is excluded from the E Factor benchmark. This means we will have an ongoing incentive to deliver the most efficient solution – whether opex or capex – and have the flexibility in-period to substitute capex for opex (or vice versa) where efficient to do so.

1164. The ERA did not receive any submissions that expressed concern that DBP may achieve efficiency gains under the E Factor scheme by inefficiently substituting capital expenditure for operating expenditure.
1165. The ERA also did not receive any submissions that expressed support for a capital expenditure efficiency incentive scheme or similar mechanism.
1166. The ERA considers that DBP is not required to implement a capital expenditure efficiency incentive mechanism.

Network Innovation Scheme

1167. DBP did not propose to introduce a Network Innovation Scheme in AA5. DBP stated that, although customers considered that DBP should be responsive to changing energy market needs, customers had mixed views on the introduction of a customer-funded innovation incentive scheme and considered that greater benefits would be achieved under an industry-wide approach.⁴⁹²

For innovation, customers noted they expect our business to play a role in supporting renewable electricity technologies, meeting renewable energy and emissions targets, and decarbonising energy supply. However, customers had mixed views on the introduction of an innovation incentive scheme in AA5 and many felt these were not required at this time.

For an innovation scheme, customers felt benefits would likely be greater under a whole of industry approach to innovation.

1168. In its submission to the ERA's issues paper, Perth Energy considered that a more appropriate and measured response to DBP's stranded assets risk would be to allow a small amount of regulated revenue or any incentive payments retained under its proposed E-Factor Scheme to be spent on innovation through an arrangement such as proposed by DBP under the 'Network Innovation Scheme' in its Draft Plan.
1169. The ERA considers there is no regulatory impediment to DBP allocating a portion of efficiency gains or from undertaking the type of investment in innovation that may be proposed under an arrangement such as a Network Innovation Scheme. Capital and operating expenditure are subject to prudent service provider requirements under rules 79 and 91 of the NGR and speculative capital investment may be considered under rule 84.
1170. The ERA also considers that it is not authorised under the NGR to require DBP to allocate a portion of efficiency savings achieved under the E Factor scheme towards an arrangement such as a Network Innovation Scheme.

Indexation of carry forward efficiency gains and losses

1171. DBP proposed to index efficiency gains or losses carried forward to preserve the value of gains or losses in real amounts, consistent with the method applied to

⁴⁹² DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 117-8.

calculate forecast operating expenditure (clause 15.9 of the proposed revised access arrangement).

1172. The ERA considers the indexation of carry forward gains and losses under the E Factor scheme using a method consistent with forecast operating expenditure to be consistent with the revenue and pricing principles and the national gas objective.

Conclusion

1173. The ERA considers the E Factor scheme proposed by DBP for AA5 is consistent with the revenue and pricing principles and the national gas objective, subject to the required amendments at paragraphs 1112, 1126, 1136, 1143 and 1146 of this decision.
1174. The ERA also requires further administrative amendments to clauses 15.2(c) and 15.8 of the proposed revised access arrangement to correct typographical errors.
- In clause 15.2(c), the reference to “clause 16.11” should be a reference to “clause 15.11”.
 - In clause 15.8, the reference to “(A5 in paragraph (16.7) above)” should be a reference to “(A₅ in paragraph (15.7) above)”.
1175. DBP is not required to implement a service performance contingency scheme or capital expenditure efficiency scheme.

Required Amendment 20

DBP must amend clauses 15.2(c) and 15.8 of the proposed revised access arrangement to correct the following typographical errors:

- In clause 15.2(c), the reference to “clause 16.11” must be changed to “clause 15.11”.
- In clause 15.8, the reference to “(A5 in paragraph (16.7) above)” must be changed to “(A₅ in paragraph (15.7) above)”.

Allocation of total revenue

1176. The NGR require total revenue to be allocated between reference services and other services on an allocation of cost basis.

1177. Rule 93 of the NGR states how costs are to be allocated between reference and other services. The rule further allows some pipeline services, other than reference services, to be classified as rebateable services, with part of the revenue from the sale of these services to be rebated or refunded to users of reference services in specified circumstances:

93 Allocation of total revenue and costs

- (1) Total revenue is to be allocated between reference and other services in the ratio in which costs are allocated between reference and other services.
- (2) Costs are to be allocated between reference and other services as follows:
 - (a) costs directly attributable to reference services are to be allocated to those services; and
 - (b) costs directly attributable to pipeline services that are not reference services are to be allocated to those services; and
 - (c) other costs are to be allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].
- (3) The [ERA] may, however, permit the allocation of the costs of rebateable services, in whole or part, to reference services if:
 - (a) the [ERA] is satisfied that the service provider will apply an appropriate portion of the revenue generated from the sale of rebateable services to reduce the reference tariff in accordance with rule 97; and
 - (b) any other conditions determined by the [ERA] are satisfied.
- (4) A pipeline service is a rebateable service if:
 - (a) the service is not a reference service; and
 - (b) substantial uncertainty exists concerning the extent of the demand for the service or of the revenue to be generated from the service.

1178. In March 2019, the NGR were amended to provide clarity on the allocation of costs between reference services and other services. Rules 79(6) and 91(2) of the NGR were added to the NGR governing the determination of conforming capital and operating expenditure:

79 New capital expenditure criteria

...

- (6) Conforming capital expenditure that is included in an access arrangement revision proposal must be for expenditure that is allocated between:
 - (a) reference services;
 - (b) other services provided by means of the covered pipeline; and
 - (c) other services provided by means of uncovered parts (if any) of the pipeline,
 in accordance with rule 93.

91 Criteria governing operating expenditure

...

- (2) The forecast of required operating expenditure of a pipeline service provider that is included in the full access arrangement must be for expenditure that is allocated between:
- (a) reference services;
 - (b) other services provided by means of the covered pipeline; and
 - (c) other services provided by means of uncovered parts (if any) of the pipeline,
- in accordance with rule 93.

DBP's proposal

1179. DBP submitted that most (around 97 per cent) of its revenue would continue to be derived from services with a reference tariff and terms and conditions that form the basis of negotiations.⁴⁹³
1180. DBP did not propose any changes in the way costs were allocated between the proposed reference services, that is, the full haul (T1), part haul (P1) and back haul (B1) services. Costs will continue to be allocated using a "full haul equivalent" value. DBP submitted:⁴⁹⁴

In line with stakeholder feedback, we have not proposed any changes in the way our costs are allocated between the Full Haul (T1), Part Haul (P1) and Back Haul (B1) services. This is because we first convert all services into a "full haul equivalent" value (multiplying the quantity of gas in TJ by the proportion of pipeline used by the service) and then sum all services to determine the tariff. This has the practical effect that the P1 and B1 services are the same as the T1 on a per-km basis.

Not only does this approach align with stakeholder feedback, but it also reflects the costs of providing each service; apart from some overhead costs, a shipper transporting gas halfway down the pipeline uses roughly half the pipeline infrastructure as one transporting gas the full length of the pipeline, and is charged accordingly.

Submissions

1181. Wesfarmers Chemicals, Energy & Fertiliser Ltd (WesCEF) raised two issues concerning the proposed tariff structure for the DBNGP access arrangement. The first was whether the proposed reference tariffs were compliant with the requirements of the NGR (rule 95). The second was whether total revenue and costs should continue to be recovered only from reference service tariffs.⁴⁹⁵
1182. The ERA has addressed WesCEF's submission on the first issue (that is, reference tariffs) in the reference services section of this draft decision (at paragraph 1192). On the second issue, WesCEF submitted that the ERA should investigate whether the tariff structure was consistent with rule 93 of the NGR, which sets out the requirements for the allocation of total revenue and costs.⁴⁹⁶

⁴⁹³ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 54.

⁴⁹⁴ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 123.

⁴⁹⁵ Wesfarmers Chemicals, Energy & Fertilisers Ltd submission, p. 5.

⁴⁹⁶ Wesfarmers Chemicals, Energy & Fertilisers Ltd submission, pp. 6-7.

WesCEF also encourages the ERA to investigate further whether the tariff structure is consistent with Rule 93 of the NGR. This is because in the proposed AA5, [DBP] is seeking to recover all of the total revenue from reference services in circumstances where the pipeline's capacity utilisation for AA5 is forecast to be significantly less than what it has been in the past. Rule 93(1) of the NGR requires total revenue to be allocated between reference and other services in the ratio in which costs are allocated between such services. Rule 93(2) then provides that costs are to be allocated so that costs directly attributable to reference services are allocated to those services. It is not clear to WesCEF how, with capacity utilisation for AA5 being forecast to be much less, all of [DBP's] costs should continue to be allocated to the reference services.

Furthermore, [DBP] itself has recognised non-reference service revenues of two to five per cent of its total revenues in the last three years. ERA's AA4 decision reported that non-reference services represented four per cent of the service provider's revenues in FY2014/15. WesCEF holds the view that the nonreference revenues have consistently been considered to be variable or uncertain in nature but that these revenues have nonetheless appeared to exist across the last two Access Arrangements. In these circumstances, WesCEF believes costs should be allocated to these services under Rule 93(2) of the NGR, or that a rebate mechanism applies to these services in accordance with Rule 93(3) of the NGR.

Draft decision

1183. The ERA has considered DBP's proposed reference tariffs for AA5, including WesCEF's relevant submissions, elsewhere in this decision (see paragraph 1192). WesCEF's submission concerning the recovery of revenue and costs is considered as part of the ERA's considerations below on the allocation of total revenue.
1184. The ERA has considered DBP's proposed operating and capital costs for AA5 elsewhere in this decision (see paragraphs 206 and 583, respectively). While DBP has allocated costs between the regulated (that is, DBP) and non-regulated business entities of AGIG in accordance with its operational accounting procedures, the ERA is unable to determine the extent to which regulated costs have been allocated between reference services and non-reference services.⁴⁹⁷ DBP has submitted that where operating and capital costs for the provision of non-reference services are directly attributable to an individual shipper, these costs are allocated directly to that shipper and not included in its proposed expenditure for AA5. Such operating costs include system use gas, labour and other variable costs associated with running the service.
1185. The allocation of costs between reference and other services, as set out in rule 93(2) of the NGR, is problematic in circumstances where costs cannot be separated, that is, the costs are shared costs for the provision of reference and other (non-reference) services and/or the allocated proportions of the costs may change over time. In these circumstances, the ERA considers that only costs which are a direct cost of providing a reference service or non-reference service should be allocated in accordance with rule 91(2) for operating expenditure and 79(6) for capital expenditure (see paragraphs 246 and 446). For all shared costs, the allocation should be made under rule 93 on a basis that reflects the ratios of the provision of the relevant services (for example, the ratio of recent actual reference and non-reference service revenue).
1186. DBP has submitted that around 97 per cent of its revenue is derived from reference services.⁴⁹⁸

⁴⁹⁷ DBP, *Response to information request ERA27 and ERA29*.

⁴⁹⁸ DBP, *Response to information request ERA16*, 5 June 2020.

The 97% refers to the revenue we receive from the provision of full haul, part haul and back haul services either by way of a reference service or a negotiated service (which are considered reference service equivalents for the purposes of NGR 47A(2)).

1187. In response to an information request, DBP provided the actual and forecast revenue from non-reference services, by service, for AA4 and AA5.⁴⁹⁹ The revenue values provided are consistent with DBP's statement that (approximately) three per cent of its revenue is derived from the provision of non-reference services.
1188. Given the considerations above, the ERA has determined that total revenue should be allocated between reference services and other (non-reference) services. Except for system use gas, which is an operating cost that is directly attributable to reference services, the ERA considers that all other operating and capital costs are shared costs for the provision of pipeline services on the DBNGP and should be allocated by reference to total revenue in the proportion of expected revenue from those services.⁵⁰⁰ DBP expects that it will continue to receive 97 per cent of its revenue from the provision of full haul, part haul and back haul services (that is, reference services or reference service equivalents), with the remaining three per cent from the provision of other (non-reference) services. The ERA considers this 97:3 ratio to be the best estimate and basis for allocating total revenue between reference and other (non-reference) services. On this basis, the ERA has allocated total revenue between reference and non-reference services as set out in Table 122. This allocation of total revenue satisfies the requirements of rule 93 of the NGR and is consistent with the revenue and pricing principles and the national gas objective.

Table 122: ERA allocation of total revenue between reference and other (non-reference) services for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025	Total
Total revenue	326.16	305.96	308.36	306.56	306.03	1,553.08
Allocation to reference services	317.11	297.54	299.89	298.16	297.65	1,510.34
Allocation to other (non-reference) services	9.06	8.43	8.47	8.40	8.38	42.74

Source: ERA, August 2020, Draft Decision tariff model

1189. Following contract renegotiations with some shippers in May 2020, DBP advised the ERA that the Peaking Service should be classified as a rebateable service for AA5.⁵⁰¹ The ERA has considered DBP's proposal to include a rebateable service as part of its considerations of pipeline and reference services for AA5 (at paragraph 144). As a rebateable service, a portion of the revenue generated from the Peaking Service will be used to reduce the reference tariffs for reference services. While DBP was unable to provide a forecast of revenue from the Peaking Service for AA5 (because the service is new and demand is uncertain), DBP noted that it expected the forecast to fall between the following minimum and maximum estimates:⁵⁰²

⁴⁹⁹ DBP, *Response to information request ERA16*, 5 June 2020.

⁵⁰⁰ Expenditure for system use gas is calculated based on reference service throughput forecasts and does not include any non-reference service costs.

⁵⁰¹ DBP, 'Information Requests – ERA17 to ERA20', [email] 29 May 2020.

⁵⁰² DBP, *Response to information request ERA16*, 5 June 2020.

- a minimum forecast revenue of roughly ██████████ per annum from the Peaking service reflects the capacity component of the tariff; and
 - a maximum of roughly ██████████ per annum in revenue is expected based on the full haul reference service capacity relinquished to take up these services.
1190. Given that the costs for providing the Peaking Service are included in the total revenue calculation for AA5, a rebate mechanism is required to adjust the reference tariffs for the rebateable service.⁵⁰³ The ERA has considered DBP's proposed rebate mechanism as part of its consideration of the tariff variation mechanism (at paragraph 1234).
1191. WesCEF noted that non-reference service revenues "have consistently been considered to be variable or uncertain in nature but that these revenues have nonetheless appeared to exist across the last two access arrangements." WesCEF submitted that in these circumstances "costs should be allocated to these services under rule 93(2) of the NGR, or that a rebate mechanism [should apply] to these services in accordance with rule 93(3)." The ERA considers that a fixed principle in the access arrangement prevented the revenue earned from non-reference services to be taken into account in past access arrangements.⁵⁰⁴ The ERA has separately considered fixed principles at paragraph 1239 of this decision. For AA5, where the costs for the provision of a certain service cannot be reasonably forecast and hence allocated, for example the Peaking Service, the service will be classified as a rebateable service and will have a rebate mechanism as provided for by rule 93(3) of the NGR.

Reference tariffs

1192. Rule 92 of the NGR requires that there is a reference tariff variation mechanism that is designed to equalise (in terms of present values) the portion of total revenue allocated to reference services and the forecast revenue from reference services over the access arrangement period.
1193. Rule 95 of the NGR sets out the requirements for determining reference tariffs for transmission pipelines:

95 Tariffs – transmission pipelines

- (1) A tariff for a reference service provided by means of a transmission pipeline must be designed:
- (a) to generate from the provision of each reference service the portion of total revenue referable to that reference service; and
 - (b) as far as is practicable consistently with paragraph (a), to generate from the user, or the class of users, to which the reference service is provided, the portion of total revenue referable to providing the reference service to the particular user or class of users.
- (2) The portion of total revenue referable to a particular reference service is determined as follows:
- (a) costs directly attributable to each reference service are to be allocated to that service; and

⁵⁰³ While the Peaking Service is a non-reference service, the non-reference service revenue used to allocate costs between reference and non-reference services excludes revenue from the Peaking Service.

⁵⁰⁴ See fixed principle in clause 13.1(b) of the current (AA4) access arrangement.

- (b) other costs attributable to reference services are to be allocated between them on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].
- (3) The portion of total revenue referable to providing a reference service to a particular user or class of users is determined as follows:
- (a) costs directly attributable to supplying the user or class of users are to be allocated to the relevant user or class; and
- (b) other costs are to be allocated between the user or class of users and other users or classes of users on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the [ERA].
1194. Rule 96 of the NGR allows the service provider to propose a discount for a particular user or prospective user, or a particular class of users or prospective users. The ERA may approve a discount only if it is necessary to respond to competition from other providers of pipeline services or other sources of energy, or to maintain the efficient use of the pipeline. The provision of the discount must also be likely to lead to reference or equivalent tariffs being lower than they would otherwise have been.

DBP's proposal

1195. DBP retained the reference services and tariffs offered under the current (AA4) access arrangement, which are:
- T1 Service and T1 Tariff for full haul services
 - P1 Service and P1 Tariff for part haul services
 - B1 Service and B1 Tariff for back haul services.⁵⁰⁵
1196. Consistent with the current access arrangement, DBP proposed a two-part tariff structure for each reference service for AA5 that comprised:⁵⁰⁶
- A *capacity (or reservation) charge* that recovers the fixed costs of delivering reference services, calculated as the sum of the fixed cost elements of unsmoothed total revenue (determined as building block total revenue minus the cost of system use gas) divided by forecast capacity demand.
 - A *commodity (or throughput) charge* that recovers the variable costs of delivering reference services, calculated as the sum of the variable cost elements of unsmoothed total revenue (determined as the cost of system use gas) divided by forecast throughput.
1197. However, to reflect the reduction in the variable cost for system use gas in AA5, DBP adjusted the proportion of fixed and variable components of the tariff. Specifically, in AA5, DBP reduced the commodity (or throughput) charge to 6 per cent (from 10 per cent in AA4) and so increased the capacity (or reservation) charge component of the tariff to 94 per cent (from 90 per cent in AA4).⁵⁰⁷
1198. DBP allocated costs across the full haul (T1 Service), part haul (P1 Service) and back haul (B1 Service) services using the same approach as applied in the current access arrangement, which was to sum the “full haul equivalent” value of each service

⁵⁰⁵ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 123.

⁵⁰⁶ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 123.

⁵⁰⁷ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 123.

(determined as the quantity in TJ multiplied by the proportion of pipeline used by the service). DBP noted that this approach had the practical effect that the tariff for the part haul and back haul services were calculated on the same per kilometre basis as the full haul service.⁵⁰⁸ DBP stated:

Not only does this approach align with stakeholder feedback, but it also reflects the costs of providing each service; apart from some overhead costs, a shipper transporting gas halfway down the pipeline uses roughly half the pipeline infrastructure as one transporting gas the full length of the pipeline, and is charged accordingly.⁵⁰⁹

1199. DBP's proposed reference tariffs as provided in its Final Plan are set out in Table 123.

Table 123: DBP's proposed reference tariffs (AA5) (\$ real as at 31 December 2019)

Tariff component	Tariff
Full Haul (T1)	
Capacity (reservation) charge (\$/GJ/day)	1.323657
Commodity (throughput) charge (\$/GJ/day)	0.090587
Total	1.414245
Part Haul (P1)	
Capacity (reservation) charge (\$/GJ/km/day)	0.000946
Commodity (throughput) charge (\$/GJ/km/day)	0.000065
Total	0.001011
Back Haul (B1)	
Capacity (reservation) charge (\$/GJ/km/day)	0.000946
Commodity (throughput) charge (\$/GJ/km/day)	0.000065
Total	0.001011

Source: DBP, 2021-25 Final Plan, Proposed Tariff Model (confidential). ERA converted numbers into \$ as at 31 December 2019.

1200. As noted at paragraph 177, in May 2020, DBP provided the ERA with a revised tariff model to update demand forecasts for reference services following the completion of major contract renegotiations. DBP's proposed reference tariffs as set out in the revised tariff model are set out in Table 124.

⁵⁰⁸ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, January 2020, p. 123.

⁵⁰⁹ DBP, Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan, January 2020, p. 123.

Table 124: DBP's revised proposed reference tariffs (AA5) (\$ real as at 31 December 2019)

Tariff component	Tariff
Full Haul (T1)	
Capacity (reservation) charge (\$/GJ/day)	1.387300
Commodity (throughput) charge (\$/GJ/day)	0.082527
Total	1.469827
Part Haul (P1)	
Capacity (reservation) charge (\$/GJ/km/day)	0.000992
Commodity (throughput) charge (\$/GJ/km/day)	0.000059
Total	0.001051
Back Haul (B1)	
Capacity (reservation) charge (\$/GJ/km/day)	0.000992
Commodity (throughput) charge (\$/GJ/km/day)	0.000059
Total	0.001051

Source: DBP, 2021-25 Final Plan, Revised Tariff Model (confidential), May 2020. ERA converted numbers into \$ as at 31 December 2019.

Submissions

1201. Citic Pacific Mining Management Pty Ltd (CPM) considered that DBP's proposed reference tariff for a full haul service was too high. CPM used DBP's model and adjusted all components and considered that a reference tariff of \$1.32/GJ to apply from 1 January 2021 would align with the business objectives of the shippers and DBP. CPM also considered that the current reference tariff may not be the best benchmark for comparing DBP's forecast tariffs for AA5 and referred to an expectation that tariffs would fall significantly in AA4 due to the rescue deal agreed following the insolvency of the then-owner of the DBNGP in 2004.⁵¹⁰
1202. Gas Trading Australia Pty Ltd (gasTrading) supported the fixed and variable components of the reference tariff as broadly reflective of DBP's actual costs but noted that some costs were based on run hours of the equipment, which it considered would change if gas supply arrangements changed. DBP did not appear to have considered this point.⁵¹¹
1203. Wesfarmers Chemicals, Energy & Fertiliser Ltd (WesCEF) noted DBP's assumption that system use gas was the only variable cost attributable to the commodity tariff and considered that this should be reviewed as WesCEF identified the following variable costs that could vary with the throughput in the pipeline:

⁵¹⁰ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 30 March 2020, pp. 5-6.

⁵¹¹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 9.

- Turbine and GEA overhauls: AGIG notes that these costs are a function of unit run hours. These costs were predicted to be \$33 million in AA4. They will actually result in a total of \$24 million on the basis of lower run hours, themselves, a function of the throughput in the DBNGP.
- Compressor stations: AGIG notes that these assets are “run based on the requirements of our customers and must be ramped up or down quickly to meet these needs”. The ERA had concluded in its technical paper on short run marginal costs in the electricity industry that “where output causes a costly deterioration of equipment, wear and tear can be thought of as a productive input, and thus can be described by an input-output curve similar to that of fuel.”⁵¹²

1204. WesCEF further submitted that there may be a need to amend the tariff structure to differentiate between different classes of users.

Traditional industrial, commercial and residential users of gas have not changed the nature nor the profile of their consumption. Therefore, the costs involved in the provision of each service to this class of user has not changed. However, a new class of user has evolved for each type of service over recent years – the user involved in the generation of electricity. Given the level of contracted capacity has reduced significantly, but the cost base of the DBNGP is not proposed to be reduced, it would appear that significantly more costs are required to provide a service to this distinct class of user.

Yet, based on the way in which total revenue (and costs) are proposed to be allocated under AA5 and also the structure of the reference tariffs being proposed, the same tariff structure is being proposed for two distinctly different classes of users of the services. The class of users who use the service for electricity generation have, and are continuing to use the service in a way that gives rise to costs that would not be incurred by the service provider were all users of the class of industrial, commercial and residential users. But, according to [DBP] under its proposal, this class of users is now expected to contribute to the costs associated with changes to the electricity sector. WesCEF believes that the cost of this increased need for gas flexibility should at least be differentiated amongst the different classes of users of the service on the pipeline.

To adopt this approach would be consistent with the requirements of Rule 95 of the NGR. WesCEF trusts that the ERA and the appropriate electricity market operator would recognise this cost and allow for it to be efficiently passed through into downstream electricity markets or tariffication, where appropriate.⁵¹³

1205. AGIG, owner of DBP, noted that it followed the previously accepted approach for determining the fixed and variable splits of tariffs and that including other charges to determine variable charges would only have a small effect:

It may be possible to include other items, such as the turbine overhauls, into the variable cost bucket, but this would be a decision made by the ERA. To provide context around the impact of such a change, we have modelled the specific example of turbine overhauls which total \$25 million in opex over the period ... Including this as part of the variable charge would change the split from 94/6 to 92/8, raising the total tariff (fixed plus variable per GJ) slightly as the variable cost is divided by throughput, which is lower than contracted capacity.⁵¹⁴

1206. In response to the ERA’s issues paper, gasTrading considered that there was no need to account for the Overrun Charge into the revenue calculations if the charge was imposed to encourage good shipper behaviour. However, if DBP engaged in systemic behaviour to promote, manipulate or maximise these charges, then the revenue for these charges should reduce the reference tariff.

⁵¹² Wesfarmers Chemicals, Energy & Fertilisers Ltd submission, p. 7.

⁵¹³ Wesfarmers Chemicals, Energy & Fertilisers Ltd submission, p. 6.

⁵¹⁴ Australian Gas Infrastructure Group – Attachment C, p. 3.

1207. AGIG noted that overrun services were not distinct services but included in the terms and conditions of the reference services and designed to:

Encourage shippers to contract for the firm capacity they require. Further, these charges play a role in the operational management of the pipeline by imposing a charge on shippers nominating to take more gas than contracted, thus enabling DBP to prudently manage the pipeline for all Shippers on fair and equal basis.⁵¹⁵

1208. Also, AGIG considered that the overrun service can't be forecast and that the revenue from the charges was immaterial.⁵¹⁶

1209. AGIG considered that incorporating the charges in the tariff calculation is likely to have a perverse incentive of encouraging more use of overruns. AGIG submitted:

Incorporating overrun charges into the tariff calculation, is likely to have the perverse incentive of encouraging more use of overruns. This is because a shipper who overruns would also receive a benefit through their reference tariffs under such an arrangement. As a behaviour charge, we therefore do not consider overrun charges should form part of the reference tariff calculation.⁵¹⁷

Draft decision

1210. DBP retained the same two-part tariff structure for each of the reference services that existed for AA4. However, for AA5, DBP adjusted the fixed and variable components to reflect the reduction in the variable costs, which was only related to the cost of system use gas. Specifically, the tariffs were calculated to recover 94 per cent of total revenue from the capacity (or reservation) charge and 6 per cent of total revenue from the commodity (or throughput) charge.

1211. The ERA has previously accepted the two-part tariff structure and notes that stakeholders were not opposed to the fixed and variable charge, but gasTrading and WesCEF did note that there may be other variable costs, and the split of costs between the tariffs should be considered. The ERA considers that, while there may be some further variable costs than the system use gas cost, the effect on the tariff split would not be material (as submitted by DBP) and that DBP's method of determining the tariff structure was reasonable and consistent with rule 95(2) of the NGR and the revenue and pricing principles. As the ERA has determined a higher amount of system use gas costs (see paragraph 420), the total revenue recovered from the commodity (or throughput) charge has increased. The ERA's calculated draft decision reference tariffs recover 91.4 per cent of total revenue from the capacity (or reservation) charge and 8.6 per cent of total revenue from the commodity (or throughput) charge.

1212. WesCEF considered there was a need to amend the tariff structure to differentiate different classes of users. WesCEF submitted that there had been a change in the cost of service provision due to electricity generators reducing their contracted capacity and consumption recently and that industrial, commercial and residential users had not changed their usage. The ERA does not consider that there are two distinctly different classes of users of the service. All of these customers are seeking firm reference services. For the Peaking Service a portion of revenue will be rebated against the reference tariff. While electricity generators may not use the DBNGP in the same manner as other customers, it is not in the long-term interests of industrial, commercial and residential customers (as referred to by WesCEF) to set higher

⁵¹⁵ Australian Gas Infrastructure Group submission, p. 3.

⁵¹⁶ Australian Gas Infrastructure Group – Attachment B, p. 14.

⁵¹⁷ Australian Gas Infrastructure Group submission, p. 3.

reference tariffs for electricity customers, which may create a perverse incentive for them to reduce their consumption even more.

1213. As set out in Table 125, DBP's proposed tariffs would be 9.9 per cent higher than the current tariffs due to DBP's expected decrease in forecast demand. DBP's proposed capacity (or reservation) tariff for AA5, as revised in May 2020, was 15.3 per cent higher than the current 2020 approved tariff for the DBNGP, while the commodity (or throughput) tariff was 38.3 per cent lower. These percentage changes reflect adjustments to the proportion of fixed and variable components of the tariff (as noted at paragraph 1210).

Table 125: Comparison of DBP's proposed revised tariff and current tariff for the DBNGP (\$ real as at 31 December 2019)

Tariff component	Current tariff (2020)	DBP proposed revised AA5 tariff	Change (%)
Full Haul (T1)			
Capacity (Reservation) Charge (\$/GJ/day)	1.203099	1.387300	15.3
Commodity (Throughput) Charge (\$/GJ/day)	0.133790	0.082527	(38.3)
Total	1.336889	1.469827	9.9
Part Haul (P1)			
Capacity (Reservation) Charge (\$/GJ/km/day)	0.000860	0.000992	15.3
Commodity (Throughput) Charge (\$/GJ/km/day)	0.000096	0.000059	(38.3)
Total	0.000956	0.001051	9.9
Back Haul (B1)			
Capacity (Reservation) Charge (\$/GJ/km/day)	0.000860	0.000992	15.3
Commodity (Throughput) Charge (\$/GJ/km/day)	0.000096	0.000059	(38.3)
Total	0.000956	0.001051	9.9

Source: ERA Tariff Model

1214. The ERA assessed DBP's proposed tariffs with reference to rules 92 and 95 of the NGR and the revenue and pricing principles in the NGL. The ERA must approve an access arrangement that includes tariffs that comply with rule 92, which allows DBP to recover the portion of total revenue allocated to reference services.
1215. In response to the ERA's issues paper, gasTrading considered that there was no need to account for the overrun charge into the revenue calculations if the charge was imposed to encourage good shipper behaviour. However, if DBP engaged in systemic behaviour to promote, manipulate or maximise these charges, then the revenue for these charges should reduce the reference tariff. The overrun charge is

levied on gas users who exceed their daily contracted capacity. The overrun charge is the greater of 115 per cent of the reference tariff or the highest price bid for spot capacity and is charged on the excess capacity used. The ERA has no evidence that DBP has engaged in any systemic behaviour to promote, manipulate or maximise these charges and notes DBP's submission that stated that the revenue from these overrun charges was relatively small. As a result, the ERA has not accounted for the revenue of these overrun charges in the calculation of reference services.

1216. Table 126 shows the reference tariffs calculated by the ERA for AA5, consistent with the ERA's calculation of total revenue (see paragraph 205) and the allocation of that revenue to reference services (see paragraph 1188). The calculated tariffs will vary based on the tariff variation mechanism (see paragraphs 1227 to 1238).

Table 126: ERA's draft decision reference service tariffs for AA5 (\$ real as at 31 December 2019)

Tariff component	DBP Proposed Tariff	Draft Decision Tariff
Full Haul (T1)		
Capacity (Reservation) Charge (\$/GJ/day)	1.387300	0.959110
Commodity (Throughput) Charge (\$/GJ/day)	0.082527	0.088937
Total	1.469827	1.048047
Part Haul (P1)		
Capacity (Reservation) Charge (\$/GJ/km/day)	0.000992	0.000686
Commodity (Throughput) Charge (\$/GJ/km/day)	0.000059	0.000064
Total	0.001051	0.000749
Back Haul (B1)		
Capacity (Reservation) Charge (\$/GJ/km/day)	0.000992	0.000686
Commodity (Throughput) Charge (\$/GJ/km/day)	0.000059	0.000064
Total	0.001051	0.000749

Source: ERA draft decision tariff model, August 2020

Required Amendment 21

DBP must amend the proposed revised access arrangement to reflect the draft decision tariffs in Table 126.

Reference tariff variation mechanism

1217. Rule 92 of the NGR requires DBP to include a reference tariff variation mechanism to vary reference tariffs over the course of the access arrangement period:

92 Revenue equalisation

- (1) A full access arrangement must include a mechanism (a reference tariff variation mechanism) for variation of a reference tariff over the course of an access arrangement period.
- (2) Except to the extent that subrule (3) applies, the reference tariff variation mechanism must be designed to equalise (in terms of present values):
 - (a) forecast revenue from reference services for the access arrangement period; and
 - (b) the portion of total revenue allocated to reference services for the access arrangement period.
- (3) If there is an interval between a revision commencement date stated in a full access arrangement and the date on which revisions to the access arrangement actually commence (the interval of delay):
 - (a) reference tariffs, as in force at the end of the previous access arrangement period, must continue without variation for the interval of delay; but
 - (b) the operation of this subrule must be taken into account in fixing reference tariffs for the new access arrangement period, such that there may be an adjustment for any under-recovery or over-recovery by the service provider as a result of the continuation of reference tariffs from the previous access arrangement period during the interval of delay.
- (4) For the avoidance of doubt, once the revisions to an access arrangement actually commence the access arrangement period to which the revised access arrangement applies includes the interval of delay.

1218. Rule 93(3) of the NGR specifies the requirements for rebating the revenue generated from rebateable services to reduce the reference tariff:

93 Allocation of total revenue and costs

...

- (3) The [ERA] may, however, permit the allocation of the costs of rebateable services, in whole or part, to reference services if:
 - (a) the [ERA] is satisfied that the service provider will apply an appropriate portion of the revenue generated from the sale of rebateable services to reduce the reference tariff in accordance with rule 97; and
 - (b) any other conditions determined by the [ERA] are satisfied.

1219. Rule 97 of the NGR specifies the required mechanics for a reference tariff variation:

97 Mechanics of reference tariff variation

- (1) A reference tariff variation mechanism may provide for variation of a reference tariff:
 - (a) in accordance with a schedule of fixed tariffs; or
 - (b) in accordance with a formula set out in the access arrangement; or
 - (c) as a result of a cost pass through for a defined event (such as a cost pass through for a particular tax); or
 - (c1) as a result of the application of a portion of the revenue generated from the sale of rebateable services to reduce the reference tariff as contemplated under rule 93(3); or
 - (d) by the combined operation of 2 or more of the above.

- (2) A formula for variation of a reference tariff may (for example) provide for:
 - (a) variable caps on the revenue to be derived from a particular combination of reference services; or
 - (b) tariff basket price control; or
 - (c) revenue yield control; or
 - (d) a combination of all or any of the above.
- (3) In deciding whether a particular reference tariff variation mechanism is appropriate to a particular access arrangement, the [ERA] must have regard to:
 - (a) the need for efficient tariff structures; and
 - (b) the possible effects of the reference tariff variation mechanism on administrative costs of the [ERA], the service provider, and users or potential users; and
 - (c) the regulatory arrangements (if any) applicable to the relevant reference services before the commencement of the proposed reference tariff variation mechanism; and
 - (d) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
 - (d1) the risk sharing arrangements implicit in the access arrangement; and
 - (e) any other relevant factor.
- (4) A reference tariff variation mechanism must give the [ERA] adequate oversight or powers of approval over variation of the reference tariff.
- (5) Except as provided by a reference tariff variation mechanism, a reference tariff is not to vary during the course of an access arrangement period.

DBP's proposal

1220. DBP proposed to amend the tariff variation mechanism for AA5 as set out in clause 11 and Annexure A of the proposed revised access arrangement.⁵¹⁸
1221. Consistent with the current (AA4) reference tariff variation mechanism, DBP proposed that the reference tariff variation mechanism for AA5 would provide for annual updates to the reference tariff to adjust for changes in:
- inflation
 - the debt risk premium
 - tax policy
 - new costs pass through.
1222. DBP proposed to adjust inflation on 1 January for each of the years 2022, 2023, 2024 and 2025 using the formula:⁵¹⁹

$$Tariff_N^{i,j} \leq Tariff_R^{i,j} \times \frac{CPI_{Sep(N-1)}}{CPI_{Sep 2019}}$$

where:

⁵¹⁸ DBP, *DBNGP Access Arrangement 2021-25*, Clause 11 (Reference Tariff Variation Mechanism).

⁵¹⁹ DBP, *DBNGP Access Arrangement 2021-25*, Annexure A, paragraph 18.7.

$Tariff_N^{i,j}$ is the tariff value of Reference Service and Reference Tariff Component as varied from 1 January of the Variation Year N;

$Tariff_N^{i,j}$ is the tariff value in real December 2020 dollar as calculated by the Tariff Model after the Annual Update of Trailing Average Cost of Debt for Reference Service and Reference Tariff Component j as varied from 1 January of the Variation Year N;

R is the tariff calculated by the Tariff Model for the Variation Year N in real 31 December 2020 dollar;

N is the Variation Year 2022, 2023, 2024 and 2025;

i is the Reference Service with:

$i = 1$ being T1 service,

$i = 2$ being P1 service, and

$i = 3$ being B1 service;

j is the Reference Tariff Component with:

$j = 1$ being Capacity Reservation Tariff, and

$j = 2$ being Capacity Commodity Reservation Tariff;

$CPI_{Sep(N-1)}$ is the value of the CPI All Groups, Weighted Average of Eight Capital Cities as published by the Australian Bureau of Statistics for 30 September of the year (N-1) as a proxy to 31 December year N CPI for which the Reference Tariff is being adjusted; and

$CPI_{Sep 2019}$ is the value of the CPI All Groups, Weighted Average of Eight Capital Cities as published by the Australian Bureau of Statistics for quarter ending on 30 September 2019 as a proxy to 31 December 2020 CPI.

1223. DBP calculated the annual update of the trailing average debt risk premium component of the rate of return in each year of the access arrangement period using the formula:⁵²⁰

$$TA\ DRP_0 = \frac{\sum_{t=0}^{-9} DRP_t}{10}$$

where:

$TA\ DRP_0$ is the equally weighted trailing average of the DRP to apply in the following year as the annual update of the estimated used in the current year; and

DRP_t is the DRP estimated for each of the 10 regulatory years $t = 0, -1, -2, \dots, 9$.

DRP_t is the DRP estimates in each year $t = 0, -1, -2, \dots, 9$, which are either:

the forward looking DRP estimators for the calendar year 2022, 2023, 2024 or 2025, estimated during the 40 trading days averaging period, using the method of automatic formulas set out in Appendix XX of the Final Decision; or

the published DRP_t estimates, derived from the Reserve Bank of Australia 10 year BBB credit spread to swap interpolated daily data (up to the period 31 May 2015) and from the ERA's DATE estimate of the DRP, as follows, as set out in Appendix XX of the Final Decision:

calendar year 2012: DRP₂₀₁₂: 3.168 per cent;

calendar year 2013: DRP₂₀₁₃: 3.043 per cent;

calendar year 2014: DRP₂₀₁₄: 2.251 per cent;

calendar year 2015: DRP₂₀₁₅: 2.070 per cent;

⁵²⁰ DBP, *DBNGP Access Arrangement 2021-25*, Annexure A, paragraph 18.10.

calendar year 2016: DRP2016: 2.612 per cent;
 calendar year 2017: DRP2017: 2.274 per cent;
 calendar year 2018: DRP2018: 1.756 per cent;
 calendar year 2019: DRP2019: 1.712 per cent;
 calendar year 2020: DRP2020: 1.995 per cent
 calendar year 2021: DRP2021: XX per cent

1224. DBP amended its approach to updating the debt risk premium to conform with the ERA's Rate of Return Guidelines.⁵²¹ Specifically, as provided in revisions to Annexure A of the proposed revised access arrangement, DBP proposed that:

The Service Provider has also adopted a 'trailing average' approach to estimate the Debt Risk Premium used to determine the Reference Tariff. The trailing average approach is a method of the type referred to in the ERA Final Rate of Return Guidelines.

... all annual updates of the debt risk premium should be determined consistent with the automatic formulas summarised in Appendices 6, 6 and 7 of the Explanation Statement to the ERA's December 2018 *Rate of Return Guideline* ...

The forward looking estimates of the debt risk premium (DRP) for each regulatory year will be estimated using the ERA's Revised Bond Yield Approach as described in the ERA's December 2018 *Rate of Return Guideline*.

... *The method of automatic formulas applies for updating the estimates of the DRP, and will remain unchanged for the duration of the AA5 period, and hence will apply for the estimates made for DRP2022, as well as for the estimates DRP2023, DRP2024 and DRP2025. They are described in the ERA's December 2018 Rate of Return Guideline.*⁵²²

1225. DBP made only minor revisions to the wording of the reference tariff variation mechanism used to adjust prices for changes in tax policy and new cost pass throughs.⁵²³ These changes predominantly reflect updates to some defined terms in the proposed access arrangement.⁵²⁴

Submissions

1226. Citic Pacific Mining Management Pty Ltd (CPM) supported a reference tariff variation mechanism that adjusts prices for unforeseen changes in law or tax. However, CPM considered that the reference tariff variation mechanism should apply only to variable costs incurred in delivering services. CPM submitted that:

The portion of [DBP's] costs that will actually be exposed to tariff variation mechanisms should be very low and the escalation formulae used in the Authority's final decision should take this into consideration.⁵²⁵

⁵²¹ Economic Regulation Authority, *Final Rate of Return Guidelines (2018) Meeting the requirements of the National Gas Rules*, 18 December 2018.

⁵²² DBP, *DBNGP Access Arrangement 2021-25*, Annexure A.

⁵²³ See DBP, *DBNGP Access Arrangement 2021-25*, Clause 11 (Reference Tariff Variation Mechanism).

⁵²⁴ See DBP, *DBNGP Access Arrangement 2021-25*, Clause 16 (Definitions).

⁵²⁵ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 30 March 2020, p. 6.

Draft decision

1227. DBP made minor revisions to the wording of the reference tariff variation mechanism that adjusts prices for changes in tax policy and new costs pass through as provided in clause 11 and Annexure A of the revised access arrangement. The ERA considers that these revisions are consistent with rule 92 and rule 97 of the NGR. However, there is a typographical error in paragraph 11.5(j) that must be corrected so that the reference is identified as “clause 11.5” (and not “clause 0”).

Inflation

1228. CPM submitted that the reference tariff variation mechanism should adjust only for inflation of the variable costs incurred in delivering services. The ERA adjusts for inflation of all costs by setting the total revenue and not reference tariffs. The ERA uses its inflation estimate determined as part of the rate of return as its best forecast of inflation for these costs. The ERA has also made adjustments to costs where it does not consider these the best forecast such as, for example, real labour cost escalation.
1229. The ERA has considered the reference tariff variation mechanism for inflation in accordance with rule 74 of the NGR.
1230. The tariff adjustment mechanism updates the ERA’s forecast of inflation with a more recent actual measure of inflation through the Consumer Price Index (CPI). The ERA considers that this is a reasonable approach and consistent with the national gas objective and rule 97 of the NGR.
1231. As the ERA calculates real December 2019 tariffs and not real December 2020 tariffs, the ERA requires the CPI in the denominator of the formula at paragraph 1222 to be amended to refer to the CPI for 2018 and not 2019. This will ensure the tariffs reflect the appropriate amount of inflation to determine nominal tariffs.
1232. The ERA requires that DBP adjust inflation on 1 January for each of the years 2022, 2023, 2024 and 2025 using the formula:

$$Tariff_N^{i,j} \leq Tariff_R^{i,j} \times \frac{CPI_{Sep(N-1)}}{CPI_{Sep 2018}}$$

where:

$Tariff_N^{i,j}$ is the tariff value of Reference Service and Reference Tariff Component as varied from 1 January of the Variation Year N;

$Tariff_R^{i,j}$ is the tariff value in real 31 December 2019 dollar as calculated by the Tariff Model after the Annual Update of Trailing Average Cost of Debt for Reference Service and Reference Tariff Component j as varied from 1 January of the Variation Year N;

R is the tariff calculated by the Tariff Model for the Variation Year N in real 31 December 2019 dollar;

N is the Variation Year 2022, 2023, 2024 and 2025;

i is the Reference Service with:

$i = 1$ being T1 service

$i = 2$ being P1 service

$i = 3$ being B1 service;

j is the Reference Tariff Component with:

$j = 1$ being Capacity Reservation Tariff

$j = 2$ being Capacity Commodity Reservation Tariff;

$CPI_{Sep(N-1)}$ is the value of the CPI All Groups, Weighted Average of Eight Capital Cities as published by the Australian Bureau of Statistics for 30 September of the year (N-1) as a proxy to 31 December year N CPI for which the Reference Tariff is being adjusted; and

$CPI_{Sep 2018}$ is the value of the CPI All Groups, Weighted Average of Eight Capital Cities as published by the Australian Bureau of Statistics for quarter ending on 30 September 2018.

Debt risk premium

1233. To ensure that updates to the debt risk premium conform with the ERA's Rate of Return Guidelines, the ERA requires the following paragraphs of Annexure A of the proposed revised access arrangement to be amended as follows:

- In paragraph 18.10:
 - Delete the words “40 trading days averaging period” and replace with “20 trading days averaging period”.
 - Delete the words “(up to the period 31 May 2015)” and replace with “(for years prior to 2015)”.
 - Delete the words “ERA's DATE estimate” and replace with “ERA's 2015 estimate”.
- In paragraph 18.11, delete the words “Appendices 6, 6 and 7” and replace with “Appendix 7”.
- Delete the words in paragraph 18.12 and replace with:

“The ERA required that DBP nominate averaging periods for each of 2022, 2023, 2024 and 2025 consistent with Appendix 7 of the Explanatory Statement to the ERA's December 2018 Rate of Return Guideline. The averaging period for each year's debt risk premium estimates will be 20 consecutive trading days. This averaging period must fall within a window at least two months prior to, but no longer than six months before the regulatory period. The averaging periods must be nominated prior to the ERA's Final Decision. The ERA does not require the nominated 20 trading day averaging period for each of the four years to be identical periods – only that they occur in the above window in each period.”
- Delete paragraph 18.14 by replacing the words with “[DELETED]”.
- Delete the words in paragraph 18.16 and replace with:

“The next DRP estimate that will be made will be based on the nominated 20 days falling in the period July to October 2021 (for DRP2022). That next DRP estimate will be incorporated in the trailing average DRP (that is, TA DRP2022), and hence the updated rate of return, which will then apply in 2022 through the annual tariff variation.”

Rebateable services revenue

1234. In May 2020, DBP advised that it had completed contract renegotiations with shippers and as a result some shippers would now use the Peaking Service during AA5 and that this service should be specified as a rebateable service.⁵²⁶ As noted at

⁵²⁶ DBP, 'Demand and Services Update', [email] 22 May 2020.

paragraphs 147 to 149, the ERA has approved DBP's proposal for the Peaking Service to be a rebateable service for AA5.

1235. When considering an appropriate rebate mechanism for the Peaking Service, DBP considered that there was a "good case" for the rebate to be set at least at 70:30 (with 70 per cent of the benefit being passed through to customers).⁵²⁷ DBP noted that the costs associated with providing the Peaking Service were likely to be incremental costs only because the service did not require new capital expenditure. Incremental costs would "include fuel gas and the increased impact on volume driven tasks such as turbine overhauls [and would] together account for roughly a third of [DBP's] overall operating costs."⁵²⁸ However, DBP stated:⁵²⁹

[The recovery of incremental costs] suggests a lower bound sharing ratio of 30% would be appropriate to recover incremental costs. However, a prudent mechanism would require setting the sharing ratio at some level above the expected incremental cost to reflect the risk associated with any opex or capex cost overruns that we would otherwise not be able to recover.

We consider there is a good case that an appropriate rebate would be set at least at 70:30 (with 70 percent of the benefit being passed through to customers).

1236. In support of its proposal, DBP cited the example of the AER's 2017 Final Decision for the Roma to Brisbane Gas Pipeline, in which the AER considered two rebateable services and applied the same sharing ratio of 70:30 (with 70 per cent of the benefit being passed through to consumers). In its final decision, the AER stated:⁵³⁰

The NGR does not set out any rules that we must apply when determining the share of the revenue that a service provider generates from the provision of rebateable services that is to be returned to customers. However, given a service provider is likely to incur some incremental costs when providing these services, we think it is appropriate that it keep some of the revenue generated so that it has a reasonable opportunity to recover at least the efficient costs associated with providing the services. We also think it is appropriate to allow service providers to retain a share of the revenue so that it has an effective incentive to respond to customer needs.

In the draft decision, we proposed a 70:30 benefit sharing ratio for in-pipe trading and capacity trading services and a 90:10 benefit sharing ratio for park and loan services. A lower sharing ratio for shippers was proposed for in-pipe trades and capacity trading services because we thought APTPPL should receive a greater reward for developing more innovative services.

Having reflected on this further, and considering comments from APTPPL, we think that trying to draw a distinction between innovative and less innovative services and ascribing different sharing ratios to each may be somewhat artificial. We have therefore decided to apply the same sharing ratio to all of these services and to employ the same sharing ratio that we use in other incentive mechanisms, which is a 70:30 sharing ratio. Under this sharing ratio, APTPPL will be able to retain 30 per cent of the revenue it generates from the provision of rebateable services and the remaining 70 per cent will be passed through to reference service users. In our view, the adoption of this sharing ratio provides a reasonable balance between:

⁵²⁷ DBP, 'Demand and Services Update', [email] 22 May 2020, Attachment: *Further information on our demand and services*, p. 10.

⁵²⁸ DBP, 'Demand and Services Update', [email] 22 May 2020, Attachment: *Further information on our demand and services*, p. 8.

⁵²⁹ DBP, 'Demand and Services Update', [email] 22 May 2020, Attachment: *Further information on our demand and services*, p. 8.

⁵³⁰ AER, *Final decision: Roma to Brisbane Gas Pipeline Access Arrangement 2017–22, Attachment 1 – Services covered by the access arrangement*, November 2017, pp. 18-19.

- promoting the efficient use of the pipeline (e.g. by ensuring the prices charged for reference services are relatively cost reflective), and
- providing effective incentives to service providers to promote economic efficiency in relation to the services it provides (e.g. by rewarding APTPPL for responding to customer needs), which will, in turn, promote the efficient provision of pipeline services and efficient investment in the pipeline over the longer term.

It should also provide APTPPL with a reasonable opportunity to recover the incremental costs it incurs when providing these services, which APTPPL has confirmed are relatively small.

We are therefore satisfied that this sharing ratio is consistent with the [revenue and pricing principles] and [national gas objective].

1237. In accordance with rule 93(3)(a) of the NGR, the ERA must be “satisfied that the service provider will apply an appropriate portion of the revenue generated from the sale of rebateable services to reduce the reference tariff in accordance with rule 97.” The ERA considers that the AER’s decision for the Roma to Brisbane Gas Pipeline and the ERA’s accepted sharing ratio for the E Factor incentive mechanism (see paragraphs 1058 to 1067) supports DBP’s proposed allocation of 70 per cent of the benefit (revenue) being passed through to customers and meets the requirements of rule 93(3)(a) and rule 97 of the NGR.
1238. As DBP did not include a rebate mechanism in its original proposal, DBP must amend clause 11 and Annexure A of the proposed revised access arrangement to include a rebate mechanism for the rebateable peaking service.

Required Amendment 22

DBP must amend clause 11 (Reference Tariff Variation Mechanism) and Annexure A of the proposed revised access arrangement to:

- Include a rebate mechanism for the rebateable peaking service.
- Amend the description of the debt risk premium (in Annexure A) to ensure it conforms with the ERA’s Rate of Return Guideline. The required amendments are set out at paragraph 1233 of this draft decision.
- Correct the typographical error in paragraph 11.5(j) so that the reference is identified as “clause 11.5” (and not “clause 0”).

Fixed principles

1239. Rule 99 of the NGR provides for an access arrangement to include fixed principles.

99 Fixed principles

- (1) A full access arrangement may include a principle declared in the access arrangement to be fixed for a stated period.
- (2) A principle may be fixed for a period extending over 2 or more access arrangement periods.
- (3) A fixed principle approved before the commencement of these rules, or approved by the [ERA] under these rules, is binding on the [ERA] and the service provider for the period for which the principle is fixed.
- (4) However:
 - (a) the [ERA] may vary or revoke a fixed principle at any time with the service provider's consent; and
 - (b) if a rule is inconsistent with a fixed principle, the rule operates to the exclusion of the fixed principle.

DBP's proposal

1240. Clause 13 of the proposed revised access arrangement details two fixed principles that will apply in AA5. The fixed principles cover the method for determining the capital base for each year of the access arrangement period (clause 13.1(a)), and the circumstances in which revenue earned by DBP must not be taken into account (clause 13.1(b)).

1241. DBP amended the fixed principle in clause 13.1(b) as follows:

13.1 The following are Fixed Principles in accordance with NGR 99:

- (a) the method of determination of the Capital Base at the commencement of each year of each access arrangement period as set out in section 7 of the Current Access Arrangement Information;
- (b) the revenue earned by Operator during the period commencing on 1 July 2005 and ending on 31 December ~~2020~~2015 from the sale of any services which is in excess of the amount (in net present value terms) equal to the sum of:
 - (i) the revenue that would have been earned had any of those services which were Full Haul services been sold at the Reference Tariff [for T1 Service](#); and
 - (ii) the revenue actually earned from the sale of those services which were services other than Full Haul services,
 must not:
 - (iii) be taken into account directly or indirectly for the purposes of setting a Reference Tariff or determining or applying any aspect of the price and revenue elements of the Access Arrangement which applies on or after 1 January 2011; or
 - (iv) otherwise be taken into account directly or indirectly by the relevant Regulator in performing any of its functions under the NGA, NGL or NGR.

1242. Clause 13.2 states the period for which the fixed principles will apply. DBP amended this clause as follows:

13.2 For the purposes of the Fixed Principles referred to in clauses 13.1(a) and 13.1(b) of this Access Arrangement, the fixed period is until 31 December ~~2036~~²⁰³⁴.

1243. DBP submitted that it had extended the application of the fixed principles to extend their application for a further access arrangement period.⁵³¹

Submissions

1244. No submissions to the ERA addressed the fixed principles and DBP's proposal to make amendments to them.

Draft decision

1245. The current (AA4) fixed principles were first included in the access arrangement for the second access arrangement period (AA2, 2005 to 2010) and have remained substantively the same for the third (AA3, 2011 to 2015) and fourth (AA4, 2016 to 2020) access arrangement periods.

Fixed period

1246. As allowed by the NGR, fixed principles may be fixed for a stated period that extends over two or more access arrangement periods. The fixed principles that were introduced into the access arrangement for AA2 are fixed until 31 December 2031. In a submission to the ERA during the AA2 review process, DBP submitted that the fixed period reflected the period that was used in financial modelling to determine the price paid to purchase the DBNGP.⁵³²

Consistent with its overall objective of providing a degree of certainty in the total (regulated and unregulated) revenue stream which provides the return on and return of the financing for pipeline acquisition, Operator has, in section 7.13(b) of the Proposed Revised Access Arrangement, set the Fixed Period as the period until 31 December 2031. This was the time horizon of the financial modelling undertaken by the consortium members to determine the price they would pay for the DBNGP.

Revenue earned by operator

1247. The ERA's final decision for AA3 noted special circumstances applying to the DBNGP that resulted from negotiations between DBP and users in 2004, when DBP purchased the pipeline.⁵³³ The ERA's final decision for AA4 provided an update to these circumstances, which changed following contract renegotiations between DBP and shippers in 2014.⁵³⁴

Access contracts between DBP and users of the DBNGP – the DBNGP shipper contracts – are currently substantially independent of the access terms and reference

⁵³¹ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, p. 127.

⁵³² DBP, *Submission #4 Reference Tariff Policy and Reference Tariff (Public Version)*, 27 January 2005, p. 41, paragraph 8.15.

⁵³³ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 31 October 2011 (As amended on 22 December 2011), pp. 15-17.

⁵³⁴ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016 – 2020*, 30 June 2016, pp. 10-13.

tariffs under the access arrangement for the DBNGP. With the exception of an access contract with the foundation customer (Alcoa), the contracts with shippers have taken the form of the "Standard Shipper Contract" (SSC). The terms of the SSC were originally negotiated in 2004 (previous SSC). DBP renegotiated the terms of the previous SSC with most of its customers in 2014 (current SSC) ...

Clause 20.5 (subclauses (d) to (g)) of the previous SSC made provision, as at 1 January 2016, for gas transmission tariffs to be adjusted, to a tariff equal to the reference tariff for the closest equivalent service to the service provided to the relevant customer under the SSC.

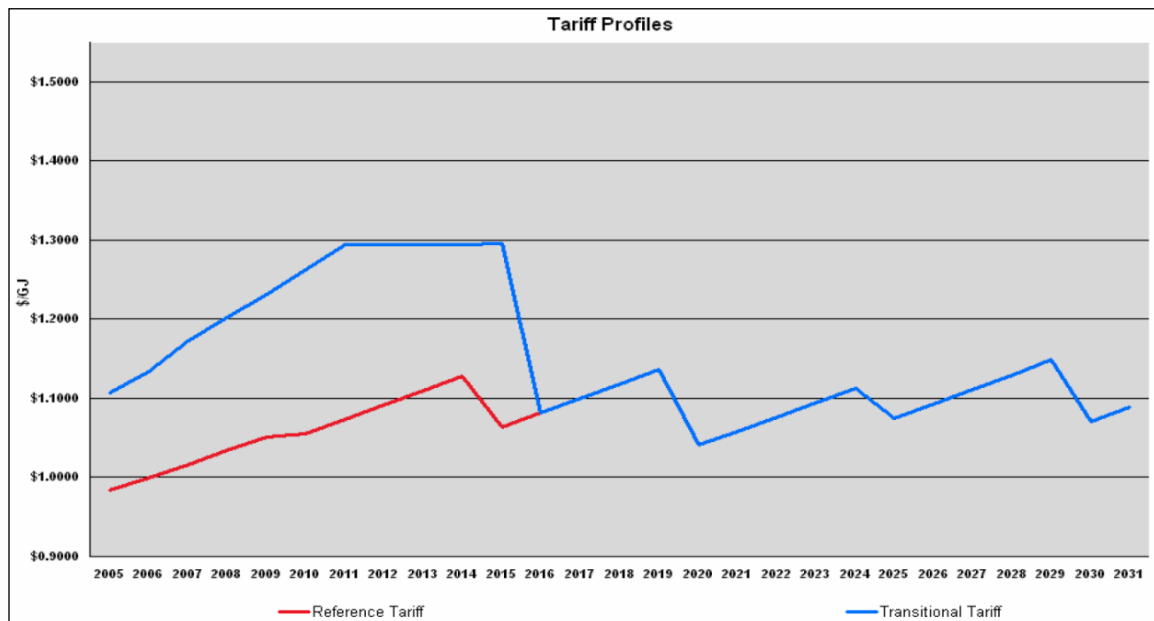
20.5 Adjustment to Base T1 Tariff

...

- d) With effect from 08:00 hours on 1 January 2016, the Base T1 Tariff must be adjusted so that the Base T1 Tariff, T1 Capacity Reservation Tariff and T1 Commodity Tariff is at any time the same as the Firm Service Reference Tariff (or equivalent) at that time.
- e) In this clause 20.5, Firm Service Reference Tariff means the Reference Tariff for the Reference Service under the Access Arrangement that is, at 100% load factor, the closest equivalent Full-Haul Service to the T1 Service as at 1 January 2016 (T1 Equivalent Reference Service).
- f) The Parties agree the following in relation to the Reference Tariff:
 - i) The present intention of the Parties is that, with effect from 08:00 hours on 1 January 2016, the tariff payable by the Shipper under clause 20.5 (d) will be a Reference Tariff based on the Reference Tariff Policy in clause 7 of the Access Arrangement as that clause was in force at 27 October 2004 (for the purposes of which that clause 7 is to be read as though references to "Firm Services" were replaced with "T1 Service");
 - ii) The diagram and the financial model assumptions in Schedule 9, being the forecast tariff post 2016, illustrate the Parties' current expectations as to the effect of clause 20.5(f)(i). The Parties agree that the tariff levels depicted in Schedule 9 are based on certain assumptions about the inputs and methodology for determining tariffs under the approach approved by the ERA in the Reference Tariff Policy referred to in clause 20.5(f)(i), and that the actual tariff levels payable under clause 20.5(d) may differ from the tariff levels shown in Schedule 9 if the inputs and methodology are different at 2016. The Parties acknowledge that this clause 20.5 and Schedule 9 may be provided to the Regulator in making any submission referred to in clause 20.5(f)(iii) or clause 20.5(f)(iv);
- ...
- g) If on 1 January 2016, and during any time thereafter, the capacity reservation charge/commodity charge split (i.e. fixed/variable charge split) is not 80%/20% of the Firm Service Reference Tariff, the capacity reservation charge/commodity charge split of the Base T1 Tariff will be the same percentage split as the Firm Service Reference Tariff at and during that time.

As specified in subclause 20.5(f)(ii) of the previous SSC, Schedule 9 indicated the expectation of the parties, at the time the previous SSC was signed (2004), about the tariff in 2016 based on the access arrangement and law that was in force at the time. The diagram referred to in subclause 20.5(f)(ii) is reproduced in Figure 1 below.

Figure 1: Tariff expectations under Schedule 9 of the old Standard Shipper Contract



In a submission to the [ERA], DBP notes that, during the first half of 2014, it engaged all firm full haul shippers in negotiations to renegotiate their SSCs. The majority of shippers agreed to amend their contracts in a number of respects. The key amendments identified by DBP are as follows:

- All Participating Shippers agreed to extend the period during which the tariff payable under the contract sits outside the regulatory framework of the NGL (WA) and NGR. Effective from 1 July 2014, the parties have agreed to a fixed tariff and tariff path until 1 January 2021 at which time, the tariff under the contract will revert to the reference tariff for the reference service that is the most similar to the service provided under the SSCs.
- Certain Participating Shippers ...
- All Participating Shippers ...

1248. Since AA2, the fixed principles in the access arrangement have reflected the negotiations that occurred in 2004, which provided for a tariff that was higher than the reference tariff for the ten year period from 1 July 2005 to 31 December 2015 (as shown in the figure reproduced from the ERA's AA2 final decision above). The modelling of the expected tariff path from 1 January 2016 to 31 December 2031 is consistent with DBP's reasoning in its AA2 submission to the ERA for originally setting the fixed period until 31 December 2031.

1249. Other than stating that it had extended the fixed principles to extend their application for a further access arrangement period, DBP did not provide any reasoning to explain why the extension was necessary. In the absence of such information and given the considerations above, the ERA considers that the fixed principles should remain unchanged. The existing fixed principles reflect the negotiations and modelling that secured the purchase of the DBNGP by DBP in 2004.

1250. However, the ERA considers that the proposed amendment to add the words "for T1 Service" in clause 13.1(b)(i) clarifies that the "Reference Tariff" is the reference tariff for the T1 Service and should be made. The amendment is consistent with the national gas objective as it clarifies the fixed principles provisions in the access arrangement to promote efficient investment in, and efficient operation and use of, the DBNGP.

Required Amendment 23

DBP must amend clause 13 of the proposed revised access arrangement to delete the proposed amendments to the fixed principles so that the fixed principles remain the same as the current (AA4) fixed principles. That is:

- Clause 13.1(b) must be amended to read: “the revenue earned by Operator during the period commencing on 1 July 2005 and ending on 31 December 2015 from the sale of any services ...”
- Clause 13.2 must be amended to read: “For the purposes of the Fixed Principles referred to in clauses 13.1(a) and 13.1(b) of this Access Arrangement, the fixed period is until 31 December 2031”.

However, DBP must make the proposed amendment to clause 13.1(b)(i) to insert the words “for T1 Service” to clarify that the reference tariff is for the T1 Service.

Determination of the capital base

1251. Clause 13.1(a) of the proposed revised access arrangement sets out the following fixed principle for the determination of the capital base and remains unchanged from the current (AA4) access arrangement.

13.1 The following are Fixed Principles in accordance with NGR 99:

- (a) the method of determination of the Capital Base at the commencement of each year of each access arrangement period as set out in section 7 of the Current Access Arrangement Information;

1252. Rule 99(4) of the NGR allows the ERA to revoke a fixed principle at any time with DBP’s consent.

99 Fixed principles

...

(4) However:

- (a) the [ERA] may vary or revoke a fixed principle at any time with the service provider's consent; and
- (b) if a rule is inconsistent with a fixed principle, the rule operates to the exclusion of the fixed principle.

1253. Given that rule 77 of the NGR clearly sets out the method for determining the opening capital base, the ERA considers that the fixed principle in clause 13.1(a) of the proposed revised access arrangement should be revoked on the basis that it is redundant. That is, there is no reason for the access arrangement to contain a fixed principle that covers the determination of the capital base at the start of each access arrangement period as this is a matter that is addressed in the NGR. Having such a fixed principle in the access arrangement is likely to confuse users as to the requirements of establishing the capital base for the DBNGP access arrangement.⁵³⁵ Rule 99(4)(b) provides that where there are inconsistencies between a fixed principle and a rule in the NGR, the rule operates to the exclusion of the fixed principle. This means that if the requirements for determining the opening capital base in the access

⁵³⁵ Incidentally, the fixed principle as drafted in clause 13.1(a) of the proposed revised access arrangement contains an error – the method of determining the capital base is not set out in section 7 of the access arrangement information (rather it is set out in section 9 of DBP’s Final Plan).

arrangement information differ from the requirements for determining the opening capital base in the NGR, the opening capital base for the DBNGP access arrangement will always be determined in accordance with the requirements set out in the NGR.

Required Amendment 24

DBP must consider deleting the fixed principle for determining the capital base in clause 13.1(a) of the proposed revised access arrangement and replacing it with the words “[DELETED]”.

Subject to the fixed principle in clause 13.1(a) being deleted, a consequential amendment to clause 13.2 to delete the reference to “clause 13.1(a)” must be made so that the clause reads: “For the purposes of the Fixed Principles referred to in clause 13.1(b) of this Access Arrangement, the fixed period is until 31 December 2031”.

Terms and conditions

1254. Modified rule 48(1)(e)(ii) of the NGR requires the access arrangement to set out, in addition to the reference tariff, the other terms and conditions on which each reference service will be provided.⁵³⁶

1255. Rule 100 of the NGR sets out the requirements for consistency, which must be taken into consideration when assessing any proposed amendment to the access arrangement terms and conditions:

100 General requirement for consistency

- (1) The provisions of an access arrangement must be consistent with:
 - (a) the national gas objective; and
 - (b) these rules and the Procedures as in force when the terms and conditions of the access arrangement are determined or revised.
- (2) In deciding whether the non-tariff terms and conditions of an access arrangement are appropriate, the [ERA] must have regard to the risk-sharing arrangements implicit in the reference tariff.

DBP's proposal

1256. Clause 4 of the proposed revised access arrangement sets out the terms and conditions for each reference service. DBP proposed to maintain the three reference services offered under the current (AA4) access arrangement, being the T1 Service, P1 Service and B1 Service (see paragraph 66 of this decision). The proposed terms and conditions for each of the reference services are provided as attachments to the revised access arrangement:

- for the T1 Service – Attachment 2 of the access arrangement
- for the P1 Service – Attachment 3 of the access arrangement
- for the B1 Service – Attachment 4 of the access arrangement.

1257. DBP submitted that it undertook “a wholesale review of the reference service terms and conditions” with a focus on:⁵³⁷

- correcting typographical errors and anomalies;
- correcting references to matters that are no longer relevant (e.g. due to the passage of time and changes to legislation and standards);
- changes arising due to changes in the ownership structure of DBP since the last Access Arrangement; and
- aligning the Reference Contracts to the Negotiated Contracts to enhance [its] ability to administer all of [its] contracts in a consistent manner.

⁵³⁶ As set out in schedule 1 (rule 62) of the NGR.

⁵³⁷ DBP, *2021-2025 Final Plan, January 2020*, pp. 126-127.

1258. Based on its review, DBP proposed amendments to the terms and conditions that will apply for AA5. DBP provided a detailed overview and justification for each of the proposed amendments in Attachment 14.1 to its proposal, with marked-up versions of the proposed terms and conditions also provided.^{538,539}
1259. DBP submitted that the principal changes to the terms and conditions included:⁵⁴⁰
- new definitions of Aggregated T1, P1 and B1 Services have been included to reflect the use of those terms in the Curtailment Plan, Reference Contracts, Negotiated Contracts and Standard Shipper Contracts;
 - amendments to align relevant curtailment provisions;
 - amendments to the fall-back rule applicable where a Shipper does not tell the Operator in which order it is to apply gas received. The amendments align allocation of gas at inlet points across all contracts with the same shipper;
 - amendments to the maintenance charge for inlet and outlet stations to better reflect the intent that these costs are recovered fairly across shippers;
 - amendments to better align the imbalance and peaking remedies across the Negotiated Contracts, the Standard Shipper Contracts and the Reference Contracts; and
 - amendments to the relocation clause to make clear a relocation is not automatically available as of right.
1260. DBP's consultation on the terms and conditions included a shipper roundtable on 15 November 2019, where participants were provided with copies of the proposed amendments (in marked-up versions of the terms and conditions) and a summary document explaining the amendments. Given the timeframe for this consultation, DBP indicated that it would continue to engage with shippers on the proposed amendments to the terms and conditions in early 2020 and after its submission to the ERA.⁵⁴¹

On 15 November 2019 we circulated for consultation a table of proposed amendments and a mark-up of the Reference Service Terms and Conditions for T1, P1 and B1 Reference Services. We sought feedback by 2 December 2019, however we noted the tight timeline and offered to continue to engage with shippers through the new year.

Submissions

1261. Several submissions addressed the amended terms and conditions for DBP's proposed reference services.
1262. CITIC Pacific Mining Management Pty Ltd (CPM) submitted that most of DBP's proposed amendments to the terms and conditions were reasonable, although some amendments would reduce operational flexibility for shippers.⁵⁴²

⁵³⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020.

⁵³⁹ DBP, *2021-2025 Final Plan*, January 2020. Attachments 14.2 (T1 Service), 14.3 (P1 Service) and 14.4 (B1 Service).

⁵⁴⁰ DBP, *2021-2025 Final Plan*, January 2020, p. 127.

⁵⁴¹ DBP, *2021-2025 Final Plan*, January 2020, p. 40, Table 5.7.

⁵⁴² CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 30 March 2020, p. 3.

Many of the changes in AGIG's proposed revisions to the reference [service] agreements are considered reasonable, however, some will reduce operational flexibility for shippers, increase risk for shippers and there has been no changes proposed to remove discrimination currently present between part haul Shipper and full haul shippers in the B1 and P1 agreements. Additionally, there is no contemplation within the P1 and B1 agreement terms and conditions to deal with the ever increasing likelihood that the north part of the DBNGP will become a bidirectional gas transport arena.

1263. CPM also submitted that it completed a review of the proposed amendments to the terms and conditions for the P1 and B1 Services and identified several provisions where further amendments were required.⁵⁴³ In support of its submission, CPM provided a marked-up copy of DBP's proposed terms and conditions for the P1 Service with its suggested amendments, together with an external memorandum providing specific advice on amendments to overrun provisions in the P1 and B1 Services terms and conditions.⁵⁴⁴
1264. Synergy submitted that clauses 6, 11, 28 and schedule 2 of the terms and conditions required further amendments.⁵⁴⁵ Synergy considered that:
- The amendments to the provisions for the apportionment of maintenance charges were inappropriate (clauses 6.11 and 6.12).
 - In determining the overrun rate, the provisions should explicitly include terms that prevent the shipper from bidding against itself (clause 11.1).
 - The amendment to the provision prohibiting disclosure of confidential information to persons involved in the generation or sale of electricity, which limits the prohibition to a person directly involved in the generation or sale of electricity in the South West Interconnected System, may provide the operator with competitive advantages (clause 28.3).
 - In determining the Excess Imbalance Charge, Hourly Peaking Charge and Unavailable Overrun Charge set out in schedule 2, the charges for the P1 and B1 Services should be determined by reference to a distance factor (schedule 2).
1265. Gas Trading Australia Pty Ltd (gasTrading) submitted that DBP's proposal had "not addressed the much-rumoured export of onshore gas to the North West Shelf Project for 'back fill' or export as LNG" and how this would affect the reference service contracts.⁵⁴⁶ In support of its submission, gasTrading provided a discussion paper on the proposed "back fill" arrangements to export gas via the North West Shelf joint venture.⁵⁴⁷
1266. DBP's parent company Australian Gas Infrastructure Group's (AGIG) submission outlined its continuing engagement with customers and stakeholders, including shipper roundtable meetings. At the most recent shipper roundtable, held on

⁵⁴³ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 30 March 2020, p. 6.

⁵⁴⁴ CITIC Pacific Mining Management Pty Ltd, *Public Submission in response to the Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021 – 2025*, 30 March 2020, pp. 6-7.

⁵⁴⁵ Synergy submission, 31 March 2020, Annexure A, pp. 3-5.

⁵⁴⁶ Gas Trading Australia Pty Ltd submission, 30 March 2020, p. 4.

⁵⁴⁷ Gas Trading Australia Pty Ltd submission, 30 March 2020, Attachment 2: Discussion on proposed "back fill" arrangements to export gas via the North West Shelf JV, pp. 20-31.

25 March 2020, AGIG reiterated its position on the terms and conditions for reference services:⁵⁴⁸

Proposal is to continue with the reference services consistent with the current period: Full Haul T1 Service; Part Haul P1 Service; Back Haul B1 Service.

The three reference services and respective terms and conditions are well established and have been subject to a number of regulatory reviews.

Proposed amendments to T&Cs are not substantial in nature and generally look to increase consistency with the current contracts and reference services.

1267. Specific details of the matters raised in the above submissions are addressed in the ERA's draft decision considerations below.

Draft decision

1268. The ERA has considered DBP's proposed amendments to the terms and conditions for each of the proposed reference services: the T1 Service, P1 Service and B1 Service.

1269. To assess the terms and conditions that will apply to the reference services under the access arrangement, the ERA has considered:

- The rationale for variations to the proposed terms and conditions from those established under existing access contracts for pipeline services (that is, full haul, part haul and back haul services) negotiated with shippers.
- Any concerns raised by existing and prospective shippers with the current (AA4) terms and conditions and with proposed revisions to those terms and conditions.
- Operational and practical considerations in the operation of the pipeline.
- A balancing of interests between DBP and users, including consideration of common principles of contracting.
- Whether drafting changes to certain terms and clauses achieve DBP's expressed intention and whether these changes may have other unintended consequences.

1270. DBP's proposed amendments to the terms and conditions are detailed in supporting information (attachments) submitted with its proposal:

- Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020 (Attachment 14.1).
- Reference Services Terms and Conditions – Markup T1 Full Haul, January 2020 (Attachment 14.2).
- Reference Services Terms and Conditions – Markup P1 Part Haul, January 2020 (Attachment 14.3).
- Reference Services Terms and Conditions – Markup B1 Back Haul, January 2020 (Attachment 14.4).

⁵⁴⁸ AGIG submission, 31 March 2020, Attachment B: Shipper Roundtable #10, 25 March 2020, presentation slide 9.

1271. In summary, DBP's proposed changes comprise:
- Typographical, formatting and cross-referencing corrections throughout the terms and conditions.
 - Amendments to some defined terms used in the terms and conditions, including the deletion of redundant terms.
 - Amendments to the drafting of specific clauses of the terms and conditions.
1272. DBP's proposed changes that comprise typographical, formatting and cross-referencing corrections, unless otherwise stated, are administrative in nature and do not materially alter the terms and conditions. Further amendments of this nature are required in the terms and conditions for the T1 Service, P1 Service and/or B1 Service. The ERA has footnoted the instances where such further amendments are needed as part of its considerations (for example, footnote 666), however, this is not an exhaustive review of amendments of this kind.
1273. DBP's proposed changes to amend defined terms and the drafting of individual clauses are considered in turn below (at paragraph 1277 and following). Unless otherwise stated, the proposed amendments apply to the terms and conditions for the T1 Service, P1 Service and B1 Service. The ERA has also considered submissions from interested parties that proposed additional amendments to the terms and conditions that remain unchanged from the current (AA4) terms and conditions (at paragraph 1697 and following).

Consistency with standard shipper contracts and negotiated contracts

1274. DBP submitted that amendments were made to the terms and conditions to, among other things, "align the Reference Contracts to the Negotiated Contracts to enhance [its] ability to administer all of [its] contracts in a consistent manner."⁵⁴⁹
1275. DBP clarified its use of terminology when referencing contracts as follows:⁵⁵⁰
- "Negotiated Contracts" means existing contracts with shippers for T1 Service, P1 Service or B1 Service which are based upon the Standard Shipper Contracts rather than the Reference Service Terms and Conditions under the current or any previous Access Arrangement.
 - "Reference Contract" means the proposed Terms and Conditions for Reference Services in respect of any one of the T1 Service, P1 Service and B1 Service (and "Reference Contracts" means any two or all three of them as the case requires).
 - "Standard Shipper Contracts" means the contracts for T1 Service, P1 Service and B1 Service currently published on DBP's website.
1276. The ERA considers that business efficacy (that is, the ability to produce the intended result) for the terms and conditions of the reference services under the access arrangement is likely to be better achieved in instances where the terms and conditions are:
- generally consistent with the contracts in place with shippers (that is, the "Standard Shipper Contracts" as published on DBP's website or a negotiated variation of them, being a "Negotiated Contract"); and

⁵⁴⁹ DBP, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline, 2021-2025 Final Plan*, January 2020, pp. 126-127.

⁵⁵⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020.

- reflective of the usual terms being negotiated in the market.⁵⁵¹

On this basis, the ERA considers that the amendments that DBP has proposed to align the terms and conditions for reference services with the contracts in place with shippers are consistent with the national gas objective (that is, the amendments promote efficient investment in, and efficient operation and use of, the DBNGP) unless otherwise stated. Where otherwise stated, the ERA has assessed the amendments to be unfair to shippers, unreasonable or inconsistent with the national gas objective for the reasons stated.

Clause 1 (Interpretation)

1277. Clause 1 details the defined terms used in the terms and conditions and their meaning. Table 127 shows DBP's proposed amendments to clause 1 that include amendments to:

- delete certain defined terms
- amend defined terms that reference the *Corporations Act 2001 (Cth)*
- update defined terms that reference certain legislation and standards
- insert new defined terms
- amend existing defined terms.

⁵⁵¹ DBP, *Standard Shipper Contract – Part Haul P1* (March 2015); *Standard Shipper Contract – Back Haul B1* (June 2015); and *Standard Shipper Contract – Full Haul T1* (February 2015) ([online](#)) (accessed May 2020).

Table 127: DBP’s proposed amendments to clause 1 (Interpretation) of the terms and conditions for reference services

Clause 1 (Interpretation)
Terms to be deleted
B1 Contract, DBNGP Trustee; Inlet Sales Agreement; P1 Contract; REMCO; Storage Service; T1 Contract, Tp Service
Terms defined by reference to the Corporations Act to be amended
Associate; Control; Controller; Related Body Corporate; Related Entity
Terms referencing legislation or standards to be updated
Actual Mass Flow Rate; SI Units
New terms to be inserted⁵⁵²
AEMO; AGIG; Aggregated Service; Aggregated B1 Service; Aggregated P1 Service; Aggregated T1 Service; Data; Outer Accumulated Imbalance Limit; Outer Hourly Peaking Limit
Existing terms to be amended⁵⁵³
Accumulated Imbalance; Associated; B1 Service; Contracted Capacity; Contracted Firm Capacity; Daily Nomination; DBNGP, Excess Imbalance Charge; Execution Date; Hourly Peaking Charge; Inlet Point; National Gas Access (Western Australia) Law; Notice; Other Reserved Service; Outlet Point; Overrun Gas; P1 Capacity Reservation Tariff; P1 Commodity Tariff; P1 Service; P1 Tariff; Reference Tariff Variation Mechanism; Relevant Construction Costs; Shipper; T1 Service; T1 Tariff

Source: DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020.

Terms to be deleted

1278. DBP submitted that the following terms were redundant and should be deleted from the terms and conditions.⁵⁵⁴
- “DBNGP Trustee” – This term was removed from the AA4 terms and conditions. The two references that remain in the terms and conditions (this definition and in the definition of “Party”) were an oversight.
 - “Inlet Sales Agreement” – This term is not used in the terms and conditions.
 - “P1 Contract”, “T1 Contract” and “B1 Contract” – These terms are not used in the respective terms and conditions for each reference service.
 - “REMCo” – References to this term were replaced with the new term “AEMO”.
 - “Storage Service” – This term is not used in the terms and conditions.

⁵⁵² New terms “Dedicated Email Address”, “GJ” and “TJ” were also inserted into the terms and conditions. The ERA considers the addition of these new terms to be administrative in nature.

⁵⁵³ Amendments were also made to existing terms: “Full Haul service”, “Kwinana Junction”, “MHQ”, “Original Capacity”, “Part Haul service”, “Party”, “Period”, “Regulator”, “Reserved Capacity”, and “Share of the Distributions Networks’ IPQ”. The ERA considers the amendments made to these terms to be administrative in nature.

⁵⁵⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 1.2.

- “Tp Service” – This term is not used in the terms and conditions.
1279. DBP submitted that the term “Tp Service” was not used in the terms and conditions for reference services or the negotiated contracts in place with shippers. However, the term is defined and used in the current terms and conditions for each reference service (see curtailment regime provisions in clause 17.9(c)(ii) and schedule 6) and the Standard Shipper Contracts as published on DBP’s website. Provided that the “Tp Service” is a service that is no longer offered, the ERA considers the term to be redundant and that it should be deleted from the terms and conditions (including all uses of the term) and that the same amendment should be made to Standard Shipper Contracts when next reviewed.
1280. The ERA considers DBP’s proposal to delete redundant terms is consistent with the national gas objective – the amendments correct and simplify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Terms defined by the Corporations Act 2001 (Cth)

1281. The terms “Associate”, “Control”, “Controller”, “Related Body Corporate” and “Related Entity” are defined in the terms and conditions by reference to the meaning given in the *Corporations Act 2001 (Cth)* as at the execution date. For example, “Associate has the meaning given in section 11 of the Corporations Act as at the Execution Date”. DBP amended each of the specified terms to replace the words “as at the Execution Date” with “as at 15 July 2019”. DBP submitted the following reasons for the amendments:⁵⁵⁵
- It is not appropriate that the meaning ascribed to this definition may be changed by future (unknown) changes to the Corporations Act 2001 (Cth). Rather, the definition should be fixed as if the concept presently in that Act were set out in the Reference Contracts in full; and
 - 15 July 2019 was selected as the date to fix the definition as this is the latest compilation of that Act as at the time of preparing the submitted changes to the [reference service terms and conditions], containing amendments up to Act No. 50, 2019.
1282. It is not uncommon to assign a meaning to the terms identified by DBP by referencing the Corporations Act, as amended from time to time. While the ERA does not require an amendment, if DBP’s preference is to fix the definitions at a point in time (that is, at 15 July 2019), the ERA considers that DBP should include a reference to the Compilation Number and Federal Register of Legislation ID of the Act in the definitions (that is, “Compilation No 95, Federal Register of Legislation ID C2019C00216”) to avoid parties having to identify the relevant version of the Act in the future.
1283. Notwithstanding the considerations above, the ERA considers that DBP’s proposal to specify a relevant date for the Corporations Act is consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁵⁵⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 1.3.

Terms referencing legislation or standards

1284. The terms “Actual Mass Flow Rate” and “SI Units” are defined by referencing specific legislation or industry standards. DBP amended these terms to update the references to current legislation or standards.⁵⁵⁶
- “Actual Mass Flow Rate” was amended to correctly reference in full the current American Gas Association’s report that is used to measure the thermodynamic properties of natural gas and related gases.⁵⁵⁷
 - “SI Units” was amended to delete a reference to an obsolete Australian Standard (that is, “AS1000-1979”, which has been superseded by AS ISO 1000-1998).
1285. DBP further amended clause 7.12 (Odourisation) of the terms and conditions to replace the reference to the *Gas Standards Regulations 1983 (WA)* with a reference to the *Gas Standards (Gas Supply and System Safety) Regulations 2000 (WA)*.
1286. The term “SI Units” are dealt with under the *National Measurement Act 1960 (Cth)* and are defined in the *National Measurement Regulations 1999* as: “SI, for a unit of measurement, means the system of measurement known as the International System of Units.” Given that clause 2.1(k) of the terms and conditions provides that “all units of measurement used in this Contract are SI Units as they are applied as Australian legal units of measurement under the *National Measurement Act 1960 (Cth)*”, the ERA considers that a definition of SI Units is not required.
1287. Notwithstanding the above consideration, the ERA considers that the DBP’s proposal to update references to legislation and standards is consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “Accumulated Imbalance”

1288. DBP amended the term “Accumulated Imbalance” to update the cross-reference to “clause 9.8” to “clause 9.9”. The amendment is consequential and subject to DBP’s proposed amendment to insert new clause 9.6 (Excess Imbalance Charge), which is discussed at paragraph 1517 of this decision. Consistent with the ERA’s considerations of clause 9.6, the amendment to the term “Accumulated Imbalance” is required.

New term “AEMO”

1289. DBP inserted the new term “AEMO” to mean “Australian Energy Market Operator Limited ACN 072 010 327” and submitted that the new term replaced the redundant term “REMPCo”, which was deleted from clause 1 (see paragraph 1278 of this decision). The term “AEMO” is used in clauses 6.2, 6.3(d) and 6.3(f) of the terms and conditions.⁵⁵⁸

⁵⁵⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 1.4.

⁵⁵⁷ American Gas Association, *Report No. 8, Part 1 (Thermodynamic Properties of Natural Gas and Related Gases – DETAIL and GROSS Equations of State) and Part 2 (Thermodynamic Properties of Natural Gas and Related Gases, GERG-2008 Equation of State), Third Edition April 2017*.

⁵⁵⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.2.

1290. The ERA considers that DBP’s proposal to replace the term “REMPo” with “AEMO” is necessary. The functions of the Retail Energy Market Company were moved to AEMO in 2016.

New term “AGIG”

1291. DBP inserted the new term “AGIG” to reflect changes of ownership following the acquisition of DBP by the CKI Group in 2017. DBP’s proposed definition of “AGIG” is reproduced in Appendix 5 (page 401) of this decision.
1292. DBP submitted that the new term replaced references to “DUET Group”, being the previous owners of the DBNGP. The term “AGIG” is used in the definition of “Data” in clause 1 and clauses 25.3(a), 28.2 and 28.3(a)(i) of the terms and conditions.⁵⁵⁹
1293. The ERA considers that DBP’s proposal to introduce and use the term “AGIG” is required due to the change in ownership of the DBNGP since the approval of the access arrangement for AA4. However, it is noted that the term “AGIG”:
- Is not actually used in clause 25.3(a) of the terms and conditions, despite DBP submitting that it is.
 - Has been used in clause 28.2 to replace a reference to “DUET Trust No 2” and not a reference to “DUET Group” as submitted by DBP.
 - Is an addition to clause 28.3(a)(i) and not a replacement of an existing reference to “DUET Group” as submitted by DBP, although its addition in clause 28 is consistent with the intention of these provisions.
1294. Notwithstanding the above points, DBP’s proposal to insert the new term “AGIG” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New term “Aggregated Service”

1295. DBP inserted the new term “Aggregated Service” to mean “Aggregated P1 Service, Aggregated T1 Service and Aggregated B1 Service or any one or more of them (as the case may require)”.
1296. DBP submitted that the new term was inserted to improve drafting and was not a new type of service. It is used in the definition of “Other Reserved Service” in clause 1, clauses 8.17(a), 17.9(b)(vi), 17.9(c)(ii) and schedule 6 (part B) of the terms and conditions.⁵⁶⁰
1297. The current (AA4) terms and conditions use the terms Aggregated P1 Service, Aggregated T1 Service and Aggregated B1 Service (see for example schedule 6). DBP’s proposed term and definition encompasses these existing terms and, as submitted by DBP, is not a new type of service.
1298. The ERA considers that DBP’s insertion of the proposed new term “Aggregated Service” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁵⁵⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 2.3 and 2.4.

⁵⁶⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 2.5 to 2.7.

New term “Aggregated B1 Service”

1299. DBP inserted the new term “Aggregated B1 Service”. DBP’s proposed definition for this term is reproduced in Appendix 5 (page 401) of this decision and applies to the terms and conditions for the P1 Service and T1 Service. In the terms and conditions for the B1 Service, the definition of “Aggregated B1 Service” takes the form of proposed new term “Aggregated P1 Service” (see paragraph 1302).
1300. DBP submitted that the new term was inserted to correct a drafting anomaly. Aggregated Services, including the Aggregated B1 Service, were referred to throughout the terms and conditions (see for example, schedule 6). The new term therefore reflected the existing use of the term in the terms and conditions. DBP further submitted that the new term was consistent with the existing use of the term in negotiated contracts in place with shippers.⁵⁶¹
1301. There is no definition of “Aggregated Service” or “Aggregated B1 Service” in the current (AA4) terms and conditions, despite the terms being used. Consistent with DBP’s proposal to insert the term “Aggregated Service” and the ERA’s considerations of this (at paragraph 1295), DBP’s proposal to introduce the new term “Aggregated B1 Service” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New term “Aggregated P1 Service”

1302. DBP inserted the new term “Aggregated P1 Service”. DBP’s proposed definition for this term is reproduced in Appendix 5 (page 401) of this decision and applies to the terms and conditions for the P1 Service. In the terms and conditions for the B1 Service and T1 Service, the definition of “Aggregated P1 Service” takes the form of proposed new term “Aggregated B1 Service” (see paragraph 1299).
1303. DBP submitted that the new term was inserted to correct a drafting anomaly. Aggregated services, including the Aggregated P1 Service, were referred to throughout the terms and conditions (see for example, schedule 6). The new term therefore reflected the existing use of the term in the terms and conditions. DBP further submitted that the new term was consistent with the existing use of the term in negotiated contracts in place with shippers.⁵⁶²
1304. There is no definition of “Aggregated Service” or “Aggregated P1 Service” in the current (AA4) terms and conditions, despite the terms being used. Consistent with DBP’s proposal to insert the term “Aggregated Service” and ERA’s considerations of this (at paragraph 1295), DBP’s proposal to introduce the new term “Aggregated P1 Service” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New term “Aggregated T1 Service”

1305. DBP inserted the new term “Aggregated T1 Service”. DBP’s proposed definition for this term is reproduced in Appendix 5 (page 402) of this decision and applies to the terms and conditions for the P1 Service and B1 Service. In the terms and conditions

⁵⁶¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.9 to 2.11.

⁵⁶² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.12 to 2.14.

for the T1 Service, the definition of “Aggregated T1 Service” takes the form of proposed new term “Aggregated P1 Service” (see paragraph 1302).

1306. DBP submitted that the new term was inserted to correct a drafting anomaly. Aggregated services, including the Aggregated T1 Service, were referred to throughout the terms and conditions (see for example, schedule 6). The new term therefore reflected the existing use of the term in the terms and conditions. DBP further submitted that the new term was consistent with the existing use of the term in negotiated contracts in place with shippers.⁵⁶³
1307. There is no definition of “Aggregated Service” or “Aggregated T1 Service” in the current (AA4) terms and conditions, despite the terms being used. Consistent with DBP’s proposal to insert the term “Aggregated Service” and ERA’s considerations of this (at paragraph 1295), DBP’s proposal to introduce the new term “Aggregated T1 Service” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “Associated”

1308. DBP amended the term “Associated” to correct drafting omissions. DBP’s proposed amendment is reproduced in Appendix 5 (page 402) of this decision.
1309. DBP submitted that the inclusion of new paragraph (a) reflected the way in which the term was used in the terms and conditions (see for example, clauses 6.10(c) and 13.5(b)(ii)). The inclusion of the words “and relates and related, when used to describe such relationships, have analogous meanings” at the end of the definition reflected the way in which the words “relates” and “related” were used in clause 6.11 of the terms and conditions.⁵⁶⁴
1310. The ERA considers that DBP’s proposal to introduce new paragraph (a) is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP. However, the introduction of the words referring to the use of the terms “relates” and “related” may be unnecessary as these terms can be replaced in the terms and conditions with “associated”. While the ERA does not require an amendment, if DBP considers it necessary to use the terms “relates” and “related”, the ERA considers that the terms should be in a separate definition to ensure users can easily find the defined terms.⁵⁶⁵

Existing term “B1 Service”

1311. DBP amended the term “B1 Service” to correct drafting anomalies and other administrative (typographical and referencing) errors. DBP’s proposed amendment is reproduced in Appendix 5 (page 402) of this decision and applies to the terms and conditions for the P1 Service and T1 Service. In the terms and conditions for the B1 Service, the amended definition of “B1 Service” is analogous to the proposed amendment to the term “P1 Service” (see paragraph 1371).

⁵⁶³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.15 to 2.17.

⁵⁶⁴ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.18 and 2.19.

⁵⁶⁵ In a separate definition the terms “relates” and “related” would be alphabetically listed in clause 1 (Interpretation) of the terms and conditions making it intuitively easier to find.

1312. DBP submitted the following explanation for the proposed amendments:⁵⁶⁶

- The term “B1 Service” is used to identify all back haul transportation services which are named as a B1 Service and, hence, are treated in a particular (and equal) way in the Curtailment Plan and the nominations priority rule in clause 8.10(a).
- The words “reference service provided under the terms and conditions set out in the access arrangement for the B1 Service” needed to be deleted, otherwise B1 Service could only be offered under a reference service contract. If the words remained, B1 Service would exclude all services that are not provided by way of a reference service contract despite other non-reference service contracts using the term B1 Service. B1 Service cannot have a different meaning across different contracts.
- The words “can only be curtailed in the circumstances specified in clause 17.2” needed to be deleted because other (negotiated) contracts may allow the operator to curtail in additional circumstances. If the words were to remain, a negotiated contract for B1 Service may not, despite what was negotiated for by the shipper, be regarded as B1 Service as that term is used in the reference service contract because the negotiated contract can be curtailed in circumstances that are not listed in clause 17.2.

1313. CPM’s submission did not directly address DBP’s proposed amendments to delete the words “can only be curtailed in the circumstances specified in clause 17.2” from the definition of “B1 Service”. However, CPM’s submission did address the deletion of the same words from clause 3.2(a) of the terms and conditions, which covers provisions for the capacity service (see paragraph 1404).

1314. Consistent with the ERA’s considerations of DBP’s proposed amendments to clause 3.2(a) (at paragraph 1407), the ERA considers that in the context of the defined term “B1 Service” in the terms and conditions for the P1 Service and T1 Service the words “can only be curtailed in the circumstances specified in clause 17.2” can be deleted as proposed by DBP. The amended definition in this context is consistent with the amended definition of “B1 Service” in the terms and conditions of the B1 Service, which defines the B1 Service specific to the contract and in broader terms (that is, “in respect of other shippers and other contracts”).

- In the terms and conditions for the B1 Service:⁵⁶⁷

B1 Service in respect of the Shipper’s Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts means a Back Haul transportation service which is named in the relevant contract as B1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

⁵⁶⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.22 to 2.25.

⁵⁶⁷ DBP, *DBNGP Access Arrangement 2021-25, Attachment 4 – B1 Reference Service Terms and Conditions*.

- In the terms and conditions for the P1 Service and T1 Service:⁵⁶⁸

B1 Service means a Back Haul transportation service which is named in the relevant contract as B1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

1315. The ERA considers that DBP's other proposed amendments to the definition of "B1 Service" clarify the meaning of this term as it is used in the terms and conditions for reference services and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term "Contracted Capacity"

1316. DBP amended the term "Contracted Capacity" to clarify the current drafting and to fix a cross-referencing error. DBP's proposed amendment is reproduced in Appendix 5 (page 403) of this decision and applies to the terms and conditions for the P1 Service. Analogous amendments to the term were made in the terms and conditions for the B1 Service and T1 Service.

1317. The ERA considers that DBP's proposal to amend the term "Contracted Capacity" is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term "Contracted Firm Capacity"

1318. DBP amended the term "Contracted Firm Capacity" to mean "Alcoa's Exempt Capacity and any contracted Capacity Service other than a Spot Transaction". DBP's proposed amendment is reproduced in Appendix 5 (page 403) of this decision.

1319. DBP submitted that the amendment aligned the term with the negotiated contracts in place with shippers. The term is used in clauses 5.3(g), 5.7(f), 8.9(d), 8.9(g) and 9.5(b)(ii) of the terms and conditions. In the context of each of these clauses, DBP submitted that the amended definition was fair and reasonable and in the net interest of shippers and consumers for the following reason.⁵⁶⁹

The change to the definition of "Contracted Firm Capacity" is fair and reasonable, and in the net interest of shippers and consumers, as it only restricts the Shipper under a Reference Contract from using more than its Contracted Capacity at the inlet point, and only allows the Operator to impose such restriction where the excess use interferes with other shippers taking their contracted Capacity Services. If [DBP does] not make the change to the definition of "Contracted Firm Capacity" (by extending the types of Contracted Capacity that are protected from excess use by the Shipper under a Reference Contract), then all Capacity Services, other than T1 Service, P1 Service and B1 Service and Firm Service, would be subject to the whim of excess use by shippers

⁵⁶⁸ DBP, *DBNGP Access Arrangement 2021-25, Attachment 3 – P1 Reference Service Terms and Conditions and Attachment 2 – T1 Reference Service Terms and Conditions*.

⁵⁶⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.32.

under the Reference Services (making those other services unreliable and unpalatable).

1320. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective. While the term “Contracted Firm Capacity” in the Standard Shipper Contracts (as published on DBP’s website) does not contain the words “other than a Spot Transaction”, the definitions are consistent because the Standard Shipper Contracts exclude “Spot Transactions” from the definition of the term “Capacity Service”. Consequently, Spot Transactions are excluded from the Standard Shipper Contracts’ definition of “Contracted Firm Capacity” making the provisions consistent in substance and effect.

Existing term “Daily Nomination”

1321. DBP amended the term “Daily Nomination”. DBP’s proposed amendment is reproduced in Appendix 5 (page 403) of this decision.
1322. DBP submitted that:⁵⁷⁰
- The amendment to insert the word “scheduled” was to clarify that the daily nomination describes what the shipper is *scheduled* to deliver and receive at the relevant point on the gas day. The amendment clarified that the definition does not, and is not intended to, create an obligation on the shipper (or operator) to deliver such amounts.
 - The amendment to replace the words “set out in the Initial Nomination” with “scheduled under clause 8” was necessary because the “Daily Nomination” is not the same as the “Initial Nomination”.
 - The amendment to delete the words “Type of” corrected a drafting error. The term “Type of Capacity Services” is only relevant to the determination of priority in particular circumstances and is not applicable in the context of defining a daily nomination.
1323. The ERA considers that DBP’s proposal to amend the term “Daily Nomination” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New term “Data”

1324. DBP inserted the new term “Data”. DBP’s proposed definition of “Data” is reproduced in Appendix 5 (page 404) of this decision.
1325. DBP submitted that the new term was required because of proposed new clause 28.10 (FIRB Compliance), which is considered at paragraph 1672 of this decision.
1326. Consistent with the ERA’s considerations of clause 28.10, the addition of the new term “Data” is a necessary and consequential amendment to the terms and conditions.

Existing term “DBNGP”

1327. DBP amended the term “DBNGP” to update references to dates. DBP’s proposed amendment is reproduced in Appendix 5 (page 404) of this decision.

⁵⁷⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 2.33 to 2.37.

1328. DBP submitted that the amendments updated the access arrangement period from “2016 – 2020” to “2021 – 2025” and created certainty by replacing the words “the Execution Date” with “1 January 2020”.⁵⁷¹
1329. DBP’s proposal to amend the definition of “DBNGP” reflects the next (AA5) access arrangement period, being the five-year period from 2021 to 2025. The replacement of the words “the Execution Date” with “1 January 2020” reflects the revisions submission date for the current (AA4) access arrangement. Given that the assessment process of proposed revisions to an access arrangement can take up to 12 months (or possibly longer in some instances), the ERA considers that the relevant date used in the definition of “DBNGP” should be a date that is closer to the commencement date of the revised access arrangement for the DBNGP, which is expected to be 1 January 2021.

Required Amendment 25

DBP must amend the term “DBNGP” in clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to change the date “1 January 2020” to a date that reflects the commencement date of the revised access arrangement, which is expected to be 1 January 2021.

Existing term “Excess Imbalance Charge”

1330. DBP amended the term “Excess Imbalance Charge” to change the cross-reference to “clause 9.5(c)” to “clause 9.5(e)” and insert a new cross-reference to “clause 9.6(b)”.
1331. The change of the cross reference to clause 9.5(e) is to correct an error and the insertion of the new cross reference is consequential and subject to DBP’s proposed amendments to clause 9 (Imbalances), which are considered at paragraph 1505 of this decision. Consistent with the ERA’s considerations of clause 9, the consequential amendments to the term “Excess Imbalance Charge” are required.

Existing term “Execution Date”

1332. DBP amended the term “Execution Date” to replace the word “Contract” with the words “the Access Request Form” so that the term means “the date on which the Access Request Form is signed by the last of the Parties to sign it”.
1333. The term is used in the definition of “Total Physical Capacity” and clause 5.14(d) of the terms and conditions.⁵⁷² DBP submitted that it amended the term Execution Date because the contract may not be signed by the parties. Rather, the contract is formed by execution of the Access Request Form in accordance with schedule 1 (item 8) of the terms and conditions.⁵⁷³
1334. The ERA considers that DBP’s proposal to amend the term “Execution Date” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁵⁷¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.40 and 2.41.

⁵⁷² Clause 5.14 sets out provisions for ‘Shipper’s gas installations’.

⁵⁷³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.47.

Existing term “Hourly Peaking Charge”

1335. DBP amended the term “Hourly Peaking Charge” to change the cross-reference to “clause 10.3(b)” to “clause 10.3(d)” and insert a new cross-reference to “clause 10.4(b)”.
1336. The amendment to insert the reference to clause 10.4(b) is consequential and subject to DBP’s proposed amendment to add new clause 10.4 (Outer Hourly Peaking Limit), which is considered at paragraph 1548 of this decision. The other amendment fixed a cross-referencing error.
1337. Consistent with the ERA’s considerations of clause 10.4, the amendment to add a cross-reference to clause 10.4(b) is a necessary and consequential amendment to the terms and conditions.

Existing term “Inlet Point”

1338. DBP amended the term “Inlet Point”. DBP’s proposed amendment is reproduced in Appendix 5 (page 404) of this decision.
1339. DBP submitted that the amendment was needed to correct a drafting error and aligned the terms and conditions with the negotiated contracts in place with shippers.
1340. In the terms and conditions, the term “Inlet Point” is used to refer to any flange, joint or other point specified in clause 3.3(a) at which the shipper has contracted capacity, as well as, to refer more broadly to any inlet point on the DBNGP.⁵⁷⁴ If the amendment was not made (that is, the term remained confined to inlet points at which the shipper has contracted capacity), the rights otherwise granted to the shipper under the reference service contract may be undermined.⁵⁷⁵
1341. DBP’s amended definition is consistent with the definition of “Inlet Point” in the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Existing term “National Gas Access (Western Australia) Law”

1342. DBP amended the term “National Gas Access (Western Australia) Law” to add the words “as changed from time to time, or any similar provisions specified in or made in accordance with any amendment or replacement of the *National Gas Access (WA) Act 2009 (WA)*.” DBP’s proposed amendment is reproduced in Appendix 5 (page 404) of this decision.
1343. DBP submitted that the amendment improved the drafting of the definition and better aligned the definition in the terms and conditions with the negotiated contracts in place with shippers.⁵⁷⁶
1344. Clause 2.1(e) of the terms and conditions states:

⁵⁷⁴ In Attachment 14.1 (paragraph 2.54), DBP stated “the term “Inlet Point” is used to refer to any flange, joint or other point specified in clause 1.1(a) at which the shipper has contracted capacity...”. The terms and conditions however state “... any flange, joint or other point specified in clause 3.3(a) ...”.

⁵⁷⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.53 and 2.54.

⁵⁷⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.57.

In the construction of this Contract, unless the context requires otherwise a reference to any statutory Law extends to and includes any regulations under that Law and any amendment of, modification of, or substitution for, that Law.

1345. The ERA considers that clause 2.1(e) addresses the issue that DBP has identified and as such DBP's proposed amendment to the term "National Gas Access (Western Australia) Law" is unnecessary. However, should DBP proceed with its proposed amendment, the rights or risk allocation under the terms and conditions will not be altered, and the amended term remains consistent with the national gas objective.

Existing term "Notice"

1346. DBP amended the term "Notice" to replace the word "facsimile" with the words "email to a Dedicated Email Address." DBP submitted that this amendment aligned with the provision in clause 29.4(b) of the terms and conditions, which includes email as an approved form of delivery for notices.⁵⁷⁷
1347. The ERA considers that DBP's proposal to amend the term "Notice" is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term "Other Reserved Service"

1348. DBP amended the term "Other Reserved Service" to exclude "Aggregated Service" from the definition. DBP's proposed amendment is reproduced in Appendix 5 (page 404) of this decision.
1349. DBP considered the amendment to be a correction of a typographical error. DBP submitted that "Aggregated Service" was not, and was never intended to be, an "Other Reserved Service" – Aggregated Service is a different capacity service and has a separate priority (in the Curtailment Plan that is set out in schedule 6 of the terms and conditions) to Other Reserved Service.⁵⁷⁸
1350. The ERA considers that DBP's proposal to amend the term "Other Reserved Service" is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New term "Outer Accumulated Imbalance Limit"

1351. DBP inserted the new term "Outer Accumulated Imbalance Limit" that has the meaning given in proposed new clause 9.6(a). New clause 9.6(a) is considered at paragraph 1517 of this decision.
1352. DBP's proposed new term "Outer Accumulated Imbalance Limit" is consequential and subject to proposed new clause 9.6(a). Consistent with the ERA's considerations of clause 9.6(a), the addition of the new term "Outer Accumulated Imbalance Limit" is required.

⁵⁷⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 2.58.

⁵⁷⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 2.7, 2.8 and 2.60.

New term “Outer Hourly Peaking Limit”

1353. DBP inserted the new term “Outer Hourly Peaking Limit” that has the meaning given in proposed new clause 10.4(a). New clause 10.4(a) is considered at paragraph 1548 of this decision.
1354. DBP’s proposed new term “Outer Hourly Peaking Limit” is consequential and subject to proposed new clause 10.4(a). Consistent with the ERA’s considerations of clause 10.4(a), the addition of the new term “Outer Hourly Peaking Limit” is required.

Existing term “Outlet Point”

1355. DBP amended the term “Outlet Point”. DBP’s proposed amendment is reproduced in Appendix 5 (page 405) of this decision.
1356. DBP submitted that the amendment was needed to correct a drafting error and aligned the terms and conditions with the negotiated contracts in place with shippers.
1357. In the terms and conditions, the term “Outlet Point” is used to refer to any flange, joint or other point specified in clause 3.3(b) at which the shipper has contracted capacity, as well as, to refer more broadly to any outlet point on the DBNGP.⁵⁷⁹ If the amendment was not made (that is, the term remained confined to outlet points at which the shipper has contracted capacity), the rights otherwise granted to the shipper under the reference service contract may be undermined.⁵⁸⁰
1358. DBP’s amended definition is consistent with the definition of “Outlet Point” in the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Existing term “Overrun Gas”

1359. DBP amended the term “Overrun Gas”. DBP’s proposed amendment is reproduced in Appendix 5 (page 405) of this decision and applies to the terms and conditions for the P1 Service. Analogous amendments to the term were made in the terms and conditions for the T1 Service and B1 Service.
1360. DBP submitted that the amendment was to improve the drafting of the term across the reference service contracts and to better align the contracts with the negotiated contracts in place with shippers. The amendment clarified what services were included under the shipper’s capacity services. The term “Capacity Service” incorporates the T1 Service, B1 Service and P1 Service, hence the proposed amendment has not changed the meaning or operation of the definition.⁵⁸¹
1361. The amended definition of “Overrun Gas” is consistent with the definition in the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and

⁵⁷⁹ In Attachment 14.1 (paragraph 2.64), DBP stated “the term “Outlet Point” is used to refer to any flange, joint or other point specified in clause 1.1(a) at which the shipper has contracted capacity...”. The terms and conditions however state “... any flange, joint or other point specified in clause 3.3(b) ...”.

⁵⁸⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.63 and 2.64.

⁵⁸¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.66.

conditions to align with contracts in place with shippers are consistent with the national gas objective.

Existing term “P1 Capacity Reservation Tariff”

1362. DBP amended the term “P1 Capacity Reservation Tariff”. DBP’s proposed amendment is reproduced in Appendix 5 (page 405) of this decision and applies to the terms and conditions for the P1 Service. Analogous amendments to the term “B1 Capacity Reservation Tariff” and “T1 Capacity Reservation Tariff” were made in the terms and conditions for the B1 Service and T1 Service, respectively. However, DBP submitted that the term “T1 Capacity Reservation Tariff” in the terms and conditions for the T1 Service did not include the reference to clause 14.7 because this clause was not relevant.⁵⁸²
1363. DBP submitted that the amendment improved the intent of the existing drafting. Specifically:⁵⁸³
- The words “subject to clause 14.7” were inserted into the definition to remind that where there is a relocation of contracted capacity, as contemplated by clause 14, the quantum of the charges may be affected by clause 14.7 (Charges for relocation).
 - The words “subject to clause 20.5(a)(iii)” were inserted into the definition to remind that the quantum of the charges may be affected by tariff resets approved by the regulator for any new access arrangement periods over the term of the contract (clause 20.5(a)(iii)).
1364. The ERA considers that DBP’s proposed amendment contains errors.
- The proposed amendment refers to the “meaning given in clause 15 of the Access Arrangement”. However, the meanings for terms are set out in clause 16 (Definitions) of the proposed revised access arrangement.
 - Despite DBP submitting that the term “T1 Capacity Reservation Tariff” in the terms and conditions for the T1 Service did not include the reference to clause 14.7 because it was irrelevant, the reference to clause 14.7 remains. Consistent with DBP’s submission, a reference to clause 14.7 is not required in this definition because even if the relocation changes the nature of the service from full haul to part haul, the capacity remains on the same terms and conditions as full haul capacity for T1 Service under the contract. Whereas, if a relocation of a P1 Service or B1 Service changes the nature of the service to full haul, the capacity so relocated is to be treated as if it were on the terms of the T1 Service.
1365. Further to correcting the above errors, the ERA considers that the amended definition should also be subject to clause 20.5(a)(ii) of the terms and conditions. Like clause 20.5(a)(iii), the quantum of the charges may also be affected by further variations that occur from time to time in accordance with the reference tariff variation mechanism (clause 20.5(a)(ii)). This is consistent with the definitions of “P1 Capacity Reservation Tariff”, “B1 Capacity Reservation Tariff” and “T1 Capacity Reservation Tariff” in the proposed revised access arrangement which all state that the respective tariff will be “varied pursuant to the Reference Tariff Variation Mechanism from time to time.”

⁵⁸² While this statement was made by DBP, the definition for the term “T1 Capacity Reservation Tariff” in the proposed terms and conditions for the T1 Service does contain the reference to clause 14.7.

⁵⁸³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.68 to 2.72.

Required Amendment 26

DBP must amend the term “P1 Capacity Reservation Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Capacity Reservation Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the term “B1 Capacity Reservation Tariff” and “T1 Capacity Reservation Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Existing term “P1 Commodity Tariff”

1366. DBP amended the term “P1 Commodity Tariff”. DBP’s proposed amendment is reproduced in Appendix 5 (page 405) of this decision and applies to the terms and conditions for the P1 Service. Analogous amendments to the term “B1 Commodity Tariff” and “T1 Commodity Tariff” were made in the terms and conditions for the B1 Service and T1 Service, respectively. However, DBP submitted that:⁵⁸⁴

- The terms “B1 Commodity Tariff” and “T1 Commodity Tariff” in the terms and conditions for the B1 Service and T1 Service, respectively, also needed to have the words “as adjusted by the Reference Tariff Variation Mechanism from time to time” included.⁵⁸⁵
- The term “T1 Commodity Tariff” in the terms and conditions for the T1 Service did not include the reference to clause 14.7 because this clause was not relevant.⁵⁸⁶

1367. DBP submitted that the amendment improved the intent of the existing drafting. Specifically:⁵⁸⁷

- The words “subject to clause 14.7” were inserted into the definition to remind that where there is a relocation of contracted capacity, as contemplated by clause 14, the quantum of the charges may be affected by clause 14.7 (Charges for relocation).
- The words “subject to clause 20.5(a)(iii)” were inserted into the definition to remind that the quantum of the charges may be affected by tariff resets approved by the regulator for any new access arrangement periods over the term of the contract (clause 20.5(a)(iii)).

⁵⁸⁴ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.73.

⁵⁸⁵ While this statement was made by DBP, the words “as adjusted by the Reference Tariff Variation Mechanism from time to time” were deleted from the term “P1 Commodity Tariff” in the terms and conditions for the P1 Service. The words were never included in the definitions for the terms “B1 Commodity Tariff” and “T1 Commodity Tariff” in the proposed terms and conditions for the B1 Service or T1 Service respectively.

⁵⁸⁶ While this statement was made by DBP, the definition for the term “T1 Commodity Tariff” in the proposed terms and conditions for the T1 Service does contain the reference to clause 14.7.

⁵⁸⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.73 to 2.77.

1368. The ERA considers that, like DBP’s proposed amendment to the term “P1 Capacity Reservation Tariff”, the amendment to the term “P1 Commodity Tariff” contains similar errors.⁵⁸⁸
- The proposed amendment refers to the “meaning given in clause 15 of the Access Arrangement”. However, the meanings for terms are set out in clause 16 (Definitions) of the proposed revised access arrangement.
 - Despite DBP submitting that the term “T1 Commodity Tariff” in the terms and conditions for the T1 Service did not include the reference to clause 14.7 because it was irrelevant, the reference to clause 14.7 remains. Consistent with DBP’s submission, a reference to clause 14.7 is not required in this definition because even if the relocation changes the nature of the service from full haul to part haul, the capacity remains on the same terms and conditions as full haul capacity for T1 Service under the contract. Whereas, if a relocation of a P1 Service or B1 Service changes the nature of the service to full haul, the capacity so relocated is to be treated as if it were on the terms of the T1 Service.
1369. In addition, despite DBP submitting that the words “as adjusted by the Reference Tariff Variation Mechanism from time to time” needed to be included in the definitions for the “B1 Commodity Tariff” and “T1 Commodity Tariff”, these words were deleted from the definition for “P1 Commodity Tariff” and never included in the definitions for “B1 Commodity Tariff” and “T1 Commodity Tariff” in the respective terms and conditions. Regardless of DBP’s submission, the ERA considers the words are not necessary and can be deleted.
1370. Further to correcting the errors identified above, the ERA considers that the amended definition should also be subject to clause 20.5(a)(ii) of the terms and conditions. Like clause 20.5(a)(iii), the quantum of the charges may also be affected by further variations that occur from time to time in accordance with the reference tariff variation mechanism (clause 20.5(a)(ii)). This is consistent with the definitions of “P1 Commodity Tariff”, “B1 Commodity Tariff” and “T1 Commodity Tariff” in the proposed revised access arrangement which all state that the respective tariff will be “varied pursuant to the Reference Tariff Variation Mechanism from time to time.”

Required Amendment 27

DBP must amend the term “P1 Commodity Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Commodity Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the term “B1 Commodity Tariff” and “T1 Commodity Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Existing term “P1 Service”

1371. DBP amended the term “P1 Service”. DBP’s proposed amendment is reproduced in Appendix 5 (page 406) of this decision and applies to the terms and conditions for

⁵⁸⁸ The term “P1 Commodity Tariff” in the terms and conditions for the P1 Service also contains a formatting error that is visible in the unmarked (clean) version of the document – the term is bundled in with the definition for “P1 Capacity Reservation Tariff”.

the P1 Service. In the terms and conditions for the T1 Service and B1 Service, the amended definition of “P1 Service” is analogous to the proposed amendment to the term “T1 Service” (see paragraph 1390).

1372. DBP submitted that the words used to amend the definition of “P1 Service” were substantially the same as the words used to amend the definition of “B1 Service” in the terms and conditions for the P1 Service. Therefore, DBP said that its submissions made to explain the proposed amendment to the term “B1 Service” (as set out at paragraph 1312 of this decision) were generally applicable.⁵⁸⁹

1373. DBP also submitted that:⁵⁹⁰

- If the reference to clause 3.4(a) of the access arrangement was retained in the definition of P1 Service the differences between the negotiated contracts in place with shippers would lead to “irreconcilable differences in the application of the Curtailment Plan and the nominations priority rule in clause 8.10”.
- The definition of P1 Service cannot refer to it being “Part Haul” (and likewise the definition of T1 Service cannot refer to it being “Full Haul”) because the terms “Part Haul” and “Full Haul” have different definitions in the reference service contracts to those corresponding terms in the negotiated contracts in place with shippers. With these different definitions a negotiated contract for P1 Service may not, despite what was negotiated for by the shipper, be regarded as a P1 Service as that term is used in the reference service contract.

1374. DBP’s proposed amendments to the term “P1 Service” are consistent with the amendments made to the terms “B1 Service” and “T1 Service” (see paragraphs 1311 and 1390, respectively). Hence, the amended definitions for each of these respective terms across the terms and conditions for each reference service are consistent and provide for a definition that either:

- Describes the service in the context of the respective contract and in broader terms (that is, “in respect of other shippers and other contracts”). For example, the definition of “P1 Service” in the terms and conditions for the P1 Service means:⁵⁹¹

P1 Service in respect of the Shipper’s Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts means a Forward Haul transportation service which is named in the relevant contract as P1 Service which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

or

⁵⁸⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.79.

⁵⁹⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.82 and 2.84.

⁵⁹¹ DBP, *DBNGP Access Arrangement 2021-25, Attachment 3 – P1 Reference Service Terms and Conditions*.

- Describes the service in broader terms. For example, the definition of “P1 Service” in the terms and conditions for the T1 Service and B1 Service means:⁵⁹²

P1 Service means a Forward Haul transportation service which is named in the relevant contract as P1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

1375. The ERA considers that the proposed amendments to definition of “P1 Service” clarifies the meaning of this term as it is used in the terms and conditions for reference services and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “P1 Tariff”

1376. DBP amended the term “P1 Tariff”. DBP’s proposed amendment is reproduced in Appendix 5 (page 406) of this decision and applies to the terms and conditions for the P1 Service. Analogous amendments to the term “T1 Tariff” and “B1 Tariff” were made in the terms and conditions for the T1 Service and B1 Service, respectively.

1377. DBP submitted that the amendment clarified the intent of the existing drafting. Specifically:⁵⁹³

- The words “subject to clause 14.7” were inserted into the definition to remind that where there is a relocation of contracted capacity, as contemplated by clause 14, the quantum of the charges may be affected by clause 14.7 (Charges for relocation).
- The words “subject to clause 20.5(a)(iii)” were inserted into the definition to remind that the quantum of the charges may be affected by tariff resets approved by the regulator for any new access arrangement periods over the term of the contract (clause 20.5(a)(iii)).

1378. DBP’s proposed amendment to the term “P1 Tariff” is similar to the amendments made to the definitions of “P1 Capacity Reservation Tariff” (see paragraph 1362) and “P1 Commodity Tariff” (see paragraph 1366), except that DBP did not make any reference to clause 14.7 being irrelevant to the term “T1 Tariff” in the terms and conditions for the T1 Service.

1379. Consistent with the ERA’s considerations of the proposed amendments to the terms “P1 Capacity Reservation Tariff” and “P1 Commodity Tariff” the ERA considers that:

- A reference to clause 14.7 is not required in the definition of “T1 Tariff” because even if the relocation changes the nature of the service from full haul to part haul, the capacity remains on the same terms and conditions as full haul

⁵⁹² DBP, *DBNGP Access Arrangement 2021-25, Attachment 2 – T1 Reference Service Terms and Conditions and Attachment 4 – B1 Reference Service Terms and Conditions*.

⁵⁹³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 2.87 to 2.90.

capacity for T1 Service under the contract. Whereas, if a relocation of a P1 Service or B1 Service changes the nature of the service to full haul, the capacity so relocated is to be treated as if it were on the terms of the T1 Service.

- The amended definition contains an error that must be fixed – the meanings for terms are set out in clause 16 (Definitions) of the proposed revised access arrangement and not clause 15.
- The amended definition should also be subject to clause 20.5(a)(ii) of the terms and conditions. Like clause 20.5(a)(iii), the quantum of the charges may also be affected by further variations that occur from time to time in accordance with the reference tariff variation mechanism (clause 20.5(a)(ii)). This is consistent with the definitions of “P1 Tariff”, “B1 Tariff” and “T1 Tariff” in the proposed revised access arrangement which all state that the respective tariff will be “varied pursuant to the Reference Tariff Variation Mechanism from time to time.”

Required Amendment 28

DBP must amend the term “P1 Tariff” in clause 1 of the proposed terms and conditions for the P1 Service to mean:

P1 Tariff, in all cases subject to clauses 14.7, 20.5(a)(ii) and 20.5(a)(iii), has the meaning given in clause 16 of the Access Arrangement.

Analogous amendments to the terms “B1 Tariff” and “T1 Tariff” must also be made in the terms and conditions for the B1 Service and T1 Service, respectively. However, in the terms and conditions for the T1 Service, the cross-reference to clause 14.7 must be deleted.

Existing term “Reference Tariff Variation Mechanism”

1380. DBP submitted that it amended the term “Reference Tariff Variation Mechanism” to mean “the mechanism for varying the “Reference Tariff” (as that term is defined in the Access Arrangement) as set out in section 11 of the Access Arrangement”. The amended definition better aligned with the actual terms of the access arrangement.⁵⁹⁴
1381. As submitted by DBP the amended definition does align with the terms of the access arrangement. However, in the proposed terms and conditions for the reference services, the definition includes the words “from time to time” at the end. The ERA considers these words to be unnecessary and that the definition should read the same as the proposed amendment set out Attachment 14.1 to DBP’s Final Plan.
1382. DBP’s proposed amendment to the term “Reference Tariff Variation Mechanism” (once the required changes have been made) is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁵⁹⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 2.95.

Required Amendment 29

DBP must amend the term “Reference Tariff Variation Mechanism” in clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete the words “from time to time”.

Existing term “Relevant Construction Costs”

1383. DBP amended the term “Relevant Construction Costs” to insert the words “Relevant Inlet Point Connection Facilities Construction Costs,” and “or Relevant Gate Station Construction Costs”. DBP’s proposed amendments are reproduced in Appendix 5 (page 406) of this decision.
1384. DBP submitted that:⁵⁹⁵
- The amendment to insert “Relevant Inlet Point Connection Facilities Construction Costs” corrected an error. Under clause 6.11(a) of the terms and conditions, “Relevant Construction Costs” may refer to costs in relation to inlet stations.
 - The amendment to insert “Relevant Gate Station Construction Costs” was required because of the proposed amendments to clause 6.8 to separate the “regime for gate stations” from the “regime for other outlet stations”.
1385. As submitted by DBP, the amendments to the term “Relevant Construction Costs”:
- Correct an error, that is, construction costs can relate to inlet stations as well as outlet stations.
 - Reflect the proposed amendments to clause 6.8 (Design and installation of Outlet Stations and Gate Stations), which are discussed at paragraph 1440 of this decision.
1386. Consistent with the ERA’s considerations of clause 6.8, the amendment to insert the words “Relevant Gate Station Construction Costs” is a necessary and consequential amendment to the terms and conditions. The other amendment to include the words “Relevant Inlet Point Connection Facilities Construction Costs” corrects an error and is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “Shipper”

1387. DBP amended the term “Shipper” to change the definition from “the party so described where the parties to this Contract are named on its first page” to “the party described as the Prospective Shipper in the Access Request Form”.
1388. DBP submitted the amendment was needed because the reference service contract does not actually contemplate the naming of the contracting party on the first page.⁵⁹⁶
1389. The ERA considers that DBP’s proposal to amend the term “Shipper” is consistent with the national gas objective – the amendment corrects and/or clarifies the terms

⁵⁹⁵ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 2.97 and 2.98.

⁵⁹⁶ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 2.101.

and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “T1 Service”

1390. DBP amended the term “T1 Service”. DBP’s proposed amendment is reproduced in Appendix 5 (page 407) of this decision and applies to the terms and conditions for the P1 Service and B1 Service. In the terms and conditions for the T1 Service, the amended definition of “T1 Service” is analogous to the proposed amendment to the term “P1 Service” (see paragraph 1371).

1391. DBP submitted that the amendment was needed to correct drafting anomalies and administrative (typographical and cross-referencing) errors and was consistent with the amendments made to the definitions of “B1 Service” and “P1 Service”. For this reason, DBP said that its submissions made to explain the proposed amendments to the terms “B1 Service” and “P1 Service” (as set out at paragraphs 1312 and 1372 of this decision, respectively) were applicable.⁵⁹⁷

1392. DBP’s proposed amendments to the term “T1 Service” are consistent with the amendments made to the terms “B1 Service” and “P1 Service” (see paragraphs 1311 and 1371, respectively). Hence, the amended definitions for each of these respective terms across the terms and conditions for each reference service are consistent and provide for a definition that either:

- Describes the service in the context of the respective contract and in broader terms (that is, “in respect of other shippers and other contracts”). For example, the definition of “T1 Service” in the terms and conditions for the T1 Service means:⁵⁹⁸

T1 Service in respect of the Shipper’s Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts means a Forward Haul transportation service which is named in the relevant contract as T1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

or

- Describes the service in broader terms. For example, the definition of “T1 Service” in the terms and conditions for the P1 Service and B1 Service means:⁵⁹⁹

T1 Service means a Forward Haul transportation service which is named in the relevant contract as T1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

⁵⁹⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 2.79.

⁵⁹⁸ DBP, *DBNGP Access Arrangement 2021-25, Attachment 2 – T1 Reference Service Terms and Conditions*.

⁵⁹⁹ DBP, *DBNGP Access Arrangement 2021-25, Attachment 3 – P1 Reference Service Terms and Conditions and Attachment 4 – PB Reference Service Terms and Conditions*.

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

1393. The ERA considers that the proposed amendments to definition of “T1 Service” clarifies the meaning of this term as it is used in the terms and conditions for reference services and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Existing term “T1 Tariff”

1394. DBP amended the term “T1 Tariff” to “T1 Reference Tariff”. DBP’s proposed amendment is reproduced in Appendix 5 (page 407) of this decision and applies to the terms and conditions for the P1 Service and B1 Service.
1395. DBP submitted that the reference service contracts for the P1 Service and B1 Service used the term “T1 Reference Tariff” in schedule 2 of the contracts. The amendment was therefore needed to correct the use of this term in those contracts.
1396. The amendments required by the ERA to reinstate provisions from the terms and conditions that applied in the second access arrangement period (see Required Amendment 45 and Required Amendment 46) mean that DBP’s proposed correction is no longer needed. As required by the ERA (at paragraph 1724), the terms “P1 Reference Tariff” and “B1 Reference Tariff” must be inserted into the terms and conditions for the P1 Service and B1 Service, respectively. Consistent with this requirement, the ERA requires the deletion of the defined term “T1 Reference Tariff” from the terms and conditions for the P1 and B1 Services.

Required Amendment 30

DBP must delete the term “T1 Reference Tariff” from the proposed terms and conditions for the P1 Service and B1 Service.

Clause 2 (General)

1397. DBP amended clauses 2.4 and 2.5(e) of the terms and conditions, which set out general provisions for other contracts and the system operator, respectively. DBP’s proposed amendments are reproduced in Appendix 5 (page 407) of this decision.
1398. DBP submitted that:⁶⁰⁰
- The amendment to clause 2.4 was needed to clarify that “Aggregated Services” are not “Other Reserved Services” (as those terms are defined). The amendment also aligned the reference service contracts with the negotiated contracts in place with shippers.
 - The amendment to clause 2.5(e) aligned the clause with the terminology used in Part 2, Chapter 4, of the *National Gas Access (Western Australia) Law*.

⁶⁰⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 3.1 and 3.2.

1399. Apart from the following differences, DBP’s proposed amendments are consistent with the drafting in the Standard Shipper Contracts (as published on DBP’s website).
- Clause 2.4 of the Standard Shipper Contracts does not reference the “Aggregated B1 Service”.
 - Clause 2.5(e) of the Standard Shipper Contracts does not specify “Part 2” of Chapter 4 of the *National Gas Access (Western Australia) Law* – reference is only made to Chapter 4 (Ring Fencing) of the Law.
1400. The ERA considers DBP’s proposed amendments and drafting in the terms and conditions to be a more accurate form of drafting and considers that the drafting in the Standard Shipper Contracts should, at some point, be amended accordingly. The revised drafting simplifies the interpretation and does not change the meaning of the clauses as currently the same meaning is achieved in a less direct manner.
1401. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 3 (Capacity Service)

Clause 3.2(a)

1402. DBP amended clause 3.2(a), which sets out provisions for the capacity service under the contract. DBP’s proposed amendments are reproduced in Appendix 5 (page 408) of this decision and apply to terms and conditions for the P1 Service. Analogous amendments were made to clause 3.2(a) in the terms and conditions for the T1 Service and B1 Service.
1403. DBP submitted that its reasoning for amending the terms “P1 Service” and “B1 Service” were relevant to the amendments to clause 3.2(a). The amendments overall clarified how the reference service contract worked, decreased discrepancies between contract terms and lowered the probability for disputes.⁶⁰¹
1404. CPM addressed DBP’s proposed amendments to clause 3.2(a) and requested that the words “can only be Curtailed in the circumstances specified in clause 17.2” (existing clause 3.2(a)(i)) be reinstated. It considered the reasoning provided by DBP for the deletion of these words to be incorrect. CPM submitted:⁶⁰²

With the removal of “can only be Curtailed in the circumstances in clause 17.2” it is no longer clear and express that 17.2 contains the only rights of curtailment. This creates a risk that the Operator could argue that a right to curtail is implied by another part of the contract when it is not.

Having an express, clearly set out list of circumstances where curtailment is permitted is fundamental for a shipper to understand their rights in relation to the service provided.

The explanation provided [DBP] is incorrect, as it is based on the concept that referencing 17.2 in clause 3.2 would prevent contracts which do not have the exact curtailment circumstances as set out in 17.2 from being a ‘B1 Service’. However, retaining the words in clause 3.2 places no limitation on the curtailment provisions in a different contract and has no effect on whether a backhaul service under a negotiated contract is a ‘B1 Service’.

⁶⁰¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 4.2 to 4.6.

⁶⁰² CITIC Pacific Mining Management Pty Ltd submission, pp. 10-11.

This is because clause 3.2 only describes the B1 Service for the particular shipper under this contract and does not prevent a service with different curtailment rights under other contracts also being a 'B1 Service'. The definition of 'B1 Service' clearly states that clause 3.2 only describes the 'the Shipper's Capacity Service under this Contract' and goes on to give a different, much broader, meaning for other shippers and contracts – all are 'B1 Services' (the reference to cl 17.2 has been removed from the 'B1 Service' definition so will not apply to other shippers and contracts). The same is true for 'P1 Service' in the P1 Reference Contract.

1405. Clause 17.2 (Curtailment Generally) of the terms and conditions states:⁶⁰³

The Operator may Curtail the provision of the Capacity Services to the Shipper from time to time to the extent the Operator as a Reasonable and Prudent Person believes it is necessary to Curtail:

- (a) if there is an event of Force Majeure where the Operator is the Affected Party;
- (b) whenever it needs to undertake any Major Works;
- (c) by reason of, or in response to a reduction in Gas Transmission Capacity caused by the default, negligence, breach of contractual term or other misconduct of Shipper;
- (d) for any Planned Maintenance; and
- (e) in circumstances where the Operator, acting as a Reasonable and Prudent Person, determines for any other reason (including to avoid or lessen a threat of danger to the life, health or property of any person or to preserve the operational integrity of the DBNGP) that a Curtailment is desirable.

1406. DBP did not provide a reason for the deletion of clause 3.2(a)(i) in the context of clause 3.2(a), but its reason for the deletion of the same words in the definition of B1 Service was that some B1 Services had additional operator curtailment rights and that the goal was to ensure that all B1 Services are treated as B1 Services (see paragraph 1312).

1407. As submitted by CPM, clause 3.2 is specific to the B1, P1 or T1 Service under the contract and does not prevent a service with different curtailment rights under other contracts also being a B1, P1 or T1 Service given the definitions of these services in the terms and conditions. The definitions of "B1 Service", "P1 Service" and "T1 Service" in their respective terms and conditions all use the words: "in respect of the Shipper's Capacity Service under this Contract, has the meaning given in clause 3.2, and in respect of other shippers and other contracts means." The definitions then go on to define the respective service in broader terms, which is consistent with the definition of that service in the other terms and conditions. For example:⁶⁰⁴

- In the terms and conditions for the B1 Service, "B1 Service" is defined as:
B1 Service in respect of the Shipper's Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts means a Back Haul transportation service which is named in the relevant contract as B1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

⁶⁰³ The terms and conditions for the B1 Service include (proposed) paragraph (f) that states: "in circumstances where actual Forward Haul gas flow is less than the B1 Service demand across all shippers with a B1 Service".

⁶⁰⁴ The definition for "B1 Service" is the definition as proposed by DBP for AA5 (that is, it is not the current (AA4) definition). DBP's proposed amendment to the term "B1 Service" is discussed at paragraph 1311 of this decision.

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
 - (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.
- In the terms and conditions for the P1 Service and T1 Service, “B1 Service” is defined as:

B1 Service means a Back Haul transportation service which is named in the relevant contract as B1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

 - (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
 - (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.
1408. In the context of clause 3.2(a), the ERA considers that based on the submission made by CPM, there is no reason to delete subclause (i) and that the clause should be reinstated (with the necessary formatting amendments).
1409. The ERA considers that DBP’s other proposed amendments to clause 3.2(a) improve the drafting of the terms and conditions and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Required Amendment 31

DBP must amend clause 3.2(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to retain subclause (i) that reads:

- (i) can only be Curtailed in the circumstances specified in clause 17.2;

Clause 3.2(b)

1410. DBP amended clause 3.2(b), which details the operator’s acknowledgements and agreements for the capacity service. DBP’s proposed amendments are reproduced in Appendix 5 (page 408) of this decision.
1411. DBP submitted that the amendments to clause 3.2(b) aligned the reference service contracts with the negotiated contracts in place with shippers and reflected how the pipeline’s operations were required to be measured in practice.⁶⁰⁵
1412. DBP’s proposed amendments are consistent with the drafting in the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

⁶⁰⁵ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 4.7.

Clause 3.2(c)

1413. DBP amended clause 3.2(c), which details the operator’s acknowledgements and agreements, subject to clause 14 (Relocations), for the capacity service. DBP’s proposed amendments are reproduced in Appendix 5 (page 409) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the B1 Service and T1 Service, clause 3.2(c) was amended to align the clauses with same approach.
1414. DBP submitted that the clause was amended in the terms and conditions for the P1 Service and B1 Service to refer to the respective services and the characteristics of those services, rather than describing the T1 Service. The amendment to include the words “under this Contract” was to clarify that the P1 Service, B1 Service and T1 Service are those services as defined in the respective reference service contracts.⁶⁰⁶
1415. DBP’s proposed amendments to clause 3.2(c) simplify and clarify the drafting by describing the capacity service relative to the contract. The ERA considers that the amendments are consistent with the national gas objective – the amendments simplify and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 3.3

1416. DBP amended clause 3.3, which confirms the shipper’s contract capacity under the contract. DBP’s proposed amendments are reproduced in Appendix 5 (page 409) of this decision.
1417. DBP submitted that the amendments to clause 3.3 aligned the reference service contracts with the negotiated contracts in place with shippers. Given that the Access Request Form may include multiple inlet/outlet points, the amendments also clarified that the contracted capacity for the respective service was set out in the Access Request Form “adjacent to” the inlet/outlet point.⁶⁰⁷
1418. DBP’s proposed amendments are consistent with the drafting in the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 4 (Duration of the Contract)

1419. DBP amended clause 4.8(a), which sets out provisions for the put and call of options that are available to shippers, to insert the words “or prospective shipper” as follows:
- If the Operator receives a duly completed access request form from a shipper or prospective shipper (Third Party Access Request) ...
1420. DBP submitted that the amendment clarified that notice to existing shippers under the clause must be provided where both existing and new shippers submit a Third Party Access Request. Further amendments to clause 4.8(b) clarified that it is “the”

⁶⁰⁶ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 4.9 and 4.10.

⁶⁰⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 4.12.

shipper (as opposed to “a” shipper) who wishes to exercise its options that needs to notify the operator of this.⁶⁰⁸

1421. CPM addressed DBP’s proposed amendment to clause 4.8(a) to insert the words “or prospective shipper” and requested that the opening of the clause be amended to read: “If the Operator receives a duly completed access request form from a shipper or prospective shipper in the form of a lodged Access Request (**Third Party Access Request**).” CPM submitted.⁶⁰⁹

With abundant spare capacity in the northern part of the DBNGP, and the expected decline on throughputs over the coming 30 years, the ambiguity on what the additional words of “or prospective shipper” have created needs to be removed, and can be done by simply making sure the Third Party Access Request stems from a formally submitted Access Request where fees are paid and a contract (where capacity is available) will be the eventual outcome.

1422. While there is no definition for “prospective shipper” in the terms and conditions, the access arrangement defines the term as meaning “an entity who wishes to be a Shipper on the DBNGP”.⁶¹⁰ This definition is consistent with the meaning of “prospective user”, as set out in Section 5 of the NGL.

5. Meaning of prospective user

- (1) A prospective user is a person who seeks or wishes to be provided with a pipeline service by means of a scheme pipeline.
- (2) To avoid doubt, a user is also a prospective user if the user seeks or wishes to be provided with a pipeline service by means of a scheme pipeline other than a pipeline service already provided to them under—
 - (a) a contract; or
 - (b) an access determination.

1423. In the context of the above definitions, DBP’s proposed amendment reflects the actual operation of clause 4.8(a). As submitted by DBP, the proposed amendment clarifies that the operator must give notice for the put and call of options to the shipper when it receives an access request form from either an *existing* shipper or *prospective* shipper (and in both cases being a “Third Party Access Request”).
1424. However, the ERA considers that the words “access request form” may be ambiguous and that this ambiguity can be addressed by capitalising the words to make it a defined term, meaning: “the access request form in Schedule 1 entered into between the Operator and the Shipper to which these Terms and Conditions are appended”. The ERA considers that this amendment addresses CPM’s submission by clarifying that the “Third Party Access Request” is a formal request using the prescribed form, being the “Access Request Form”.
1425. The ERA considers that DBP’s other proposed amendments to clause 4.8(b) to change the words “a shipper” to “the shipper” are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁶⁰⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 5.1 and 5.2.

⁶⁰⁹ CITIC Pacific Mining Management Pty Ltd submission, p. 12.

⁶¹⁰ Clause 16 (Definitions) in the proposed revised access arrangement.

Required Amendment 32

DBP must amend clause 4.8(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to capitalise the words “access request form” (in the first line) so that the words become the defined term: “Access Request Form”.

Clause 5 (Receiving and Delivering Gas)

New clause 5.7(f)

1426. DBP amended clause 5.7, which details the cases where the operator may refuse to deliver gas to the shipper, to insert new clause 5.7(f). DBP’s proposed amendment is reproduced in Appendix 5 (page 409) of this decision.
1427. DBP submitted that “the purpose of [the amendment] is to fix an anomaly whereby the equivalent of clause 5.3(g)(ii) (which applies to Inlet Points) has not been replicated in [clause] 5.7 (which applies to Outlet Points)”.⁶¹¹ Proposed clause 5.7(f) gives the operator an express right to refuse to deliver to the shipper more than the shipper’s contracted capacity at a particular outlet point, if doing so would interfere with any other shipper’s contracted firm capacity at that outlet point, which is consistent with the existing provisions of clause 5.3(g)(ii), applying to inlet points.
1428. As submitted by DBP, the proposed new clause 5.7(f) is consistent with the provisions of clause 5.3(g)(ii), which applies to inlet points. However, clause 5.3(g) outlines two conditions that may apply:

5.3 Operator may refuse to Receive Gas

In addition to any other rights and remedies that may be available to it under this Contract or under any Law, the Operator may (subject to clause 5.4(a)), without prior notice to the Shipper, refuse to Receive Gas from the Shipper at an Inlet Point in all or any of the following cases:

...

- (g) to the extent that either:
- (i) at any time during a Gas Day, the Receipt of that Gas at an Inlet Point exceeds the Shipper’s MHQ for that Inlet Point for that Gas Day; or
 - (ii) the Receipt of that Gas for a Gas Day at an Inlet Point is in excess of the aggregate of all the Shipper’s Contracted Capacity, in respect of that Inlet Point for that Gas Day,
- and if the Operator considers as a Reasonable and Prudent Person, that to Receive such Gas would interfere with other shippers’ rights to their Contracted Firm Capacity at the relevant Inlet Point.

1429. Given DBP’s reasons for the proposed new clause, it is not clear why the proposed drafting for clause 5.7(f) does not match the drafting in clause 5.3(g) to include the condition about the shipper’s MHQ.⁶¹² While it is not necessary for the respective

⁶¹¹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 6.11.

⁶¹² In the terms and conditions, **MHQ** [maximum hourly quantity] means: “(a) for an Outlet Point on a particular Gas Day in respect of a shipper, (subject to clause 17.7(c)(vi)) one twenty fourth of the sum of the quantities referred to as Contracted Capacity for that Outlet Point across all of the shipper’s Capacity Services for that Gas Day in respect of that shipper; and (b) for an Inlet Point on a particular Gas Day in respect of a shipper,

clauses to match for the provisions to operate effectively, the ERA considers that, if the reason for the amendment is to replicate provisions that apply equally to inlet and outlet points, DBP may wish to reconsider the drafting of the clauses to make the drafting the same. While the ERA does not require any drafting amendments, it considers that drafting amendments of this nature would further simplify the terms and conditions.

Clause 5.14(b)

1430. DBP amended clause 5.14(b), which sets out provisions for the inspection of gas installations. DBP's proposed amendments are reproduced in Appendix 5 (page 410) of this decision.
1431. DBP submitted that the amendments aligned the reference service contracts with the negotiated contracts in place with shippers and removed unnecessary drafting.⁶¹³
1432. DBP's proposed amendments to clause 5.14(b) are consistent with the drafting in the equivalent clause in the Standard Shipper Contracts (as published on DBP's website).⁶¹⁴ For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 6 (Inlet Points and Outlet Points)

Clause 6.4(c)

1433. DBP amended clause 6.4(c), which sets out provisions for the allocation of gas at inlet points, to change the time for the shipper to procure the delivery of written confirmation to the operator from 11:30 hours to 10:00 hours.
1434. DBP submitted that the amendment reflected current practice. While there is some variation from 10:00 hours in the negotiated contracts in place with shippers, DBP submitted that the majority of these contracts did reference 10:00 hours and there would be a move to align all contracts to this time.⁶¹⁵
1435. No submissions to the ERA addressed DBP's proposed amendment to clause 6.4(c). The ERA considers that in the absence of any submissions that dispute the current practice, DBP's proposed amendment is consistent with the national gas objective – the amendment reflects current operational practices for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clauses 6.4(d) and 6.5(d)

1436. DBP amended clauses 6.4(d) and 6.5(d), which set out provisions for the allocation of gas at inlet points and outlet points, respectively. DBP's proposed amendments are reproduced in Appendix 5 (page 410) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the T1 Service and B1 Service, amendments to clauses 6.4(d) and 6.5(d) were made to use the same amended drafting.

one twenty fourth of the sum of the quantities referred to as Contracted Capacity for that Inlet Point across all of the shipper's Capacity Services for that Gas Day in respect of that shipper".

⁶¹³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 6.14 and 6.15.

⁶¹⁴ Standard Shipper Contracts, clause 5.15(b).

⁶¹⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 7.2.

1437. DBP submitted that the amendments to these clauses provided a “fall-back rule” that could be applied if the shipper does not tell the operator in which order it is to apply gas received (in the case of clause 6.4(d)), or gas delivered (in the case of clause 6.5(d)). The amendments were required to provide consistency across the operation of the DBNGP for gas allocation in the event that a shipper does not instruct the operator.⁶¹⁶
1438. As submitted by DBP, clauses 6.4(d) and 6.5(d) set out the order for the allocation of gas at inlet points and outlet points, respectively. The amended clauses set out a pre-determined order (which is consistent across the terms and conditions for all reference services) in which gas is deemed to be received by the operator under clause 6.4(d), or shipper under clause 6.5(d), in instances where the shipper fails to specify the order. The ability for shippers to specify the order in which gas is deemed to be received is unchanged – shippers can still, in effect, unilaterally change the order set out in clauses 6.4(d) and 6.5(d).
1439. The ERA considers that DBP’s proposal to amend clauses 6.4(d) and 6.5(d) to apply a consistent rule of order for the allocation of gas at inlet and outlet points in instances where the shipper does not specify the order itself is consistent with the national gas objective – drafting amendments that standardised, where possible and appropriate, the terms and conditions for reference services promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 6.8

1440. DBP amended clause 6.8, which sets out provisions for the design and installation of outlet stations. DBP’s proposed amendments are reproduced in Appendix 5 (page 411) of this decision.
1441. The amendments removed “Gate Stations” from clause 6.8(a), which are now covered in new clauses 6.8(e) and 6.8(f) and added the words “(and in such case, for the purpose of clause 6.11(e), such costs are deemed to be associated with an Operator Owned Point)” to the end of clause 6.8(a)(ii).
1442. DBP submitted that gate stations needed to be removed from clause 6.8(a) because such points were notional points used by many shippers and it was unreasonable for one shipper to be able to request works and pass on the charges payable to other shippers using that point. The amendments also aligned the reference service contracts with the negotiated contracts in place with shippers.⁶¹⁷
1443. The Standard Shipper Contracts (as published on DBP’s website) separately deal with the design and installation of outlet stations (under clause 6.7) and gate stations (under clause 6.10). Proposed new clauses 6.8(e) and 6.8(f) are consistent with the provisions in the Standard Shipper Contracts for gate stations. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.
1444. DBP further submitted that the amendment at the end of clause 6.8(a)(ii) was required to clarify that, consistent with the obvious intention of the clause, Relevant Outlet Station Construction Costs are to be included in the Maintenance Charge which must

⁶¹⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 7.4 to 7.10.

⁶¹⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 7.12 and 7.13.

be paid by shippers pursuant to clause 6.11(e).⁶¹⁸ The ERA considers that DBP's proposed amendment to clause 6.8(a)(ii) clarifies the costs that are included in the Maintenance Charge and is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 6.11

1445. DBP amended clause 6.11, which sets out provisions for the charging of a maintenance charge for inlet and outlet stations. DBP's proposed amendments are reproduced in Appendix 5 (page 412) of this decision.
1446. DBP submitted that the amendments to clause 6.11 were made to better reflect the intent that relevant construction costs, and the costs of maintaining, operating, refurbishing, upgrading and replacing inlet and outlet stations are recovered fairly across shippers, and are neither over-recovered nor under-recovered by the operator.⁶¹⁹
1447. Submissions from CPM and Synergy addressed DBP's proposed amendments to clause 6.11.
1448. CPM considered the proposed amendments to be unnecessary and submitted:⁶²⁰

Separating Inlet Station and Outlet Station Maintenance charges is silly and make [the] contracts unnecessarily complex. A gas distribution network cannot distribute gas without Inlet Stations and Outlet Stations. It stands to reason then that Inlet Stations and Outlet Stations are part of the pipeline, just as much as the pipe is. The costs of maintaining the [pipeline] are included in the tariffs and are regulated. Why then can't the Station maintenance costs be included in the Tariffs also? Such would be a standard in a "normal" market and changing now will take us a step closer to a "normal" market.

Extending on the normal market concepts; it is considered un-fair that Maintenance Charges are recoverable from Shippers only. Producers gain significant benefits from connecting their projects to the DBNGP and yet it appears that they pay nothing for the maintenance of their Inlet Station connection point.

...

[CPM] request a change to make P1 and B1 contracts structure generally such that the provisions for O&M charges get bundled into tariffs where Producers get charged for Inlet Station O&M costs based on their delivered gas volumes and Shippers for Outlet Stations based on consumption.

1449. CPM further submitted that if its requested change to the structure of station maintenance costs was not implemented, other amendments to clause 6.11 were needed. CPM's other requested amendments are outlined and considered below (see paragraph 1454 and following).
1450. Synergy noted DBP's proposed changes to the apportionment of the maintenance charge for existing inlet, outlet and gate stations and submitted that "it would be more appropriate for rebates to be given to Shippers in proportion to the respective amounts charged to each Shipper in the first instance (excluding any rebate), rather

⁶¹⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 7.15.

⁶¹⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 7.17.

⁶²⁰ CITIC Pacific Mining Management Pty Ltd submission, pp. 12-13.

than only in proportion to the Shipper's Contracted Capacity."⁶²¹ Synergy's suggested amendments are outlined and considered below at paragraph 1454.

Clause 6.11 generally

1451. DBP's proposed amendments to clause 6.11 aim to clarify the provisions concerning the maintenance charge applying for an inlet station, outlet station and gate station by separating out the charge for each type of station in clauses 6.11(d), 6.11(e) and 6.11(f), respectively. DBP submitted that "the changes to [clause 6.11 were] made so that clause 6.11 better reflects the intent that the Relevant Construction Costs and costs of maintaining, operating, refurbishing, upgrading and replacing Inlet Stations and Outlet Stations are recovered fairly across shippers (and so that the relevant costs are neither over-recovered nor under-recovered by the Operator)".⁶²² For the purpose of clause 6.11, the meaning of "maintenance charge" is set out in clause 6.11(a) as follows:⁶²³

... with respect to a particular Inlet Station or Outlet Station a charge determined by the Operator (acting as a Reasonable and Prudent Person) as being sufficient to allow the Operator (across all shippers who pay a charge for substantially the same purpose in respect of the Inlet Station or Outlet Station) to amortise, over the life of the Inlet Station or Outlet Station (as the case may be), so much of the Relevant Construction Costs as are not already paid by any shipper under clauses 6.6, or 6.8(a)(i), or (or the material equivalent in any other contract), and the costs of:

- (i) maintaining;
- (ii) operating;
- (iii) refurbishing;
- (iv) upgrading;
- (v) replacing; and
- (vi) decommissioning,

the Inlet Station or Outlet Station, plus a reasonable premium calculated to recognise the value of the Operator's management time, allowing for the charge to amortise those costs over the life of the Inlet Station or Outlet Station.

1452. CPM submitted that the amendments to clause 6.11 were unnecessary and that the provisions for operations and maintenance charges for inlet, outlet and gate stations should be bundled into tariffs. The ERA considers that while such an approach could be adopted, clause 6.11 is currently operating effectively in accordance with the set provisions. Given this, there is no clear need to amend the current charging method for maintenance charges.

1453. On the matter concerning gas producers contributing to the costs of maintaining the inlet points used to connect gas supplies to the DBNGP, the ERA considers that this could affect competition upstream and discourage efficient investment in, and efficient operation and use of, the DBNGP. If such costs were required to be paid by producers, it is likely that these costs would be passed on to and recovered from shippers and/or end users in any case.

⁶²¹ Synergy submission, 31 March 2020, Annexure A, pp. 3-4.

⁶²² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 7.17.

⁶²³ Clause 6.11(a) of the terms and conditions for reference services as proposed to be amended by DBP.

Clause 6.11(a)

1454. CPM submitted that DBP's proposed amendments to clause 6.11(a):⁶²⁴

- Were confusing and could lead to operations and maintenance costs for multiple inlet points being charged to shippers that do not use them (under aggregation), but who have the inlet points listed in a schedule to the contract for possible use (that is, a "just in case" basis).
- Needed to clarify that there is no amortisation of costs where such costs have been paid by others.
- Needed to be transparent on the life of the inlet or outlet station.

1455. Based on its submissions, CPM requested the following changes to clause 6.11(a) (shown in mark-up to DBP's proposal).⁶²⁵

For the purposes of this clause... as being sufficient to allow the Operator (across all shippers who [use, have Contracted Capacity and](#) pay a charge for substantially the same purpose in respect of the Inlet Station or Outlet Station) ... the Relevant Construction Costs ~~as~~[which](#) are not already paid by any shipper under clauses 6.6, or 6.8(a)(i) [or paid for by others excluding the Operator](#), or (or the material equivalent in any other contract), and the costs of:

(i) ...

the Inlet Station or Outlet Station, plus a reasonable premium calculated to recognise the value of the Operator's management time, allowing for the charge to amortise those costs over the life ([life periods provided in Schedule \[??\]](#)) of the Inlet Station or Outlet Station.

1456. The ERA considers that, while DBP's proposed amendments to clause 6.11(a) are sufficiently detailed for the provisions of the clause to operate effectively, additional amendments, including those requested by CPM, could be made to further clarify the provisions.

- The criteria for the allocation of maintenance charges across shippers in clause 6.11(a) should include "usage" or "contracted capacity". This is consistent with DBP's reasoning for the amendment to the clause, where it stated that "the reason for the change is that, under clauses 6.11(d) to (f), Maintenance Charges are recovered from shippers if they **have Contracted Capacity** at the relevant inlet point / outlet point **or** if they **use** the relevant inlet point / outlet point" **[emphasis added]**.⁶²⁶ Further, the use of the words "use or have Contracted Capacity" is consistent with DBP's proposed amendments to clause 6.12 (Provisions relating both to Relevant Construction Costs and Maintenance Charge) to allow the operator "to impose charges on the shipper and other shippers who have Contracted Capacity at, or use [an] existing station" (see paragraph 1469).
- The words "as are not" should be amended to read "which are not" to be grammatically correct. Also, the (first) additional word "or" should be deleted from the words "or (or the material equivalent in any other contract)".
- Relevant construction costs that are paid by a shipper under clauses 6.6 or 6.8(a)(i) may include amounts paid by third parties to the shipper under some

⁶²⁴ CITIC Pacific Mining Management Pty Ltd submission, p. 13.

⁶²⁵ CITIC Pacific Mining Management Pty Ltd submission, Appendix 2: CPM Requested Amendments to B1 and P1 T&Cs, pp. 43-44.

⁶²⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 7.18.

separate arrangement. For this reason, clause 6.11(a) should make clear that there is no amortisation of relevant construction costs where those costs are already paid for by the shipper or another third party (excluding the operator).

1457. The ERA does not consider it necessary for the terms and conditions to include a schedule that details the lives of inlet and outlet stations and for clause 6.11(a) to refer to such a schedule. However, as submitted by CPM, there should be transparency concerning the asset lives of inlet and outlet stations given that the maintenance charge is amortised over the life of such assets. Clause 6.11(c) provides that, at the shipper's request, the operator must provide a statement of the calculations used to determine the maintenance charge. The ERA considers that this existing provision provides for adequate transparency in the calculation of the maintenance charge, including the asset life used in the calculation.
1458. Based on the above considerations, the ERA requires clause 6.11(a) to be amended as follows:

6.11 Maintenance Charge for Inlet Stations and Outlet Stations

- (a) For the purposes of this clause 6.11 and subject to clause 6.11(b), Maintenance Charge means, with respect to a particular Inlet Station or Outlet Station a charge determined by the Operator (acting as a Reasonable and Prudent Person) as being sufficient to allow the Operator (across all shippers who [use or have Contracted Capacity and](#) pay a charge for substantially the same purpose in respect of the Inlet Station or Outlet Station) to amortise, over the life of the Inlet Station or Outlet Station (as the case may be), so much of the Relevant Construction Costs ~~as~~[which](#) are not already paid by any shipper under clauses 6.6, or 6.8(a)(i) [or paid for by another third party excluding the Operator](#), ~~or~~ (or the material equivalent in any other contract), and the costs of:
- (i) ...
- the Inlet Station or Outlet Station, plus a reasonable premium calculated to recognise the value of the Operator's management time, allowing for the charge to amortise those costs over the life of the Inlet Station or Outlet Station.]

Required Amendment 33

DBP must amend clause 6.11(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to:

- Clarify the criteria for the allocation of maintenance charges across shippers.
- Correct grammatical and typographical errors.
- Make clear that there is no amortisation of relevant construction costs where those costs are already paid for by the shipper or another third party.

The required drafting amendments are set out at paragraph 1458 of this draft decision.

Clauses 6.11(d), (e) and (f)

1459. Clauses 6.11(d), (e) and (f) cover provisions relating to the maintenance charge for an existing inlet station, outlet station and gate station, respectively. DBP's proposed amendments apply the same cost recovery rules to each of the clauses.⁶²⁷

⁶²⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 7.18.

1460. CPM submitted that:⁶²⁸

Whilst amendments to clauses 6.11(e) & (f) clarify the wording so that both clauses provide that [the] Shipper pays a proportion of the relevant Maintenance Charge for a month equal to the proportion that its Contracted Capacity bears to the sum of all shippers' Contracted Capacity, except where the Shipper either does not have Contracted Capacity or it takes Gas in excess of its Contracted Capacity in which case it pays a proportion in relation to the amount it has taken against the amount taken by all other shippers ... the [maintenance charge] should reflect the capacity utilised and not be strictly set on Contracted Capacity.

1461. CPM requested the following amendment to clause 6.11(e)(i) to insert the word "used" as follows (shown in mark-up to DBP's proposal).⁶²⁹

- (e) Subject to clause 6.12(b) in relation to Existing Stations, the Shipper must pay a proportion of the Maintenance Charge relating to an Outlet Station associated with an Operator Owned Point (but no other Outlet Stations) that is the greater of the amount that:
 - (i) in the case of an Outlet Station related to an Outlet Point, is equal to the proportion that the sum of the Shipper's Contracted Capacity used (across all Capacity Services but prior to any reduction under the Curtailment Plan) at that Outlet Point during the previous calendar month bears to the aggregate Contracted Capacity used (across all Capacity Services but prior to any reduction under the Curtailment Plan) ...

1462. In response to CPM's submission to amend clause 6.11(e)(i), the ERA refers to the drafting amendments required to clause 6.11(a) at paragraph 1458 of this decision. The required amendments mean that clause 6.11(a) reflects the position in the current (and unamended) clause 6.11(e)(i), that maintenance charges are to be recovered from shippers who use or have contracted capacity at the inlet or outlet station and who pay a charge for substantially the same purpose in respect of the relevant inlet or outlet station. CPM's requested amendment to clause 6.11(e)(i) would be inconsistent with the amended clause 6.11(a).

1463. Synergy noted DBP's proposed changes to the apportionment of the maintenance charge for existing inlet, outlet and gate stations in clauses 6.11(d), (e) and (f), respectively, so that the apportionment was made based on the greater of:⁶³⁰

1464. the proportion of the Shipper's Contracted Capacity at that Inlet Point/Outlet Station/Gate Station to the aggregate Contracted Capacity for all Shippers at that Inlet Point during the previous calendar month; and

1465. where the Shipper does not have Contracted Capacity at that Inlet Point/Outlet Station/Gate Station or delivers a quantity of Gas at that Inlet Point/Outlet Station/Gate Station which is greater than its Contracted Capacity during the previous calendar month, the proportion that the sum of the Shipper's deliveries of gas bears to the sum of all shipper's delivery of Gas at that Inlet Point/Outlet Station/Gate Station during the previous calendar month,

provided that if that would result in the Operator recovering from all shippers an amount greater than the Maintenance Charge for the relevant month, the Operator must rebate

⁶²⁸ CITIC Pacific Mining Management Pty Ltd submission, p. 14.

⁶²⁹ CITIC Pacific Mining Management Pty Ltd submission, Appendix 2: CPM Requested Amendments to B1 and P1 T&Cs, pp. 44-45.

⁶³⁰ Synergy submission, 31 March 2020, Annexure A, p. 3.

a proportion of the excess to the Shipper in proportion to its Contracted Capacity at that Inlet Point/Outlet Station/Gate Station.

1466. Synergy submitted that “it would be more appropriate for rebates to be given to Shippers in proportion to the respective amounts charged to each Shipper in the first instance (excluding any rebate), rather than only in proportion to the Shipper’s Contracted Capacity”, and further noted that:⁶³¹

DBP’s proposed apportionment and rebate methodology may still ultimately result in the Operator retaining more than the Maintenance Charge. The rebate mechanism is only contained in the proposed Access Contract Terms and Conditions, and not under the Operator’s Non Reference contracts (including the “standard shipper contracts” published on DBP’s website). Accordingly, if the Operator only provides rebates to those Shippers who have Reference Services by reference to their proportion of the Contracted Capacity held by all Shippers (including Shippers who do not have Reference Services), then the Operator will still ultimately retain some of the excess amount, which is not appropriate. Given this issue, it would be preferable if the apportionment mechanism did not allow the Operator to recover more than the Maintenance Charge from all shippers in the first place.

1467. Synergy’s position that the rebate should be given to shippers in proportion to the respective amounts charged to each shipper in the first instance is consistent with the terms of clause 6.11 (as amended by Required Amendment 33) and the proposed drafting in clauses 6.11(d), (e) and (f). However, the ERA requires each of clauses 6.11(d), (e) and (f) to be amended as follows to clarify that the rebate is a proportion of the excess which is the same proportion as the greater of the amount determined by the respective subclauses (i) and (ii).

6.11 Maintenance Charge for Inlet Stations and Outlet Stations

...

- (d) ... save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to an Inlet Station for the relevant month, the Operator must rebate to the Shipper a proportion of the excess being the same proportion ~~described in~~ as the greater of the amount determined by clause 6.11(d)(i) and clause 6.11(d)(ii) in respect to that month.
- (e) ... save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to an Inlet Station for the relevant month, the Operator must rebate to the Shipper a proportion of the excess being the same proportion ~~described in~~ as the greater of the amount determined by clause 6.11(e)(i) and clause 6.11(e)(ii) in respect to that month.
- (f) ... save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to an Inlet Station for the relevant month, the Operator must rebate to the Shipper a proportion of the excess being the same proportion ~~described in~~ as the greater of the amount determined by clause 6.11(f)(i) and clause 6.11(f)(ii) in respect to that month.

1468. Synergy noted that there may still be over-recovery under the Standard Shipper Contracts (and other non-reference contracts) because the rebate mechanism is not included in these contracts. While this may occur, any over-recovery under the Standard Shipper Contracts is not something that can be addressed through the terms and conditions for reference services.

⁶³¹ Synergy submission, 31 March 2020, Annexure A, p. 4.

Required Amendment 34

DBP must amend clauses 6.11(d), 6.11(e) and 6.11(f) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to clarify that the rebate given is a proportion of the excess which is the same proportion as the greater of the amount determined by the respective subclauses (i) and (ii).

The required drafting amendments are set out at paragraph 1467 of this draft decision.

Clause 6.12(b)

1469. DBP amended clause 6.12(b), which sets out provisions relating to both relevant construction costs and the maintenance charge. DBP's proposed amendments are reproduced in Appendix 5 (page 414) of this decision.
1470. DBP submitted that the amendments clarified the drafting intent and reflected the other amendments made to clause 6.⁶³² In particular:
- Amended clauses 6.11(e) and 6.11(f) calculate the maintenance charge by reference to both "contracted capacity" and "use", hence the amended words "have Contracted Capacity at, or use" in clause 6.12(b).
 - There are no existing stations that are inlet stations, hence the replacement of the words "clause 6.11(d)" (which applies to inlet stations) with "clause 6.11(e) or 6.11(f)" (which apply to outlet stations and gate stations, respectively).
1471. DBP's proposal to use the words "have Contracted Capacity at, or use" in clause 6.12(b) is consistent with the drafting elsewhere in clause 6.11. The replacement of the words "clause 6.11(d)" with "clause 6.11(e) or 6.11(f)" reflects the current list of existing stations (in schedule 5 of the terms and conditions), which does not include any inlet stations. The ERA considers that DBP's proposed amendments to clause 6.12(b) are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.
1472. Synergy stated that its submission made on clauses 6.11(d), (e) and (f) was also relevant to clause 6.12(b), which apportions certain incremental costs on the same basis. The ERA considered Synergy's submission on clause 6.11 at paragraph 1467. In the context of clause 6.12(b), the ERA considers that clauses 6.11(e) and 6.11(f) apply (once the necessary changes have been made) to the charges under clause 6.12(b) and that the amendments to clauses 6.11(e) and 6.11(f) address Synergy's submission.

Clause 6.13(b)

1473. DBP amended clause 6.13, which sets out provisions for a Contribution Agreement between the operator and shipper in respect of an outlet point. DBP's proposed amendments are reproduced in Appendix 5 (page 414) of this decision and were required to reflect the amendments made to clause 6.11, and in particular the insertion of new clauses 6.11(e) and 6.11(f).⁶³³

⁶³² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 7.20 and 7.21.

⁶³³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 7.22 and 7.23.

1474. DBP's proposed amendments to clause 6.13(b) are consequential and subject to the amendments made to clause 6.11 to separate the maintenance charge provisions for inlet stations (clause 6.11(d)), outlet stations (clause 6.11(e)) and gate stations (clause 6.11(f)). The ERA has considered these amendments at paragraph 1445 of this decision. Consistent with the ERA's considerations of clause 6.11, the amendments to clause 6.13(b) are required.

Clause 6.14

1475. DBP amended clause 6.14, which details the provisions for a Shipper Specific Facility Agreement, to correct cross-referencing errors. The amendments apply only to the terms and conditions for the P1 Service.⁶³⁴
1476. The cross-referencing errors that DBP proposes to correct exist because of a formatting issue. The current (AA4) drafting of clause 6.14 in the terms and conditions for the T1 Service and B1 Service is the same as the drafting in the terms and conditions for the P1 Service, however, the formatting is different (that is, the numbering of the subclauses is different). It is this difference in formatting that causes the cross-referencing errors.
1477. While the ERA does not require an amendment, DBP may wish to reformat clause 6.14 in the terms and conditions for the P1 Service (rather than correcting the cross-references). Reformatting clause 6.14 in the terms and conditions for the P1 Service would make the clause consistent in drafting (and formatting) across the terms and conditions for each reference service.

Clause 8 (Nominations)

Clause 8.5(b)

1478. DBP amended clause 8.5(b), which clarifies the consequences of the provision of information about available capacity in bulletins. DBP's proposed amendment, to add the words "and Aggregated P1 Service", is reproduced in Appendix 5 (page 415) of this decision and applies to the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.
1479. DBP submitted that the amendment was needed to fix an error. All the shipper's capacity services under the contract, including the aggregated service, should be referred to in clause 8.5(b).⁶³⁵
1480. DBP's proposed amendment clarifies that the aggregated service is relevant to clause 8.5(b) and is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 8.8

1481. DBP amended clause 8.8, which sets out provisions for the priority of nominations. DBP's proposed amendments are reproduced in Appendix 5 (page 415) of this decision.

⁶³⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 7.24.

⁶³⁵ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 8.1.

1482. DBP submitted that the amendments reflected the commercial understanding of shippers and the terms of clause 17 (Curtailment) that all capacity services within a row in the Curtailment Plan rank equally upon a relevant curtailment (that is, the T1 Service, P1 Service and B1 Service each rank equally upon a relevant curtailment).⁶³⁶
1483. DBP's proposed amendments clarify how the different rows in the table of schedule 6 (Curtailment Plan) are interpreted and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 8.9

1484. DBP amended clause 8.9, which sets out provisions for the scheduling of daily nominations. DBP's proposed amendments are reproduced in Appendix 5 (page 415) of this decision and apply to the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.
1485. DBP submitted that the amendments to clause 8.9 were needed for the following reasons:⁶³⁷
- Spot capacity is not offered under the reference service contracts, hence the reference to spot capacity in clause 8.9(a) needed to be deleted.
 - The clause did not properly deal with the aggregated service. The amendments to clauses 8.9(c), (d), (f) and (g) were needed so that the P1 Service and Aggregated P1 Service were dealt with in aggregate.
 - The clause contained several typographical errors that needed correcting.
1486. DBP's proposed amendments clarify the provisions for the scheduling of daily nominations. With the exception of the amendments made to the terms "Inlet Point" and "Outlet Point" in clauses 8.9(c)(i) and 8.9(f)(i), respectively, the ERA considers that the amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.
1487. DBP uncapitalised the term "Inlet Point" in clause 8.9(c)(i) and submitted that:⁶³⁸
- The reason for this change is to make it clearer that the Aggregated Service being offered to the Shipper under the Reference Contract is not limited to Inlet Points referred to in the second limb of the defined term "Inlet Point" (that is "a flange, joint or other point specified in clause 1.1(a) at which the Shipper has Contracted Capacity from time to time") (as otherwise there may be uncertainty as to whether this is a circumstance "where the context requires" as that phrase is used in the definition of "Inlet Point").

⁶³⁶ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 8.3.

⁶³⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 8.4 to 8.11.

⁶³⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 8.7(b).

1488. DBP also uncapitalised the term “Outlet Point” in clause 8.9(f)(i) for the same reason as set out above, and further indicated that the proposed change aligned with the proposed drafting of clause 8.16 (see paragraph 1497).⁶³⁹
1489. Given the definitions for the terms “Inlet Point” and “Outlet Point” in clause 1 (Interpretation) of the terms and conditions, the current (AA4) use of the defined terms in clauses 8.9(c)(i) and 8.9(f)(i) may, as submitted by DBP, create uncertainty. The ERA considers that to address this uncertainty it is preferable to specify that for the purposes of clauses 8.9(c) and 8.9(f) *inlet point* means an inlet point on the DBNGP and *outlet point* means an outlet point on the DBNGP.⁶⁴⁰ That is:
- In clause 8.9(c):
Subject to clause 8.9(d), in no case may the sum of the scheduled Capacity Services in respect of the Shipper’s Daily Nominations for P1 Service and Aggregated P1 Service:
 - (i) across all inlet points exceed the Shipper’s Total Contracted Capacity for P1 Service across all Inlet Points; or
 - (ii) at and upstream of any particular inlet point, exceed the Shipper’s Contracted Capacity for P1 Service at Inlet Points at or upstream of that inlet point,
where, for the purpose of this clause *inlet point* means an inlet point on the DBNGP.
 - In clause 8.9(f):
Subject to clause 8.9(g), in no case may the sum of the scheduled Capacity Services in respect of the Shipper’s Daily Nominations for P1 Service and Aggregated P1 Service:
 - (i) across all outlet points, exceed the Shipper’s Total Contracted Capacity for P1 Service across all Outlet Points; or
 - (ii) at and downstream of any particular outlet point, exceed the Contracted Capacity for P1 Service at Outlet Points at or downstream of that outlet point,
where, for the purpose of this clause *outlet point* means an outlet point on the DBNGP.

Required Amendment 35

DBP must amend clauses 8.9(c) and 8.9(f) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to specify that:

- For the purpose clause 8.9(c), *inlet point* means an inlet point on the DBNGP.
- For the purpose of clause 8.9(f), *outlet point* means an outlet point on the DBNGP.

The required drafting amendments are set out at paragraph 1489 of this draft decision.

Clause 8.10(b)

1490. DBP amended clause 8.10(b), which sets out provisions for the scheduling of services where there is insufficient available capacity. DBP’s proposed amendments are reproduced in Appendix 5 (page 416) of this decision and apply to the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.

⁶³⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 8.10 and footnote 11.

⁶⁴⁰ Given DBP’s submission that the changes to clauses 8.9(c) and 8.9(f) aligned with the proposed drafting of clause 8.16, the ERA’s consideration should equally apply to clause 8.16.

1491. DBP submitted that the amendments to clause 8.10(b) clarified the drafting to better account for the aggregated service and took into consideration the provisions provided for under clause 8.9.⁶⁴¹

The key reason for the changes is that, as per clause 8.9, the Operator is allowed to schedule less P1 Service at a point than the amount of the Shipper's Contracted Capacity for P1 Service at that point if the Shipper has already used that Contracted Capacity to request Aggregated P1 Service at a different point. So for this reason we have inserted the words "and except where, and to the extent, permitted or required pursuant to clause [8.9]". Further, clause 8.9 expressly on its terms allows the Operator to schedule Capacity Service which is less than the Shipper's Initial Nomination for P1 Service at a point, in the circumstances described in clauses 8.9(c) and 8.9(f) (see also the "subject to" wording in clauses 8.9(b)(ii) and 8.9(e)(ii)), so the added phrase provides improved clarity for consistency with that position.

1492. While CPM's submission did not directly address DBP's proposed amendments to clause 8.10(b), CPM submitted that, given the penalty regime for exceeding imbalance limits, it was necessary that formal notice be given (from the operator to the shipper) when the operator triggered an outlet curtailment. CPM suggested that the words "the Operator is taken to have issued a Curtailment Notice at the time it schedules that Capacity Service" (which remains unchanged from AA4) be changed to "the Operator must issue a Curtailment Notice at the time it schedules that Capacity Service".⁶⁴²
1493. The ERA considers that CPM's proposed amendment to the current (AA4) drafting of clause 8.10(b) accurately reflects the obligations of the operator to issue a Curtailment Notice and requires the amendment to be made. Subject to this amendment, DBP's proposed amendments clarify how the provisions in clause 8.10(b) work and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Required Amendment 36

DBP must amend clause 8.10(b) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to replace the words "the Operator is taken to have issued a Curtailment Notice at the time it schedules that Capacity Service" with the words "the Operator must issue a Curtailment Notice at the time it schedules that Capacity Service".

Clause 8.15

1494. DBP amended clause 8.15, which sets out the shipper's default provision for the renomination process, to delete the words "from the previous Gas Day's nomination". DBP's proposed amendment is reproduced in Appendix 5 (page 417) of this decision.
1495. DBP submitted that these words were deleted as it was preferable for the shipper's most recent nomination to remain unchanged when a subsequent renomination was not effective, rather than having to go back to the previous gas day's nomination. The

⁶⁴¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 8.13 to 8.17.

⁶⁴² CITIC Pacific Mining Management Pty Ltd submission, p. 14.

proposed amendment also aligned the reference service contracts with the negotiated contracts in place with shippers.⁶⁴³

1496. DBP's proposed amendment is consistent with the drafting in the Standard Shipper Contracts (as published on DBP's website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 8.16

1497. DBP amended clause 8.16, which sets out provisions for nominations at inlet and outlet points where the shipper does not have sufficient contracted capacity. DBP's proposed amendments are reproduced in Appendix 5 (page 417) of this decision and apply to the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made with the following exceptions:

- In the terms and conditions for the T1 Service, there is no equivalent new clause 8.16(d).
- In the terms and conditions for the B1 Service, the words "provided that such nomination does not result in any service under this Contract becoming Forward Haul" are included in clauses 8.16(a) and 8.16(b).

1498. DBP submitted that the amendments clarified the terms on which the aggregated service was offered.⁶⁴⁴ Specifically, and in the context of the P1 Service:

Clause 8.16(c): Aggregated P1 Service is derived from the Shipper's P1 Service, so it is fair and reasonable, and intended, that the Aggregated P1 Service is a Forward Haul Service.

Clause 8.16(d): Aggregated P1 Service cannot be used so as to facilitate the Shipper delivering Gas upstream of the Inlet Point, or receiving Gas downstream of the Outlet Point, from which the Aggregated P1 Service is derived (i.e. the point at which the Shipper holds the relevant Contracted Capacity).

Clause 8.16(e): the new clause reminds the reader of clause 6.13 (... which helps to ensure that users of the Contract do not get caught out by this requirement if they do not read the whole Contract at the relevant time they consider this clause).

1499. CPM's submission addressed DBP's proposed amendment to clause 8.16. CPM submitted that:⁶⁴⁵

The new conditions must all be satisfied in order for Aggregated P1 Service to be provided at either an inlet point or outlet point (above CS9). However, clause 6.13 provides that agreements may be made in respect of not only outlet points but also inlet points, and, in certain circumstances, no agreement will be required. Accordingly, the last condition relating to "an agreement in relation to the relevant outlet point" may not be able to be satisfied if Aggregated P1 Service is required in respect of an inlet point.

1500. As submitted by CPM, clause 6.13 (Contributions Agreement) provides for agreements in respect of inlet points and outlet points. Given this, and DBP's reasons for including this clause (to "remind the reader of clause 6.13") the ERA requires proposed new clause 8.16(e) to be amended to read: "the Shipper has complied with its obligations under clause 6.13 in respect of the relevant inlet point or outlet point".

⁶⁴³ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 8.18 and 8.19.

⁶⁴⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 8.21 to 8.24.

⁶⁴⁵ CITIC Pacific Mining Management Pty Ltd submission, p. 14.

1501. Subject to amending clause 8.16(e), DBP’s proposed amendments to clause 8.16 clarify the criteria for nominations and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Required Amendment 37

DBP must amend clause 8.16(e) of the proposed terms and conditions for the P1 Service and B1 Service to read:

(e) the Shipper has complied with its obligations under clause 6.13 in respect of the relevant inlet point or outlet point.

The same amendment must also be made to clause 8.16(d) of the proposed terms and conditions for the T1 Service (which is the equivalent clause).

Clause 8.17

1502. DBP amended clause 8.17, which sets out provisions for nominations for the aggregated service. DBP’s proposed amendments are reproduced in Appendix 5 (page 418) of this decision and apply to the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.
1503. DBP submitted that the amendments were made to clarify, and not change, the terms on which the aggregated service is offered.⁶⁴⁶
- The amendment to clause 8.17(a) clarified that all aggregated services have equal priority in the Curtailment Plan, regardless of whether the aggregated service is derived from T1 Service, P1 Service or B1 Service.
 - The amendment to clause 8.17(c) was consistent with clause 8.16, which provides that the aggregated service is derived from the right to make certain nominations for P1 Service.
 - The amendment to clause 8.17(d) reminded the reader that the commodity charge applies to the aggregated service P1 Service.
1504. DBP’s proposed amendments to clause 8.17 reflect and clarify existing provisions for the aggregated service and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 9 (Imbalances)

Clause 9.3

1505. DBP amended clause 9.3, which confirms what the shipper’s accumulated imbalance is, to delete the statement: “The Accumulated Imbalance at the Capacity Start Date is zero”.
1506. DBP submitted that the amendment was needed to fix a drafting error. The shipper’s accumulated imbalance is calculated as a single figure across all the shipper’s capacity services (contracts). That is, if a shipper has another capacity service (contract) in place at the time it enters into a reference service contract, then the

⁶⁴⁶ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 8.26 to 8.29.

accumulated imbalance on the capacity start date under the reference service contract should be same figure as the accumulated imbalance under all of the shippers' existing contracts at that date, not zero. The amendment also aligned the reference service contracts with the negotiated contracts in place with shippers.⁶⁴⁷

1507. DBP's proposed amendment is consistent with the Standard Shipper Contracts (as published on DBP's website), which state: "At the end of any Gas Day, the Accumulated Imbalance is the Accumulated Imbalance at the end of the previous Gas Day plus the Shipper's Daily Imbalance on the Gas Day."
1508. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 9.4

1509. DBP amended clause 9.4, which requires the operator to provide notice of the shipper's imbalances. DBP's proposed amendments are reproduced in Appendix 5 (page 418) of this decision.
1510. DBP submitted that the amendment to change the time from 13:30 hours to 13:00 hours aligned the reference service contracts with the negotiated contracts in place with shippers. The amendment to use the term "Capacity Start Date", instead of "Contract Commencement Date" was to fix a drafting error (the latter term is not a defined term in the terms and conditions).⁶⁴⁸
1511. DBP's proposed amended time of 13:00 hours is consistent with the time in the Standard Shipper Contracts (as published on DBP's website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.
1512. The other amendment is an administrative amendment to use the defined term in clause 1 (Interpretation) and is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 9.5

1513. DBP amended clause 9.5, which sets out provisions for the accumulated imbalance limit. DBP's proposed amendments are reproduced in Appendix 5 (page 418) of this decision.
1514. DBP submitted that:⁶⁴⁹
- The amendment to clause 9.5(a) was needed to remove the reference to spot transactions because spot transactions are already captured by the words "Contracted Capacity across all of the Shipper's Capacity Services" and must not be double counted. The inclusion of "P1 Service and B1 Service" clarified the inclusion of these services.

⁶⁴⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 9.1 to 9.3.

⁶⁴⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 9.4 and 9.5.

⁶⁴⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 9.6 to 9.18.

- The amendment to clause 9.5(b) to use the words “either or both” (instead of “and/or”) was more certain in its meaning and the addition of the word “immediate” clarified that the timeframe for the shipper to procure compliance was the same as if it were complying itself.
 - The amendment to clause 9.5(e), to insert the words “up to the Outer Accumulated Imbalance Limit” was needed to accommodate the addition of new clauses 9.6(a) and 9.6(b) – that is, the amendment was consequential to the creation of new clause 9.6 (Excess Imbalance Charge).
1515. DBP’s proposed amendments to clauses 9.5(a) and 9.5(b) reflect and clarify existing provisions for the accumulated imbalance limit and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.
1516. The amendment to clause 9.5(e) is consequential and subject to DBP’s proposed amendment to insert new clause 9.6, which is discussed below. Consistent with the ERA’s considerations of clause 9.6, the amendment to insert the words “up to the Outer Accumulated Imbalance Limit” is required.

New clause 9.6

1517. DBP amended existing clause 9.5(g) to create new clause 9.6 (Excess Imbalance Charge), which sets out provisions for an excess imbalance charge. DBP’s proposed amendments are reproduced in Appendix 5 (page 419) of this decision.
1518. DBP submitted that the amendments aligned the reference service contracts with the negotiated contracts in place with shippers. In particular:⁶⁵⁰
- New clauses 9.6(a) and 9.6(b) added a separate remedial approach for instances where the shipper exceeded its outer accumulated imbalance limit of 20 per cent of the sum of contracted capacity across all of its capacity services. This approach was an agreed outcome from arms’ length negotiations with shippers in 2004.
 - The amendment of clause 9.6(c) to include a reference to clause 9.6(b) was needed, and consequential to, the amendment to separate the application of the excess imbalance charge between the regime in clause 9.5(e) (for imbalances above 8 per cent and up to 20 per cent) and the regime in clause 9.6(b) (for imbalances above 20 per cent). Clause 9.6(c) applies to the entire imbalance charge, so references to clauses 9.5(e) and 9.6(b) are needed.
1519. CPM’s submission addressed DBP’s proposal to insert new clause 9.6 into the terms and conditions. CPM submitted:⁶⁵¹

New clause 9.6 appears to introduce a new concept of an “Outer Accumulated Imbalance Limit” by locking in a 20% accumulated limit and provides that if the Shipper’s Accumulated Imbalance exceeds this limit then the Shipper must pay the Excess Imbalance Charge regardless of whether that Shipper has agreed a different Imbalance Limit under a separate and valid contract for that Gas Day. This could be a reduction of the rights of a Shipper which should be considered as unfair to apply where an existing contract sets a separately agreed limit.

⁶⁵⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 9.19 to 9.31.

⁶⁵¹ CITIC Pacific Mining Management Pty Ltd submission, pp. 14-15.

Whilst [CPM] consider the changes reasonable, it is concerned that some Shippers existing rights may be reduced if the change proceeds unaltered.

1520. DBP's proposal to introduce provisions for an excess imbalance charge (new clause 9.6) is consistent with the Standard Shipper Contracts (as published on DBP's website). While the drafting of the provisions in the terms and conditions for reference services is different in places, the proposed provisions are substantively consistent with the provisions in the Standard Shipper Contracts.
1521. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective. However, given the submission made by CPM, the ERA considers that clause 9.6 should be subject to any other imbalance limit that has been agreed. For example, clause 9.7 (previously clause 9.6) provides for agreements to increase the imbalance limit in particular circumstances.⁶⁵² In such circumstances, where an agreement has been made to increase the imbalance limit, the provisions of clause 9.6 should be subject to this agreement.
1522. The ERA further considers that clause 9.5, which sets out provisions for the accumulated imbalance limit, should also be subject to any other imbalance limit that has been agreed.

Required Amendment 38

DBP must amend clause 9.6(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to make the clause subject to any other agreement to change the imbalance limit by inserting the following words at the beginning of the clause: "Except where the Shipper has contracted with the Operator for a different Outer Accumulated Imbalance Limit, ...".

DBP must also amend clause 9.5(a) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to make the clause subject to any other agreement to change the imbalance limit by inserting the following words at the beginning of the clause: "Except where the Shipper has contracted with the Operator for a different Accumulated Imbalance Limit, ...".

Clause 9.7 (previously clause 9.6)

1523. DBP amended clause 9.7, which sets out provisions for the balancing of a shipper's gas supply in particular circumstances, to include a reference to "the Outer Accumulated Imbalance Limit" and update several cross-references.
1524. DBP submitted that the amendments were required as a result of new clauses 9.6(a) and 9.6(b).⁶⁵³
1525. The amendments to clause 9.7 are consequential and subject to DBP's proposed amendment to insert new clause 9.6 (Excess Imbalance Charge), which is discussed at paragraph 1517 of this decision. Consistent with the ERA's considerations of clause 9.6, the amendments to clause 9.7 are required.

⁶⁵² DBP has proposed amendments to clause 9.7 to include the words "or the Outer Accumulated Imbalance Limit (or both)" so that the clause applies to both the accumulated imbalance limit (clause 9.5) and outer accumulated imbalance limit (clause 9.6).

⁶⁵³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 9.32.

Clause 9.8 (previously clause 9.7)

1526. DBP amended clause 9.8, which sets out remedies for breach of imbalance limits. DBP's proposed amendments are reproduced in Appendix 5 (page 419) of this decision.
1527. DBP submitted that new clause 9.8(a) aligned the express imbalance remedies across the reference service contracts and negotiated contracts in place with shippers and reflected an agreed outcome from arms' length negotiations with shippers in 2004. The amendments to cross-references resulted from the amendments to add new clauses.⁶⁵⁴
1528. CPM addressed DBP's proposal to insert new clause 9.8(a) and requested that it be deleted on the basis that it added confusion and increased the potential for disputes. CPM submitted:⁶⁵⁵
- New clause 9.8(a) provides additional remedy for the Operator to take against the Shipper for exceeding the Accumulated Imbalance Limit and in doing it turns a certain, well understood and easily calculated remedy (payment of the Excess Imbalance Charge) into an uncertain claim for damages, which has the potential to give rise to disputes. Excess Imbalance Charge act as, essentially, liquidated damages for the imbalance. Even though the damages claim is reduced by the Excess Imbalance Charges paid, having a separate damages claim defeats the utility of having the Excess Imbalance Charge at all. Leaving it as it was allows both the Operator and Shippers easily understood remedy provisions that can easily move forward with no dispute.
1529. CPM further submitted that if new clause 9.8(a) were to remain in the terms and conditions, other amendments were needed. In particular, the reference to "clause 9.2" should be removed.⁶⁵⁶
1530. DBP's proposed amendment to insert new clause 9.8(a) is consistent with the Standard Shipper Contracts (as published on DBP's website), except for a reference to "clause 9.2" in the first line (the Shipper Contracts only make reference to "clause 9.5(b)(iii)").
1531. Based on DBP's reason for the introduction of the clause (that is, to align the express imbalance remedies across the reference service contracts and negotiated contracts in place with shippers) and CPM's submission on the drafting of clause 9.8(a) (if it is to remain in the terms and conditions) the ERA considers that the drafting should be materially consistent with the drafting in the Standard Shipper Contracts. That is, clause 9.8(a) should only apply in respect of "an action for breach of clause 9.5(b)(iii)".
1532. In any case, CPM submitted that new clause 9.8(a) was an additional and unwarranted remedy for the operator and should not be included in the terms and conditions. CPM further suggested that the existing provisions for remedies for the breach of imbalance limits was the normal and accepted practice for pipeline services in Western Australia.
1533. The current (AA4) provisions for remedies for breach of imbalance limits, as set out in clauses 9.7(a), (b) and (c), provide for:

⁶⁵⁴ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 9.33 to 9.36.

⁶⁵⁵ CITIC Pacific Mining Management Pty Ltd submission, p. 15.

⁶⁵⁶ CITIC Pacific Mining Management Pty Ltd submission, pp. 15-16.

- The recovery of the excess imbalance charge or excess imbalance charges where permitted by and in accordance with the clause.
 - The refusal to receive gas from the shipper at an inlet point or refuse to deliver gas to the shipper at an outlet point, to bring the shipper's accumulated imbalance within the accumulated imbalance limit.
 - Any combination of the rights and remedies set out above.
1534. The ERA considers CPM's reasoning for deleting proposed clause 9.8(a) to be reasonable. The existing remedies for breach of imbalance limits are well established and, in the case of the excess imbalance charge, can be easily calculated under and in accordance with the relevant clause.⁶⁵⁷ A provision that provides for a separate damages claim (under clause 23) may create uncertainty as to the remedy being sought and increase the level of disputes.
1535. Given that DBP's proposed drafting of new clause 9.8(a) is materially different to the drafting in the Standard Shipper Contracts, and the matters raised by CPM, the ERA considers that on balance the existing remedies for breach of imbalance limits are likely to better meet the national gas objective. The existing provisions are sufficiently clear in their drafting and provide objective remedies to efficiently address breaches of imbalance limits.

Required Amendment 39

DBP must amend clause 9.8 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete proposed new clause 9.8(a).

Clause 9.9 (previously clause 9.8)

1536. DBP amended clause 9.9(b), which details provisions for trading in imbalances, to amend the timeframe for giving notice. DBP's proposed amendments are reproduced in Appendix 5 (page 420) of this decision.
1537. DBP submitted that the amendments to the drafting reflected current operational practice and aligned the reference service contracts with the negotiated contracts in place with shippers.⁶⁵⁸
1538. DBP's proposed drafting is consistent with the drafting in the Standard Shipper Contracts (as published on DBP's website). No submissions to the ERA addressed DBP's proposed amendment to clause 9.9(b).
1539. The ERA considers that in the absence of any submissions that dispute the current practice, DBP's proposed amendment is consistent with the national gas objective – the amendment reflects current operational practices for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁶⁵⁷ Clauses 9.5(e) and 9.6(b) detail the calculation of the excess imbalance charge when the shipper exceeds the accumulated imbalance limit and outer accumulated imbalance limit, respectively.

⁶⁵⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 9.38.

Clause 9.10 (previously clause 9.9)

1540. DBP amended clause 9.10, which confirms the timing and effect of cashing out imbalances, to amend the heading to read: “Cashing out imbalances at end of Contract” (instead of “Cashing out imbalances at end of each Gas Month”).
1541. DBP submitted that the amended heading, together with minor wording changes, better reflected the substance of the clause and aligned the reference service contracts with the negotiated contracts in place with shippers.⁶⁵⁹
1542. While clause 2.2 of the terms and conditions provides that headings are inserted for convenience and do not affect the interpretation of the contract, the ERA considers it preferable to amend headings where they are potentially misleading. DBP’s other amendments to wording are administrative in nature (grammatical) and do not materially alter the provisions of the clause.

Clause 10 (Peaking)**Clause 10.3(a)**

1543. DBP amended clause 10.3(a), which sets out the consequences of exceeding the hourly peaking limit. DBP’s proposed amendments are reproduced in Appendix 5 (page 420) of this decision.
1544. DBP submitted that:⁶⁶⁰
- The amendment to clause 10.3(a)(ii) to replace the words “will adversely impact ... on any other Capacity, or any Other Reserved Service” with “will adversely impact ... on any other Capacity Service” improved the drafting and aligned with the intended purpose of the clause, which is to set, as one of the preconditions to the operator exercising certain rights where peaking limits are breached, that there be an actual or likely adverse effect on other services on the pipeline. The amended drafting also aligned the reference service contracts with the position in the negotiated contracts in place with shippers.
 - The amendment to clause 10.3(a)(iii) to insert the word “immediate” clarified the timeframe for the shipper to procure compliance with a notice to cease exceeding the hourly peaking limit. That is, the shipper is to immediately comply itself or immediately procure compliance.
1545. DBP’s proposed amendments clarify the provisions of the clause and are consistent with the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective. Additionally, the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clauses 10.3(d), 10.3(e) and 10.3(g)

1546. DBP amended cross-references in clauses 10.3(d), (e) and (g), which set out consequences for exceeding the hourly peaking limit. DBP submitted that the

⁶⁵⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 9.39 to 9.41.

⁶⁶⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 10.1, 10.2, 10.7 and 10.12.

amendments were consequential to the proposed amendment to insert new clause 10.4 (Outer Hourly Peaking Limit), which is discussed below.⁶⁶¹

1547. Consistent with the ERA's considerations of clause 10.4, the consequential amendments to clauses 10.3(d), (e) and (g) are required.

New clause 10.4

1548. DBP inserted new clause 10.4 (Outer Hourly Peaking Limit) into the terms and conditions to introduce provisions for an outer hourly peaking limit. DBP's proposed new clause is reproduced in Appendix 5 (page 421) of this decision.
1549. DBP submitted that clause 10.4 was inserted to create a separate remedial approach where the shipper exceeded its outer hourly peaking limit of 140 per cent of the aggregate MHQ calculated across relevant outlet points across all the shipper's capacity services.⁶⁶² The new clause aligned the reference service contracts with the negotiated contracts in place with shippers, which included the outer threshold remedy as an agreed outcome from arms' length negotiations in 2004.⁶⁶³
1550. DBP further explained the workings of new clause 10.4 as follows:⁶⁶⁴
1551. The charge under clause 10.4 for exceeding the 140% limit is levied at the same rate as the charge under clause 10.3 for exceeding the 125% limit. The charge under clause 10.4 only applies to gigajoules above the 140% figure and only if a separate notice, under new clause 10.4(e), is first issued. If the notice under clause 10.4(e) is issued then, between the 125% Hourly Peaking Limit and up to the 140% Outer Hourly Peaking Limit, the provisions of clause 10.3 continue to apply in their existing form. If no notice is issued under clause 10.4(e), then the entire amount above the 125% Hourly Peaking Limit is subject to the application of the provisions of clause 10.3 in their existing form.
1552. There is no duplication of charges in respect of exceeding the 125% Hourly Peaking Limit and the 140% Outer Hourly Peaking Limit, as a result of the words "up to the Outer Hourly Peaking Limit" in the charging provision in clause 10.3(d)(ii), which applies where a notice is given under clause 10.4(e) (being a precondition to levying the charge for exceeding the Outer Hourly Peaking Limit). That is, if a notice is given under clause 10.4(e) enlivening the charging regime in clause 10.4, then above 125% and up to 140%, the Shipper is charged under clause 10.3(d)(ii) (if the relevant preconditions in clause 10.3 are met) and then, above 140%, the Shipper is charged under clause 10.4(b). The rate of the charge is the same in each case, it is merely the preconditions to charging that differ.
1553. DBP's proposal to insert new clause 10.4 is consistent with the Standard Shipper Contacts. For the reasons stated at paragraph 1276, the ERA considers that

⁶⁶¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 10.16 to 10.18.

⁶⁶² In the terms and conditions, "MHQ" means: "(a) for an Outlet Point on a particular Gas Day in respect of a shipper, (subject to clause 17.7(c)(vi)) one twenty fourth of the sum of the quantities referred to as Contracted Capacity for that Outlet Point across all of the shipper's Capacity Services for that Gas Day in respect of that shipper; and (b) for an Inlet Point on a particular Gas Day in respect of a shipper, one twenty fourth of the sum of the quantities referred to as Contracted Capacity for that Inlet Point across all of the shipper's Capacity Services for that Gas Day in respect of that shipper."

⁶⁶³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 10.21.

⁶⁶⁴ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 10.19 and 10.20.

amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 10.6

1554. DBP amended clause 10.6, which details the remedies for breach of peaking limits, to insert a reference to clause 10.2.
1555. DBP submitted that both clauses 10.2 and 10.3(a)(iii) contained obligations where a breach by the shipper should result in damages if any are suffered by the operator. Specifically, the obligation in clause 10.2 is an obligation to do all things expected of a reasonable and prudent person to ensure that the shipper's hourly quantity for each gas hour does not exceed the relevant hourly peaking limits.⁶⁶⁵
1556. DBP's proposed amendment to clause 10.6 reflects and clarifies existing provisions for remedies for breach of peaking limits and are consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP. However, further administrative amendments are required to the terms and conditions for the B1 Service to correct duplicate references.⁶⁶⁶

Clause 11 (Overrun)

1557. DBP amended clause 11.2, which contains provisions for the operator to give an unavailability notice to the shipper to advise of the unavailability or limited availability of overrun gas. DBP's proposed amendments are reproduced in Appendix 5 (page 421) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.
1558. DBP submitted that:⁶⁶⁷
- The amendment to clause 11.2(a) was needed to correct a drafting error and aligned the reference service contracts with the negotiated contracts in place with shippers. Clause 11 concerns the taking of overrun gas by the shipper, where "overrun gas" is defined as "gas in excess of the quantities of contracted capacity across all that shipper's capacity services."
 - The amendment to clause 11.2(b) was needed to correct a drafting error – overrun gas can only be received at an outlet point (and not an inlet point).
1559. DBP further acknowledged that the amendment to clause 11.2(a) arguably broaden the scheduled services that the operator could consider when determining whether to give an unavailability notice. Despite this, DBP submitted that the amendment was sensible and reasonable for the following reasons:⁶⁶⁸
- A shipper's right to overrun gas was always intended to be tempered by it not interfering with other shippers taking their capacity services.

⁶⁶⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 10.27 and 10.28.

⁶⁶⁶ For example, in clause 10.6(a) the words read: "for breach of clause 10.2 or **10.310.3(a)(iii)** limited to ..." [**emphasis added**].

⁶⁶⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 11.2, 11.3 and 11.9.

⁶⁶⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 11.4 and 11.5.

- Overrun gas is calculated as a single figure across all the shipper's capacity services.
 - If a shipper is taking overrun gas, it is taking gas in excess of its express contractual rights and it is therefore appropriate that, where such excess will, or is likely to, affect any other shipper's entitlement to its schedule nomination, the operator should be able to issue an unavailability notice.
1560. DBP's proposed amendment to clause 11.2(a) is substantially consistent with the Standard Shipper Contacts. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective. Additionally, the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 14 (Relocation)

Clause 14.2

1561. DBP amended clause 14.2, which sets out provisions for the assessment of a requested relocation. DBP's proposed amendments are reproduced in Appendix 5 (page 422) of this decision and apply to the terms and conditions for the P1 Service and T1 Service. In the terms and conditions for the B1 Service analogous amendments were made, with additional amendments to make the clause applicable to a back haul service.
1562. DBP submitted that:
- The amendments to clause 14.2(b) corrected a drafting error by clarifying that a relocation was not automatically available in circumstances where the relocation, if made, would cause a notional change in the direction of the capacity service even if there was no resulting physical change in the direction of gas flows on the DBNGP. There are no reference service contracts or negotiated contracts that allow the relevant terms of service to change from forward haul to back haul (or vice versa) where the notional direction of gas flow changes pursuant to a relocation. The amendments further clarified that the inlet point and outlet point were those points at which the shipper has contracted capacity under the contract.⁶⁶⁹
 - The amendments to clause 14.2(c) clarified that if a relocation is "not an authorised relocation" pursuant to clause 14.2(b), the relocation cannot be an "authorised relocation" under clause 14.2(c). The amendments further simplified the drafting by removing duplicated requirements.⁶⁷⁰
 - The amendments to clause 14.2(d) were the same as the amendments made to clause 14.2(c), except that clause 14.2(d) applied to outlet points (whereas clause 14.2(c) applied to inlet points).⁶⁷¹

⁶⁶⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 12.2 to 12.5.

⁶⁷⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 12.9 to 12.12.

⁶⁷¹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 12.16.

- Additional amendments were needed to clauses 14.2(b)(iii), 14.2(c)(i) and 14.2(d)(i) in the terms and conditions for the B1 Service to correct drafting errors to make the clauses applicable to the back haul service.^{672, 673}
1563. CPM's submission addressed the provisions of clause 14.2(b)(iii). While CPM did not request that the existing drafting be retained, its submission indirectly suggests that this should be the case. CPM submitted:⁶⁷⁴
- [DBP's proposed] amendment provides that a Requested Relocation will not be an Authorised Relocation if the proposed relocation would result in an Inlet Point at which there is Contracted Capacity being downstream of an Outlet Point at which there was Contracted Capacity under the Contract. Formerly, a Requested Relocation would have to change the normal direction of Gas Flow in the DBNGP before it would be considered "not an Authorised Relocation".
- [CPM] suggest the entire B1 and P1 agreements be reviewed on the basis that forward haul and back haul may become obsolete within the AA5 period with the generally understood position that the north part of the DBNGP will become bidirectional in 2020 when / if [the North West Shelf] delivered volumes decrease.
1564. The ERA has considered the matter concerning the North West Shelf in the context of pipeline services (see paragraph 88 of this decision). Until there is certainty on any significant changes in the operations of the DBNGP (including, for example, a change in the direction of gas flow), DBP's proposed amendment to clause 14.2(b)(iii) must be considered based on actual and expected operations. DBP has not made any proposed amendments to the terms and conditions based on expected changes to the nature of the reference services resulting from changes to gas flows in the north-west.
1565. DBP's proposed amendments to clause 14.2(b), which remove the words "and it would change the normal direction of Gas flow in the DBNGP", are not directed to a particular gas flow. Rather, the amendment is directed to removing an '*as of right relocation*' in circumstances where the relocation (if made) would cause a notional change in direction of the capacity service under that contract. DBP further noted that the original formulation of the clause was a drafting mistake and was inconsistent with other terms of the contracts for reference services. In this context, and as there have not been any DBP proposed amendments to the terms and conditions based on expected changes to the nature of the reference services resulting from changes to gas flows in the north-west, the ERA considers that these amendments are consistent with the national gas objective – drafting amendments that correct and/or clarify the terms and conditions for reference services promotes efficient investment in, and efficient operation and use of, the DBNGP.
1566. DBP's proposed amendments to clauses 14.2(c) and 14.2(d) further clarified that where a relocation was "not an authorised relocation" pursuant to clause 14.2(b), the relocation could not be an "authorised relocation" under clause 14.2(c) which applied to inlet points, or clause 14.2(d) which applied to outlet points. The deletion of the requirement to satisfy the operator's technical and operational requirements from the clauses further simplified the drafting by removing a requirement that is already covered by clause 14.2(b). The ERA considers these amendments are consistent with the national gas objective – the amendments clarify and/or simplify the terms

⁶⁷² DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 12.7, 12.14 and 12.18.

⁶⁷³ In clauses 14.2(b)(iii) and 14.2(c)(i) the reference to "downstream" was replaced with "upstream", and in clause 14(d)(i) the reference to "downstream" was replaced with "upstream".

⁶⁷⁴ CITIC Pacific Mining Management Pty Ltd submission, p. 17.

and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 14.7(a)

1567. DBP amended clause 14.7(a), which sets out the charges for relocation and provides that, unless agreed in writing, such charges will not be reduced in certain circumstances. DBP's proposed amendments are reproduced in Appendix 5 (page 423) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the B1 Service and T1 Service analogous amendments were made where applicable.
1568. For the terms and conditions for the P1 Service and B1 Service, DBP submitted that the amendments were needed to reflect the way in which the P1 and B1 Commodity Tariffs and P1 and B1 Capacity Reservation Tariffs were calculated under the respective reference service contract.⁶⁷⁵
1569. For the terms and conditions for the T1 Service, DBP submitted that the amendments clarified that the T1 Capacity Reservation Tariff did not reduce because of any reduction in the distance between the inlet point(s) and outlet point(s) at which the shipper had contracted capacity.⁶⁷⁶
1570. DBP's proposed amendments clarify how each of the tariffs for reference services are calculated under the respective terms and conditions that apply. The ERA considers that these amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 14.7(b)

1571. DBP amended clause 14.7(b), which sets out the charges for relocation to a point downstream of the southern most point of the DBNGP. The amendment only applies to the terms and conditions for the B1 Service and is as follows:

If a relocation of Capacity under this clause 14 results in Gas being transported to the Shipper to, or from, or Received from the Shipper at, a point downstream of the southern most point of the DBNGP as at 30 December 2003 (being Clifton Road), in addition to the matters described in clause 14.7(c), the Shipper ...

1572. DBP submitted that the amendment was needed to correct a drafting error – under a B1 Service, if a relocation occurred the transportation of gas would most likely commence from a southerly point on the DBNGP and be transported northwards.⁶⁷⁷
1573. The “Back Haul B1” Standard Shipper Contract states the following:⁶⁷⁸

If a relocation of Capacity under this clause results in Gas being transported to the Shipper from, or Received from the Shipper at, a point downstream of the southern most point of the DBNGP as at 30 December 2003 (being Clifton Road), in addition to the matters described in clause 14.7(c), the Shipper ...

⁶⁷⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 12.20.

⁶⁷⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 12.26.

⁶⁷⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 12.28.

⁶⁷⁸ DBP, *Standard Shipper Contract – Back Haul B1 (June 2015)*, clause 14.7(b) ([online](#)) (accessed May 2020).

1574. While the proposed drafting in the terms and conditions for B1 Service is substantially consistent with the drafting of the same clause in the Standard Shipper Contract, the ERA considers that the drafting in the Standard Shipper Contract is preferable and more accurate, and is consistent with the national gas objective – drafting amendments that correct and/or clarify the terms and conditions for reference services promotes efficient investment in, and efficient operation and use of, the DBNGP.

Required Amendment 40

DBP must amend clause 14.7(b) of the proposed terms and conditions for the B1 Service to make the clause read:

(b) Except where the Shipper has contracted with the Operator for a different Outer Accumulated Imbalance Limit, if a relocation of Capacity under this clause results in Gas being transported to the Shipper from, or Received from the Shipper at, a point downstream of the southern most point of the DBNGP as at 30 December 2003 (being Clifton Road), in addition to the matters described in clause 14.7(c), the Shipper ...

Clause 14.7(c)

1575. DBP amended clause 14.7(c), which sets out the charges for relocation from an inlet point upstream of Main Line Valve 31 (MLV31) to an outlet point downstream of Compressor Station 9 (CS9). DBP's proposed amendments are reproduced in Appendix 5 (page 423) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the B1 Service analogous amendments were made to align with the P1 Service amendments. Separate amendments were made to clause 14.7 in the terms and conditions for the T1 Service, which sets out the charges for relocation to an outlet point upstream of CS9.
1576. For the terms and conditions of the P1 Service and B1 Service, DBP submitted that the amendments better reflected the intent of the clause – the existing drafting does not inform of the exact terms and conditions that apply to the relocated capacity.⁶⁷⁹
1577. For the terms and conditions for the T1 Service, DBP submitted that the amendments were drafting improvements that clarified the terms for the capacity service did not change.⁶⁸⁰
1578. DBP's proposed changes to clause 14.7 in the terms and conditions for the P1 and B1 Services clarify how a part haul service and back haul service, respectively, are to be treated in instances where they become a full haul service following a relocation of capacity. The proposed changes to clause 14.7 in the terms and conditions for the T1 Service, clarify that the terms for the service do not change in instances where a full haul service becomes a part haul service. The ERA considers that these amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁶⁷⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 12.30.

⁶⁸⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 12.34.

Clause 14.9

1579. DBP amended clause 14.9, which provides for the contract to be amended to reflect the requested relocation, to add the words “but without prejudice to clause 14.7(a) or 14.7(c)” to the end of the clause.
1580. DBP submitted that the amendment provided a reminder of the provisions in clause 14.7(a) and 14.7(c) and clarified the effect of such changes to the Access Request Form.⁶⁸¹
1581. Clause 14.7 sets out provisions dealing with the charges for relocation. DBP’s proposed amendments clarify that where an agreement for relocation is reached, the requested relocation and related terms and conditions must be given effect by amending the Access Request Form in accordance with clause 38 (Revocation, Substitution and Amendment), but without prejudice to clause 14.7(a) or 14.7(c). The ERA considers that DBP’s proposed amendment is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 15 (Metering)**Clause 15.3**

1582. DBP amended clause 15.3, which sets out provisions for metering uncertainty. DBP’s proposed amendments are reproduced in Appendix 5 (page 425) of this decision.
1583. DBP submitted that the amendments were made for consistency with the negotiated contracts in place with shippers and to distinguish between levels of accuracy required for primary metering equipment and alternative metering equipment.⁶⁸²
- The amendments to clause 15.3(a)(i) to change the words “plus or minus 0.75% of Actual Mass Flow Rate” to “plus or minus 1% of Actual Mass Flow Rate” reflected the uncertainty level for measuring in line with the negotiated contracts.
 - The amendments to clauses 15.3(a)(i) and 15.3(c) to make the clauses “subject to clause 15.3(b)” reflected the insertion of a new clause for metering certainty measures in connection with alternative metering equipment.
 - New clause 15.3(b) sets out the metering certainty measures for alternative metering equipment, which is equipment incorporated into metering stations as a failsafe if the uncertainty regime differs from primary metering equipment. Metering equipment is only “alternative” metering equipment if it meets the criteria in clause 15.3(b), being that it is not used or likely to be used for more than 72 hours in any gas year and that it is designed, adjusted and operated so as to achieve measurement to within a maximum uncertainty of plus or minus two per cent of actual mass flow rate.
1584. DBP’s proposed amendments are consistent with the drafting of the Standard Shipper Contracts (as published on DBP’s website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and

⁶⁸¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 12.36.

⁶⁸² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 13.1 to 13.5.

conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 15.4(c)

1585. DBP amended clause 15.4(c), which details the primary measurements and derived variables associated with gas quality and quantity for inlet metering equipment. DBP's proposed amendment is reproduced in Appendix 5 (page 425) of this decision.
1586. DBP submitted that clause 15.4(c) listed the gas quality and quantity information that inlet metering equipment must measure and record. This information benefits the shipper as it allows the shipper to ensure the gas received from producers meet their requirements under their Gas Supply Agreements. The amendment to add "LPG content in tonnes per TJ of Gas" corrected an omission and reflected what occurred in practice.⁶⁸³
1587. The proposed amendment to include "LPG content in tonnes per TJ of Gas" is consistent with the Standard Shipper Contracts (as published on DBP's website). No submissions to the ERA addressed DBP's proposed amendment to clause 15.4(c). The ERA considers that in the absence of any submissions that dispute the current practice, DBP's proposed amendment is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clauses 15.5(e) and 15.5(g)

1588. DBP deleted clause 15.5(e) from the terms and conditions and made consequential amendments to clause 15.5(g) to correct cross-references. DBP's amendments are reproduced in Appendix 5 (page 426) of this decision.
1589. Clause 15.5(e) contained provisions concerning the provision of information under the Operating Agreement between ATCO and DBP. DBP submitted that the Operating Agreement had ended and was no longer in effect, hence the clause was not needed.⁶⁸⁴
1590. DBP further submitted that the term "Networks", which is defined as "ATCO Australia Pty Ltd ABN 90 089 531 975 (formerly WA Gas Networks Pty Ltd and before that AlintaGas Networks Pty Ltd)", could also be deleted from clause 1 of the terms and conditions and the term "Distribution Network" amended as follows:⁶⁸⁵

Distribution Network means any Gas distribution system which receives Gas from the DBNGP ~~and includes any Gas distribution system owned or operated by Networks which receives Gas from the DBNGP.~~

1591. DBP's proposal to delete clause 15.5(e) removes a provision from the terms and conditions that is no longer relevant and the amendments to clause 15.5(g) are consequential to the deletion of clause 15.5(e). The ERA considers DBP's proposed amendments to remove this redundant provision are consistent with the national gas objective – the amendments correct and/or simplify the terms and conditions for

⁶⁸³ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 13.6.

⁶⁸⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 13.7.

⁶⁸⁵ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 13.8.

reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

1592. Consistent with the above reasoning, the ERA considers that DBP's suggested amendment to delete the term "Networks" from clause 1 (Interpretation) of the terms and conditions and to amend the term "Distribution Network" should be implemented.⁶⁸⁶

Required Amendment 41

DBP must amend clause 1 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to:

- Delete the term "Networks".
- Amend the term "Distribution Network" to mean "any Gas distribution system which receives Gas from the DBNGP".

Clause 17 (Curtailment)

Clause 17.2

1593. DBP amended clause 17.2, which details the general provisions for curtailment, to insert new clause 17.2(f). DBP's proposed new clause is reproduced in Appendix 5 (page 426) of this decision and applies to the terms and conditions for the B1 Service only.
1594. DBP submitted that in the terms and conditions for the B1 Service, "Back Haul" means "a Gas transportation service on the DBNGP where the Inlet Point is downstream of the Outlet Point". New clause 17.2(f) was an application of the definition and reflected operational reality – the back haul service can only be provided where there is sufficient actual forward haul gas flow to accommodate the provision of a notional back haul service. The new clause also aligned with the negotiated contracts in place with shippers for B1 Service.⁶⁸⁷
1595. CPM's submission addressed DBP's proposal to insert new clause 17.2(f). CPM submitted:⁶⁸⁸

New clause 17.2(f) provides that Operator may Curtail the provision of Contract Services in circumstances where actual Forward Haul gas flow is less than the B1 service demands across all shippers with a B1 Service. [CPM] is concerned with these amendments as they essentially mean that curtailment of B1 Shippers is allowed with no liability to the Operator (see 17.3(b)). Two key implications are:

1596. curtailment of any Forward Haul gas for any reason would be mean that a B1 Service could be curtailed with no liability (regardless of whether the Forward Haul curtailment meant there was sufficient gas flow from other forward hauls. So, even if there was negligence or misconduct that would entitle compensation for the Forward-Haul shippers, there would be none for B1 shippers; and

⁶⁸⁶ These suggested amendments were not incorporated in DBP's proposed terms and conditions.

⁶⁸⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.1 to 14.3.

⁶⁸⁸ CITIC Pacific Mining Management Pty Ltd submission, pp. 17-18.

1597. it removes the incentive to not over-contract the pipeline capacity.
- This, as with other amendments which are advised by AGIG to assist in ‘alignment’ across contracts, again means reducing rights of Shippers under the reference agreements.
- [CPM] requests that clause 17.2(f) (B1 agreement only) be deleted in entirety and take into consideration how the B1 and P1 reference services will be impacted by the bidirectional flow of the DBNGP in the north part of the pipe and whether this clause will need further modification to address bidirectional outcomes. Alternatively, if ERA accept the new B1 clause 17(f); [CPM] request provisions be added such that the Operator will not contract additional B1 Services unless it reasonably considers there will be sufficient Forward Haul gas under normal operating conditions to provide all B1 Services on a firm basis (excluding interruptible services).
1598. Like the considerations of proposed amendments to clause 14.2(b) (see paragraph 1561 of this decision), until there is certainty on any significant changes in the operations of the DBNGP (including, for example, a change in the direction of gas flow), DBP’s proposed amendment to clause 17.2(f) must be considered based on actual and expected operations. DBP has not made any proposed amendments to the terms and conditions based on expected changes to the nature of the reference services resulting from changes to gas flows in the north-west.
1599. DBP’s proposed new clause 17.2(f) is consistent with the equivalent clause in the “Back Haul B1” Standard Shipper Contract.⁶⁸⁹ However, as submitted by CPM, clause 17.2(f) may allow B1 Services to be curtailed with no liability for the operator and may also affect incentives to not over contract pipeline capacity.
1600. In the circumstances, the ERA considers it to be reasonable and consistent with the national gas objective to require that the operator will not contract additional B1 Services unless it reasonably considers that there will be sufficient forward haul gas under normal operating conditions to provide all B1 Services on a firm basis (excluding interruptible services). On this basis, the ERA requires DBP to insert a new clause 3.5 into the terms and conditions for the B1 Service as follows, with a consequential amendment made to clause 17.3(b)(ii).

3.5 Need for sufficient Forward Haul Gas

The Operator must not agree to provide a B1 Service unless it considers, as a Reasonable and Prudent Person, that there will be sufficient Forward Haul Gas under normal operating conditions to provide all B1 Services on a firm basis (excluding interruptible services).

[Consequential amendment to clause 17.3(b)(ii) as shown in mark-up:]

- (ii) where the Curtailment is in accordance with any of clauses 17.2(a), 17.2(b) or [subject to clauses 3.5](#), 17.2(f); or

⁶⁸⁹ DBP, *Standard Shipper Contract – Back Haul B1 (June 2015)*, clause 17.2(d) ([online](#)) (accessed May 2020).

Required Amendment 42

DBP must amend the proposed terms and conditions for the B1 Service to insert a new clause 3.5 (Need for sufficient Forward Haul Gas) which requires the operator to not contract additional B1 Services unless it considers as a reasonable and prudent person that there will be sufficient forward haul gas under normal operating conditions to provide all B1 Services on a firm basis.

The required drafting for new clause 3.5, including a consequential drafting change to clause 17.3(b)(ii), is set out at paragraph 1600 of this draft decision.

Clause 17.3

1601. DBP amended clause 17.3, which sets out provisions for curtailment without liability, to insert additional cross-references. DBP's proposed amendments are reproduced in Appendix 5 (page 426) of this decision.
1602. DBP submitted that:⁶⁹⁰
- In clause 17.3(b)(ii) and clause 17.3(c)(i) of the terms and conditions for the B1 Service, a cross-reference to clause "17.2(f)" was inserted. The amendments reflected the addition of new clause 17.2(f), which was consistent with and implemented the definition of "Back Haul" (see paragraph 1594 of this decision).
 - In clause 17.3(c)(i) of the terms and conditions for the P1 Service, a cross-reference to clause "17.2(b)" was inserted to correct an error and align the drafting with the negotiated contracts in place with shippers. Analogous amendments were made to the terms and conditions for the T1 Service and B1 Service.
1603. Clause 17.3(b) of the terms and conditions details the circumstances where the operator has no liability to the shipper. Clause 17.3(c) details exceptions to the curtailments that are to be aggregated when determining whether the accumulated duration of curtailments in a gas year cause the permissible curtailment limit to be exceeded.
1604. For the terms and conditions for the B1 Service, DBP's proposed amendments to clauses 17.3(b)(ii) and 17.3(c)(i) to insert references to clause "17.2(f)" are consistent with the drafting in the Back Haul B1 Standard Shipper Contract.⁶⁹¹ The ERA considers DBP's proposed amendments to clauses 17.3(b)(ii) and 17.3(c)(i) are materially consistent with the Standard Shipper Contract, and for the reasons stated at paragraph 1276, are consistent with the national gas objective.
1605. Additionally, DBP's proposal to insert a reference to clause "17.2(b)", which allows the operator to curtail "whenever it needs to undertake any Major Works, in clause 17.3(c)(i) of the terms and conditions for each of the reference services is also materially consistent with the Standard Shipper Contracts.

⁶⁹⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.4 to 14.11.

⁶⁹¹ DBP, *Standard Shipper Contract – Back Haul B1 (June 2015)*, clause 17.2(d) ([online](#)) (accessed May 2020). Clause 17.2(d) in the Standard Shipper Contract is the equivalent clause of clause 17.2(f) in the terms and conditions for the B1 Service.

Clause 17.7(c)

1606. DBP amended clause 17.7(c)(vi), which applies to a Curtailment Notice, to add a reference to “Outer Hourly Peaking Limits”. DBP’s proposed amendment is reproduced in Appendix 5 (page 427) of this decision.
1607. DBP submitted that the amendment was consequential to the addition of new clause 10.4 (Outer Hourly Peaking Limit), which is discussed at paragraph 1548 of this decision.⁶⁹²
1608. Consistent with the ERA’s considerations of clause 10.4, the amendment to clause 17.7(c)(vi) is required.

Clause 17.8(c)

1609. DBP amended clause 17.8(c), which allows the operator to take action following the shipper’s failure to comply with a curtailment notice, to insert a reference to clause “17.8(b)”.
1610. DBP submitted that the amendment was needed to correct an error – clause 17.8(c) is intended to cover the shipper’s failure to comply with any curtailment notice, whether such notice is given in relation to a “point specific curtailment” under clause 17.8(a) or a curtailment that is “not a point specific curtailment notice” under clause 17.8(b).⁶⁹³
1611. Clause 17.8(c) currently states:⁶⁹⁴
- If the Shipper does not comply with the requirements of the Curtailment Notice in accordance with clause 17.8(a), the Operator may take action to the extent necessary to give effect to the requirements set out in the Curtailment Notice, including refusing to Receive Gas from the Shipper at an Inlet Point or refusing to Deliver Gas to the Shipper at an Outlet Point.
1612. As submitted by DBP, clause 17.8(a) concerns a curtailment notice for a point specific curtailment.⁶⁹⁵ Clause 17.8(b) concerns a curtailment notice for a curtailment that is not a point specific curtailment. The provisions of clause 17.8(c) should apply to curtailment notices in both instances.
1613. The ERA considers that DBP’s proposed amendment to clause 17.8(c) is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 17.9

1614. DBP amended clause 17.9, which sets out provisions concerning the priority of curtailment. DBP’s proposed amendments are reproduced in Appendix 5 (page 427) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made. Further to these amendments, additional amendments were made to clause

⁶⁹² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 14.12.

⁶⁹³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 14.13.

⁶⁹⁴ Terms and conditions for applying for AA4.

⁶⁹⁵ Clause 1 (Interpretation) of the terms and conditions defines “Point Specific Curtailment” as “a Curtailment as it affects or applies to a particular Inlet Point or Outlet Point”.

17.9(c)(i) that only apply to the terms and conditions for the P1 Service and B1 Service.

1615. DBP submitted that:

- The amendment to clause 17.9(b)(i) to delete the words “for the purposes of this clause” corrected a drafting error. The definition of “Capacity Service” in the terms and conditions includes capacity under a “Spot Transaction”, so it is incorrect to state that the inclusion is only “for the purposes of [that] clause”.⁶⁹⁶
- The amendment to clause 17.9(b)(iii)(A) to capitalise the words “inlet points” and “outlet points” clarified that drafting was referring to the terms “Inlet Points” and “Outlet Points” as the terms are defined in the terms and conditions.⁶⁹⁷
- The amendment to clause 17.9(b)(vi) was made to improve and clarify the application of the Curtailment Plan. In a curtailment, the operator must be able to apply the Curtailment Plan consistently across all contracts (including reference service contracts and negotiated contracts) and across all capacity services without breaching any particular contract by virtue of consistencies.⁶⁹⁸
- The amendment to clause 17.9(c)(ii) to delete the words “(other than a Tp Service)” and insert the words “or Aggregated Service” were drafting improvements and clarified the operator’s obligations where there is a relevant curtailment of an aggregated service.⁶⁹⁹
 - The term “Tp Service” is not used in the terms and conditions.
 - The inclusion of the words “or Aggregated Service” clarified that Aggregated Service is subject to the operator’s obligation that is imposed by clause 17.9(c)(ii).

1616. DBP submitted that the additional amendments made to clause 17.9(c)(i) in the terms and conditions for the P1 Service and B1 Service were required to make the allocation mechanism the same across all the reference service contracts. The T1 Service, P1 Service and B1 Service are all treated as a single “Type of Capacity Service” for the purpose of applying the Curtailment Plan, with equal priority. Therefore, the formula in clause 17.9(c)(i) needs to be the same across the contracts for each service. The amendments also aligned the reference service contracts with the negotiated contracts in place with shippers.⁷⁰⁰

1617. The ERA considers that DBP’s proposed amendments to clause 17.9 clarify the provisions for the priority of curtailment – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP. Additionally, the proposed amendments are consistent with the Standard Shipper Contracts (as published on DBP’s website) and for the reasons stated at paragraph 1276 are consistent with the national gas objective.

⁶⁹⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 14.14.

⁶⁹⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 14.16.

⁶⁹⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.19 to 14.21.

⁶⁹⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.25 to 14.27.

⁷⁰⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.22 to 14.24.

Clause 17.10(a)

1618. DBP amended clause 17.10(a), which details how the operator must apportion a shipper's curtailments. DBP's proposed amendments are reproduced in Appendix 5 (page 429) of this decision.
1619. DBP submitted that the amendments to the words "Deliver" and "Received" corrected drafting errors, which also exist (and will be corrected) in the Standard Shipper Contracts published on its website. The addition of the words "in a manner required by the Shipper" corrected omissions.⁷⁰¹
1620. DBP's proposed amendments to clause 17.10(a)(i) and (ii) correct drafting errors – where the shipper delivers gas at an inlet point, the operator is *receiving* that gas. Similarly, where the shipper receives gas at an outlet point, the operator is *delivering* that gas. The addition of the words "in the manner required by the Shipper" in clauses 17.10(a)(ii) and (iii) is consistent with the existing drafting in clause 17.10(a)(i) and should also apply to subclauses (ii) and (iii). The ERA considers that these amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 18 (Maintenance and Major Works)

1621. DBP amended clause 18, which sets out provisions that cover maintenance and major works. DBP's proposed amendments are reproduced in Appendix 5 (page 429) of this decision.
1622. DBP submitted that the amendments to the referenced dates assisted it (as the operator of the DBNGP) with its budget setting process and streamlined the maintenance programming process. DBP now operates on a calendar year basis, rather than a financial year basis, and as such DBP sets the budget and maintenance plans for the following year in November. The amendments also aligned the reference service contracts with the negotiated contracts in place with shippers.⁷⁰²
1623. DBP's proposed amendments are consistent with the Standard Shipper Contracts (as published on DBP's website) and reflect DBP's actual operations, which are now calendar year based. For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

Clause 20 (Charges)**Clauses 20.2(a) and 20.3**

1624. DBP amended clause 20.2(a) and 20.3, which sets out provisions for the Capacity Reservation Charge and Commodity Charge, respectively, to make the clauses "subject to clause 14.7". The amendments apply to the terms and conditions for the P1 Service and B1 Service are reproduced in Appendix 5 (page 430) of this decision.

⁷⁰¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 14.28 and 14.29.

⁷⁰² DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 15.1.

1625. DBP submitted that the amendments reminded that where there was a relocation of contracted capacity, as contemplated by clause 14, the quantum of the charges may be affected by clause 14.7.⁷⁰³
1626. Further amendments to clause 20.2(a) were made in the terms and conditions for the P1 Service and B1 Service to change the reference to “T1 Capacity Reservation Tariff” to “P1 Capacity Reservation Tariff” and “B1 Capacity Reservation Tariff”, respectively. DBP submitted that these amendments corrected an error to ensure that:⁷⁰⁴
- For the P1 Service, the P1 Capacity Reservation Charge is calculated by reference to the “P1 Capacity Reservation Tariff”.
 - For the B1 Service, the B1 Capacity Reservation Charge is calculated by reference to the “B1 Capacity Reservation Tariff”.
1627. Clause 14.7 of the terms and conditions concerns the charges for relocation. As submitted by DBP, the Capacity Reservation Charge (clause 20.2(a)) and Commodity Charge (clause 20.3) may be affected by these provisions. DBP’s proposal to insert the words “subject to clause 14.7” in the terms and conditions for the P1 Service and B1 Service clarifies this. An equivalent amendment to the terms and conditions for the T1 Service is not required because, in this context, even if a relocation changes the nature of the service from full haul to part haul, the capacity remains on the same terms and conditions as full haul capacity for T1 Service under the contract.⁷⁰⁵
1628. Similarly, DBP’s other amendments to clause 20.2(a) clarify that the P1 and B1 Capacity Reservation Charges are calculated by reference to the P1 and B1 Capacity Reservation Tariffs, respectively (and not the T1 Capacity Reservation Tariff, as is currently drafted).
1629. The ERA considers that DBP’s proposed amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 20.4(a)

1630. DBP amended clause 20.4(a), which confirms the other charges that apply, to amend cross-references as follows:

20.4 Other Charges

- (a) The following charges apply to this Contract:
- (i) Excess Imbalance Charge (clauses [9.5\(e\)](#) ~~9.5(e)~~ [and 9.6\(b\)](#));
 - (ii) Hourly Peaking Charge (clauses [10.3\(d\)](#) ~~10.3(b)~~ [and 10.4\(b\)](#));

1631. DBP submitted that the amendments to delete and replace cross-references corrected errors. The amendments to add cross-references were consequential to

⁷⁰³ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 16.1 and 16.4.

⁷⁰⁴ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 16.3.

⁷⁰⁵ Whereas, if a relocation of a P1 Service or B1 Service changes the nature of the service to full haul, the capacity so relocated is to be treated as if it were on the terms of the T1 Service.

new clauses 9.6 (Excess Imbalance Charge) and 10.4 (Outer Hourly Peaking Limit).⁷⁰⁶

1632. DBP's amendments to correct errors are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP. The amendments to add additional cross-references are consequential and subject to DBP's proposed amendments to insert new clauses 9.6 and 10.4, which are discussed at paragraphs 1517 and 1548 of this decision, respectively. Consistent with the ERA's considerations of these clauses, the additional cross-references are required.

Clause 20.5(a)

1633. DBP amended clause 20.5(a), which sets out how the tariff will be adjusted. DBP's proposed amendments are reproduced in Appendix 5 (page 430) of this decision and apply to the terms and conditions for the P1 Service. In the terms and conditions for the T1 Service and B1 Service analogous amendments were made.
1634. DBP submitted that the amendments clarified and aligned with the way in which the access arrangement document described the make-up of, and variations to, the respective tariff.⁷⁰⁷
1635. DBP's proposed amendments reflect the description of the respective tariffs in the access arrangement. That is, each tariff consists of a capacity reservation tariff and commodity tariff (for example, for the P1 Service, the "P1 Tariff" consists of the "P1 Capacity Reservation Tariff" and "P1 Commodity Tariff"). Each of these tariff components can be varied either:
- In accordance with the Reference Tariff Variation Mechanism (as set out in clause 11 of the access arrangement).
 - As part of the approval of a revised access arrangement for a new access arrangement period.
1636. The ERA considers that DBP's proposed amendments to clause 20.5(a) are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 22 (Default and Termination)

Clauses 22.2 and 22.3(c)

1637. DBP amended clause 22.2, which provides for the operator to issue the shipper with a Shipper Default Notice, and clause 22.3(c), which details the circumstances when the operator may exercise remedy. DBP's proposed amendments are reproduced in Appendix 5 (page 431) of this decision.
1638. DBP submitted that the amendments were to clarify and reflect the fact that the occurrence of an event that may give rise to a shipper default is not necessarily a

⁷⁰⁶ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 16.5 to 16.7.

⁷⁰⁷ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 16.8.

default until expiry of the time stipulated for remedy of the relevant event in clause 22.3(b).⁷⁰⁸

1639. DBP's proposed amendments clarify the events that constitute a default by the shipper and when those events become actual defaults. Clause 22.1 sets out the events where the shipper is in default, however, as submitted by DBP, clause 22.3(b) provides that the shipper is not in default until the expiry of the time specified in clauses 22.3(b)(i), (ii) or (iii) and the event has not been remedied.
1640. The ERA considers that DBP's proposed amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clauses 22.6 and 22.7(c)

1641. DBP amended clause 22.6, which provides for the shipper to issue the operator with an Operator Default Notice, and clause 22.7(c), which details the circumstances when the shipper may exercise remedy. DBP's proposed amendments are reproduced in Appendix 5 (page 431) of this decision.
1642. DBP submitted that the amendments were to clarify and reflect the fact that the occurrence of an event that may give rise to an operator default is not necessarily a default until expiry of the time stipulated for remedy of the relevant event in clause 22.7(b).⁷⁰⁹
1643. DBP's proposed amendments clarify the events that constitute a default by the operator and when those events become actual defaults. Clause 22.5 sets out the events where the operator is in default, however, as submitted by DBP, clause 22.7(b) provides that the operator is not in default until the expiry of the time specified in clauses 22.7(b)(i) or (ii) and the event has not been remedied.
1644. The ERA considers that DBP's proposed amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 25 (Assignment)

Clause 25.2(a)

1645. DBP amended clause 25.2(a), which sets out provisions for the assignment of charges, to add the words "and chargee". DBP's proposed amendment is reproduced in Appendix 5 (page 431) of this decision.
1646. DBP submitted that the amendment reflected the intended purpose of the clause. The purpose of entry into the tripartite agreement (deed) is to protect the non-charging party by ensuring that, regardless of a default by the charging party under its financial arrangements, the financial institution (the "chargee") is bound to continue to comply with the terms of the reference service contract for so long as the non-charging party complies with its obligations under the contract. To ensure the

⁷⁰⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 17.1 and 17.2.

⁷⁰⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 17.3 and 17.4.

tripartite agreement is effective, the chargee must enter into the agreement with the non-charging party.⁷¹⁰

1647. DBP's proposed amendment to add the words "chargee" clarifies that both the chargor and chargee must enter into a tripartite deed with the other party for the provisions to be effective. The ERA considers the amendment to be consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 25.5(f)

1648. DBP amended clause 25.5(f), which sets out provisions concerning the acknowledgements and undertakings of the Pipeline Trustee, to delete redundant wording. DBP's proposed amendment is reproduced in Appendix 5 (page 432) of this decision.
1649. DBP submitted that the words "Other than to the extent ... Capacity Start Date" referred to documentation entered into in 2004, which was no longer relevant to the operation of the DBNGP and the corporate structure of AGIG. The words were therefore irrelevant and deleted.⁷¹¹
1650. The ERA considers that DBP's proposal to delete redundant drafting is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

New clause 25.7

1651. DBP inserted new clause 25.7 into the terms and conditions to create a provision for non-complying assignment. The proposed amendment is reproduced in Appendix 5 (page 432) of this decision.
1652. DBP submitted that clause 25.7 was inserted to clarify drafting and was consistent with the negotiated contracts in place with shippers. The stipulation that a purported sale, transfer or assignment is compliant with the protections offered to the non-selling/non-transferring/non-assigning party is fundamental to the security of each party in understanding who they are contracting with and what the creditworthiness of their counter party is.
1653. DBP's proposed new clause for non-complying assignment is consistent with the Standard Shipper Contracts (as published on DBP's website). For the reasons stated at paragraph 1276, the ERA considers that amendments made to the terms and conditions to align with contracts in place with shippers are consistent with the national gas objective.

⁷¹⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 18.1.

⁷¹¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 18.2.

Clause 28 (Confidentiality)

Clause 28.2(i)

1654. DBP amended clause 28.2(i), which sets out provisions for exceptions to confidentiality. DBP's proposed amendments are reproduced in Appendix 5 (page 432) of this decision.
1655. DBP submitted that the amendments to clause 28.2(i) were needed to reflect the changes to the corporate structure of DBP and its holding companies since the approval of the access arrangement for the period 2016 to 2020.⁷¹²
1656. The corporate structure of DBP and its holding companies changed following the acquisition of DBP by the CKI Group in 2017. DBP's proposed amendments update the terms and conditions to reflect the changes in corporate structure. The ERA considers that the amendments are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 28.3

1657. Clause 28.3 sets out provisions for permitted disclosure. DBP amended clauses 28.3(a) and 28.3(b), which allows and restricts the permitted disclosure of confidential information to certain persons, respectively. DBP's proposed amendments are reproduced in Appendix 5 (page 432) of this decision.

Clause 28.3(a)

1658. DBP submitted that the amendments to clause 28.3(a) were needed:⁷¹³
- To correct grammatical and drafting errors.
 - To enable the provision of information about the operations of the DBNGP to financiers of AGIG in circumstances where the borrowing entity is not DBNGP Finance Co Pty Ltd, but another member of AGIG that is able to borrow at better rates and then provide inter-company loans to the operator.
 - To deem, for the purpose of clause 28.3, all members of AGIG to be “related bodies corporate” of the operator.
1659. The ERA considers that DBP's proposed amendments clarify the persons who may receive confidential information and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 28.3(b)

1660. DBP submitted that the intent of clause 28.3(b)(i) is to restrict the provision of confidential information by the operator, or the system operator, to any person that may be in competition with the shippers of gas on the DBNGP. The amendments to clause 28.3(b)(i)(A) and 28.3(b)(i)(C) were required.⁷¹⁴

⁷¹² DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 20.1.

⁷¹³ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 20.2.

⁷¹⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 20.5 to 20.7.

- To update the description of the entities involved in gas distribution networks.
- To ensure that members of AGIG were not prevented from tendering for, owning, constructing, operating or maintaining electricity generation operations where those operations were not connected to the South West Interconnected System.

1661. DBP further submitted that the amendments to clause 28.3(b)(iv) and the deletion of clause 28.3(b)(v) were made to reflect current arrangements for the disclosure of information to Alcoa. Specifically, DBP stated:⁷¹⁵

[REDACTED]

1662. With the deletion of clause 28.3(b)(v), a consequential amendment was made to clause 28.4(b) to remove the reference to the now deleted clause “28.3(b)(v)”.

1663. Synergy’s submission addressed DBP’s proposed amendment to clause 28.3(b)(i)(C). Synergy submitted:⁷¹⁶

DBP are seeking to amend Clause 28.3(b)(i)(C) so that rather than being restricted from disclosing Confidential Information to any person directly involved in the generation or sale of electricity in Western Australia, the restriction only applies to disclosure to a person directly involved in the generation or sale of electricity in the South West Interconnected System (SWIS) of Western Australia.

DBP has stated that one of the reasons it is seeking this amendment is that the Operator’s operations provide it no advantage in terms of electricity generation operations that are isolated from the SWIS. Synergy does not agree with this assertion. The DBNGP transports gas to locations which are outside the SWIS and it would be entirely possible for power stations outside the SWIS to be supplied with gas which is transported (whether partly or entirely) on the DBNGP. Accordingly, the Operator may have information which provide it with advantages in respect of electricity generation options that are outside the SWIS.

Synergy therefore does not support the proposed amendment.

1664. Synergy suggested that DBP had information that would provide it with advantages in respect of electricity generation options outside the South West Interconnected System and therefore the amendment to clause 28.3(b)(i)(C) should not be made. The ERA sought additional information from Synergy concerning its submission, where it clarified that it did not understand why the drafting change was necessary if

⁷¹⁵ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 20.8 and 20.9.

⁷¹⁶ Synergy submission, 31 March 2020, Annexure A, pp. 4-5.

DBP saw no advantage in terms of electricity generation operations outside of the South West Interconnected System.⁷¹⁷

1665. In response to Synergy's submission, the ERA considers that there is potential for power stations outside the South West Interconnected System to be supplied with gas transported on the DBNGP and, consequently, that DBP may have confidential information that may be used to its advantage in respect of generation options outside of the South West Interconnected System. Given this, the proposed amendment to clause 28.3(b)(i)(C) must not be made as it is inconsistent with the national gas objective – the ability to disclose such information could affect decisions concerning investment in natural gas services.

Required Amendment 43

DBP must amend clause 28.3(b)(i)(C) of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to delete the proposed amendments so that the clause prohibits the permitted disclosure of confidential information to any person who is directly involved in the generation or sale of electricity in Western Australia (rather than the generation or sale of electricity in the South West Interconnected System of Western Australia).

1666. Concerning DBP's other amendments to clause 28.3(b), the ERA considers that these amendments clarify the persons who cannot receive confidential information (that is, the situations where permitted disclosure is restricted) and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Clause 28.6(a)

1667. DBP amended clause 28.6(a), which sets out provisions for information received by the operator. DBP's proposed amendment is reproduced in Appendix 5 (page 433) of this decision.
1668. DBP submitted that clause 28.6 solely governed how the operator must ensure that it actively enforced its confidentiality obligations under clauses 28.3, 28.4 and 28.5. The amendment to add the words "in relation to disclosure of Confidential Information" clarified the operation of clause 28.6(a)(ii) and sought to ensure that the clause was not taken to mean that the operator must develop, implement and enforce policies and procedures to ensure that all shippers are treated equally and fairly in all respects.⁷¹⁸
1669. As submitted by DBP, the amendment to clause 28.6(a)(ii) clarifies that the operator's obligation to ensure that all shippers are treated equally and fairly is in relation to provisions for confidential information that are established under clause 28. The ERA considers that the amendment is consistent with the national gas objective – the amendment corrects and/or clarifies the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

⁷¹⁷ Synergy, 'Re: Follow up on Synergy's submission on the proposed access arrangement for the DBNGP (2012-2025)', [email] 26 May 2020.

⁷¹⁸ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 20.11.

Clause 28.7(j)

1670. DBP amended clause 28.7(j), which concerns provisions for breaches by the operator, to change the cross-reference to clause “28.10” to “28.11”.⁷¹⁹
1671. The amendment is consequential and subject to DBP’s proposed amendment to insert new clause 28.10 (FIRB Compliance), which is discussed below. Consistent with the ERA’s considerations of clause 28.10, the consequential amendment to clause 28.7(j) is required.

New clause 28.10

1672. DBP inserted new clause 28.10 (FIRB Compliance) into the terms and conditions to create a provision for compliance with the Foreign Investments Review Board (FIRB). DBP’s proposed new clause is reproduced in Appendix 5 (page 434) of this decision.
1673. DBP submitted that clause 28.10 was inserted to comply with certain conditions imposed upon the CKI Group by FIRB when it acquired the DUET Group. The conditions restrict access to and storage of bulk personal information. Unless otherwise agreed with the Commonwealth, AGIG must ensure that all data is stored only in Australia, is accessible and maintained only from within Australia and may not be taken outside of Australia, except in specified circumstances.⁷²⁰
1674. DBP’s proposed amendment to insert new clause 28.10 reflects the conditions set by FIRB and is consistent with the national gas objective – drafting amendments that correct and/or clarify the terms and conditions for reference services promotes efficient investment in, and efficient operation and use of, the DBNGP. While the ERA does not require an amendment, the ERA considers that it would be preferable to use the heading “Foreign Investments Review Board Compliance” rather than the acronym “FIRB”. Given clause 2.2, which states that “headings are inserted for convenience and do not affect the interpretation of [the] contract”, such an amendment is administrative in nature.

Clause 29 (Notices)

1675. DBP amended clause 29, which sets out provisions for notices, to remove the requirement for notices to be served by facsimile. DBP’s proposed amendments to clauses 29.1, 29.3 and 29.4 are reproduced in Appendix 5 (page 434) of this decision.
1676. The requirement for notices to be served by facsimile was replaced with the requirement for notices to be served by electronic mail (email). DBP submitted that the amendments were in line with current practices of the operator and its commercial counterparts given that fax machines were all but obsolete.⁷²¹
1677. DBP’s proposed amendments reflect the transition away from facsimile to electronic mail and is consistent with the current practices of most commercial businesses and workplaces. The ERA considers that the amendments are consistent with the national gas objective – the amendments reflect operational practice and promote efficient investment in, and efficient operation and use of, the DBNGP.

⁷¹⁹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 20.13.

⁷²⁰ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 20.15 and 20.16.

⁷²¹ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraph 21.1.

Clause 44 (General)

1678. Clause 44.1 requires the operator to treat the shipper fairly and reasonably in circumstances where it has discretion to take action under the contract. DBP amended this clause to change the cross-reference to “clause 9.7” to “clause 9.8”.⁷²²
1679. The amendment to clause 44.1 is consequential and subject to DBP’s proposed amendment to insert new clause 9.6 (Excess Imbalance Charge), which is discussed at paragraph 1517 of this decision. Consistent with the ERA’s considerations of clause 9.6, the amendment to clause 44.1 is required.

Schedules

Schedule 1 (Access Request Form)

1680. Schedule 1 of the terms and conditions contains the Access Request Form. DBP amended sections 1 (Prospective Shipper Details), 2 (Operator Details), 6 (Terms and Conditions) and 8 (Agreement) of the Form as follows:⁷²³
- DBP deleted the requirement in sections 1 and 2 of the Form for the prospective shipper and operator, respectively, to provide a “facsimile number”. DBP submitted that the amendment was consequential to the proposed amendments to clause 29 of the terms and conditions to replace the provision of notices by facsimile with the provision of notices by electronic mail (see paragraph 1675).
 - DBP amended section 6 of the Form to correct errors in the terms and conditions for the P1 Service and B1 Service to clarify the terms and conditions that are applicable.
 - In the terms and conditions for the P1 Service, the P1 Service Access Request Form now references “the P1 Reference Service Terms and Conditions” (instead of “the Terms and Conditions of the T1 Shipper Contract”).
 - In the terms and conditions for the B1 Service, the B1 Service Access Request Form now references “the B1 Reference Service Terms and Conditions” (instead of “the Terms and Conditions of the T1 Shipper Contract”).
 - In the terms and conditions for the T1 Service, the T1 Service Access Request Form now references “the T1 Reference Service Terms and Conditions” (instead of “the Terms and Conditions of the T1 Shipper Contract”).
 - DBP amended section 8 of the Form to correct errors in the terms and conditions for the P1 Service and B1 Service to clarify that: “In accordance with the Access Arrangement, this Access Request when executed by the Operator and Pipeline Trustee and attached to the [x] forms the Contract between the parties”, where [x]:
 - In the terms and conditions for the P1 Service is a reference to “P1 Reference Service Terms and Conditions”.

⁷²² DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 22.1.

⁷²³ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 23.1 to 23.4.

- In the terms and conditions for the B1 Service is a reference to “B1 Reference Service Terms and Conditions”.
- In the terms and conditions for the T1 Service is a reference to “T1 Reference Service Terms and Conditions”.

1681. DBP’s proposed amendments to schedule 1 (Access Request Form) of the terms and conditions correct and/or clarify the information within the schedule and are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.

Schedule 2 (Charges)

1682. Schedule 2 of the terms and conditions sets out a table of charges that includes the Excess Imbalance Charge, Hourly Peaking Charge, Overrun Charge and Unavailable Overrun Charge. DBP amended the table of charges as follows:

- Table row 1 – Excess Imbalance Charge – was amended to change the cross-reference to clause “9.5(c)” to “9.5(e)” and insert a reference to “clause 9.6(b)”.
- Table row 2 – Hourly Peaking Charge – was amended to insert a reference to “clause 10.4(b)”.

1683. DBP submitted that:⁷²⁴

- The amendment to row 1 was made to correct a cross-referencing error and to insert a reference to new clause 9.6(b), and its submissions on its proposal to insert new clause 9.6 were relevant (see paragraph 1518 of this decision).
- The amendment to row 2 was made to insert a reference to new clause 10.4(b), and its submissions on its proposal to insert new clause 10.4 were relevant (see paragraph 1549 of this decision).

1684. DBP’s proposed amendments to schedule 2 of the terms and conditions to correct and/or insert new cross-referencing are consequential and subject to DBP’s proposed amendments to insert new clauses 9.6 and 10.4(b) into the terms and conditions, which are discussed at paragraphs 1517 and 1548 of this decision, respectively. Consistent with the ERA’s considerations of these new clauses, the amendments to schedule 2 are required.

1685. While Synergy’s submission did not address DBP’s proposed amendments to insert new clauses 9.6 or 10.4 into the terms and conditions to provide for an excess imbalance charge and outer hourly peaking limit, respectively, it did address the associated charges specified in schedule 2. Synergy submitted:⁷²⁵

The Excess Imbalance Charge, Hourly Peaking Charge and Unavailable Overrun Charge in Schedule 2 of the P1 and B1 Reference Contracts are each determined by reference to a multiple of the T1 Reference Tariff.

Synergy submits that it would be more appropriate for these charges to be determined by reference to multiples of the P1 Tariff or B1 Tariff (as applicable), which apply a distance factor to the T1 Reference Tariff reflecting the nature of the service being provided. Where Gas is being transported over relatively short distances, imposing Excess Imbalance Charges, Hourly Peaking Charges and Unavailable Overrun

⁷²⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 24.1 and 24.2.

⁷²⁵ Synergy submission, 31 March 2020, Annexure A, p. 5.

Charges on the basis of the T1 Reference Tariff produces an entirely disproportionate result and is onerous.

Amending the charges so that they are based on a multiple of the P1 Tariff or B1 Tariff would also align with the position under Clause 11.1(b)(i) which charges an Overrun Rate by reference to the P1 Tariff or B1 Tariff (as applicable).

1686. Schedule 2 of the terms and conditions for the P1 Service and B1 Service currently state that the Excess Imbalance Charge, Hourly Peaking Charge and Unavailable Overrun Charge are determined at a rate based on the T1 Reference Tariff (see Table 128 below), whereas the Overrun Charge is determined at the rate specified in clause 11.1(b), which states:⁷²⁶

The Overrun Rate is the greater of:

- (i) 115% of the [x] Tariff; and
- (ii) the highest price bid for Spot Capacity which was accepted for that Gas Day other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid,

(**Overrun Rate**).

Table 128: DBP's terms and conditions for the P1 Service and B1 Service – schedule 2 (Charges)

Row	Description of charge	Rate at which charge is determined ⁷²⁷
1	Excess Imbalance Charge (clause 9.5(e) and 9.6(b))	200% of the T1 Reference Tariff from time to time
2	Hourly Peaking Charge (clause 10.3(d) and 10.4(b))	200% of the T1 Reference Tariff from time to time
3	Overrun Charge (clause 11.1(a))	At the rate specified in clause 11.1(b)
4	Unavailable Overrun Charge (clause 11.6 and clause 17.8(e))	The greater of: (a) 250% of the T1 Reference Tariff from time to time; and (b) the highest price bid for Spot Capacity which was accepted for that Gas Day, other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid.

Source: DBP, *Reference Services Terms and Conditions – P1 Part Haul and B1 Back Haul, Schedule 2 (Charges)*, January 2020.

1687. The ERA has addressed Synergy's comments on the determination of the Excess Imbalance Charge, Hourly Peaking Charge and Unavailable Overrun Charge as set out in schedule 2 of the terms and conditions for the P1 Service and B1 Service as part of its considerations of additional amendments to clause 11.1 (see paragraph 1714 of this decision). As set out in these considerations, the ERA is requiring the amendment of these charges in line with Synergy's submission.

⁷²⁶ Where [x] is a reference to the "T1 Tariff", "P1 Tariff" and "B1 Tariff" in the terms and conditions for the T1 Service, P1 Service and B1 Service, respectively.

⁷²⁷ In the terms and conditions for the T1 Service, references to "T1 Reference Tariff" are references to "T1 Tariff" (as noted at 1394 of this decision).

Schedule 6 (Curtailment Plan)

1688. Schedule 6 of the terms and conditions sets out the Curtailment Plan, comprising:
- Part A that contains a table listing the order of priority for “system curtailment” (columns 1 and 2) and “point specific curtailment” (columns 3 and 4).
 - Part B that sets out how the amount of capacity available, after allowing for items in Part A, must be apportioned.
1689. DBP’s proposed amendments to part A and part B are reproduced in Appendix 5 (page 435) of this decision.
1690. For the amendments to the order of priority for *system curtailments* in part A (columns 1 and 2), DBP submitted that:
- The amendments to row 3, corrected errors and improved drafting clarity. In particular, the inclusion of references to “P1 Service (including Aggregated P1 Service)” and “B1 Service (including Aggregated B1 Service)” corrected an oversight. As noted in submissions concerning the definitions of “T1 Service”, “P1 Service” and “B1 Service”, and clause 3.2 (Capacity Service), these three services are intended to be treated the same in a curtailment scenario. This is consistent with market expectations (as reflected in the negotiated contracts in place with shippers) that capacity under contracts for T1 Service, P1 Service and B1 Service will be treated the same in a curtailment, regardless of which of the three capacity services the capacity is for and regardless of whether such capacity was granted under a negotiated contract or reference service contract.⁷²⁸
 - The amendments to row 4 to include the words “(including Aggregated P1 Service)” and “(including Aggregate B1 Service)” corrected an oversight and were consistent with the equal priority afforded to Aggregated P1 Service and Aggregated B1 Service vis-à-vis Aggregated T1 Service.⁷²⁹
 - The amendment to row 6 to include “Other Reserved Service” and delete “(other than Tp Service)” corrected an error. Prior to the amendment, “Other Reserved Service” was not addressed in the Curtailment Plan for a system curtailment (unlike the Curtailment Plan for a point specific curtailment). Given that Tp Service is not described in any row of the Curtailment Plan and is not addressed in the reference service contracts, it was not appropriate to carve it out from Other Reserved Service in row 6.⁷³⁰
1691. For the amendments to the order of priority for *point specific curtailments* in part A (columns 3 and 4), DBP submitted that:
- The amendment to include an asterisk (*), which “denotes amounts that are net of such quantities delivered at other inlet points or outlet points (as the case requires) on the relevant Gas Day” to the table for point specific curtailments, clarified that when determining the allocation in the relevant categories (that is, the categories with respect to which the asterisk has been added), amounts delivered within these categories at other points must be taken into account.

⁷²⁸ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 26.1 to 26.7.

⁷²⁹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 26.8 to 26.11.

⁷³⁰ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 26.12.

That is, amounts delivered at other points are not included in the amount that attracts the relevant priority at the curtailed point in question.⁷³¹

- The amendments to rows 1 and 2 to include the asterisk (*) clarified that, when determining the allocation in these categories at a particular point, amounts delivered within these categories at other points must be taken into account.⁷³²
- The amendments to row 3:⁷³³
 - To include the asterisk (*) clarified that, when determining the allocation in the “Alcoa’s Exempt Delivery Entitlement (excluding Alcoa’s Priority Quantity)” category at a particular point, amounts delivered within this category at other points must be taken into account.
 - To include references to the “P1 Service (excluding Aggregate P1 Service)” and “B1 Service (excluding Aggregate B1 Service)” corrected an oversight, similar to the oversight identified in row 3 for a system curtailment (columns 1 and 2).
 - To change the word “including” to “excluding” corrected an error. It has always been intended (and understood by the market), and the reference service contracts otherwise make it clear (see clause 8.17(b)), that in a point specific curtailment “Aggregated Service” at a point has a lower priority than T1/P1/B1 Service with contracted capacity at that point.
- The amendments to row 4:⁷³⁴
 - To include the asterisk (*) clarified that, when determining the allocation in the “Alcoa’s Exempt Delivery Entitlement (excluding Alcoa’s Priority Quantity)” category at a particular point, amounts delivered within this category at other points must be taken into account.
 - To include the words “(excluding Aggregated P1 Service)” and “(excluding Aggregate B1 Service)” corrected a drafting error and was consistent with the equal priority afforded to Aggregated P1 Service and Aggregated B1 Service vis-à-vis Aggregated T1 Service.
 - To change the word “including” to “excluding” corrected an error. It has always been intended (and understood by the market), and the reference service contracts otherwise make it clear (see clause 8.17(b)), that in a point specific curtailment “Aggregated Service” at a point has a lower priority than T1/P1/B1 Service with contracted capacity at that point.
- The amendment to row 6 to delete “(other than Tp Service)” was made to reflect the reference service contracts – the Tp Service is not addressed in the reference service contracts nor is it described in any row of the Curtailment Plan hence it is not appropriate to carve it out from Other Reserved Service in row 6.⁷³⁵
- The amendment to insert a new row 7 to include the category “Aggregated T1 Service, Aggregated P1 Service and Aggregated B1 Service, at the relevant

⁷³¹ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 26.38.

⁷³² DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 26.14 and 26.15.

⁷³³ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 26.17 and 26.22.

⁷³⁴ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraphs 26.26 to 26.33.

⁷³⁵ DBP, 2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information, January 2020, paragraph 26.34.

point” aligned with the negotiated contracts in place with shippers and was consistent with market expectations, and the reference service contracts otherwise make it clear, that in a point specific curtailment, “Aggregated Service” at a point has a lower priority than “T1/P1/B1 Service” with contracted capacity at that point. The omission of a separate row addressing the separate priority status of “Aggregated Service” in a point specific curtailment was a drafting error that needed correction.⁷³⁶

1692. For the amendments made to part B of the Curtailment Plan to insert the words “(including, in a relevant System Curtailment, Aggregated Service)” in parts (a)(ii) and (b)(ii), DBP submitted that the amendments clarified the existing drafting and did not change the priority order. In particular, the amendments articulated how clause 17.9(b)(vi) was to be applied in a curtailment.⁷³⁷
1693. The proposed amendments to schedule 6 of the terms and conditions correct and/or clarify the application of the Curtailment Plan and are consistent with the provisions of the terms and conditions. For these reasons, the ERA considers that the amendments to schedule 6 are consistent with the national gas objective – the amendments correct and/or clarify the terms and conditions for reference services to promote efficient investment in, and efficient operation and use of, the DBNGP.
1694. While CPM’s submission did not specifically address DBP’s proposed amendments to schedule 6, it did address the provisions of schedule 6 generally. CPM submitted:⁷³⁸

With the DBNGP receiving gas in multiple locations along its entire length there is a risk that P1 & B1 Shippers may be subject to curtailment unnecessarily and therefore unfairly. Take a situation where North West Shelf are shut down and such may potentially cause a Curtailment Notice, triggering the Curtailment Plan which may see a Shipper like CITIC curtailed at its sole used Outlet Point even though it has its suppliers deliver the gas it requires into the pipe at multiple inlet points along the pipe to meet its operational needs.

1695. CPM further suggested that the terms and conditions should be amended to expressly state that the Curtailment Plan, as well as the general allocation of capacity by the operator, must take into consideration the specific location of the shipper’s outlet on the DBNGP and the available capacity in that section of the pipeline.⁷³⁹

Schedule 6, and generally throughout the contract, the T&Cs, including the definition of Gas Transmission Capacity, should expressly state that the Curtailment Plan and generally Capacity allocation by the Operator must take into consideration the available Capacity in the specific section of the DBNGP where the Shippers Outlet is located, as such may be vastly different to the available Capacity at the southern part of the DBNGP (where the Alcoa capacity is key) where T1 Capacity relates. Such should not restrict or impact on Alcoa’s Priority Quantity or Alcoa’s Exempt Delivery Entitlement under their T1 services and it will be acceptable for Alcoa’s priority services to remain the priority for the sake of the T&C’s.

1696. The ERA has considered CPM’s submission and considers that it is not clear that unnecessary curtailment is currently occurring as a result of a failure by the operator to take into account available capacity in the specific location of the shipper’s outlet on the DBNGP and available capacity in that section of the pipeline. In the

⁷³⁶ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 26.35 to 26.37.

⁷³⁷ DBP, *2021-2025 Final Plan, Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020, paragraphs 26.40 and 26.42.

⁷³⁸ CITIC Pacific Mining Management Pty Ltd submission, p. 18.

⁷³⁹ CITIC Pacific Mining Management Pty Ltd submission, p. 18.

circumstances, and without evidence of unnecessary curtailment occurring, the ERA does not consider that an amendment is required to address this matter.

Additional amendments to the terms and conditions

1697. CPM and Synergy both submitted that additional amendments to the terms and conditions were required (Table 129).
1698. CPM submissions were provided in response to a review of the terms and conditions for the P1 Service and B1 Service (that is, CPM did not review the terms and conditions for the T1 Service as it is not a T1 Shipper).⁷⁴⁰ Where relevant, the ERA has considered CPM's submissions in the context of the terms and conditions for reference services and unless otherwise specified its considerations apply equally to the terms and conditions for the P1 Service, B1 Service and T1 Service.

Table 129: Additional proposed amendments to the terms and conditions for reference services submitted by interested parties

Clause	Proposed additional amendment
1 (Interpretation)	CPM submitted that the definition of "Gas Transmission Capacity" should be amended to take into consideration the location of outlet points on the DBNGP and good gas industry practice when determining shipper outlet curtailments.
4.3 (Option to renew Contract)	CPM submitted that this clause should be amended to change the period for renewal to a period that is chosen by the shipper, which does not exceed one year.
4.5 (Notice exercising an Option)	CPM submitted that this clause should be amended to change the notification period from 12 months to 6 months and to allow the operator to give express approval to exercise an option where no notice has been given.
11.1 (Overrun Charge)	CPM submitted that this clause should be amended so that the Overrun Charge for P1 Service and B1 Service is determined by reference to a distance factor. Synergy submitted that this clause should include a provision to avoid the shipper effectively bidding against itself for Spot Capacity.

Clause 1 (Interpretation – "Gas Transmission Capacity")

1699. CPM submitted that the existing term "Gas Transmission Capacity" in clause 1 of the terms and conditions should be amended to make the location of an outlet point a consideration of the operator when determining shipper outlet curtailments.⁷⁴¹

With DBNGP northern looping expanding the Capacity in the northern section of the pipe and new production now delivering large amounts of gas further south, the northern part of the pipe has much more capacity to transport gas in that section without impacting T1 Shippers transporting gas to the southern end of the pipe.

[CPM request an amendment of] the definition to expressly bring Outlet location into the Operators deliberations and Good Gas Industry Practice when determining Shipper Outlet curtailments.

⁷⁴⁰ CITIC Pacific Mining Management Pty Ltd submission, p. 6, paragraph 8.1.

⁷⁴¹ CITIC Pacific Mining Management Pty Ltd submission, p. 10.

1700. CPM further submitted that “consideration should also be given to enhancing the definition of “T1 Capacity” in [clause] 3.2(b)(iv)) to capture [the same] concept”.
1701. The term “Gas Transmission Capacity” means “the capacity of the DBNGP to transport Gas” and remains unchanged from the definition in the current (AA4) terms and conditions. It is also consistent with the Standard Shipper Contracts (as published on DBP’s website).
1702. CPM submitted the that the term should be amended as follows:⁷⁴²

Gas Transmission Capacity means the capacity of the DBNGP to transport Gas, [taking into consideration the specific sections of the DBNGP and the location of a Shippers Outlet Point to which gas is to be transported.](#)

1703. The term “Gas Transmission Capacity” is used throughout the access arrangement and not just in relation to the curtailment regime. It is not clear what the practical effect of CPM’s proposed amendment would be. If a local definition were inserted for the purposes of the curtailment regime, this may address the matters raised by CPM, but as there is no evidence that curtailments are currently occurring unnecessarily without such an amendment, the ERA does not consider that an amendment is necessary.

Clause 4.3 (Option to renew Contract)

1704. CPM submitted that clause 4.3 of the terms and conditions should be amended to allow the shipper to specify the period for renewal, subject to the period not exceeding one year. CPM submitted:⁷⁴³

Why should Shippers have to contract capacity for periods it does not need capacity. Why does a pipeline owner seek to take cash from shippers through a period when they will not be using the contracted capacity? As an example – a shipper contracts for the supply of gas under a contract with a set term of 30 months. The shipper puts in place a P1 or B1 reference contract to cover the fixed 30 month supply, the Shipper subsequently extends to the term of supply by 3 months. The shipper should be able to extend the term of the P1 or B1 service for 3 months and NOT be forced to take capacity for 12 months because capacity will be payable when that shipper will not use that capacity.

1705. CPM requested that clause 4.3 be amended to conclude with the words “for a period chosen by the Shipper but not exceeding 1 year (**Option**)”.
1706. Clause 4.3 of the terms and conditions provides for two, one-year options, to extend and remains unchanged from the current (AA4) terms and conditions.

4.3 Option to renew Contract

Subject to clauses 4.4, 4.5, 4.6, 4.7 and 4.8, Shipper has two options to extend the Capacity End Date in respect of Contracted Capacity the subject of this Contract as at the Capacity Start Date (**Original Capacity**) each for a period of 1 year (**Option**).

1707. Clause 4.3 of the terms and conditions differs to the Standard Shipper Contracts (as published on DBP’s website) in that the Standard Shipper Contracts provide for two, five-year options to extend. Contracts for other Australian covered pipelines (for

⁷⁴² CITIC Pacific Mining Management Pty Ltd submission (Attachment of marked-up amendments to DBP’s P1 Reference Service Terms and Conditions).

⁷⁴³ CITIC Pacific Mining Management Pty Ltd submission, p. 11.

example, contracts provided by APA and Jemena) do not contain any such extension options.⁷⁴⁴

1708. Based on a comparison between the provisions of the terms and conditions for reference services, the Standard Shipper Contracts and contracts for other covered Australian pipelines, the existing provisions in the terms and conditions appear to be reasonable. However, given CPM's submission the ERA considers clauses 4.3 and 4.5 should be amended to provide for options to extend that are less than one year if required by the shipper, but should also be subject to a minimum period (for example, one month) to minimise administrative costs for the operator. Such an amendment would provide for shorter term options to extend that may otherwise be lost in circumstances where the shipper is unwilling or unable to pay for capacity that is not actually needed and is consistent with the national gas objective as it promotes efficient investment in, and efficient operation and use of, the DBNGP. The required amendments to clauses 4.3 and 4.5 are as follows.

4.3 Option to renew Contract

Subject to clauses 4.4, 4.5, 4.6, 4.7 and 4.8, Shipper has two options (each an Option) to extend the Capacity End Date:

- (a) in respect of Contracted Capacity the subject of this Contract as at the Capacity Start Date (**Original Capacity**) ~~each for a period of 1 year (Option);~~ and
- (b) for a period of not less than 1 month and not greater than 1 year (Option Period), specified in the written notice given to the Operator in accordance with clause 4.5.

...

4.5 Notice exercising an Option

Not later than 12 months before the Capacity End Date, a Shipper may give written notice to the Operator that it wishes to exercise an Option for the Option Period. If such notice is not given before such time, the Option lapses, is of no force and effect whatsoever, and cannot be exercised.

1709. Further to amending clauses 4.3 and 4.5, the following consequential amendments are needed to clauses 4.6 and 4.7.

- Clause 4.6:
If Shipper gives a notice in accordance with clauses 4.5 or 4.8 exercising the first option given to it under clause 4.3, then the Period of Supply for the Original Capacity under this Contract will be extended for the Option Period ~~a period of 1 year~~ and: ...
- Clause 4.7:
If Shipper has exercised the first option under clause 4.3 and gives a notice in accordance with clauses 4.5 or 4.8 exercising the second option given to it under clause 4.3 then the Period of Supply for the Original Capacity under this Contract will be extended for the Option Period ~~a period of another year~~ and: ...

⁷⁴⁴ APA, *Standard Gas Transportation Agreements*, ([online](#)) [accessed June 2020] and Jemena, *Northern Gas Pipeline Gas Transportation Agreement*, ([online](#)) [accessed June 2020].

Required Amendment 44

DBP must amend clauses 4.3 and 4.5 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service to provide for options to extend that are more than one month and less than one year. The required drafting for these amendments is set out at paragraph 1708 of this draft decision.

Consequential amendments must also be made to clauses 4.6 and 4.7 of the proposed terms and conditions for the T1 Service, P1 Service and B1 Service. The required drafting for these amendments is set out at paragraph 1709 of this draft decision.

Clause 4.5 (Notice exercising an Option)

1710. CPM submitted that clause 4.5 of the terms and conditions should be amended to change the notification period for exercising an option from 12 months to six months and provide for the operator's approval to exercise an option where no notice has been given before such time. CPM submitted:⁷⁴⁵

With abundant spare capacity in the northern part of the DBNGP, and the Operator's other rights in the contract (see clause 4.8) there is no reasonable explanation of why a shipper should have to provide more than 6 months notice to exercise an Option on their P1 or B1 service, particularly where they may not have decided they need to extend the term of a gas supply agreement 12 months prior (as they may not need to recover inventory gas at that time (inventory gas is generally delivered in the months after [Gas Service Agreement] term has ended) and if it's not an issue to agree to exercise after the 6 month curfew, why then should a shipper lose that right, they "own" the pipe as they pay for it in their fees, notwithstanding it should still be the Operators choice but they should act reasonably in making that decision. No one wants to pay for capacity that they will not utilise and if they have to establish another contract for a short term then they may be forced to take term longer then their gas supply runs when they shouldn't have to, they pay their application fee they should be entitled to a term of their choice (being reasonable to the Operators capacity management position).

1711. Clause 4.5 of the terms and conditions states the following and remains unchanged from the current (AA4) terms and conditions.

4.5 Notice exercising an Option

Not later than 12 months before the Capacity End Date, a Shipper may give written notice to the Operator that it wishes to exercise an Option. If such notice is not given before such time, the Option lapses, is of no force and effect whatsoever, and cannot be exercised.

1712. Clause 4.5 of the terms and conditions differs to the Standard Shipper Contracts (as published on DBP's website) in that the Shipper Contracts require written notice to exercise an option 30 months before the capacity end date. Based on a comparison between the provisions of the terms and conditions for reference services and the Standard Shipper Contracts, the provisions in the terms and conditions to provide at least 12 months' notice appear to be reasonable.
1713. CPM submitted that clause 4.5 should be amended to provide for a shorter notification period of six months and to clarify the position in circumstances where notification is not provided within the timeframe. While such amendments would provide additional time for shippers to assess their operational requirements and

⁷⁴⁵ CITIC Pacific Mining Management Pty Ltd submission, p. 12.

decide on whether to exercise their options to extend their contracts, the amendments may affect the operator's ability to manage all its contracts. Given that the option to renew is an 'as of right' option, that is, DBP must provide the capacity, the ERA considers it to be reasonable for DBP to be given at least 12 months' notice by a shipper who wishes to exercise its option to renew.

Clause 11.1 (Overrun Charge)

1714. Both CPM and Synergy submitted that clause 11.1 of the terms and conditions, which sets out provisions for the Overrun Charge, should be amended.
1715. CPM submitted that the Overrun Charge for part haul shippers needed to be determined by reference to a 'distance factor' so that these shippers were not discriminated against.⁷⁴⁶

Part haul Shippers are being discriminated against in respect to paying full haul shipper penalties for part haul overruns resulting in an unfair calculation of Overrun Charges for what is supposedly designed to be "behaviour modifying provisions" (as stated by AGIG) to commercially incentivise Shippers not to overrun.

With Producers injecting large volumes of gas up and down the DBNGP in multiple locations and inference today that the north part of the pipe will flow bi-directionally there is an apparent abundance of spare un-used capacity on the northern section of the DBNGP which results in zero impact to full haul capacity availability in the southern part of the pipe. Add to this the fact that there is no economically viable part haul daily spot capacity market, the Spot Capacity market is being utilised by full haulers (requiring 11.1(b)(ii) to apply to part haul over runs) the Overrun Charges payable by part haulers go materially beyond a behaviour modifier, they become an unfair penalty applying a 3000% + penalty on part haul Shippers compared to a 15% penalty to full haul Shippers and such is considered grossly unfair and inconsistent with ERA's stated principles for allocating costs and the National Gas Objective.

1716. In support of its submission, CPM provided an external memorandum prepared by Allen & Overy on the application of a distance factor to P1 and B1 Overrun Charges that advised:⁷⁴⁷

The purpose of overrun charges is obvious – to economically incentivise parties to limit their overrun, to assist in the consistent operation of the pipeline. This purpose would be achieved by a percentage mark-up on the shipper's tariff (and increasing that percentage where the shipper has been notified that overrun gas is not available). This is the approach for the T1 service. So arguably a fair basis for the P1 and B1 Overrun Rate and Unavailable Overrun Rate is the greater of:

- **[115 / 250] % of the [P1 / B1] Tariff from time to time; and**
- the highest price bid for Spot Capacity which was accepted for that Gas Day, other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid, **multiplied by the Distance Factor.**

The current formulation goes well beyond this fair allocation. By referencing the full-haul tariff (or full-haul spot market) an extraordinary mark-up to the P1 or B1 tariff is produced. This is applied even to the 'innocent' use of overrun (that is, where there is no notice that overrun is not available). This amounts to a significant (and discriminatory) penalty against P1 and B1 shippers.

A significant penalty limits any flexibility of shippers in pipeline use, which in turn will limit flexibility / tolerance in their operations and inflict a disproportionate financial burden on them. This financial and operational burden is inconsistent with the goal of

⁷⁴⁶ CITIC Pacific Mining Management Pty Ltd submission, p. 16.

⁷⁴⁷ CITIC Pacific Mining Management Pty Ltd submission – *Memorandum from Allen & Overy, 'Application of Distance Factor to DBP P1 and B1 Overrun Charges', 9 March 2020.*

providing cost-effective and reliable supply of gas to consumers (and so is contrary to the National Gas Objective).

1717. Synergy submitted that:⁷⁴⁸

Under clause 11.1(b), the Overrun Rate is the greater of:

- the 115% of the T1/P1/B1 Tariff (as applicable); and
- the highest price bid for Spot Capacity which was accepted for that Gas Day, other than where the highest price bid was not a bona fide bid, in which case the highest bona fide bid.

Synergy submits that where the Shipper has made the highest price bid for Spot Capacity, Clause 11.1(b)(ii) should refer to the highest price bona fide bid by a party other than the Shipper to avoid the Shipper effectively bidding against itself.

1718. Clause 11 of the current (AA4) terms and conditions provide for an Overrun Charge (clause 11.1) and Unavailable Overrun Charge (clause 11.6).

- Overrun Charge
 - The Overrun Charge is payable for each gigajoule of overrun gas received by the shipper on a gas day and is calculated by applying the Overrun Rate to the total of overrun gas received.
 - The Overrun Rate is the greater of: (i) 115 per cent of the T1, P1 or B1 Tariff (as the case may be); and (ii) the highest price bid for spot capacity which was accepted for that gas day other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid.⁷⁴⁹
- Unavailable Overrun Charge
 - The Unavailable Overrun Charge is applicable in instances where the operator has given notice (Unavailability Notice) to the shipper that overrun gas is unavailable or only available to a limited extent and the shipper does not comply with the notice.
 - The Unavailable Overrun Charge is payable, in addition to the Overrun Charge, for each gigajoule of overrun gas taken by the shipper in excess of the quantity specified in the Unavailability Notice and is calculated by applying the Unavailable Overrun Rate to each gigajoule of overrun gas taken.
 - The Unavailable Overrun Rate is specified in schedule 2 of the terms and conditions as the greater of: (a) 250 per cent of the T1 Reference Tariff from time to time; and (b) the highest price bid for spot capacity which was accepted for that gas day other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid.

1719. As noted in the Allen & Overy memorandum, the charges for overruns in the terms and conditions for part haul and back haul reference services did historically take into consideration a distance factor. Specifically, in the ERA approved access arrangement for 2005 to 2010 (that is, the second access arrangement period or AA2)

⁷⁴⁸ Synergy submission, 31 March 2020, Annexure A, p. 4.

⁷⁴⁹ The T1 Tariff is used to determine the Overrun Rate in the terms and conditions for the T1 Service. Likewise, the P1 Tariff and B1 Tariff are used to determine the Overrun Rate in the terms and conditions for the P1 Service and B1 Service, respectively.

the terms and conditions for the P1 Service and B1 Service contained the following provisions:⁷⁵⁰

In the terms and conditions for the P1 Service:

- Clause 1 (Interpretation)

Distance Factor means for each Outlet Point at which Shipper has Part Haul Contracted Capacity the distance in kilometres between the Inlet Point and the Outlet Point divided by 1399 kilometres.

- Schedule 2 (Charges)

Unavailable Overrun Charge [being] the greater of:

- 250% of the P1 Reference Tariff from time to time; and
- the highest price bid for Spot Capacity which was accepted for that Gas Day, other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid, multiplied by the Distance Factor.

In the terms and conditions for the B1 Service:

- Clause 1 (Interpretation)

Distance Factor means for each Outlet Point at which Shipper has Back Haul Contracted Capacity the distance in kilometres between the Inlet Point and the Outlet Point divided by 1399 kilometres.

- Schedule 2 (Charges)

Unavailable Overrun Charge [being] the greater of:

- 250% of the B1 Reference Tariff from time to time; and
- the highest price bid for Spot Capacity which was accepted for that Gas Day, other than when the highest price bid was not a bona fide bid, in which case the highest bona fide bid, multiplied by the Distance Factor.

1720. DBP's proposed revisions to the access arrangement for the third access arrangement period (AA3, 2011 to 2015) included significant changes to the reference services. For AA3, DBP proposed to replace the three existing reference services (full haul T1 Service, part haul P1 Service and back haul B1 Service) with one new reference service – the Full Haul R1 Service. The proposed related terms and conditions for the R1 Service were based on the terms and conditions for the T1 Service, amended as required to provide for the new reference service.
1721. The ERA did not approve DBP's proposed changes to the reference services for AA3 and required the existing (AA2) reference services to be reinstated. Following its final decision for AA3, which refused to approve DBP's proposed revised access arrangement, the ERA published its own access arrangement, including terms and conditions for the reinstated reference services. However, in constructing the terms and conditions for the P1 Service and B1 Service the required changes to the overrun charges to account for the nature of the services, being part haul and back haul, respectively, were overlooked. That is, instead of the respective provisions being based on the T1 Service and amended as required, the provisions of the T1 Service were simply replicated (with no further amendment) for the P1 Service and B1 Service. Additionally, the schedules to the terms and conditions for the P1 and

⁷⁵⁰ ERA, *Revised Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Appendix 1 Part A, Part B and Part C Terms and Conditions For Reference Services*, 15 December 2005.

B1 Services were not published (that is, schedules were only published in the terms and conditions for the T1 Service).⁷⁵¹

1722. The ERA considers that its process for proposing and giving effect to its own revised access arrangement for AA3 resulted in the omission of required changes that applied a distance factor when determining the charges for overruns from the terms and conditions for the P1 Service and B1 Service. Notwithstanding this, the ERA considers that the submission made by CPM, including the information provided by Allen & Overy, clearly demonstrates that the historical AA2 provisions (as outlined in paragraph 1719) are consistent with the national gas objective and should apply to the terms and conditions for the P1 Service and B1 Service.

Required Amendment 45

DBP must amend clause 1 and schedule 2 (row 4) of the proposed terms and conditions for the P1 Service and B1 Service to reinstate the provisions that applied in the second access arrangement period (AA2) for determining the Unavailable Overrun Charge. The required drafting for these provisions is set out at paragraph 1719 of this draft decision.

DBP must also amend clause 11.1(b)(ii) of the proposed terms and conditions for the P1 Service and B1 Service to add the words “multiplied by the Distance Factor” at the end of the clause.

1723. In reviewing its decisions for AA2 and AA3, the ERA further considers that the rates at which the Excess Imbalance Charge and Hourly Peaking Charge are determined were also omissions from the AA3 process that need to be reinstated. In schedule 2 of the ERA’s terms and conditions for the P1 Service and B1 Service for AA2 the charges are determined by reference to the respective tariff. That is:⁷⁵²

In the terms and conditions for the P1 Service:

Excess Imbalance Charge [being] 200% of the P1 Reference Tariff from time to time.

Hourly Peaking Charge [being] 200% of the P1 Reference Tariff from time to time.

In the terms and conditions for the B1 Service:

Excess Imbalance Charge [being] 200% of the B1 Reference Tariff from time to time.

Hourly Peaking Charge [being] 200% of the B1 Reference Tariff from time to time.

⁷⁵¹ ERA, *Revised Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Appendix 1 – Terms and Conditions for reference services*, 22 December 2011.

⁷⁵² ERA, *Revised Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Appendix 1 Part A, Part B and Part C Terms and Conditions For Reference Services*, 15 December 2005.

Required Amendment 46

DBP must amend rows 1 and 2 in schedule 2 of the proposed terms and conditions for the P1 Service and B1 Service to reinstate the provisions that applied in the second access arrangement period (AA2) for determining the Excess Imbalance Charge and Hourly Peaking Charge, respectively.

The required drafting for these provisions is set out in paragraph 1723 of this draft decision.

1724. Required Amendment 45 and Required Amendment 46 both require reinstatement of provisions from the AA2 terms and conditions that include references to the terms “P1 Reference Tariff” and “B1 Reference Tariff”, which must consequentially be defined in the respective terms and conditions. Based on DBP’s proposed amendment to the term “T1 Tariff” (which is no longer required, see paragraph 1394), the ERA requires the following definitions:

P1 Reference Tariff means the reference tariff for P1 Service set out in clause 3.4 of the Access Arrangement, as adjusted by the Reference Tariff Variation Mechanism from time to time, save that the P1 Reference Tariff shall be re-set to reflect any replacement reference tariff for P1 Service approved by the Regulator for any new Access Arrangement Periods over the Term of this Contract.

B1 Reference Tariff means the reference tariff for B1 Service set out in clause 3.5 of the Access Arrangement, as adjusted by the Reference Tariff Variation Mechanism from time to time, save that the B1 Reference Tariff shall be re-set to reflect any replacement reference tariff for B1 Service approved by the Regulator for any new Access Arrangement Periods over the Term of this Contract.

1725. As there is currently no definition of “Access Arrangement Period” in the respective terms and conditions, the ERA also requires the following additional definition to be included in each of the terms and conditions:

Access Arrangement Period has the meaning given in the Rules.

Required Amendment 47

DBP must include definitions for the terms “P1 Reference Tariff” and “B1 Reference Tariff” in the terms and conditions for the P1 Service and B1 Service, respectively. A definition for the term “Access Arrangement Period” must also be included in both the terms and conditions for the P1 Service and B1 Service.

The required meanings for these terms are set out at paragraphs 1724 and 1725 of this draft decision.

1726. Notwithstanding the historical omissions, the ERA considers that to be consistent with the national gas objective, each of the charges set out in schedule 2 of the terms and conditions must reflect the nature of the reference service to which the terms and conditions apply. That is, the terms and conditions for the P1 Service and B1 Service must reflect the nature of the part haul service and back haul service, respectively, with charges allocated on a dollar per kilometre basis (as opposed to a charge that reflects the full haul service). References to the “P1 Tariff” and “B1 Tariff” (instead of “T1 Reference Tariff”) in schedule 2 of the terms and conditions for the P1 Service and B1 Service, respectively, ensures this dollar per kilometre allocation. The ERA

considers that provided the identified omissions are corrected, no further amendments are required.

1727. In response to Synergy's submission that clause 11.1(b)(ii) should include a provision to avoid the shipper bidding against itself for spot capacity, the ERA considers that this is not required. The calculation under clause 11.1(b) is tied to the highest spot price and is neutral on who bid that price.

Other access arrangement provisions

Access and queuing requirements

1728. Rule 112 of the NGR details the requirements for requesting access to a pipeline service:

112 Requests for access

- (1) A prospective user may request a scheme pipeline service provider to provide a pipeline service for the prospective user. For the purposes of this rule 112, the date that the prospective user's access request is received by the service provider is referred to as the "**access request date**".
- (2) The request must be made in writing and must:
 - (a) state the time or times when the pipeline service will be required and the capacity that is to be utilised; and
 - (b) identify the entry point where the user proposes to introduce natural gas to the pipeline or the exit point where the user proposes to take natural gas from the pipeline or, if the requested service is a haulage service, both entry and exit point; and
 - (c) state the relevant technical details (including the proposed gas specification) for the connection to the pipeline, and for ensuring safety and reliability of the supply of natural gas to, or from, the pipeline.
- (3) The service provider must:
 - (a) within 5 business days after the access request date, acknowledge receipt of the request; and
 - (b) within 10 business days after the access request date, inform the prospective user:
 - (i) that it is able to provide the requested pipeline service;
 - (ii) that it needs to carry out further investigation to determine whether it can provide the requested pipeline service and provide the prospective user with a statement of the nature of the investigation and the reasonable costs of the investigation the prospective user would be required to meet; or
 - (iii) that it is unable to provide the requested pipeline service.
- (4) If the service provider is unable to provide the requested pipeline service, it must:
 - (a) provide the prospective user with written reasons explaining why the requested pipeline service cannot be provided; and
 - (b) if there is some prospect that it will become possible to provide the requested service at some time in the future – give details (which must be as specific as the circumstances reasonably allow) of when capacity to provide the requested service is likely to become available and, if possible, nominate a specific date.
- (5) If the service provider is able to provide the service, it must, within 25 business days of the access request date, provide the terms and conditions on which the service provider is prepared to provide the requested pipeline service (the **access proposal**).
- (6) If the service provider needs to carry out further investigation to determine whether it can provide the requested pipeline service and the prospective

user agrees to the reasonable costs specified by the service provider under subrule 3(b)(ii), it must carry out the investigation and then, within 25 business days of the access request date, inform the prospective user:

- (a) that it is able to provide the requested service; or
 - (b) that it is unable to provide the requested service.
- (7) If the service provider is unable to provide the requested pipeline service it must include in its notification under subrule (6) the information specified in subrule (4).
- (8) If the service provider is able to provide the service, it must, within 15 business days of providing the notice under subrule (6)(a), provide the terms and conditions on which the service provider is prepared to provide the requested pipeline service (the **access proposal**).
- (9) If the prospective user:
- (a) wants to seek access to the pipeline service based on the access proposal provided by the service provider under subrules (5) or (8), it must notify the service provider within 15 business days of receiving the access proposal; or
 - (b) wants to request amendments to the access proposal provided by the service provider under subrules (5) or (8), it must notify the service provider within 15 business days of receiving the access proposal and provide its requested amendments.
- (10) Following the prospective user's response under subrule (9)(b), the service provider must respond within 15 business days. If the parties have not agreed on the service provider's proposal (or some negotiated modification of it) within a further 20 business days after the date of the service provider's response under this subrule, then the service provider is taken to have rejected the prospective user's request.
- (11) The timeframes specified in subrules (5) to (11) may be extended if the relevant service provider and prospective user agree in writing.
1729. Further to requirements for requesting access, modified rule 48(1)(f) and rule 103(1) of the NGR require the access arrangement to set out queuing requirements.⁷⁵³
1730. Rule 103 of the NGR details specific provisions for queuing requirements.

103 Queuing requirements

- (1) An access arrangement must contain queuing requirements if:
- (a) the access arrangement is for a transmission pipeline; or
 - (b) the access arrangement is for a distribution pipeline and the [ERA] notifies the service provider that the access arrangement must contain queuing requirements.
- (2) If the [ERA] gives a notification under subrule (1), the access arrangement must contain queuing requirements as from the commencement of the first access arrangement period to commence after the date of the notification (but this requirement lapses if the [ERA], by notice to the service provider, withdraws the notification).
- (3) Queuing requirements must establish a process or mechanism (or both) for establishing an order of priority between prospective users of spare or developable capacity (or both) in which all prospective users (whether associates of, or unrelated to, the service provider) are treated on a fair and equal basis.

⁷⁵³ Modified rule 48(1)(f) as set out in schedule 1 (rule 62) of the NGR.

- (4) Queuing requirements might (for example) provide that the order of priority is to be determined:
- (a) on a first-come-first-served basis; or
 - (b) on the basis of a publicly notified auction in which all prospective users of the relevant spare capacity or developable capacity are able to participate.
- (5) Queuing requirements must be sufficiently detailed to enable prospective users:
- (a) to understand the basis on which an order of priority between them has been, or will be, determined; and
 - (b) if an order of priority has been determined – to determine the prospective user's position in the queue.

DBP's proposal

Procedures for access requests

1731. Clause 5 of the proposed revised access arrangement details the procedures for making access requests and queuing requirements. DBP proposed several amendments to the clause to address the changes that were made to rule 112 of the NGR:⁷⁵⁴

- Clause 5.2(b) was amended to delete the requirement for a prospective shipper to lodge an access request in circumstances where DBP advises the shipper during consultation that investigations are required.
- Clause 5.2(c) was amended to delete the requirement for the “capacity end date” to be, in the case of an access request for a reference service, a date no earlier than the date two years after the commencement date for the service.
- Clause 5.2(d) was amended to limit the forms for access requests to a Reference Service Access Request Form and Non-Reference Service Access Request Form.⁷⁵⁵ The requirement for such forms to be executed by or on behalf of the prospective shipper in accordance with section 127 of the *Corporations Act 2001 (Cth)* and be submitted in duplicate was also deleted.
- Clause 5.3 was amended to delete existing clauses and insert new clauses to reflect the changed procedures and timeframes for assessing access requests as set out in rule 112 of the NGR.⁷⁵⁶ The clause in which DBP may and must reject an access request was also amended (existing clause 5.3(e)).

Queuing requirements

1732. Clause 5.4 of the proposed revised access arrangement sets out the queuing requirements for determining the priority of access to spare and developable capacity.

1733. DBP proposed to maintain a single queue for access to reference and non-reference services that are haulage services, with access requests being entered into the queue

⁷⁵⁴ The provisions for requesting access under rule 112 of the NGR were amended in March 2019 (refer to paragraph 19 of this decision).

⁷⁵⁵ The requirement to use a Spot Capacity Service Access Request Form and Non-Transportation Services Access Request Form was deleted from the proposed revised access arrangement.

⁷⁵⁶ Existing subclauses 5.3(b), 5.3(c), 5.3(d), 5.3(f) and 5.3(g) were deleted. New clauses 5.3(b) to 5.3(f) were inserted.

on the date, being the “priority date”, that they are received by DBP.⁷⁵⁷ Clause 5.4(f) was amended to clarify the priority date in instances where the access request requires the terms and conditions of the access contract to be negotiated or is subject to conditions.

Submissions

1734. Synergy addressed DBP’s proposed amendments to the requirements for access requests. Synergy submitted that it had concerns about removing the requirement for DBP to offer the terms and conditions for reference services (that is, the Access Contract Terms and Conditions) and allowing the terms and conditions to be negotiated. It stated that:⁷⁵⁸

Under the Access Arrangement Document for the 2016-2020 period (AA4 AAD), it was reasonably clear that a Reference Service was required to be provided on the terms and conditions of the Access Contract Terms and Conditions attached to the AA4 AAD... The AA4 AAD did not contemplate that there could be any negotiation of the Access Contract Terms and Conditions (beyond the details to be filled in by the Prospective Shipper in the Access Request Form).

1735. Synergy referred to the proposed provisions in clauses 5.2 and 5.3 of the revised access arrangement to highlight its concerns:⁷⁵⁹

- Clause 5.2(c)(viii)(A) has been amended to provide that the Prospective Shipper seeking a Reference Service must state “whether” it accepts the Access Contract Terms and Conditions (rather than that it does accept them).
- The revised Clause 5.3 (Assessment of Access Requests) now no longer distinguishes between an Access Request for a Reference Service and an Access Request for a Non-Reference Service, and applies the same assessment procedure to both types of Access Requests, including the following:

If the Operator is able to provide the requested service, the Operator must provide to the Prospective Shipper the terms and conditions on which the Operator “is prepared to provide the requested service” (Clause 5.3(d)(i)).

This drafting seems to allow the Operator the discretion to not offer the Prospective Shipper the Access Contract Terms and Conditions set out in the Access Arrangement Document for a Reference Service ...

Synergy also notes that if the Operator and a Prospective Shipper seeking a Reference Service were to negotiate different terms and conditions, then the requested service should no longer be considered a Reference Service, but rather a Non-Reference Service.

- Within 15 business days after receiving terms and conditions from the Operator under clause 5.3(d)(i), the Prospective Shipper must notify whether it wants to seek access on those terms and conditions or requests amendments to those terms and conditions (together with the requested amendments) ... This suggests that even if the Operator offers the Access Contract Terms and Conditions to a Prospective Shipper seeking a Reference Service, those terms and conditions could be subject to negotiation.

In Synergy’s view, it should be made clear that if any service is not provided on the Access Contract Terms and Conditions (whether as a result of negotiation or otherwise), then the service provided to the Prospective Shipper is a Non-Reference Service, rather than a Reference Service.

⁷⁵⁷ A “haulage service” is defined in the proposed revised access arrangement to mean “a Pipeline Service involving the contracting of capacity on the DBNGP”.

⁷⁵⁸ Synergy submission, 31 March 2020, Annexure A, p. 1.

⁷⁵⁹ Synergy submission, 31 March 2020, Annexure A, pp. 1-2.

1736. Synergy further noted that amended clause 5.3(d)(ii) also deemed “the Operator to have rejected a Prospective Shipper’s Access Request if the Prospective Shipper seeks amendments to the terms and conditions offered by the Operator and those amendments are not agreed within (at most) 35 days of the Prospective Shipper seeking such amendments”.⁷⁶⁰ Synergy did not consider this to be reasonable because:

- this restriction represents a large departure from the AA4 AAD, which only permitted the Operator to reject an Access Request that required negotiation of terms and conditions if the Prospective Shipper failed to negotiate in good faith (rather than if the negotiations were not concluded within a specified period);
- commercial negotiation of terms and conditions for substantial contracts will often take more than 35 days, despite the best efforts of parties; and
- although clause 5.3(d) contemplates that the timeframes may be varied by agreement in writing between the Operator and the Prospective Shipper, the Operator has the discretion to not ever agree to any extended time frame.

1737. Gas Trading Australia Pty Ltd (gasTrading) stated that it had concerns over the access request process and that DBP needed to ensure that requests for capacity were treated fairly.⁷⁶¹

gasTrading is concerned that DBP could deny a request for Access to a Part Haul from south of MLV31 to Perth on the basis that this would quarantine their Full Haul capacity. DBP needs to ensure that a customer is made aware that any part haul or full haul would be treated fairly, and not on the basis that the full haul contract for the same “capacity” is given priority due to the higher tariff. The capacity should be available on a first come first served basis and not be prioritised based on tariff or contract value (for example a longer contract).

1738. No submissions to the ERA addressed DBP’s proposed amendment to the queuing requirements in clause 5.4(f) of the proposed revised access arrangement.

Draft decision

DBP’s proposed procedures for access requests

1739. DBP’s proposed amendments to clause 5 of the access arrangement aimed to address the changes that were made to rule 112 of the NGR. The proposed provisions and timeframes set out in new clauses 5.3(b) to 5.3(f) of the revised access arrangement are materially consistent with the required provisions and timeframes set out in rule 112. The other proposed amendments made to clauses 5.2 and 5.4 of the revised access arrangement are consequential to and/or support the new clauses.

1740. In response to Synergy’s concerns about the proposed amendments removing the requirement for DBP to offer reference services on the terms and conditions set out in the access arrangement (that is, the Access Contract Terms and Conditions) and allowing such terms and conditions to be negotiated, the ERA notes that:

- The NGL does not prohibit the negotiation of terms and conditions for access to reference services. If an access arrangement were to introduce such a prohibition, this would be inconsistent with the national gas objective: “to promote efficient investment in, and efficient operation and use of, natural gas

⁷⁶⁰ Synergy submission, 31 March 2020, Annexure A, p. 3.

⁷⁶¹ Gas Trading Australia Pty Ltd, *Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25, Issues Paper*, 30 March 2020, p. 14.

services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

- Proposed clause 5.2(c)(viii) of the proposed revised access arrangement requires the shipper in its access request to state the terms and conditions on which the service is being requested by:
 - In the case of a reference service, stating whether the shipper accepts the terms and conditions for the reference service (being the Access Contract Terms and Conditions).
 - In the case of a non-reference service, other than a Spot Capacity Service, specifying either: (a) that the shipper accepts the terms and conditions for the relevant non-reference service that is published by the operator on its website, or (b) the terms and conditions that the shipper proposes should apply to the relevant non-reference service or a request for the operator to propose the terms and conditions for provision of the service.
 - In the case of a Spot Capacity Service, stating that the shipper accepts the Spot Transaction Terms and Conditions and agrees to comply with the Spot Market Rules.

1741. In response to Synergy’s comment that “it should be made clear that if any service is not provided on the Access Contract Terms and Conditions (whether as a result of negotiation or otherwise), then the service provided to the Prospective Shipper is a Non-Reference Service, rather than a Reference Service”, the ERA notes that, as was decided by the Australian Competition Tribunal in *Application by DBNGP (WA) Transmission Pty Ltd (No.3) [2012] A CompT 14* [at 540], “the terms and conditions on which a reference service is to be offered are inseparable from the nature of the service.” If a service is negotiated on terms and conditions that differ in material respects from the Access Contract Terms and Conditions, it will constitute a non-reference service.

1742. Clause 47A(2) of the NGR provides that a pipeline service is to be treated as distinct from another pipeline service, having regard to the characteristics of different pipeline services:

47A Reference services

- (2) A pipeline service is to be treated as distinct from another pipeline service having regard to the characteristics of different pipeline services, including:
- (a) the service type (for example, forward haul, backhaul, connection, park and loan);
 - (b) the priority of the service relative to other pipeline services of the same type; and
 - (c) the receipt and delivery points.

1743. The inclusive list of the characteristics provided in clause 47A(2) includes characteristics (for example, whether a service is forward haul or backhaul) which are currently characteristics of services provided both under Standard Shipper Contracts (as published on DBP’s website) and the terms and conditions for reference services (that this, the Access Contract Terms and Conditions). The uniqueness of a reference service is not the nature of the service, but that any reference service must be available at the reference tariff and on the terms and conditions for that reference service. As stated at paragraph 1740, clause 5.2(c)(viii) of the proposed revised access arrangement provides for the shipper to request a reference service on the Access Contract Terms and Conditions.

1744. Synergy further stated that the provisions of clause 5.3 in the proposed revised access arrangement no longer distinguish between an access request for a reference service and an access request for a non-reference service. The provisions also apply the same assessment procedure to both types of access requests.
1745. Clause 5.3 of the revised access arrangement sets out the process for the assessment of access requests that are submitted under clause 5.2. Clause 5.3(a) states that the “Operator will assess and respond to an Access Request in accordance with NGR 112 based on the information provided to it with the Access Request”. Consistent with this statement, the process set out in clauses 5.3(b) to 5.3(g) of the revised access arrangement is materially consistent with the process set out rules 112(3) to 112(11) of the NGR. For this reason, the ERA considers that DBP’s proposed amendments meet the requirements of the NGR and are consistent with the national gas objective.
1746. However, given Synergy’s comments concerning the Access Contract Terms and Conditions, the ERA considers that it would be beneficial to provide for an explicit process by which a shipper’s access request for a reference service on the Access Contract Terms and Conditions and the operator’s notification that it can provide the requested service lead to a binding contract. The ERA requires the following new clause 5.3(d) (with consequential renumbering of the remaining subclauses in clause 5.3), which will apply to an access request for a reference service where the shipper states, in accordance with clause 5.2(c)(viii)(A), that it accepts the Access Contract Terms and Conditions:

5.3 Assessment of Access Requests

...

(d) [If the requested service is a Reference Service and the Prospective Shipper has stated in the Access Request that the Prospective Shipper accepts the Access Contract Terms and Conditions, the Operator is deemed to have accepted an offer from the Prospective Shipper to acquire the Reference Service on the Access Contract Terms and Conditions on the date the Operator notifies the Prospective Shipper, in accordance with clause 5.3\(c\)\(i\), that it is able to provide the requested service](#)

~~(d)~~(e) If the Operator is able to provide the requested service ...

Required Amendment 48

DBP must amend the requirements for access requests in clause 5.3 of the proposed revised access arrangement to insert new clause 5.3(d), which will apply to an access request for a reference service where the shipper states, in accordance with clause 5.2(c)(viii)(A), that it accepts the Access Contract Terms and Conditions.

The required drafting for new clause 5.3(d) is set out at paragraph 1746 of this draft decision. Consequential amendments to renumber the remaining subclauses in clause 5.3 must also be made.

1747. In response to Synergy’s submission concerning the use of the same assessment procedure to assess access requests for reference and non-reference services, the ERA considers this to be reasonable and consistent with the national gas objective. The establishment of separate assessment procedures may complicate the assessment process and lead to inefficiencies within the operator’s administrative operations (for example, the establishment of separate assessment teams to oversee

the separate assessment processes). The NGR also do not require separate assessment procedures for different pipeline services. While the assessment procedure for access requests is the same for both reference services and non-reference services, clause 5.2(d) requires the use of different request forms to differentiate between a request for a reference service and a request for a non-reference service.

1748. In response to gasTrading's submission concerning the access request process, the ERA considers that the proposed procedures for access requests together with the queuing requirements that establish a single queue, which operates on a first-come-first-served basis, provides for the fair treatment of shippers (customers) seeking access to capacity. The procedures and queuing rules for access requests, as set out in clauses 5.3 and 5.4 of the access arrangement, respectively, do not give priority based on the type of capacity (that is, full, part or back haul capacity) – access requests are assessed and, if required, queued on a first-come-first served basis regardless of what type of capacity is being requested. In any case, in circumstances where a shipper believes it is being treated unfairly, the shipper may access the provisions in chapter 6 of the NGL to raise an access dispute.⁷⁶²

DBP's proposed queuing requirements

1749. DBP's proposed queuing requirements, as set out in clause 5.4 of the proposed revised access arrangement, are substantively unchanged from the requirements set out in the current (AA4) access arrangement (the exception being clause 5.4(f) where amendments were proposed). The queuing requirements establish a single queue which operates on a first-come-first-served basis, as contemplated by the NGR.
1750. While the provisions of clause 5.4 are sufficiently detailed to explain the operation of the queue and allow prospective shippers to understand how the order of priority is determined, there may be insufficient detail for prospective shippers to determine their actual position in the queue. As drafted and proposed, the current queuing requirements do not require DBP to disclose the total number of access requests that are in the queue and the priority dates assigned to each access request. Without such information, a prospective shipper is not able to determine and/or verify its position in the queue. That is, a prospective shipper can only assume that access requests with an earlier priority date will be ahead of its access request in the queue without knowing how many access requests there are ahead of its request (and vice versa).
1751. No submissions to the ERA addressed the queuing requirements. Despite the absence of submissions to confirm the inability of prospective shippers to determine their position in the queue, the ERA considers that without additional information prospective shippers would not be able to do so.
1752. Rule 103(5)(b) of the NGR requires the queuing requirements to be sufficiently detailed to enable prospective users, where an order of priority has been determined, to determine the prospective user's position in the queue. The ERA considers this requirement to mean the user's *actual* position in the queue, rather than *relative* position in the queue. To determine and/or verify its actual position in the queue, a user must know the date its access request entered the queue, how many other users are in the queue and the date each other user entered the queue. The date of entry into the queue is needed because the queue under the access arrangement is a single queue operating on a first-come-first-served basis, with requests entered into

⁷⁶² National Gas Law, Chapter 6 (Access disputes – scheme pipelines), sections 178 to 216.

the queue based on a “priority date” that is the date on which the request is received (or deemed to be received) by DBP.

Required Amendment 49

DBP must amend the queuing requirements in clause 5.4 of the proposed revised access arrangement to require the disclosure of information to enable a user to determine its actual position in the queue for access to capacity (as required by rule 103(5)(b) of the NGR).

1753. DBP’s proposed amendments to clause 5.4(f) were made to clarify the priority date in instances where the access request requires the terms and conditions of the access contract to be negotiated or is subject to conditions.
1754. The ERA considers that the intent of DBP’s proposed amendments is consistent with the national gas objective – clarity in provisions of the access arrangement promotes efficient investment in, and efficient operation and use of, the DBNGP. However, DBP’s amended drafting does not adequately clarify clause 5.4(f) as intended:
- In part (i) of clause 5.4(f), references are made to “NGR 112(3)” and “NGR 112”. These are references to general rule provisions, which are substantively reproduced in the access arrangement at clause 5.3(c) and clause 5.3, respectively. Part (i) should make direct references to these clauses in the access arrangement because it is the access arrangement that sets out the specific requirements applicable to the queue for access to capacity of the DBNGP.
 - In part (ii) of clause 5.4(f), clause 5.3(e) is referenced as the clause where the operator is required to notify the shipper that there is no spare capacity sufficient to satisfy the access request. However, it is clause 5.3(c) where the operator is required to notify the shipper that it is able or unable to provide the requested service, or that further investigations are required to determine whether the requested service can be provided.
 - The intent of part (ii) of clause 5.4(f) is the same as part (i), except that part (ii) covers the circumstance where the shipper is notified that investigations are needed to determine whether the requested service can be provided, whereas part (i) covers the circumstance where the shipper is notified that the requested service can be provided. Where investigations are required, clause 5.3(e) applies.
 - In part (iii) of clause 5.4(f) it is not clear when negotiations are “completed” and satisfaction of the conditions should be subject to a reasonable standard.
 - Part (v) of clause 5.4(f) states what will happen to the access request and what priority date will apply, subject to the circumstances detailed in parts (i) to (iv). Part (v) should therefore be reformatted as a paragraph under clause 5.3(f), rather than being a part (that is, part (v)) of the clause.
1755. Given these concerns, the ERA considers that the following amendments are required to clause 5.4(f) to accurately clarify the priority date in instances where the access request requires the terms and conditions of the access contract to be negotiated or is subject to conditions.

5.4 Queuing Requirements

...

- (f) If an Access Request requires the terms and conditions of the Access Contract to be negotiated between Operator and the Prospective Shipper or is subject to conditions, the Access Request will be entered in the Queue with a priority date being the date of receipt of the Access Request by Operator.

However, ~~unless~~ in a case:

- (i) where Operator notifies Shipper in accordance with ~~NGR 112(3) clause 5.3(c)(i)~~ that there is Spare Capacity sufficient to satisfy the Access Request, ~~within 15 Business Days after the Prospective Shipper receives an access proposal under clause 5.3(e) the date Operator responds to the Prospective Shipper but the Prospective Shipper requests amended terms and conditions~~ in accordance with ~~NGR 112~~ the process under clause 5.3(d)(ii)(B) in respect of the Access Request; or
- (ii) where Operator notifies Shipper in accordance with clause ~~5.3(e)~~ 5.3(c)(ii) that there is not Spare Capacity sufficient to satisfy the Access Request and the parties agree to investigations being carried out under a FEED Proposal, ~~within 15 Business Days after the date the Shipper receives the Access proposal under report on the investigations to be provided to the Shipper under the FEED Proposal,~~

unless within 15 Business Days after the date the Shipper receives:

- (A) an access proposal in response to the proposed amended terms and conditions under clause 5.3(d)(ii)(B); or
- (B) an access proposal based on the investigations carried out in respect of a FEED Proposal under clause 5.3(e)(iv);

either:

- (iii) the ~~negotiations are completed~~ parties agree the terms of access and/or the conditions are, in Operator's reasonable opinion, satisfied; or
- (iv) the Prospective Shipper ~~has agreed~~ agrees to amend the Access Request such that it becomes an Access Request for a Reference Service made on the basis of the Access Contract Terms and Conditions,

~~(v) —~~

the Access Request will be removed from the Queue and will subsequently be re-entered in the Queue with a priority date being the date that ~~negotiations are completed~~ agreement is reached and/or the conditions are, in Operator's reasonable opinion, satisfied. However, where a dispute between Operator and the Prospective Shipper arises in respect of the terms and conditions of access and that dispute is referred to arbitration under section 181 of the NGA, the period of time remaining pursuant to clauses 5.4(f)(i) and 5.4(f)(ii) (as applicable) will be suspended from the date the dispute is referred to arbitration (Referral Date) until 4 months after the Referral Date.

Required Amendment 50

DBP must amend the queuing requirements in clause 5.4(f) of the proposed revised access arrangement to clarify the requirements in instances where an access request requires the terms and conditions of the access contract to be negotiated between the operator and prospective shipper or is subject to conditions.

The required drafting for these amendments is set out at paragraph 1755 of this draft decision.

Capacity trading

1756. Modified rule 48(1)(g) of the NGR requires the access arrangement to set out capacity trading requirements.⁷⁶³

1757. Rule 105 of the NGR details specific provisions for capacity trading requirements:

105 Capacity trading requirements

- (1) Capacity trading requirements must provide for transfer of capacity:
 - (a) if the service provider is registered as a participant in a particular gas market – in accordance with rules or Procedures governing the relevant gas market; or
 - (b) if the service provider is not so registered, or the relevant rules or Procedures do not deal with capacity trading – in accordance with this rule.
- (2) A user may, without the service provider's consent, transfer, by way of subcontract, all or any of the user's contracted capacity to another (the third party) with the following consequences:
 - (a) the transferor's rights against, and obligations to, the service provider are (subject to paragraph (b)) unaffected by the transfer; but
 - (b) the transferor must immediately give notice to the service provider of:
 - (i) the subcontract and its likely duration; and
 - (ii) the identity of the third party; and
 - (iii) the amount of the contracted capacity transferred.
- (3) A user may, with the service provider's consent, transfer all or any of the user's contracted capacity to another (the third party) with the following consequences:
 - (a) the transferor's rights against, and obligations to, the service provider are terminated or modified in accordance with the capacity trading requirements; and
 - (b) a contract arises between the service provider and the third party on terms and conditions determined by or in accordance with the capacity trading requirements.
- (4) The service provider must not withhold its consent under subrule (3) unless it has reasonable grounds, based on technical or commercial considerations, for doing so.

⁷⁶³ As set out in schedule 1 (rule 62) of the NGR.

- (5) An adjustment of rights and liabilities under subrule (3) does not affect rights or liabilities that had accrued under, or in relation to, the contract before the transfer took effect.
- (6) The capacity trading requirements may specify in advance conditions under which consent will or will not be given, and conditions to be complied with if consent is given.

DBP's proposal

1758. Clause 6 of the proposed revised access arrangement sets out the capacity trading requirements. DBP proposed no amendments to the clause – the clause remains the same as clause 6 of the current (AA4) access arrangement.

Submissions

1759. No submissions to the ERA addressed the capacity trading requirements and DBP's proposal to leave these requirements in the access arrangement unchanged from AA4.

Draft decision

1760. Clause 6 of the access arrangement provides for the transfer of capacity consistent with rule 105(1) of the NGR:

- Where DBP is registered as a participant in a particular gas market, the transfer of capacity will occur in accordance with the rules or procedures governing the gas market (clause 6.1(a) of the access arrangement).
- Where DBP is not registered as a participant in a particular gas market, the transfer of capacity will occur in accordance with rule 105 of the NGR and clauses 6.2 to 6.5 of the access arrangement (clause 6.1(b) of the access arrangement).

1761. Clauses 6.2 to 6.4 of the access arrangement provide that:

- Consistent with rules 105(2) and 105(3) of the NGR, shippers with a haulage service may transfer all or any of their contracted capacity with or without DBP's consent (clause 6.2 of the access arrangement):
 - Transfers without consent, by way of subcontract, may occur in accordance with clause 27.2 of the terms and conditions for each reference service.
 - Subject to any pre-existing contractual rights, transfers with consent may occur in accordance with clauses 27.3 and 27.4 of the terms and conditions for each reference service, and clauses 6.3 to 6.5 of the access arrangement.⁷⁶⁴
- Consistent with rule 105(4) of the NGR, DBP must not withhold its consent unless it has reasonable grounds, based on technical or commercial considerations, to do so (clause 6.3 of the access arrangement).
- Consistent with rule 105(6) of the NGR, clause 6.4 of the access arrangement details conditions, based on reasonable technical or commercial grounds, that must be met before DBP will give consent to a transfer. These conditions are

⁷⁶⁴ In the access arrangement, the term "Pre-existing Contractual Right" means "a 'relevant protected contractual right' as defined in section 321 of the NGL".

in addition to any conditions set out in the terms and conditions for each reference service and include, without limitation:

- That the third party must comply with the queuing requirements detailed in clause 5.4 of the access arrangement.
- That the shipper must reimburse DBP for all costs incurred by it in processing and determining the shipper's consent request regardless of whether the transfer proceeds, provided DBP can demonstrate the costs have been reasonably and properly incurred.

1762. Clause 6.5 of the access arrangement details the consequences following the transfer of capacity, with DBP's consent, to a third party. Consistent with rule 105(5) of the NGR, the shipper's rights or liabilities that accrued under, or in relation to, the shipper's access contract before the date of consent are not affected.
1763. DBP's proposed capacity trading requirements remain the same as the requirements in the current (AA4) access arrangement. There were no submissions from interested parties seeking any amendments to the requirements. For these reasons, and in the absence of any other reason to amend the requirements, the current capacity trading requirements are considered to meet the requirements of the NGR.

Extension and expansion requirements

1764. Modified rule 48(1)(h) of the NGR requires the access arrangement to set out extension and expansion requirements.⁷⁶⁵
1765. Rule 104 of the NGR details specific provisions for extension and expansion requirements. As indicated at paragraph 19, amendments to the NGR occurred in March 2019. These amendments changed the extension and expansion requirements. Rule 104, as amended, is reproduced below:

104 Extension and expansion requirements

- (1) Extension and expansion requirements may state whether the applicable access arrangement will apply to incremental services to be provided as a result of a particular extension to the pipeline made during the access arrangement period or may allow for later resolution of that question on a basis stated in the requirements.
- (2) Extension and expansion requirements may, if the service provider agrees, state that the applicable access arrangement will apply to incremental services to be provided as a result of a particular extension to the pipeline made before the revision commencement date for the applicable access arrangement.
- (3) Extension and expansion requirements must state that the applicable access arrangement will apply to incremental services to be provided as a result of any expansion to the capacity of the pipeline during the access arrangement period and deal with the effect of the expansion on tariffs.
- (4) Extension and expansion requirements included in a full access arrangement must, if they provide that an applicable access arrangement is to apply to incremental services provided as a result of an extension to the pipeline:
 - (a) in the case of extensions made before the revision commencement date for the applicable access arrangement deal with:

⁷⁶⁵ As set out in schedule 1 (rule 62) of the NGR.

- (i) the effect of the extension on the opening capital base under rule 77(2)(c1); and
- (ii) the effect of the extension on the description of reference services specified in the access arrangement proposal; and
- (b) in all cases, deal with the effect of the extension on tariffs.
- (5) The extension and expansion requirements cannot require the service provider to provide funds for work involved in making an extension or expansion unless the service provider agrees.

DBP's proposal

1766. Clause 7 of the proposed revised access arrangement sets out the extension and expansion requirements. DBP amended clause 7.3 to change the date of "1 July 2016" to "1 July 2021". Except for this amendment clause 7 remains the same as clause 7 of the current (AA4) access arrangement.

Submissions

1767. No submissions to the ERA addressed the extension and expansion requirements and DBP's proposal to leave these requirements in the access arrangement substantively unchanged from AA4.

Draft decision

1768. DBP amended clause 7.3 of the proposed revised access arrangement to change the date "1 July 2016" to "1 July 2021" as follows:

If the Operator proposes to extend or expand the DBNGP for a purpose other than meeting its obligations to the holder of a Capacity Expansion Option that was originally entered into before 1 July ~~2016~~2021:

1769. The ERA considers that the intent of DBP's proposed date change was to amend the date to reflect the commencement date of the revised access arrangement for AA5. Clause 14.1 of the revised access arrangement states that "the Current Access Arrangement Period commences on 1 January 2021". Given this date, the ERA considers that the date in clause 7.3 of the revised access arrangement should be 1 January 2021.

Required Amendment 51

DBP must amend the extension and expansion requirements in clause 7.3 of the proposed revised access arrangement to change the date from "1 July 2021" to "1 January 2021" to reflect the expected commencement date of the revised access arrangement for the fifth access arrangement period (AA5).

1770. The ERA considers that clause 7 of the proposed revised access arrangement does not expressly address the amended requirements of rule 104 of the NGR. Rule 104 provides that the extension and expansion requirements:
- May state whether the access arrangement will apply to incremental services to be provided as a result of a particular *extension* to the pipeline made *during* the access arrangement period or allow for a later resolution of that question on a basis as stated in the requirements.

- May state, if DBP agrees, that the access arrangement will apply to incremental services to be provided as a result of a particular *extension* to the pipeline made *before* the revision commencement date for the access arrangement.
 - Must state that the access arrangement will apply to incremental services to be provided as a result of any *expansion* to the capacity of the pipeline *during* the access arrangement period and deal with the effect of the expansion on tariffs.
1771. If the requirements in the access arrangement are to apply to incremental services provided as a result of an extension to the pipeline:
- In the case of extensions made before the revision commencement date for the access arrangement, the requirements must deal with the effect of the extension on the opening capital base under rule 77(2)(c1) of the NGR, as well as the effect of the extension on the description of reference services specified in the access arrangement proposal.
 - In all cases, the requirements must deal with the effect of the extension on tariffs.
1772. The extension and expansion requirements cannot require DBP to provide funds for work involved in making an extension or expansion unless DBP agrees.
1773. The ERA considers that clause 7 of the proposed revised access arrangement, as currently drafted, is not sufficiently clear as to whether the extension and expansion requirements provide that the access arrangement applies to incremental services. The term “incremental services” is not currently used in the access arrangement. Rule 3 of the NGR defines incremental services as follows:
- incremental services** means pipeline services provided by means of an extension to, or expansion of the capacity of, the pipeline.
1774. Further, clause 7.3 also provides that DBP may elect, by way of notice to the ERA, that an *extension* will not become part of the covered pipeline. DBP may also elect that an *expansion* will not become part of the covered pipeline. However, in the case of expansions, DBP must give notice to the ERA and demonstrate, to the ERA’s “reasonable satisfaction”, that the application of the access arrangement to the expansion is inconsistent with the national gas objective. The ERA must then issue a notice confirming its position as to whether it is satisfied.
1775. Rule 104 of the NGR does not require or allow the ERA to make assessments as to whether *expansions* form part of the covered pipeline and/or whether the access arrangement will apply to incremental services that are provided as a result of an expansion. In the case of expansions, the service provider has no choice – the access arrangement must apply to the incremental services that are provided as a result of the expansion (rule 104(3)).
1776. Rule 104 of the NGR further requires the extension and expansion requirements to deal with the effect of extensions and expansions on tariffs and, in the case of extensions made before the revision commencement date for the access arrangement, the effect of the extension on the: (a) opening capital base under rule 77(2)(c1) of the NGR; and (b) description of reference services specified in the access arrangement proposal (rule 104(4)).
1777. Clause 7.5 of the proposed revised access arrangement states:
- 7.5 If an extension or expansion of the DBNGP becomes part of the Covered Pipeline, the extension, expansion or enhancement will not affect the Reference Tariff before the Revisions Commencement Date for the Next

Access Arrangement. Although, if an extension, expansion or enhancement of the DBNGP becomes part of the Covered Pipeline:

- (a) Operator may seek a Capital Contribution from Prospective Shippers or levy a Surcharge on Incremental Shippers in accordance with NGR 82 and 83; and
- (b) Operator may submit proposed revisions to this Access Arrangement under NGR 50.

1778. While clause 7.5 states that an extension will not affect reference tariffs before the revision commencement date for the next access arrangement, there is no mention of the effect of the extension on the opening capital base or description of reference services.

1779. Clause 7.5 further applies to enhancements. This matter was previously considered in the final decision on amendments to the access arrangement for AA4, where it was determined that the term should not be used.⁷⁶⁶ The ERA subsequently made and published its own access arrangement (after not approving DBP's amended AA4 proposal) removing all references to the term "enhancement". The three references to "enhancement" that remain in the proposed revised access arrangement (see clauses 7.5 and 7.10) are oversights – the references should have been removed by the ERA in accordance with the required amendment in the ERA's final decision for AA4.⁷⁶⁷

1780. Given the considerations above, the ERA considers that the extension and expansion requirements set out in clause 7 of the proposed revised access arrangement do not meet the requirements of the NGR. DBP must amend clause 7 of the revised access arrangement to:

- Clarify that the extension and expansion requirements provide that the access arrangement applies to the incremental services that are provided as a result of a particular extension or expansion.
- In the case of expansions, specify that the access arrangement will apply to the incremental services that are provided as a result of the expansion.
- In the case of extensions made before the revision commencement date for the access arrangement, specify the effect of the extension on the opening capital base and description of reference services.
- Correct oversights of the ERA when it made and published the access arrangement for AA4 to remove the remaining references to the term "enhancement".

⁷⁶⁶ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, 30 June 2016, pp. 442-445, paragraphs 1865-1876.

⁷⁶⁷ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, 30 June 2016, pp. 445-446, paragraph 1877 (required amendment 39).

Required Amendment 52

DBP must amend the extension and expansion requirements in clause 7 of the proposed revised access arrangement so that the requirements satisfy rule 104 of the NGR. The matters that DBP must address are set out at paragraphs 1770 to 1780 of this draft decision.

Receipt and delivery points

1781. Modified rule 48(1)(i) of the NGR requires the access arrangement to state the terms and conditions for changing receipt and delivery points.⁷⁶⁸

1782. Rule 106 of the NGR details specific provisions for changing receipt and delivery points:

106 Change of receipt or delivery point by user

- (1) An access arrangement must provide for the change of a receipt or delivery point in accordance with the following principles:
 - (a) a user may, with the service provider's consent, change the user's receipt or delivery point;
 - (b) the service provider must not withhold its consent unless it has reasonable grounds, based on technical or commercial considerations, for doing so.
- (2) The access arrangement may specify in advance conditions under which consent will or will not be given, and conditions to be complied with if consent is given.

DBP's proposal

1783. Clause 8 of the proposed revised access arrangement sets out provisions for changing inlet (receipt) and outlet (delivery) points. DBP amended clause 8.1 to replace the words "haulage service Access Contract" with the term "Service Access Contract". Except for this amendment clause 8 remains the same as clause 8 of the current (AA4) access arrangement.

Submissions

1784. No submissions to the ERA addressed the terms and conditions for changing inlet and outlet points and DBP's proposal to leave these terms and conditions in the access arrangement substantively unchanged from AA4.

Draft decision

1785. Under clause 8.1 of the access arrangement, inlet and outlet points may be changed. Shippers may also relocate their contracted capacity from an existing inlet or outlet point according to the following principles:

- The shipper must make a change request to DBP in writing.
- DBP must consent to a change request before any change or relocation becomes effective.

⁷⁶⁸ As set out in schedule 1 (rule 62) of the NGR.

- DBP must not withhold its consent to a change request unless it has reasonable grounds, based on technical or commercial considerations, for doing so.
1786. Clause 8.2 of the access arrangement sets out the considerations which DBP will consider when deciding whether to consent to a change request and include, without limitation, technical considerations, commercial considerations and, in the case of a change request for a reference service, the considerations specified in clause 14 of the terms and conditions for the reference service.
1787. DBP proposed to replace the words “haulage service Access Contract” with the term “Service Access Contract” in clause 8.1; however, this proposed term is not a defined term in the access arrangement. The ERA considers that the term “Access Contract”, which is defined in clause 16 of the access arrangement as meaning “a contract between (among others) Operator and a Shipper for a Pipeline Service”, is the term DBP had intended to use.

Required Amendment 53

DBP must amend the terms and conditions for changing inlet and outlet points in clause 8.1 in the proposed revised access arrangement to read: “In accordance with NGR 106, the Shipper under an Access Contract may: ...”

1788. Notwithstanding DBP’s proposed amendment to use the term “Service Access Contract”, the terms and conditions for changing inlet and outlet points remain substantively the same as the terms and conditions under the current (AA4) access arrangement. There were no submissions from interested parties seeking any amendments to these terms and conditions. For these reasons, and in the absence of any other reason to amend the terms and conditions, the current terms and conditions for changing inlet and outlet points are considered to meet the requirements of the NGR.

Appendix 1 List of Tables

Table 1:	Required content of a full access arrangement pursuant to modified rule 48 of the NGR.....	9
Table 2:	DBP's proposed pipeline services for AA5.....	25
Table 3:	DBP's assessment of the Spot Capacity Service against the reference service factors.....	33
Table 4:	Spot Capacity Service demand and revenue for AA4 and AA5.....	35
Table 5:	DBP's assessment of the Pilbara Service against the reference service factors.....	38
Table 6:	Pilbara Service demand and revenue for AA4 and AA5.....	40
Table 7:	Daily demand – Full haul (T1 Service) 2016 to 2020 (TJ).....	46
Table 8:	Daily demand – Part haul (P1 Service) 2016 to 2020 (TJ).....	46
Table 9:	Daily demand – Back haul (B1 Service) 2016 to 2020 (TJ).....	46
Table 10:	Demand for non-reference services (average TJ/day).....	47
Table 11:	DBP's initial proposed demand forecasts for AA5 compared to forecast demand for 2020 (full haul equivalent TJ/d).....	49
Table 12:	DBP's revised May 2020 demand forecasts for AA5 (full haul equivalent TJ/d).....	52
Table 13:	Variance of revised May 2020 demand forecasts from initial proposal forecasts (%).....	52
Table 14:	ERA's demand forecasts for reference services for AA5 (full haul equivalent TJ/d).....	57
Table 15:	DBP's proposed revenue requirement for AA5 (\$ million nominal).....	58
Table 16:	ERA's draft decision total revenue requirement for AA5 (\$ million nominal).....	59
Table 17:	DBP's proposed forecast operating expenditure for AA5 (\$ million real as at 31 December 2019).....	63
Table 18:	DBP proposed operating expenditure for AA5 with revised system use gas values (\$ million real as at 31 December 2019).....	65
Table 19:	DBP base year components (\$ million real as at 31 December 2019).....	67
Table 20:	Western Australian Treasury – Wage Price Index and Consumer Price Index data included in calculating the real labour cost escalation (%).....	70
Table 21:	DBP forecast GEA and Turbine overhaul operating expenditure for AA5 (\$ million real as at 31 December 2019).....	72
Table 22:	DBP proposed change in capitalisation activities for AA5 (\$ million real as at 31 December 2019).....	75
Table 23:	ERA determined AA5 operating expenditure (\$ million real as at 31 December 2019).....	85
Table 24:	DBP proposed AA5 opening capital base (\$ million real as at 31 December 2019).....	88
Table 25:	Proposed conforming capital expenditure for AA4 by asset class (\$ million real as at 31 December 2019).....	89
Table 26:	DBP proposed AA5 asset categories.....	90
Table 27:	Variance between AA4 final decision forecast capital expenditure and DBP proposed capital expenditure by business case (\$ million real as at 31 December 2019).....	91
Table 28:	AA4 conforming capital expenditure – Compressor stations business case (\$ million real as at 31 December 2019).....	99
Table 29:	AA4 conforming capital expenditure – Pipeline and mainline valves business case (\$ million real as at 31 December 2019).....	100
Table 30:	AA4 conforming capital expenditure – SCADA business case (\$ million real as at 31 December 2019).....	102
Table 31:	AA4 conforming capital expenditure – Health, safety and environment business case (\$ million real as at 31 December 2019).....	102
Table 32:	AA4 conforming capital expenditure - Gas engine alternator business case (\$ million real as at 31 December 2019).....	103
Table 33:	AA4 conforming capital expenditure – Compressor station accommodation business case (\$ million real as at 31 December 2019).....	104
Table 34:	AA4 conforming capital expenditure – Compressor package control system replacement business case (\$ million real as at 31 December 2019).....	105
Table 35:	AA4 conforming capital expenditure – Jandakot site redevelopment business case (\$ million real as at 31 December 2019).....	106

Table 36:	AA4 conforming capital expenditure – Maximo and DMZ business case (\$ million real as at 31 December 2019)	107
Table 37:	AA4 conforming capital expenditure – Safety case revisions business case (\$ million real as at 31 December 2019)	108
Table 38:	AA4 conforming capital expenditure – Compressor station inspection business case (\$ million real as at 31 December 2019)	108
Table 39:	AA4 conforming capital expenditure – Asset management business case (\$ million real as at 31 December 2019)	109
Table 40:	AA4 conforming capital expenditure – Meter stations business case (\$ million real as at 31 December 2019)	110
Table 41:	AA4 conforming capital expenditure – Tools business case (\$ million real as at 31 December 2019)	111
Table 42:	AA4 conforming capital expenditure – Fleet and civil equipment business case (\$ million real as at 31 December 2019)	112
Table 43:	AA4 conforming capital expenditure – Pipeline and mainline valve inspection business case (\$ million real as at 31 December 2019)	113
Table 44:	AA4 conforming capital expenditure – Customer reporting system business case (\$ million real as at 31 December 2019)	114
Table 45:	AA4 conforming capital expenditure – IT sustaining applications business case (\$ million real as at 31 December 2019)	116
Table 46:	AA4 conforming capital expenditure – IT security business case (\$ million real as at 31 December 2019)	117
Table 47:	AA4 conforming capital expenditure – Process safety business case (\$ million real as at 31 December 2019)	118
Table 48:	AA4 conforming capital expenditure – Decommissioning business case (\$ million real as at 31 December 2019)	119
Table 49:	AA4 conforming capital expenditure – Communications business case (\$ million real as at 31 December 2019)	120
Table 50:	AA4 conforming capital expenditure – Office relocation business case (\$ million real as at 31 December 2019)	122
Table 51:	AA4 conforming capital expenditure – Southern communications upgrade business case (\$ million real as at 31 December 2019)	124
Table 52:	AA4 conforming capital expenditure – CS1 compressor re-wheeling business case (\$ million real as at 31 December 2019)	125
Table 53:	AA4 conforming capital expenditure – IT sustaining infrastructure business case (\$ million real as at 31 December 2019)	126
Table 54:	AA4 draft decision conforming capital expenditure by asset class (\$ million real as at 31 December 2019)	127
Table 55:	Draft decision – Opening capital base at 1 January 2021 (\$ million real as at 31 December 2019)	127
Table 56:	Proposed forecast capital base for AA5 (\$ million real as at 31 December 2019)	130
Table 57:	Proposed AA5 forecast capital expenditure for AA5 by asset class (\$ million real as at 31 December 2019)	131
Table 58:	Proposed forecast capital expenditure by business case (\$ million real as at 31 December 2019)	132
Table 59:	Proposed AA5 forecast capital expenditure – Compressor stations business case, by project (\$ million real as at 31 December 2019)	136
Table 60:	Proposed AA5 forecast capital expenditure – Compressor stations business case costs excluding labour escalation, by category (\$ million real as at 31 December 2019)	138
Table 61:	Draft decision AA5 capital expenditure forecast – Compressor stations business case (\$ million real as at 31 December 2019)	140
Table 62:	Proposed AA5 forecast capital expenditure - Pipeline and mainline valves business case, by project (\$ million real as at 31 December 2019)	141
Table 63:	Draft decision AA5 capital expenditure forecast – Pipeline and mainline valves business case (\$ million real as at 31 December 2019)	144
Table 64:	Proposed AA5 forecast capital expenditure - SCADA business case, by project (\$ million real as at 31 December 2019)	144
Table 65:	Draft decision for AA5 capital expenditure forecast – SCADA business case (\$ million real as at 31 December 2019)	145

Table 66:	Proposed AA5 forecast capital expenditure - Gas engine alternator control system replacement business case, by project (\$ million real as at 31 December 2019)	146
Table 67:	Draft decision AA5 capital expenditure forecast – Gas engine alternator business case (\$ million real as at 31 December 2019)	147
Table 68:	Proposed AA5 forecast capital expenditure - Compressor stations accommodation business case (\$ million real as at 31 December 2019)	148
Table 69:	Accommodation refurbishment – Cost by activity, not including labour escalation (\$ million real as at 30 June 2019)	149
Table 70:	Draft decision AA5 capital expenditure forecast – Compressor stations accommodation business case (\$ million real as at 31 December 2019)	150
Table 71:	Proposed AA5 forecast capital expenditure - Replacement of northern communications system business case (\$ million real as at 31 December 2019)	150
Table 72:	Draft decision AA5 capital expenditure forecast – Northern communications system business case (\$ million real as at 31 December 2019)	152
Table 73:	Proposed AA5 forecast capital expenditure - Compressor package control system replacement business case (\$ million real as at 31 December 2019)	152
Table 74:	Draft decision AA5 capital expenditure forecast – Compressor package control system replacement business case (\$ million real as at 31 December 2019)	153
Table 75:	Proposed AA5 capital expenditure - Jandakot site redevelopment business case, by project (\$ million real as at 31 December 2019)	154
Table 76:	Draft decision AA5 capital expenditure forecast – Jandakot site redevelopment business case (\$ million real as at 31 December 2019)	155
Table 77:	Proposed AA5 forecast capital expenditure - Maximo and DMZ business case, by project (\$ million real as at 31 December 2019)	156
Table 78:	Draft decision AA5 capital expenditure forecast – Maximo and DMZ business case (\$ million real as at 31 December 2019)	157
Table 79:	Proposed AA5 forecast capital expenditure - Safety case revisions business case, by project (\$ million real as at 31 December 2019)	157
Table 80:	Draft decision AA5 capital expenditure forecast – Safety case revisions business case (\$ million real as at 31 December 2019)	158
Table 81:	Proposed AA5 forecast capital expenditure - Meter stations business case, by project (\$ million real as at 31 December 2019)	159
Table 82:	Draft decision AA5 capital expenditure forecast – Meter stations business case (\$ million real as at 31 December 2019)	161
Table 83:	Proposed AA5 forecast capital expenditure - Tools business case, by project (\$ million real as at 31 December 2019)	161
Table 84:	Draft decision AA5 capital expenditure forecast – Tools business case (\$ million real as at 31 December 2019)	163
Table 85:	Proposed AA5 forecast capital expenditure - Fleet and civil equipment business case, by project (\$ million real as at 31 December 2019)	163
Table 86:	Draft decision AA5 capital expenditure forecast – Fleet and civil equipment replacement business case (\$ million real as at 31 December 2019)	164
Table 87:	Proposed AA5 forecast capital expenditure - Turbine exhaust replacement business case, by project (\$ million real as at 31 December 2019)	165
Table 88:	Draft decision AA5 capital expenditure forecast – Turbine exhaust replacement business case (\$ million real as at 31 December 2019)	166
Table 89:	Proposed AA5 forecast capital expenditure - Customer reporting system business case (\$ million real as at 31 December 2019)	167
Table 90:	Draft decision AA5 capital expenditure forecast – Customer reporting system business case (\$ million real as at 31 December 2019)	168
Table 91:	Proposed AA5 forecast capital expenditure - IT sustaining applications business case, by project (\$ million real as at 31 December 2019)	169
Table 92:	Draft decision AA5 capital expenditure forecast – IT sustaining applications business case (\$ million real as at 31 December 2019)	171
Table 93:	Proposed AA5 forecast capital expenditure- IT enabling business case (\$ million real as at 31 December 2019)	171
Table 94:	Draft decision AA5 capital expenditure forecast – IT enabling business case (\$ million real as at 31 December 2019)	173
Table 95:	Proposed AA5 forecast capital expenditure - IT security business case, by project (\$ million real as at 31 December 2019)	173

Table 96:	Draft decision AA5 capital expenditure forecast – IT security business case (\$ million real as at 31 December 2019)	175
Table 97:	Proposed AA5 forecast capital expenditure - IT sustaining infrastructure business case, by project (\$ million real as at 31 December 2019).....	175
Table 98:	Breakdown of proposed AA5 capital expenditure, excluding labour escalation – IT sustaining infrastructure (\$ million real as at 31 December 2019).....	176
Table 99:	Draft decision AA5 capital expenditure forecast - IT sustaining infrastructure business case (\$ million real as at 31 December 2019)	178
Table 100:	Draft decision AA5 capital expenditure forecast by business case (\$ million real as at 31 December 2019)	179
Table 101:	Draft decision AA5 capital expenditure forecast by asset class (\$ million real as at 31 December 2019).....	180
Table 102:	Draft decision projected AA5 capital base (\$ million real as at 31 December 2019).....	181
Table 103:	Draft decision projected AA5 capital base (\$ million nominal)	181
Table 104:	DBP's rate of return estimate	184
Table 105:	ERA estimated trailing average debt risk premium for DBP AA5 draft decision	187
Table 106:	ERA's draft decision rate of return estimate for AA5.....	191
Table 107:	DBP's proposed forecast regulatory depreciation for AA5 (\$ million at 31 December 2019).....	194
Table 108:	DBP's proposed economic lives for its asset categories for AA5.....	195
Table 109:	DBP's proposed 'Metering' economic life and other comparable examples	206
Table 110:	DBP's proposed economic lives (years) for new asset categories and comparable examples	210
Table 111:	Opening asset value by asset category on 1 January 2021 (\$ million real at 31 December 2019).....	214
Table 112:	ERA's draft decision forecast depreciation (\$ million real at 31 December 2019).....	215
Table 113:	DBP's proposed AA5 tax asset lives (years).....	218
Table 114:	DBP's proposed actual tax asset base for AA4 (\$ million nominal)	220
Table 115:	DBP's proposed forecast tax asset base for AA5 (\$ million nominal)	220
Table 116:	DBP's proposed calculation of estimated corporate income tax for AA5 (\$ million nominal).....	221
Table 117:	ERA's draft decision tax asset lives (years)	225
Table 118:	ERA's draft decision actual tax asset base for AA4 (\$ million nominal).....	229
Table 119:	ERA's draft decision forecast tax asset base for AA5 (\$ million nominal).....	229
Table 120:	ERA's draft decision calculation of the estimated cost of corporate income tax for AA5 (\$ million nominal)	230
Table 121:	Proposed operating expenditure categories, E Factor benchmarks and excluded cost categories, 2021 to 2025 (\$million real at 31 December 2020)	234
Table 122:	ERA allocation of total revenue between reference and other (non-reference) services for AA5 (\$ million nominal)	260
Table 123:	DBP's proposed reference tariffs (AA5) (\$ real as at 31 December 2019).....	263
Table 124:	DBP's revised proposed reference tariffs (AA5) (\$ real as at 31 December 2019).....	264
Table 125:	Comparison of DBP's proposed revised tariff and current tariff for the DBNGP (\$ real as at 31 December 2019).....	267
Table 126:	ERA's draft decision reference service tariffs for AA5 (\$ real as at 31 December 2019).....	268
Table 127:	DBP's proposed amendments to clause 1 (Interpretation) of the terms and conditions for reference services.....	289
Table 128:	DBP's terms and conditions for the P1 Service and B1 Service – schedule 2 (Charges).....	362
Table 129:	Additional proposed amendments to the terms and conditions for reference services submitted by interested parties	366

Appendix 2 List of Figures


Figure 1:	Contracted capacity (full haul equivalent TJ/d) – Actual 2016 to 2019, forecast 2020 to 2025.....	47
Figure 2:	Throughput (full haul equivalent TJ/d) – Actual 2016 to 2019, forecast 2020 to 2025.....	48
Figure 3:	Total system throughput – Actual 2016 to 2020 and DBP's May 2020 forecast 2021 to 2025 (full haul equivalent TJ/d)	54
Figure 4:	DBP capital expenditure planning process and operational risk matrix	96

Appendix 3 Abbreviations

Text **User Note:** You can speed up this process by generating a list of abbreviations terms you've marked in this document. When writing your content mark abbreviation terms (the term contained in the brackets) with the **Abbreviations** style (look for the **A** on the ERA ribbon), then when you've finished writing your content generate a list via **ERA Insert Items > Generate Abbreviations**. For instance:

Using Australian Electoral Commission (AEC) as an example, you would apply the **Abbreviations** character style (look for the **A** on the ERA ribbon) to the term in the brackets, in this case "AEC".

When you generate the list of abbreviations, the word AEC will appear in the left column of this table, and if successfully matched, the definition will appear in the corresponding right column of the table.

After your list is generated, delete any rows not required and press the **Sort** button (), which can be found under the Home menu, to sort the list into alphabetical order.

Appendix 4 Submissions received

Submissions received in response to the ERA's initiating notice and/or issues paper:

Australia Gas Infrastructure Group, Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline: Issues Paper, 31 March 2020.

CITIC Pacific Mining Management Pty Ltd, Public Submission in response to Economic Regulation Authority's Issues Paper on Proposed Revisions to the Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-2025.

Gas Trading Australia, Dampier to Bunbury Natural Gas Pipeline Access Arrangement 2021-25 Issues Paper, 30 March 2020.

NewGen Power Kwinana Pty Ltd, Response to issues paper on proposed revised access arrangement for the Dampier to Bunbury Natural Gas Pipeline, 31 March 2020.

Perth Energy, Response to Issues Paper: Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025, 14 April 2020.

Synergy, Submission in response to DBNGP proposed access arrangement for 2021-2025, 31 March 2020.

Wesfarmers Chemicals, Energy & Fertilisers, Submission on the proposed Dampier to Bunbury Natural Gas Pipeline Access Arrangement (2021-2025), 30 March 2020.

Appendix 5 Terms and conditions for reference services

The ERA has considered DBP's proposed amendments to the terms and conditions for reference services as part of this decision (see paragraph 1254). This appendix reproduces DBP's proposed amendments to individual clauses.

Clause 1 (interpretation) – “AGIG”

AGIG means

- (a) each of the following entities and any entity which is a Related Body Corporate of any of the following entities:
- (i) the Operator;
 - (ii) the Pipeline Trustee;
 - (iii) DUET Investment Holdings Pty Limited (ABN 22 120 456 573);
 - (iv) CK William Australia Holdings Pty Ltd (ABN 14 613 690 243);
 - (v) Multinet Group Holdings Pty Ltd (ABN 83 104 036 937);
 - (vi) Australian Gas Networks Limited (ABN 19 078 551 685); and
- (b) any other entity part of the group known as the Australian Gas Infrastructure Group of companies from time to time.

Clause 1 (interpretation) – “Aggregated B1 Service”

In the terms and conditions for the P1 Service and T1 Service:

Aggregated B1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for B1 Service:

- (a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for B1 Services; and
- (b) in excess of that shipper's Contracted Capacity for B1 Services at an Inlet Point or Outlet Point.

In the terms and conditions for the B1 Service:

Aggregated B1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for B1 Service:

- (a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for B1 Services; and
- (b) in excess of that shipper's Contracted Capacity for B1 Services at an Inlet Point or Outlet Point.

and in respect to the Capacity Services available under this Contract has the meaning given in clause 8.16.

Clause 1 (interpretation) – “Aggregated P1 Service”

In the terms and conditions for the P1 Service:

Aggregated P1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for P1 Service:

- (a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for P1 Services; and

(b) in excess of that shipper's Contracted Capacity for P1 Services at an Inlet Point or Outlet Point,

and in respect to the Capacity Services available under this Contract has the meaning given in clause 8.16.

In the terms and conditions for the B1 Service and T1 Service:

Aggregated P1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for P1 Service:

(a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for P1 Services; and

(b) in excess of that shipper's Contracted Capacity for P1 Services at an Inlet Point or Outlet Point.

Clause 1 (interpretation) – “Aggregated T1 Service”

In the terms and conditions for the P1 Service and B1 Service:

Aggregated T1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for T1 Service:

(a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for T1 Services; and

(b) in excess of that shipper's Contracted Capacity for T1 Services at an Inlet Point or Outlet Point.

In the terms and conditions for the T1 Service:

Aggregated T1 Service means the entitlement of a shipper (if any) to nominate that Gas be Delivered under that shipper's contract for T1 Service:

(a) at an Inlet Point or an Outlet Point at which that shipper does not have Contracted Capacity for T1 Services; and

(b) in excess of that shipper's Contracted Capacity for T1 Services at an Inlet Point or Outlet Point,

and in respect to the Capacity Services available under this Contract has the meaning given in clause 8.16.

Clause 1 (interpretation) – “Associated”

Associated, when used to describe the relationship between:

(a) a Gate Station and a Sub-network, means that Gate Station is associated with that Sub-Network;

~~(a)~~(b) an Inlet Station and an Inlet Point, means that the Inlet Station is used to measure Gas flows and other parameters at the Inlet Point; and

~~(b)~~(c) an Outlet Station and an Outlet Point, means that the Outlet Station is used to measure Gas flows and other parameters at the Outlet Point,

and **relates** and **related**, when used to describe such relationships, have the analogous meanings.

Clause 1 (interpretation) – “B1 Service”

In the terms and conditions for the P1 Service and T1 Service:

B1 Service means a Back Haul transportation ~~service~~ ~~Reference Service provided under the terms and conditions set out in the Access Arrangement for the B1 Service which is named in the relevant contract as B1 Service and~~ which gives the shipper a right, subject to the terms and conditions of the ~~Access Arrangement~~ relevant contract, to access capacity of the DBNGP and which:

- ~~(a)~~ ~~can only be Curtailed in the circumstances specified in clause 17.2;~~
- ~~(b)~~ (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- ~~(c)~~ (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause ~~8.9~~ 8.10.

In the terms and conditions for the B1 Service:

B1 Service in respect of the Shipper's Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts ~~3.5(a) of the Access Arrangement~~ and means a ~~service providing~~ Back Haul transportation service which is named in the relevant contract as B1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which: ~~capacity~~

- (a) is treated the same ~~with priority as set out~~ in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

Clause 1 (interpretation) – “Contracted Capacity”

In the terms and conditions for the P1 Service:

Contracted Capacity has, when used in respect of the P1 Service under this Contract, the meaning given in clause ~~3.2(b)(iv)~~ 3.3 and, in the context of any other contract in respect of a particular Capacity Service under that contract, has the meaning given in that contract.

In the terms and conditions for the B1 Service and T1 Service, analogous amendments were made so that the amendments are applicable to the respective service.

Clause 1 (interpretation) – “Contracted Firm Capacity”

Contracted Firm Capacity means Alcoa's Exempt Capacity and any contracted Capacity ~~under Service other than a Spot Transaction~~ ~~a T1 Service, B1 Service or P1 Service or a Firm Service.~~

Clause 1 (interpretation) – “Daily Nomination”

Daily Nomination means:

- (a) in respect of a ~~Type of~~ Capacity Service at an Inlet Point on a Gas Day - the Capacity for the quantity of Gas that the Shipper is scheduled to Deliver to

the Operator at the Inlet Point on a Gas Day under that ~~Type of Capacity Service~~; and

- (b) in respect of a ~~Type of Capacity Service~~ at an Outlet Point on a Gas Day - the Capacity for the quantity of Gas that the Shipper is scheduled to Receive from the Operator at the Outlet Point on a Gas Day under that ~~Type of Capacity Service~~,

and in each case ~~as set out in the Initial Nominations~~ scheduled under clause 8 for that Gas Day, and includes the Capacity for a revised quantity of Gas scheduled under a Renomination process.

Clause 1 (interpretation) – “Data”

Data means:

- (a) bulk customer data;
- (b) bulk personal information (being any holdings or files of personal information within the meaning of the Privacy Act 1988 (Cth) about multiple individuals which contain fields or categories); and
- (c) data as to the quantum of gas delivered (both historical and current load demand) from or to any one or more sites (or their connection points),

relating to or obtained in connection with any AGIG entity’s operations.

Clause 1 (interpretation) – “DBNGP”

DBNGP means the Gas transmission pipeline system that runs between Dampier and Bunbury in Western Australia, described in section 2 of the Access Arrangement (as approved for the period ~~2016~~2021 – ~~2020~~2025) as expanded or amended from time to time to the extent that it is geographically located within the DBNGP Pipeline Corridor created under Part 4 of the DBP Act, as that Corridor exists at ~~the Execution Date~~1 January 2020.

Clause 1 (interpretation) – “Inlet Point”

Inlet Point means an inlet point on the DBNGP flange, joint or other point at which any shipper has Contracted Capacity from time to time for the Delivery of Gas by it to the Operator and, where the context requires, means a flange, joint or other point specified in clause 3.3(a) at which the Shipper has Contracted Capacity from time to time.

Clause 1 (interpretation) – “National Gas Access (Western Australia) Law”

National Gas Access (Western Australia) Law means the provisions applying because of section 7 of the National Gas Access (WA) Act 2009 (WA), as changed from time to time, or any similar provisions specified in or made in accordance with any amendment or replacement of the National Gas Access (WA) Act 2009 (WA).

Clause 1 (interpretation) – “Other Reserved Service”

Other Reserved Service means a Capacity Service offered under a contract which, in the Operator’s opinion acting reasonably, has a capacity reservation charge or an allocation reservation deposit or any material equivalent to such charge or deposit which is payable up front or from time to time in respect to the reservation of capacity

under that contract for at least a reasonable time into the future (but at all times excluding a T1 Service, P1 Service, B1 Service, [Aggregated Service](#), a Firm Service and Capacity under a Spot Transaction).

Clause 1 (interpretation) – “Outlet Point”

Outlet Point means [an outlet point on the DBNGP](#) ~~a flange, joint or other point at which any shipper has Contracted Capacity from time to time for the Receipt by it of Gas from the Operator~~ and, where the context requires, means a flange, joint or other point referred to in clause 3.3(b) at which the Shipper has Contracted Capacity from time to time.

Clause 1 (interpretation) – “Overrun Gas”

In the terms and conditions for the P1 Service:

Overrun Gas means, for a particular Gas Day and for a particular shipper, Gas Received by that shipper (across all Outlet Points) less the aggregate of the quantities of Contracted Capacity across all of that shipper's Capacity Services (including [T1 Service](#), P1 Service [and B1 Service](#) and any Capacity under Spot Transactions) (across all Outlet Points) on that Gas Day and, if the preceding calculation produces a negative result, Overrun Gas for that Gas Day equals zero.

In the terms and conditions for the T1 Service and B1 Service, analogous amendments were made so that the amendments included references to the “T1 Service”, “P1 Service” and “B1 Service”.

Clause 1 (interpretation) – “P1 Capacity Reservation Tariff”

In the terms and conditions for the P1 Service:

P1 Capacity Reservation Tariff, [in all cases subject to clauses 14.7 and 20.5\(a\)\(iii\), has the meaning given in clause 15 of the Access Arrangement.](#) ~~has the meaning given in clause 3.4(c) of the Access Arrangement as adjusted by the Reference Tariff Variation Mechanism from time to time and subject to clause.~~

In the terms and conditions for the B1 Service and T1 Service analogous amendments were made to the terms “B1 Capacity Reservation Tariff” and “T1 Capacity Reservation Tariff”, respectively.

Clause 1 (interpretation) – “P1 Commodity Tariff”

In the terms and conditions for the P1 Service:

P1 Commodity Tariff, [in all cases subject to clauses 14.7 and 20.5\(a\)\(iii\),](#) has the meaning given in [clause 15 of](#) ~~clause 3.4(c) of~~ the Access Arrangement ~~as adjusted by the Reference Tariff Variation Mechanism from time to time.~~

In the terms and conditions for the B1 Service:

B1 Commodity Tariff, [in all cases subject to clauses 14.7 and 20.5\(a\)\(iii\),](#) has the meaning given in [clause 15 of the Access Arrangement](#) ~~has the meaning given in clause 3.5(c) of the Access Arrangement.~~

In the terms and conditions for the T1 Service:

T1 Commodity Tariff, in all cases subject to clauses 14.7 and 20.5(a)(iii), has the meaning given in clause 15 of the Access Arrangement ~~has the meaning given in clause 3.3(b) of the Access Arrangement.~~

Clause 1 (interpretation) – “P1 Service”

In the terms and conditions for the P1 Service:

P1 Service in respect of the Shipper’s Capacity Service under this Contract has the meaning given in clause 3.2, and in respect of other shippers and other contracts means a Forward Haul transportation service which is named in the relevant contract as P1 Service which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

~~3.4(a) of the Access Arrangement and means a service providing Part Haul capacity with priority as set out in the Curtailment Plan.~~

In the terms and conditions for the T1 Service and B1 Service:

P1 Service ~~has the meaning given in clause 3.4(a) of the Access Arrangement and~~ means a Forward Haul transportation service which is named in the relevant contract as P1 Service and providing Part Haul capacity which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

- (a) is treated the same ~~with priority as set out~~ in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
- (b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

Clause 1 (interpretation) – “P1 Tariff”

In the terms and conditions for the P1 Service:

P1 Tariff, in all cases subject to clauses 14.7 and 20.5(a)(iii), has the meaning given in clause 15 of the Access Arrangement. ~~means the reference tariff for P1 Service as set out in clauses 3.4 of the Access Arrangement, as adjusted by the Reference Tariff Variation Mechanism from time to time.~~

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made to the terms “T1 Tariff” and “B1 Tariff”, respectively.

Clause 1 (interpretation) – “Relevant Construction Costs”

Relevant Construction Costs means the Relevant Inlet Point Connection Facilities Construction Costs, Relevant Outlet Station Construction Costs or Relevant Gate Station Construction Costs (as the case may require).

Clause 1 (interpretation) – “T1 Service”

In the terms and conditions for the P1 Service and B1 Service:

T1 Service ~~has the meaning given in clause 3.3(a)~~ means a Forward Haul transportation service which is named in the relevant contract as T1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

(a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and

(b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

~~of the Access Arrangement and means a service providing Full Haul capacity with priority as set out in the Curtailment Plan.~~

In the terms and conditions for the T1 Service:

T1 Service in respect of the Shipper’s Capacity Service under this Contract has the meaning given in clause ~~3.2~~3.3(a) of the Access Arrangement, and in respect of other shippers and other contracts means a Forward Haul transportation service which is named in the relevant contract as T1 Service and which gives the shipper a right, subject to the terms and conditions of the relevant contract, to access capacity of the DBNGP and which:

(a) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and

(b) is treated the same in the Nominations Plan as all other shippers with a T1 Service, P1 Service or B1 Service, and in the order of priority with respect to other Types of Capacity Service, referred to in clause 8.10.

Clause 1 (interpretation) – “T1 Tariff”

In the terms and conditions for the P1 Service and B1 Service:

T1 Reference Tariff means the reference tariff for T1 Service set out in clauses ~~3.3~~ of the Access Arrangement, as adjusted by the Reference Tariff Variation Mechanism from time to time, save that the T1 Reference Tariff shall be re-set to reflect any replacement reference tariff for T1 Service approved by the Regulator for any new Access Arrangement Periods over the Term of this Contract.

In the terms and conditions for the T1 Service, the amended term “T1 Reference Tariff” (as set out above) is not used. Instead the existing term “T1 Tariff” is retained but is amended analogous to the amendment made to the term “P1 Tariff”.

Clause 2

2.4 Other contracts

Where the context requires, a term which is defined in this Contract (including P1 Service, T1 Service, B1 Service, Aggregated P1 Service, Aggregated T1 Service, Aggregated B1 Service, Other Reserved Service, Contracted Capacity, and Total Contracted Capacity) includes the same concept in any other contract in relation to the Shipper or in relation to any other shipper (as the case may require).

2.5 System Operator

...

- (e) The Operator must procure that the System Operator complies with the requirements of Ring Fencing Arrangements of Part 2 of Chapter 4 of the National Gas Access (Western Australia) Law as if it were a 'covered pipeline Sservice Pprovider' for the purposes of that ~~section~~Part.

Clause 3.2(a)

In the terms and conditions for the P1 Service:

3.2 Capacity Service

- (a) The P1 Service is the Part Haul Gas transportation service ~~provided under this Contract~~ which gives the Shipper a right, ~~subject to the terms and conditions of this Contract, to~~ of access capacity of the DBNGP to Gas Transmission Capacity and ~~which (subject in all cases to clauses 8.17 and 17.9):~~
- ~~(i) can only be Curtailed in the circumstances specified in clause 17.2;~~
 - ~~(ii)(i)~~ (i) is treated the same in the Curtailment Plan as all other shippers with a T1 Service, a P1 Service or a B1 Service, ~~or a P1 Service under the Standard Shipper Contract,~~ and in the order of priority with respect to other Types of Capacity Service set out in clause 17.9; and
 - ~~(iii)(ii)~~ (ii) is treated the same in the Nominations Plan as all other shippers with a T1 Service, a P1 Service or a B1 Service, ~~or a P1 Service under the Standard Shipper Contract,~~ and in the order of priority with respect to other Types of Capacity Service referred to in clause ~~8.8~~8.10.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 3.2(b)**3.2 Capacity Service**

...

- (b) The Operator acknowledges and agrees:
- (i) Tranche 1 Capacity in the DBNGP comprises the amount of Gas Transmission Capacity which lies between zero and the T1 Cut-off;
 - (ii) the T1 Cut-off is the amount of Gas Transmission Capacity at which the probability of supply for the next GJ of Gas to be transported in the DBNGP to any Outlet Point downstream of Compressor Station 9 is 98% for each Period of a Gas Year;
- ...
- (iv) acting as a Reasonable and Prudent Person, Operator shall ensure that the sum of:
 - (A) T1 Service (including under this Contract) which it has contracted to provide to Shipper and all other shippers; and
 - (B) Alcoa's Exempt Capacity,

does not materially exceed the amount of T1 Capacity in the DBNGP [\(which shall be calculated on the assumption that all Gas Delivered into the DBNGP has a Higher Heating Value of 37.0 MJ/m3\)](#).

Clause 3.2(c)

In the terms and conditions for the P1 Service:

3.2 Capacity Service

...

- (c) Shipper acknowledges and agrees that, subject to clause 14, the ~~T1~~P1 Service [under this Contract](#) is a ~~Full~~Forward Haul ~~Service~~service and cannot be:
- (i) Back Haul; or
 - (ii) ~~Part~~Full Haul.

In the terms and conditions for the B1 Service:

3.2 Capacity Service

...

- (c) Shipper acknowledges and agrees that, subject to clause 14, the ~~T1~~B1 Service [under this Contract](#) is a ~~Full~~Back Haul ~~Service~~service and cannot be ~~Forward Haul~~:
- ~~(i) Back Haul; or~~
 - ~~(ii) Part Haul.~~

In the terms and conditions for the T1 Service:

3.2 Capacity Service

...

- (c) Shipper acknowledges and agrees that, subject to clause 14, the T1 Service [under this Contract](#) is a Full Haul ~~Service~~service and cannot be:
- (i) Back Haul; or
 - (ii) Part Haul.

Clause 3.3

3.3 Contracted Capacity

~~The~~[Subject to this Contract, the](#) Shipper's Contracted Capacity for each Gas Day within a Period under this Contract:

- (a) at an Inlet Point specified in the Access Request Form - is the amount for P1 Service set out [\(adjacent to that Inlet Point\)](#) in the Access Request Form for that Period; and
- (b) at an Outlet Point specified in the Access Request Form - is the amount for P1 Service set out [\(adjacent to that Outlet Point\)](#) in the Access Request Form for that Period.

New clause 5.7(f)

5.7 Operator may refuse to Deliver Gas

In addition to any other rights and remedies that may be available to it under this Contract or under any Law, the Operator may refuse to Deliver Gas to the Shipper at an Outlet Point in all or any of the following cases:

...

- (d) to the extent that the Operator considers as a Reasonable and Prudent Person that it would be unsafe to Deliver that Gas or that such Delivery may exceed the Total Current Physical Capacity of the relevant Outlet Point; ~~and~~
- (e) to the extent that the Shipper has not entered into any agreement in relation to that Outlet Point required by clause 6.13; ~~and~~
- (f) to the extent that the Delivery of that Gas for a Gas Day at an Outlet Point is in excess of the aggregate of all the Shipper's Contracted Capacity in respect of that Outlet Point for that Gas Day, if the Operator considers as a Reasonable and Prudent Person, that to Deliver such Gas would interfere with other shippers' rights to their Contracted Firm Capacity at the relevant Outlet Point.

Clause 5.14(b)

5.14 Shipper's gas installations

...

- (b) The Shipper must, at its cost:
 - (i) in accordance with the *Gas Standards Act 1972* (WA) appoint an inspector to inspect:
 - (A) any gas installation ~~installed~~ used or to be used by it, or any of its Related Bodies Corporate, to which gas from the Shipper after the Execution Date DBNGP flows or may flow, prior to the commencement of any Delivery ~~of Gas~~ by the Operator of Gas which flows or may flow to such gas installation; or
 - (B) any gas installation that has been altered by, or on behalf of it, or any of its Related Bodies Corporate, the Shipper after the Execution Date by the installation of a Type B gas appliance, prior to any further Delivery, by the Operator, of Gas which flows or may flow to such gas installation by the Operator;
 - (ii) provide evidence of the completion of an inspection under clause 5.14(b)(i) to the Operator, ~~including confirmation that the gas installation is compliant with the Gas Standards Act 1972 (WA);~~ and
 - (iii) ensure that ~~once installed its~~ gas installations used by it, or any of its Related Bodies Corporate, comply ~~at all times~~ with the requirements specified under all relevant Environmental and Safety Laws including the *Gas Standards Act 1972* (WA) and *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* (WA).

Clauses 6.4(d) and 6.5(d)

In the terms and conditions for the P1 Service:

6.4 Allocation of Gas at Inlet Points

...

- (d) Gas Delivered by the Shipper to an Inlet Point is deemed to be Received by the Operator in the order specified generally or for a particular Gas Day by

the Shipper, and if the Shipper fails to specify for any Gas Day, in the following order:

- (i) first, Gas for any ~~available~~scheduled P1 Service ~~which and includes Gas for any available~~ Aggregated P1 Service;
- (ii) second, Gas for any scheduled T1 Service and Aggregated T1 Service;
- ~~(i)(iii)~~ third, Gas for any scheduled B1 Service and Aggregated B1 Service;
- ~~(ii)(iv)~~ second~~fourth~~, Gas for any available Capacity Services (other than ~~P1 Service~~Capacity Services referred to above) (and for the avoidance of doubt, including any Capacity under any Spot Transactions) in the order set out in clause 8.8(a);
- ~~(iii)(v)~~ third~~fifth~~, other gas.

6.5 Allocation of Gas at Outlet Points

...

- (d) Gas Delivered by the Operator to an Outlet Point is deemed to be Received by the Shipper in the order specified generally or for a particular Gas Day by the Shipper, and if the Shipper fails to specify for any Gas Day in the following order:

- (i) first, Gas for any ~~available~~scheduled P1 Service ~~(which shall include any available and~~ Aggregated P1 Service);
- (ii) second, Gas for any scheduled T1 Service and Aggregated T1 Service;
- ~~(i)(iii)~~ third, Gas for any scheduled B1 Service and Aggregated B1 Service;
- ~~(ii)(iv)~~ second~~fourth~~, Gas available for any available Capacity Services (other ~~than~~ Capacity Services referred to above~~P1 Service~~) (and for the avoidance of doubt, including any Capacity under any Spot Transactions) in the order set out in clause 8.8(a); and
- ~~(iii)(v)~~ third~~fifth~~, other gas.

In the terms and conditions for the T1 Service and B1 Service, clauses 6.4(d) and 6.5(d) were amended to provide for the same (amended) drafting as set out above.

Clause 6.8

6.8 Design and installation of Outlet Stations and Gate Stations

- (a) The Operator must, at the Shipper's request, design and install or procure the design and installation of any required Outlet Station that is not a Gate Station. Subject to clause 6.12, the Operator and the Shipper must negotiate and enter into an agreement in respect of the relevant works (an Outlet Station Works Agreement) by which the Shipper must agree either:

...

- (ii) to include the Relevant Outlet Station Construction Costs as part of the cost base used to calculate the Maintenance Charge relating to the Outlet Station (and in such case, for the purpose of clause 6.11(e), such costs are deemed to be associated with an Operator Owned Point).

...

- (e) The Operator must, at the collective request of all shippers who have Contracted Capacity at the Notional Gate Point for a Sub-network, procure

the design and installation by a third party contractor or third party contractors engaged by the Operator of any required Gate Station Associated with that Sub-network, other than an Existing Station.

- (f) The costs incurred by the Operator in connection with the design and installation of any Gate Station (which includes the capital cost of acquiring and installing all relevant components of the Gate Station, plus a reasonable premium calculated to recognise the Operator's management time and to allow the Operator a reasonable margin on its overhead expenses during design and installation) (Relevant Gate Station Construction Costs), must be amortised as part of the Maintenance Charge relating to the Gate Station which is payable in accordance with clause 6.11(f).

Clause 6.11

6.11 Maintenance Charge for Inlet Stations and Outlet Stations

- (a) For the purposes of this clause 6.11 and subject to clause 6.11(b), **Maintenance Charge** means, with respect to a particular Inlet Station or Outlet Station a charge determined by the Operator (acting as a Reasonable and Prudent Person) as being sufficient to allow the Operator (across all shippers who ~~use~~ pay a charge for substantially the same purpose in respect of the Inlet ~~s~~Station or Outlet ~~s~~Station) to amortise, over the life of the Inlet Station or Outlet Station (as the case may be), so much of the Relevant Construction Costs as are not already paid by any shipper under clauses 6.6, or 6.8(a)(i), or (or the material equivalent in any other contract), and the costs of:

- (i) maintaining;
- (ii) operating;
- (iii) refurbishing;
- (iv) upgrading;
- (v) replacing; and
- (vi) decommissioning,

the Inlet Station or Outlet Station, plus a reasonable premium calculated to recognise the value of the Operator's management time, allowing for the charge to amortise those costs over the life of the Inlet Station or Outlet Station.

...

- (d) Subject to clause 6.12(b) in relation to Existing Stations, the Shipper must pay a proportion of the Maintenance Charge relating to an Inlet Station that is the greater of the amount that:

- (i) in the case of an Inlet Station related to an Inlet Point, is equal to the proportion that the sum of the Shipper's Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) at that Inlet Point during the previous calendar month bears to the aggregate Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) for all shippers at that Inlet Point during the previous calendar month; and
- (ii) in the case of an Inlet Station related to an Inlet Point at which the Shipper, during the previous calendar month, does not have Contracted Capacity or Delivers a quantity of Gas greater than its Contracted Capacity, is equal to the proportion that the sum of the Shipper's deliveries of Gas (across all Capacity Services) at the Inlet Point, during the previous calendar month to which that Inlet Station relates, bears to the sum of all shippers' delivery of Gas (across all

Capacity Services) at such Inlet Point, during the previous calendar month,

save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to an Inlet Station for the relevant month, the Operator must rebate to the Shipper a proportion of the excess being the same proportion described in clause 6.11(d)(i) in respect to that month.

~~(d)~~(e)

Subject to clause 6.12(b) in relation to Existing Stations, the Shipper must pay a proportion of the Maintenance Charge relating to an Outlet Station associated with an Operator Owned Point (but no other Outlet Stations) that is the greater of the amount that:

- (i) in the case of an Outlet Station related to an Outlet Point, is equal to the proportion that the sum of the Shipper's Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) at that Outlet Point during the previous calendar month bears to the aggregate Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) for all shippers at that Outlet Point during the previous calendar month, less any amount recovered under clause 6.11(d)(ii); and
- (ii) in the case of an Outlet Station related to an Outlet Point at which the Shipper, during the previous calendar month, does not have Contracted Capacity or Receives a quantity of Gas greater than its Contracted Capacity, is equal to the proportion that the sum of the Shipper's deliveries of Gas (across all Capacity Services) at the Outlet Point, during the previous calendar month to which that Outlet Station relates, bears to the sum of all shippers' delivery of Gas (across all Capacity Services) at such Outlet Point, during the previous calendar month.

save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to an Outlet Station associated with an Operator Owned Point for the relevant month, the Operator must rebate to the Shipper a proportion of the excess being the same proportion described in clause 6.11(e)(i) in respect to that month.

~~(e)~~(f)

Subject to clause 6.12(b) in relation to Existing Stations, the Shipper must pay a proportion of the Maintenance Charge relating to ~~a~~ an GateOutlet Station that is the greater of the amount that:

- (i) is equal to the proportion that the sum of the Shipper's Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) at the relevant Notional Gate Point during the previous calendar month ~~for the time being~~ bears to the aggregate ~~sum of all the Shipper's and other shippers'~~ Contracted Capacity (across all Capacity Services but prior to any reduction under the Curtailment Plan) for all shippers at such Notional Gate Point ~~for the time being~~ during the previous calendar month; and
- (ii) in the case of a Notional Gate Point at which the Shipper, during the previous calendar month, does not have Contracted Capacity or Receives a quantity of Gas greater than its Contracted Capacity, is equal to the proportion that the sum of the Shipper's deliveries of Gas (across all Capacity Services) at the Notional Gate Point, during the previous calendar month, bears to the sum of all shippers' delivery of Gas (across all Capacity Services) at such Notional Gate Point, during the previous calendar month,

save that where the Operator recovers across all shippers an amount greater than the Maintenance Charge relating to a Gate Station for the relevant month, the Operator must rebate to the Shipper a proportion of the excess

being the same proportion described in clause 6.11(f)(i) in respect to that month.

- ~~(f)~~(g) For the avoidance of doubt and without limiting clauses 6.11(d), (e) or (f), ~~W~~ whenever a new Inlet Station or Outlet Station is installed, or Inlet Station or Outlet Station is enhanced, for the purposes of the consequent re-determination of the Maintenance Charge for the Inlet Station or Outlet Station, the Relevant Construction Costs must be included in the apportionments between all shippers who deliver Gas to the Operator at the Inlet Station or receive Gas from the Operator at the Notional Gate Point or Outlet Station (as the case may be), ~~including~~ and shippers with grants of Capacity at the Inlet Station, Notional Gate Point or Outlet Station made before the date of installation or enhancement.
- ~~(g)~~(h) For the purposes of assessing, reporting or otherwise dealing with the commercial viability of any capacity, service or thing related to a Physical Gate Point, a Notional Gate Point, ~~or an Outlet Station~~ or an Inlet Station, the Operator may have regard to the likely impact of clause 6.11(g) ~~6.11(f)~~.

Clause 6.12(b)

6.12 Provisions relating both to Relevant Construction Costs and Maintenance Charge

...

- b) The Operator is not entitled to impose any charges under clauses 6.6, 6.8 or 6.11 or otherwise under this Contract in respect of Existing Stations, except in relation to the incremental costs of the design, installation, maintenance and operation of a modification of an Existing Station which occurred, or occurs, after 1 January 1995. Where such incremental costs are incurred, the Operator is entitled to impose charges on the Shipper and other shippers who have Contracted Capacity at, or use, that Existing Station in relation to their respective proportions of those incremental costs, as determined under clause ~~6.11(d)~~ 6.11(e) or 6.11(f).

Clause 6.13(b)

6.13 Contribution Agreement

...

- (b) (i) a **Contribution Agreement** in respect of an Outlet Point is an agreement between the Operator and the Shipper ...
- (ii) the Shipper's proportion of the Maintenance Charge is determined under clause 6.11(e) ~~6.11(d)~~ or 6.11(f) (as the case may be), or is otherwise agreed in the Contribution Agreement; and
- (iii) the Shipper agrees that another shipper (**New Shipper**) may Receive Gas from the relevant Outlet Point, if:
- (A) the New Shipper agrees to pay to the Operator an amount by way of contribution to the Maintenance Charge for the Outlet Point determined in a manner consistent with the principles in clause 6.11(e) ~~6.11(d)~~ or 6.11(f) (as the case may be); and
- (B) the Operator agrees to rebate to the Shipper all, or such proportion of, the contributions it receives from the New Shipper under clause 6.13(b)(iii)(A) so as to implement the intention of clause 6.11 to apportion the relevant costs among the shippers using that point.

Clause 8.5(b)

In the terms and conditions for the P1 Service:

8.5 Operator to make available bulletins of available Capacity

...

- (b) No obligation to schedule a Capacity Service under clauses 8.9 and 8.14 or otherwise arises merely because the Operator specifies under clause 8.5(a) that Capacity is available for Nomination or Renomination, and nothing in such a bulletin limits the Operator's rights, under this Contract or under any Law, to Curtail wholly or partly the Shipper's P1 Service [and Aggregated P1 Service](#) or to refuse wholly or partly to Receive Gas from, or Deliver Gas, to the Shipper.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 8.8

8.8 Nominations priority

- (a) The priority of scheduling Capacity Services in respect of Nominations for Capacity Services (from superior to inferior [as between rows and equal priority within a row](#)) is, so far as is relevant to the Inlet Point or Outlet Point, set out in the column of Schedule 6 headed "Point Specific Curtailment" as supplemented by this clause 8 and clause 17.9.
- (b) Each category of Capacity Service described in a row of the Curtailment Plan (as relevant to the particular circumstance), [together with each other category of Capacity Service in that row](#), refers separately to a **Type of Capacity Service** such that, for example, Alcoa's Priority Quantity is a **Type of Capacity Service**.

Clause 8.9

In the terms and conditions for the P1 Service:

8.9 Scheduling of Daily Nominations

- (a) The Operator must, by no later than 16:00 hours on each Gas Day (that is, within two hours of the last time for Nomination under clause 8.6), by notice to the Shipper, schedule Capacity Services in respect of the Shipper's Initial Nomination for the Nominated Day ~~and, if applicable under the rules governing the market for Spot Capacity, schedule Capacity Services in respect of Spot Capacity determined in accordance with this clause 8.9,~~ for each Nominated Inlet Point and for each Nominated Outlet Point.
- (b) Subject to the terms of any Multi-shipper Agreement, the scheduled Capacity Services for P1 ~~Capacity~~[Service](#) for each Nominated Inlet Point:
- (i) must not exceed ...
- (c) Subject to clause 8.9(d), in no case may the sum of the scheduled Capacity Services in respect of the Shipper's Daily Nominations for P1 Service [and Aggregated P1 Service](#):
- (i) across all Inlet ~~P~~oints exceed the Shipper's Total Contracted ~~P1~~ Capacity [for P1 Service](#) across all Inlet Points; ~~or~~

- (ii) [at and upstream of any particular inlet point, exceed the Shipper's Contracted Capacity for P1 Service at Inlet Points at or upstream of that inlet point.](#)
- (d) The [sum of the](#) scheduled Capacity Services in respect of the Shipper's Daily Nomination for P1 Service [and Aggregated P1 Service](#) may exceed the Shipper's Total Contracted ~~P1~~ Capacity [for P1 Service](#) across all Inlet Points by a quantity of Gas which is to be Delivered for the purpose, or which would have the effect, of bringing the Shipper's Accumulated Imbalance within the Accumulated Imbalance Limit unless the Operator considers as a Reasonable and Prudent Person that to Deliver such gas would interfere with other shippers' rights to their Contracted Firm Capacity.
- (e) Subject to the terms of any Multi-shipper Agreement, the scheduled Capacity Services for P1 ~~Capacity~~ [Service](#) at each Nominated Outlet Point:
 - (i) must not exceed ...
- (f) Subject to clause 8.9(g), in no case may the sum of the scheduled Capacity Services in respect of the Shipper's Daily Nominations for P1 Service [and Aggregated P1 Service](#):
 - (i) across all ~~Outlet~~ [outlet Points](#), exceed the Shipper's Total Contracted ~~P1~~ Capacity [for P1 Service](#) across all Outlet Points; [or](#)
 - (ii) [at and downstream of any particular outlet point, exceed the Contracted Capacity for P1 Service at Outlet Points at or downstream of that outlet point.](#)
- (g) The [sum of the](#) scheduled Capacity Services in respect of the Shipper's Daily Nomination for P1 Service [and Aggregated P1 Service](#) may exceed the Shipper's Total Contracted ~~P1~~ Capacity [for P1 Service](#) across all Outlet Points by a quantity of Gas which is to be Delivered for the purpose, or which would have the effect, of bringing the Shipper's Accumulated Imbalance within the Accumulated Imbalance Limit, unless the Operator considers as a Reasonable and Prudent Person that to Deliver such Gas would interfere with other shippers' rights to their Contracted Firm Capacity.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 8.10(b)

In the terms and conditions for the P1 Service:

8.10 Scheduling where there is insufficient available Capacity

...

- (b) Subject to clause 17.9 [and except where, and to the extent, permitted or required pursuant to clause 8.9](#), if the Operator schedules a Capacity Service for P1 Service to the Shipper which is less than the Shipper's Initial Nomination for P1 Service at an Inlet Point or an Outlet Point, the Operator is taken to have issued a Curtailment Notice at the time it schedules that Capacity Service, such Curtailment being in respect of the difference between the Shipper's Contracted ~~T1~~ Capacity [for P1 Service at that Inlet Point or Outlet Point](#) and the Capacity Service scheduled by the Operator for P1 Service for that Gas Day [at that Inlet Point or Outlet Point](#).

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 8.15

8.15 Default provision for Renomination process

If any element of the Renomination procedure prescribed in this clause 8 is not completed within the time limit specified, unless the delay is caused or contributed to by the Operator not providing information in a timely manner under clause 8.5 or clause 15.5(d) or if for any other reason the Renomination procedure is not complied with, then the Shipper's Daily Nominations are to remain unchanged ~~from the previous Gas Day's nomination~~ (but if the Operator can reasonably continue and complete processing a Renomination after the expiry of the time limit in clause 8.12(b) it must do so).

Clause 8.16

In the terms and conditions for the P1 Service:

8.16 Nominations at inlet points and outlet points where Shipper does not have sufficient Contracted Capacity

Subject to this clause 8, Shipper is entitled to nominate that Gas be Delivered under Shipper's P1 Service:

- (a) at an inlet point or an outlet point at which Shipper does not have Contracted Capacity for P1 Services, provided that such outlet point is above CS9; and
- (b) in excess of Shipper's Contracted Capacity for P1 Services at an Inlet Point or Outlet Point,

(being Aggregated P1 Service), provided that all of the following are satisfied:

- (c) Aggregated P1 Service is a Forward Haul service and may not be used for Back Haul; and
- (d) the sum of the Shipper's nominations for P1 Service and Aggregated P1 Service (in aggregate without double counting) for:
 - (i) Delivery of Gas at and upstream of any particular inlet point cannot exceed the Contracted Capacity for P1 Service at Inlet Points at or upstream of that inlet point; and
 - (ii) Receipt of Gas at and downstream of any particular outlet point cannot exceed the Contracted Capacity for P1 Service at Outlet Points at or downstream of that outlet point; and
- (e) the Shipper has entered into any agreement in relation to the relevant outlet point required by clause 6.13.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service, with the following exceptions:

The terms and conditions for the T1 Service do not have an equivalent new clause 8.16(d) as set out above.

The terms and conditions for the B1 Service include the following amendments to clauses 8.16(a) and 8.16(b):

- (a) at an inlet point or an outlet point at which Shipper does not have Contracted Capacity for B1 Services provided that such ~~outlet point is upstream of the Shipper's Inlet Point~~ nomination does not result in any service under this Contract becoming Forward Haul; and

- (b) in excess of Shipper's Contracted Capacity for B1 Services at an Inlet Point or Outlet Point provided that such nomination does not result in any service under this Contract becoming Forward Haul,

Clause 8.17

In the terms and conditions for the P1 Service:

8.17 Aggregated P1 Service

- (a) Subject to the terms of any Multi-shipper Agreement, the Parties agree that, for the purpose of the Nominations Plan, any Nomination for P1 Service which is, according to clause 8.16, deemed to be Aggregated P1 Service, shall be deemed to be a Nomination for a separate Type of Capacity Service which service ranks equally in priority with all other Aggregated ~~P1~~ Service.
- (b) For the purposes of applying the Curtailment Plan in a Point Specific Curtailment, the Aggregated P1 Service shall be excluded from the P1 Service.
- (c) The Shipper is not permitted to use Aggregated P1 Service unless such service has been scheduled pursuant to clause 8.
- (d) For the avoidance of doubt, the Commodity Charge applies to Aggregated P1 Service pursuant to clause 20.3.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 9.4

Before ~~13:30~~13:00 hours on each Gas Day, except the ~~Contract Commencement~~ Capacity Start Date, the Operator must provide to the Shipper notice (**Accumulated Imbalance Notice**) of its Accumulated Imbalance and Daily Imbalance at the end of the preceding Gas Day, and the amounts so notified must, subject to the Operator receiving the information necessary to make an allocation of Gas Deliveries or Receipts or both to shippers as contemplated in clause 6.4(c) be materially accurate.

Clause 9.5

9.5 Accumulated Imbalance Limit

- (a) The Shipper's **Accumulated Imbalance Limit** for a Gas Day is 8% of the ~~sum of the Shipper's Contracted Capacity under Spot Transactions and~~ quantities, referred to as the Shipper's Contracted Capacity across all of the Shipper's Capacity Services (including T1 Service, P1 Service and B1 Service and Capacity under Spot Transactions) for that Gas Day.
- (b) If at any time the absolute value of the Shipper's Accumulated Imbalance exceeds the Accumulated Imbalance Limit for the Gas Day just finished and, the Operator (acting as a Reasonable and Prudent Person) considers that a continuation of that condition
- (i) will have ...
- then the Operator (acting as a Reasonable ~~and~~And Prudent Person) may, subject to clause 9.5(f), either or both:
- (iii) issue a notice requiring the Shipper to reduce its imbalance to the Accumulated Imbalance Limit (to the extent reasonably required to ameliorate the condition in clause 9.5(b)(i) or 9.5(b)(ii)) and the Shipper must use best endeavours in accordance with clause 9.5(d)

to immediately comply, or procure immediate compliance, with the notice, so as to bring the Shipper's Accumulated Imbalance within the Accumulated Imbalance Limit; and ~~or~~

- (iv) refuse to Receive Gas from the Shipper at an Inlet Point or refuse to Deliver Gas to the Shipper at an Outlet Point ...

...

- (e) If the Shipper does not comply and is not deemed pursuant to clause 9.5(d) to have used best endeavours to have complied with the notice issued for the purposes of clause 9.5(b)(iii) ... the Shipper must pay an Excess Imbalance Charge at the Excess Imbalance Rate for each GJ of Gas in excess of the Shipper's Accumulated Imbalance Limit up to the Outer Accumulated Imbalance Limit in accordance with clause 20 in respect of the Gas Day on which the notice is issued and each subsequent Gas Day the absolute value of the Shipper's Accumulated Imbalance exceeds the Shipper's Accumulated Imbalance Limit until the absolute value of the Shipper's Accumulated Imbalance is less than, or closer to the Accumulated Imbalance Limit (as the Operator sees fit).

New clause 9.6

9.6 Excess Imbalance Charge

- (a) The Shipper's Outer Accumulated Imbalance Limit for a Gas Day is 20% of the quantities referred to as the Shipper's Contracted Capacity across all of the Shipper's Capacity Services (including T1 Service, P1 Service and B1 Service and Capacity under Spot Transactions) for that Gas Day.

- (b) If the absolute value of the Shipper's Accumulated Imbalance at the end of a Gas Day exceeds the Outer Accumulated Imbalance Limit for the Gas Day just finished then, subject to clause 9.6(c), the Shipper must pay an Excess Imbalance Charge at the Excess Imbalance Rate for each GJ of Gas in excess of the Shipper's Outer Accumulated Imbalance Limit in accordance with clause 20.

- ~~(g)~~(c) No Excess Imbalance Charge under clause 9.5(e) or 9.6(b) is payable in respect of that part (if any) of the imbalance that is attributable to:

- (i) the Shipper's Capacity Service being Curtailed under clause 17;

- ~~(i)~~(ii) the Operator, for any reason not caused by the Shipper or any person supplying Gas to the Shipper, not Receiving from the Shipper at any Inlet Point a quantity of Gas equal to the Shipper's Daily Nomination for that Inlet Point;

- ~~(ii)~~(iii) the Operator failing to provide the Shipper with a materially accurate Accumulated Imbalance Notice within the period set out in clause 9.4; or

- ~~(iii)~~(iv) the Shipper being unable, for reasons beyond the Shipper's control, to remedy an imbalance arising on a prior Gas Day but then only to the extent that such imbalance was caused by an event referred to in one of clauses 9.6(c)(i), 9.6(c)(ii) or 9.6(c)(iii) 9.5(g)(i) or 9.5(g)(ii) 9.5(g)(i) or 9.5(g)(ii)

but in each case the Shipper's Daily Imbalance and Accumulated Imbalance must still be calculated for the Gas Day.

Clause 9.8 (previously clause 9.7)

9.79.8 Remedies for breach of imbalance limits

Except as provided in clause ~~9.10~~~~9-9~~, the Operator may not exercise any rights or remedies against the Shipper for exceeding the Accumulated Imbalance Limit, other than:

- (a) an action for breach of clause 9.2 or 9.5(b)(iii), limited to the recovery of Direct Damages in accordance with clause 23 and the Shipper's liability to the Operator for Direct Damages suffered by the Operator which is caused by or arises out of the Shipper's failure to comply with clause 9.5(b)(iii) is reduced by any Excess Imbalance Charge or Excess Imbalance Charges paid by the Shipper in respect of that failure;
- ~~(a)~~(b) to recover the Excess Imbalance Charge or Excess Imbalance Charges where permitted by and in accordance with this clause;
- ~~(b)~~(c) to refuse to Receive Gas from the Shipper at an Inlet Point or refuse to Deliver Gas to the Shipper at an Outlet Point so as to bring the Shipper's Accumulated Imbalance within the Accumulated Imbalance Limit; or
- ~~(e)~~(d) any combination of the rights and remedies in clauses ~~9.8(a)~~~~9-7(a)~~, ~~9.8(b)~~ and ~~9.8(c)~~~~9-7(b)~~.

The Parties agree that, because the rights and remedies set out in this clause ~~9.8~~~~9-7~~ apply across all of the Shipper's Capacity Services, when, in a particular circumstance, the Operator exercises a right or pursues a remedy under this clause ~~9.8~~~~9-7~~, the Operator may not exercise the equivalent right or pursue the equivalent remedy under another contract for Capacity Service or in relation to another Capacity Service in relation to the same circumstance.

Clause 9.9 (previously clause 9.8)

~~9-8~~~~9.9~~ Trading in imbalances

...

- (b) The Shipper must give notice in writing of any such exchange in respect of a Gas Day to the Operator ~~by 12:00 hours~~ on the next Working Day following receipt from the Operator of the Shipper's Accumulated Imbalance Notice in accordance with clause 9.4 for that Gas Day, by the later of 14:00 hours and the time (on that next Working Day) which is 1 hour after the time of receipt from the Operator of the Shipper's Accumulated Imbalance Notice for that Gas Day. If the Shipper does not give notice of an exchange by the applicable time, then the exchange is of no effect.

Clause 10.3(a)

10.3 Consequences of exceeding Hourly Peaking Limit

- (a) If at any time the Shipper exceeds an Hourly Peaking Limit and the Operator (acting as a Reasonable and Prudent Person) considers that a continuation of that condition
 - (i) will have a material adverse impact on the integrity or operation of the DBNGP; or
 - (ii) will adversely impact or is likely to adversely impact, on any other Capacity, ~~or any Other Reserved~~ Service,
 the Operator (acting as a Reasonable and Prudent Person) may, subject to clauses 10.6 and 10.3(h)(i), do either or both of the following:
 - (iii) issue a notice requiring the Shipper to reduce its take of Gas, in that or future periods (to the extent reasonably required to ameliorate the condition in clauses 10.3(a)(i) or 10.3(a)(ii)), and the Shipper must use best endeavours in accordance with clause 10.3(c) to comply

immediately, or to procure immediate compliance, with the notice so as to cease exceeding the Hourly Peaking Limit; and

- (iv) refuse to ...

New clause 10.4

10.4 Outer Hourly Peaking Limit

(a) The Shipper's Outer Hourly Peaking Limits are:

- (i) 140% of the aggregate MHQ calculated across all Outlet Points on the DBNGP;
- (ii) 140% of the aggregate MHQ calculated across all Outlet Points in Pipeline Zone 10; and
- (iii) 140% of the aggregate MHQ calculated across all Outlet Points in Pipeline Zone 10B.

(each of the limits in clauses 10.4(a)(i), 10.4(a)(ii) and 10.4(a)(iii) being an Outer Hourly Peaking Limit).

- (b) For each Gas Hour following the issue of a notice pursuant to clause 10.4(e) that the Shipper exceeds an Outer Hourly Peaking Limit, the Shipper must pay at the Hourly Peaking Rate an Hourly Peaking Charge for each GJ of Gas Received in excess of the relevant Outer Hourly Peaking Limit during that Gas Hour in accordance with clause 20.
- (c) If the Shipper exceeds more than one Outer Hourly Peaking Limit in respect of the same Gas Hour, then the Hourly Peaking Charge under clause 10.4(b) is calculated using only the amount of the largest excess.
- (d) If an Hourly Peaking Charge is payable under clause 10.3(d) and also 10.4(b) in respect of a Gas Hour, then the Shipper is required to pay both the charge under clause 10.3(d) and the charge under clause 10.4(b).
- (e) If at any time the Shipper's take of Gas is such that the Operator, acting as a Reasonable and Prudent Person, believes that the Shipper has exceeded or is likely to exceed an Outer Hourly Peaking Limit, the Operator may issue a notice to the Shipper of that fact. A notice given under this clause 10.4(e) is only valid for the purposes of clause 10.4(b) and clause 10.3(d)(ii) until the Shipper has ceased to exceed the Hourly Peaking Limit.

Clause 11.2

In the terms and conditions for the P1 Service:

11.2 Unavailability Notice

- (a) The Operator may at any time, acting as a Reasonable and Prudent Person, give notice (an Unavailability Notice) to the Shipper that Overrun Gas is unavailable to the Shipper, or is only available to the Shipper to a limited extent, for one or more Gas Days, but only to the extent that the Shipper overrun will impact or is likely to impact on any other shipper's entitlement to its Daily Nomination for ~~P1 Capacity, any Other Reserved~~ any Capacity Service ~~or including~~ allocated Spot Capacity. The Operator must, at the same time, give an Unavailability Notice to all other shippers that are taking Overrun Gas, the taking of which, due to the location on the DBNGP at which the Overrun Gas is being taken, has an impact on the ability of the Operator to Deliver Gas to meet its obligations to shippers.

...

- (c) Any Curtailment Notice issued under clause 17 for any period is taken to constitute an Unavailability Notice indicating that Overrun Gas is wholly unavailable for the same period unless the Curtailment:
- (i) is a Point Specific Curtailment;
 - (ii) does not affect Gas Transmission Capacity generally; and
 - (iii) does not affect the ~~Inlet Point or~~ Outlet Point at which the Overrun Gas is being Received by the Shipper.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clause 14.2

In the terms and conditions for the P1 Service and T1 Service:

14.2 Assessment of Requested Relocation

- (a) The Operator must, as soon as reasonably practicable and in any event not later than 40 Working Days after receiving a notice under clause 14.1, assess as a Reasonable and Prudent Person whether the Requested Relocation is an Authorised Relocation having regard to ...
- (b) For the purposes of clause 14.2(a), a Requested Relocation of Contracted Capacity is not an Authorised Relocation if:
- ...
- (iii) the Requested Relocation is such that ~~the an~~ Inlet Point at which there is Contracted Capacity under this Contract would be downstream of ~~the an~~ Outlet Point at which there is Contracted Capacity under this Contract ~~and it would change the normal direction of Gas flow in the DBNGP.~~
- (c) For the purposes of clause 14.2(a), unless clause 14.2(b) provides that it is not an Authorised Relocation, a Requested Relocation of Contracted Capacity to a New Inlet Point is an Authorised Relocation under the Contract if:
- (i) the Requested Relocation would result in the New Inlet Point being downstream of the all Existing Inlet Points;
 - (ii) the Requested Relocation would not cause the sum (after the relocation) of all shippers' quantities referred to as Contracted Capacity for that Inlet Point across all of shippers' Capacity Services) at the New Inlet Point to exceed the New Inlet Point's Total Current Physical Capacity; and
 - ~~(i) if the New Inlet Point is a proposed inlet point that new inlet point satisfies the Operator's technical and operational requirements; and~~
 - (iii) the Shipper has entered into a Contribution Agreement, or any other agreement, arrangement or understanding required by clause 6.13(a)(iii), in relation to that New Inlet Point.
- (d) For the purposes of clause 14.2(a), unless clause 14.2(b) provides that it is not an Authorised Relocation, a Requested Relocation of Contracted Capacity to a New Outlet Point is an Authorised Relocation under this Contract if:
- (i) the Requested Relocation would result in the New Outlet Point being upstream of the all Existing Outlet Points;
 - ~~(ii) if the New Inlet Point is a proposed inlet point that new inlet point satisfies the Operator's technical and operational requirements;~~

- ~~(iii)~~(ii) the Requested Relocation would not cause the sum (after the relocation) of all shippers' quantities referred to as Contracted Capacity for that Outlet Point across all shippers' Capacity Services at the New Outlet Point to exceed the New Outlet Point's Total Current Physical Capacity or to exceed the safe operating capability of the part of the DBNGP at which the New Outlet Point is located; and
- ~~(iv)~~(iii) the Shipper has entered into a Contribution Agreement, or any other agreement, arrangement or understanding required by clause 6.13(a)(iii), in relation to that Outlet Point.

In the terms and conditions for the B1 Service analogous amendments were made, with additional amendments to clauses 14.2(b)(iii), 14.2(c)(i) and 14.2(d)(i) as follows to make the clause applicable to a back haul service:

Clause 14.2(b)(iii):

the Requested Relocation is such that ~~the an~~ Inlet Point at which there is Contracted Capacity under this Contract would be ~~downstream~~upstream of ~~the an~~ Outlet Point at which there is Contracted Capacity under this Contract ~~and it would change the normal direction of Gas flow in the DBNGP.~~

Clause 14.2(c)(i):

the Requested Relocation would result in the New Inlet Point being ~~downstream~~upstream of the Existing Inlet Points;

Clause 14.2(d)(i):

the Requested Relocation would result in the New Outlet Point being ~~upstream~~downstream of the Existing Outlet Points;

Clause 14.7(a)

In the terms and conditions for the P1 Service:

14.7 Charges for relocation

- (a) Unless the Parties agree in writing to the contrary, no Charges payable under this Contract ~~must~~will be reduced as a result of a relocation of Contracted Capacity under this clause 14, even if the relocation causes some or all Gas to be transported over a shorter distance or has the result that there is a shorter distance between the inlet point(s) and outlet point(s) at which the Shipper has Contracted Capacity, or reduces the "km" (as that term is otherwise used in the calculation of the P1 Tariff, P1 Commodity Tariff or P1 Capacity Reservation Tariff (as the case may be)), or the relocation causes a notional reversal of flow of Gas transported under this Contract for the Shipper from Forward Haul to Back Haul.

In the terms and conditions for the B1 Service and T1 Service analogous amendments were made so that the amendments are applicable to the respective service.

For the T1 Service the words "or reduces the "km" (as that term is otherwise used in the calculation of the P1 Tariff, P1 Commodity Tariff or P1 Capacity Reservation Tariff (as the case may be))" are not applicable and were not included.

Clause 14.7(c)

In the terms and conditions for the P1 Service:

14.7 Charges for Relocation

...

- (c) Without limiting clause 14.7(b), if a relocation of Capacity under this clause results in Gas being transported from an Inlet Point upstream of mainline valve 31 (MLV31) on the DBNGP to an Outlet Point down stream of Compressor Station 9 on the DBNGP so that a Part Haul service becomes a Full Haul service, any Capacity so relocated is to be treated as if it were:
- (i) ~~be treated as if it were on the same terms and conditions as~~ Full Haul Capacity for T1 Service; and
 - (ii) on the terms and conditions for T1 Service forming part of the Access Arrangement at the time the relocation first takes effect (as though the Parties had executed an access request form for a Reference Service that is a T1 Service in respect of such Capacity, with a Requested Reference Service Start Date of the date the relocation first takes effect and a Requested Reference Service End Date which is the same as that in the Access Request Form), for the avoidance of doubt including as to the calculation of the Capacity Reservation Charges and the Commodity Charges; and
 - ~~(ii)(iii) be treated under this Contract as though it was Full Haul~~ no longer Contracted Capacity under this Contract.

In the terms and conditions for the B1 Service:

14.7 Charges for Relocation

...

- (c) Without limiting clause 14.7(b), if a relocation of Capacity under this clause results in Gas being transported from an Inlet Point upstream of mainline valve 31 (MLV31) on the DBNGP to an Outlet Point down stream of Compressor Station 9 on the DBNGP so that a Back Haul service becomes a Forward Haul Full Haul service, any Capacity so relocated is to be treated as if it were:
- (i) Full Haul Capacity for T1 Service; ~~the New Inlet Point being downstream of the Existing Inlet Point or the New Outlet Point being upstream of the Existing Outlet Point (or both), the Charges under this Contract must be calculated and paid using the Distance Factor applicable to that New Inlet Point or New Outlet Point (or both), as the case may be; or~~ and
 - (ii) on the terms and conditions for T1 Service forming part of the Access Arrangement at the time the relocation first takes effect (as though the Parties had executed an access request form for a Reference Service that is a T1 Service in respect of such Capacity, with a Requested Reference Service Start Date of the date the relocation first takes effect and a Requested Reference Service End Date which is the same as that in the Access Request Form), for the avoidance of doubt including as to the calculation of the Capacity Reservation Charges and the Commodity Charges; ~~the New Inlet Point being upstream of the Existing Inlet Point or the New Outlet Point being downstream of the Existing Outlet Point, the Charges under this Contract must be calculated and paid using the Distance Factor applicable to that Existing Inlet Point or Existing Outlet Point (or both), as the case may be~~ and
 - ~~(ii)(iii) no longer Contracted Capacity under this Contract.~~

In the terms and conditions for the T1 Service:

14.7 Charges for relocation

...

- (c) If a relocation of Capacity under this clause results in Gas being transported to an Outlet Point up-stream of Compressor Station 9 on the DBNGP so that a Full Haul service becomes a Part Haul service, any Capacity so relocated:
- (i) remains on the same terms and conditions as Full Haul Capacity [for T1 Service under this Contract](#), including as to the calculation of the Capacity Reservation Charges and the Commodity Charges; and
 - (ii) is treated under this Contract as though it was Full Haul Capacity [for T1 Service under this Contract](#).

Clause 15.3

15.3 Metering uncertainty

- (a) Primary Metering Equipment must be designed, adjusted and Operated so as to achieve:
- (i) measurement to within a maximum uncertainty of:
 - (A) [subject to clause 15.3\(b\)](#), plus or minus ~~0.75~~1% of Actual Mass Flow Rate at a minimum of the 95% confidence level for Metering Equipment with a design maximum flow rate of 5 TJ/d or greater; and
 - (B) plus or minus 2% of Actual Mass Flow Rate at a minimum of the 95% confidence level for Metering Equipment with a design maximum flow rate of less than 5 TJ/d; and
 - (ii) measurement to within ...
- (b) [Alternative Metering Equipment referred to in clause 15.4\(b\) need not comply with clause 15.3\(a\)\(i\)\(A\) if:](#)
- (i) [it is designed, adjusted and Operated so as to achieve measurement to within a maximum uncertainty of plus or minus 2% of Actual Mass Flow Rate at a minimum of the 95% confidence level; and](#)
 - (ii) [it is not used or likely to be used for more than 72 hours in any Gas Year.](#)
- ~~(b)~~(c) Subject to clauses 15.3(a) [and 15.3\(b\)](#), each component of Primary Metering Equipment may be designed, adjusted and Operated within limits of uncertainty agreed between the Parties.
- ~~(c)~~(d) In this clause 15, **95% confidence level** has the meaning given to that expression by ISO 5168.

Clause 15.4(c)

- (c) Inlet Metering Equipment must provide digital signals associated with valve or other equipment status, and must include components for signalling the following primary measurements and Derived Variables associated with Gas quality and quantity:
-
- (xii) hydrocarbon content in mole percent for each of the fractions [and LPG content in tonnes per TJ of Gas](#);

Existing clauses 15.5(e) and 15.5(g)

15.5 Provision of information to Shipper

...

~~(e) The Operator must make available to the Shipper via the CRS or a similar communications system as soon as practicable after receiving from Networks the information referred to in clause 33(1) of the Operating Arrangement, but in any event no later than 72 hours after the end of the Gas Day to which the information relates, the verified quantity of Gas:~~

~~(i) Received by the Shipper in a Gas Day at each Physical Gate Point; and~~

~~(ii) Received by the Shipper in a Gas Day aggregated across all outlet points including all Physical Gate Points.~~

~~(f)(e)~~ The Operator must available to the Shipper ...

~~(g)(f)~~ Clauses ~~15.5(e) and (f)~~ 15.5(e) only ~~apply~~applies for as long as the Shipper is a Distribution Networks Shipper.

Clause 17.2

In the terms and conditions for the B1 Service:

17.2 Curtailment Generally

The Operator may Curtail the provision of the Capacity Services to the Shipper from time to time to the extent the Operator as a Reasonable and Prudent Person believes it is necessary to Curtail:

...

(d) for any Planned Maintenance; ~~and~~

(e) in circumstances where the Operator, acting as a Reasonable and Prudent Person, determines for any other reason (including to avoid or lessen a threat of danger to the life, health or property of any person or to preserve the operational integrity of the DBNGP) that a Curtailment is desirable; ~~and~~

(f) in circumstances where actual Forward Haul gas flow is less than the B1 Service demand across all shippers with a B1 Service.

Clause 17.3

In the terms and conditions for the B1 Service:

17.3 Curtailment without liability

...

(b) The Operator has no liability to the Shipper whatsoever under clause 17.3(a) or otherwise, except as may be provided in clause 17.4, for a Curtailment in any of the following circumstances:

(i) where the duration of the Curtailment together with the aggregate duration of all other Curtailments of the B1 Service during the Gas Year does not cause the B1 Permissible Curtailment Limit to be exceeded;

(ii) where the Curtailment is in accordance with any of clauses 17.2(a), ~~or 17.2(b)~~ or 17.2(f); or

- (iii) where clause 17.5 provides that the circumstance is not to be regarded as a Curtailment.

This clause 17.3(b) does not derogate from or limit in any way the Operator's obligation under clause 17.1(a).

- (c) The B1 Permissible Curtailment Limit means 2% of the time in the relevant Gas Year during the Period of Supply (regardless of the amount of Capacity Curtailed during the period of the Curtailment) except that:
 - (i) a Curtailment in circumstances set out in clause 17.2(a), [17.2\(b\)](#) or [17.2\(f\)](#);
 - (ii) a circumstance where clause 17.5 provides that the circumstance is not to be regarded as a Curtailment; and
 - (iii) a Curtailment pursuant to a Multi-shipper Agreement to the extent that such capacity would not have been Curtailed if the Curtailment Plan had been applied,

is not to be aggregated with other Curtailments in determining whether the accumulated duration of Curtailments in a Gas Year cause the B1 Permissible Curtailment Limit to be exceeded.

In the terms and conditions for the P1 Service and T1 Service:

17.3 Curtailment without liability

...

- (c) The B1 Permissible Curtailment Limit means 2% of the time in the relevant Gas Year during the Period of Supply (regardless of the amount of Capacity Curtailed during the period of the Curtailment) except that:
 - (i) a Curtailment in circumstances set out in clause 17.2(a) [or 17.2\(b\)](#);
 - (ii) a circumstance ...

Clause 17.7(c)

17.7 Content of a Curtailment Notice and Initial Notice

...

- (c) A Curtailment Notice:
 - ...
 - (vi) does not retrospectively affect the Shipper's compliance with Hourly Peaking Limits [or Outer Hourly Peaking Limits](#) prior to the time the Curtailment Notice is issued on the Gas Day (for which purposes the Shipper's compliance with those limits for an hour must be determined having regard to the Shipper's Contracted Capacity at the commencement of the hour).

Clause 17.9

In the terms and conditions for the P1 Service:

17.9 Priority of Curtailment

- (a) Any Curtailment of the Shipper's Total Contracted Capacity must be conducted in accordance with the Curtailment Plan...
- (b) The general principle in clause 17.9(a) is subject to the following:

- (i) Any Laws regulating the priority of Capacity Services (~~which for the purposes of this clause~~ include capacity under a Spot Transaction) on the DBNGP.
- ...
- (iii) Any Point Specific Curtailment ... of either of the following:
- (A) (subject to clause 17.9(b)(iii)(B)) one or more ~~I~~inlet ~~P~~points or ~~O~~utlet ~~P~~points (as the case may be) where the Shipper has unutilised Contracted Capacity for the P1 Service at that point, in which case the Curtailment will not be taken into account in respect of an amount of capacity up to the Shipper's unutilised Contracted Capacity for the P1 Service at that or those ~~I~~inlet ~~P~~points or ~~O~~utlet ~~P~~points (as the case may be);
- ...
- (vi) In a System Curtailment, where the Curtailment Plan is being applied to a Curtailment Area greater than a Point Specific Curtailment, the ~~Shipper's~~relevant shipper's:
- (A) Aggregated ~~P1~~Service which derives from Contracted Capacity for P1 Services, T1 Services or B1 Services at the Outlet Points (or, where the Curtailment relates to Receipt of Gas into the DBNGP, any Inlet Point) located within the Curtailment Area shall, when the Curtailment Plan is applied to that Curtailment Area:
- (1) not be included in the Aggregated ~~P1~~Service; and
 - (2) be included in the P1 Service, T1 Service or B1 Service (as the case may be), available to the relevant Shipper in the Curtailment Area; and
- (B) Aggregated ~~P1~~Service which derives from Contracted Capacity for P1 Services, T1 Services or B1 Services at any Outlet Point (or, where the Curtailment relates to Receipt of Gas into the DBNGP, any Inlet Point) located outside the Curtailment Area shall, when the Curtailment Plan is applied to that Curtailment Area:
- (1) be included in the Aggregated ~~P1~~Service;
 - (2) not be included in the P1 Service, T1 Service or B1 Service (as the case may be), available to the relevant Shipper in the Curtailment Area.

...

(c) (i) Subject to clause 17.9(c)(ii) ...

(ii) If when applying the Curtailment Plan there is insufficient relevant available capacity to allow all shippers their relevant entitlement to a Type of Capacity Service being an Other Reserved Service (~~other than a T_p Service~~) or Aggregated Service, then the capacity available for the shipper for that Type of Capacity Service during the Curtailment will be determined by the Operator acting as a Reasonable and Prudent Person.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

In the terms and conditions for the P1 Service and B1 Service, the following additional amendments were made to clause 17.9(c)(i) to replace references to “P1 Service” and “B1 Service”, respectively, with a reference to “T1 Service”.⁷⁶⁹

Subject to clause 17.9(c)(ii), if when applying the Curtailment Plan there is insufficient relevant available capacity to allow all shippers their full Contracted Capacity in respect of a Type of Capacity Service for that Gas Day, then the capacity available for the Type of Capacity Service to each such shipper during a particular Gas Day during a Curtailment will (unless relevant shippers agree to the contrary) be calculated, from time to time by the Operator acting in good faith, on the basis of the following:

$$\text{Available Capacity} \times \frac{A}{B}$$

where:

Available Capacity = the total amount of relevant capacity which the Operator (acting in good faith) deems to be available during the particular Gas Day during the Curtailment for the particular Type of Capacity Service;

A = the particular shipper’s relevant Total Contracted Capacity (prior to any Curtailment) in respect of the particular Type of Capacity Service on that Gas Day (in the case of ~~fx~~T1 Service only, less any of the shipper’s relevant share of the Distribution Networks’ IPQ which is to be transported using that ~~fx~~T1 Service on that Gas Day); and

B = the aggregate of relevant Total Contracted Capacity (prior to any Curtailment) in respect of the particular Type of Capacity Service across all shippers on that Gas Day (in the case of ~~fx~~T1 Service only, less the aggregate of the shippers’ relevant shares of the Distribution Networks’ IPQ which is to be transported using that ~~fx~~T1 Service on that Gas Day).

Clause 17.10(a)

17.10 Apportionment of Shipper's Curtailments

- (a) Subject to clause 17.10(b), if the Shipper has:
- (i) Daily Nominations for a Capacity Service or otherwise has a right to Deliver Gas at more than one Inlet Point, the Operator must apportion any refusals to ~~Deliver~~Receive Gas across those Inlet Points in the manner required by the Shipper;
 - (ii) Daily Nominations for a Capacity Service or otherwise has a right to Receive Gas at more than one Outlet Point, the Operator must apportion any refusals to ~~Receive~~Deliver Gas across those Outlet Points in the manner required by the Shipper; or
 - (iii) Contracted Capacity or Daily Nominations (or both) at more than one Inlet Point or Outlet Point - the Operator must apportion any Curtailment of the Shipper's Capacity Service at the Inlet Points or Outlet Points across those Inlet Points or Outlet Points in the manner required by the Shipper.

Clause 18

18 Maintenance and Major Works

- (a) By 31 ~~March~~August of each Contract Year, the Shipper may provide the Operator with a schedule of events which the Shipper, acting as a Reasonable and Prudent Person, believes may increase or reduce the

⁷⁶⁹ For the purpose of reproducing DBP’s proposed amendments in this decision, references to “P1 Service” and “B1 Service” have been replaced with “[x]”.

Capacity it requires for certain periods during the 12 months starting the following 1 ~~July~~October (**Maintenance Year**) which sets out the Shipper's best estimates of the amount and the expected duration of such increase or reduction.

- (b) ~~Within 30 days of receiving the schedule referred to in clause 18(a)~~On or before 30 September of each Contract Year, the Operator (acting as a Reasonable and Prudent Person) must, in consultation with the Shipper and other shippers, schedule Major Works for the DBNGP for the Maintenance Year (**Annual DBNGP Maintenance Schedule**), using its reasonable endeavours to take into account the periods during which the Shipper's requirements for Capacity are reduced and the Shipper's and other shippers' requirements generally.

Clauses 20.2(a) and 20.3

In the terms and conditions for the P1 Service:

20.2 Capacity Reservation Charge

- (a) Subject to clause 14.7, t~~t~~The Capacity Reservation Charge will be calculated for each Gas Day during the Period of Supply by calculating the sum of Contracted Capacity for P1 Services at each Outlet Point multiplied by the ~~T4~~P1 Capacity Reservation Tariff.
- (b) ...

20.3 Commodity Charge

Subject to clause 14.7, t~~t~~The Commodity Charge will be calculated for each Gas Day during the Period of Supply by calculating the multiple of the P1 Commodity Tariff and each GJ of Gas Delivered to the Shipper up to Contracted Capacity for P1 Services at all Outlet Points by the Operator on that Gas Day.

In the terms and conditions for the B1 Service, the same amendments were made, except that in clause 20.2(a) the amendment was: "~~T4~~B1 Capacity Reservation Tariff".

Clause 20.5(a)

In the terms and conditions for the P1 Service:

20.5 Adjustment to P1 Tariff

- (a) The Parties acknowledge that:
- (i) as at the commencement of this Contract, the P1 Tariff has been calculated in the manner set out in section 3 of the Access Arrangement, as adjusted by the Reference Tariff Variation Mechanism;
 - (ii) the P1 Tariff, P1 Capacity Reservation Tariff and P1 Commodity Tariff may be further varied from time-to-time in accordance with the Reference Tariff Variation Mechanism; and:
 - (iii) the P1 Tariff, P1 Capacity Reservation Tariff and P1 Commodity Tariff shall be re-set to reflect any new P1 Tariff, P1 Capacity Reservation Tariff and P1 Commodity Tariff approved by the Regulator for any new Access Arrangement Periods over the Term of this Contract.

In the terms and conditions for the T1 Service and B1 Service analogous amendments were made so that the amendments are applicable to the respective service.

Clauses 22.2 and 22.3(c)

22.2 Notice of Shipper's default

If an event referred to in any one or more of clauses 22.1(a) to 22.1(f) (inclusive) occurs, then the Operator may give notice in writing to the Shipper specifying the nature of the ~~default~~event and requiring the Shipper to rectify the event~~default~~ (**Shipper Default Notice**).

22.3 When Operator may exercise remedy

...

- (c) An defaultevent of the kind referred to in clause 22.1(d) is deemed to be remedied when the relevant Insolvency Event is no longer continuing.

Clauses 22.6 and 22.7(c)

22.6 Notice of Operator's default

If an event referred to in clause 22.5 occurs, then the Shipper may give notice in writing to the Operator specifying the nature of the ~~default~~event and requiring the Operator to rectify the ~~default~~event (**Operator Default Notice**).

22.7 When Shipper may exercise remedy

...

- (c) An defaultevent of the kind referred to in clause 22.5(b) is deemed to be remedied when the relevant Insolvency Event is no longer continuing. An defaultevent of the kind referred to in clause 22.5(a) that relates to the repudiation or disclaimer of a contract, agreement or deed is deemed to be remedied when the relevant repudiation or disclaimer is no longer continuing.

Clause 25.2(a)

25.2 Charges

- (a) A Party may, without the consent of the other Party (but subject to all other necessary consents and approvals), charge in favour of any recognised bank or financial institution or a Related Body Corporate of the Party the whole or any part of its rights or interests under this Contract (including any right to receive money), provided that the chargor and chargee enters into a tripartite deed with the other Party substantially in the form of Schedule 7. If the Shipper is the Party charging its rights and interests under this Contract under this clause 25.2, the tripartite deed in the form of Schedule 7 must be modified in the manner necessary to change the charging Party from the Operator to the Shipper.

Clause 25.5(f)

25.5 Pipeline Trustee's Acknowledgments and Undertakings

...

- (f) ~~Other than to the extent relating to the transaction documentation entered into on or about the Capacity Start Date, t~~The Pipeline Trustee shall not dispose of the whole or any part of its rights, title or interest in the DBNGP without requiring the ~~disposee~~disponee to enter into a deed of assumption with Shipper to the reasonable satisfaction of Shipper pursuant to which it:
- (i) assumes all, or the relevant portion, of the ...

New clause 25.7

25.7 Non complying assignment

Any purported sale, transfer or assignment in breach of the requirements of any of the provisions of this clause 25 is void *ab initio*.

The Parties acknowledge that this clause 25 does not apply to a Transfer under clause 27.

Clause 28.2(i)

28.2 Exceptions to Confidentiality

Either Party may disclose Confidential Information which:

...

- (i) is required by Law or any governmental agency or stock exchange to be disclosed in connection with the issue of securities or financial products by a Party, a Related Body Corporate of a Party, a member of AGIG, the Diversified Utility and Energy Trust No 1 ABN 83 495 791 796~~and No 2~~ or the DUET Finance Trust~~POWERS Trust~~ ABN 85 482 841 876, or any funding vehicle of any of those parties;

Clause 28.3

28.3 Permitted Disclosure

(a) Either Party may disclose Confidential Information to:

- (i) subject to clauses 28.3(d) and 28.5, its, and its Related Bodies Corporate's, employees, officers, agents, contractors, consultants, lawyers, bankers, financiers (including any entity that directly or indirectly provides financial accommodation to a Party or its Related Body Corporate or a financier of any of them), financial and technical advisers (and for the purpose of this clause 28.3(a) Alcoa, ~~and~~ the System Operator and each member of AGIG are deemed to be~~must be considered~~ Related Bodies Corporate of the Operator); and

(ii) ...

(b) Nothing in this clause 28.3 permits disclosure by the Operator or the System Operator, or by a person or persons to whom Confidential Information from the Operator or the System Operator has been disclosed under this clause 28, to:

- (i) any person who is directly involved in:

- (A) the distribution of Gas to customers through a covered pipeline that is a distribution pipeline situated in the Western Australia – Natural Gas Distribution System as that term is used in the National Third Party Access Rules for Natural Gas Pipeline Systems (as amended from time to time) under the National Gas Access (Western Australia) Law;
- (B) the retailing of Gas within Western Australia;
- (C) the generation or sale of electricity in the South West Interconnected System of Western Australia;
- (D) contracting for Capacity on the DBNGP; or
- (E) the management of the activities referred to in clauses 28.3(b)(i)(A) to 28.3(b)(i)(D); or
- (ii) such person's employees, officers, agents, contractors, consultants and technical advisers who are themselves directly involved in any of the activities described in clause 28.3(b)(i);⁷

except to the extent that such person is:

- (iii) the System Operator ...
- (iv) a director or senior manager of Alcoa, or any of Alcoa's Related Bodies Corporate ~~through which they have a direct or indirect equity interest in the DBNGP, and requires~~ who is provided with the disclosure of aggregated information in connection with ~~the management of their respective equity~~ their interests in the DBNGP; ~~or~~
- ~~(v) a senior manager of Alcoa, or any of Alcoa's Related Bodies Corporate, who:~~
 - ~~(A) is a director of the Operator or its Related Bodies Corporate, or of the System Operator; or~~
 - ~~(B) by virtue of his or her duties as a senior manager is required to assist a director under clause 28.3(b)(iv);~~

which disclosure under clauses 28.3(b)(iii) and, 28.3(b)(iv) ~~and 28.3(b)(v)~~ is, subject to clauses 28.3(d) and 28.5, permitted in accordance with the provisions of this clause 28.3.

Clause 28.6(a)

- 28.6 Information received by Operator
- (a) The Operator must develop, implement and enforce, policies and procedures to:
 - (i) give effect to its obligations under:
 - (A) clause 28.3(a)(i), 28.3(b), 28.6(a), 28.6(b) or 28.6(c); and
 - (B) clauses 28.4 and 28.5 to the extent related to disclosure under clauses 28.3(a)(i), 28.3(b) or 28.6(b); and
 - (ii) ensure that all shippers are treated equally and fairly in relation to disclosure of Confidential Information,

and must procure that its direct and indirect shareholders, service providers (including the System Operator) and all Related Bodies Corporate of these entities comply with those policies and procedures and with the Law.

New clause 28.10

28.10 FIRB Compliance

Unless otherwise agreed by the Operator, the Shipper acknowledges that the Data is subject to conditions imposed under section 74(4) of the Foreign Acquisitions and Takeovers Act 1975 (Cth) and undertakes to ensure that all Data provided (or access to which is provided) to it by or on behalf of the Operator:

- (a) is stored only within Australia;
- (b) is accessible and maintained only from within Australia; and
- (c) will not be taken outside of Australia,

except in circumstances where it is required to be accessed in order to comply with any law of the Commonwealth of Australia or any of its States and Territories.

Clause 29

29. Notices

29.1 Notices for nominations, Curtailment, unavailability, balancing, Out-of-Specification Gas and capacity trading

- (a) Subject to clause 29.1(b), all Curtailment Notices and Unavailability Notices and notices under clauses 7.5, ~~9.9(b)~~~~9.9(e)~~, and 17.6(a) must be communicated by ~~facsimile to the facsimile number~~email to the email address set out in the Access Request Form, until further notice is given under clause 29.3(c).
- (b) The Operator and the Shipper may agree on an alternative means for communication of the notices specified in clause 29.1(a), in which case the notices must be communicated using that alternative method.
- (c) Until the Operator and the Shipper agree an alternative method of communication under clause 29.1(b), the Operator and the Shipper must each ~~install~~establish and maintain a dedicated ~~email address~~facsimile machine on a separate facsimile number for the purposes of clause 29.1(a), and from time to time either Party may advise the other Party in writing of a new ~~email address~~facsimile number which takes effect in substitution for the ~~email address~~number set out in in the Access Request Form.

...

29.3 Notices generally

- (a) Where under this Contract a notice is required or permitted to be communicated to a Party (other than the notices specified in clauses 29.1(a) and 29.2(a)), the notice is taken to have been communicated if it is in writing and it is delivered personally to, or sent by certified mail addressed to, the Party at the address, or is sent by email to the Dedicated Email Address, ~~or is sent by facsimile transmission to the facsimile number~~, last notified under this clause.
- (b) For the purposes of this clause, and until further notice is given under clause 29.3(c), the addresses ~~and~~, Dedicated Email Addresses ~~and facsimile numbers~~ of the Parties are as set out in the Access Request Form.
- (c) From time to time, for the purposes of this clause, either Party may advise the other Party in writing of an address located within the State, ~~of and~~ a Dedicated Email Address ~~and a facsimile number~~ which are to take effect in substitution for the details set out in this clause.

- (d) Nothing in this clause prevents ...

29.4 Receipt of notices

- (a) A reference in this Contract to notice before a certain time means that the notice must be received at the intended address or ~~facsimile machine~~[email address](#), or posted to the CRS, by no later than that time.
- ~~(b) For the purposes of this Contract, any notice sent by facsimile machine is, subject to clause 29.4(c), to be taken to have been sent and received on the date and at the time printed on a transmission report produced by the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the appropriate facsimile number, unless the recipient notifies the sender within one hour (in the case of a notice to which clause 29.1(a) applies) or 12 hours (in any other case) of the time printed on the transmission report that the facsimile was not received in its entirety in legible form.~~
- ~~(c) When the time printed on the transmission report referred to in clause 29.4(b) is between:~~
- ~~(i) 00:00 hours and 09:00 hours; or~~
- ~~(ii) 17:00 hours and 24:00 hours,~~
- ~~on a Working Day, clause 29.4(b) applies as if, in respect to 29.4(c)(i), the time on the transmission report was 09:00 hours on the Working Day and, in respect to clause 29.4(c)(ii), the time on the transmission report was 09:00 hours on the next Working Day.~~
- ~~(d)~~[\(b\)](#) For the purposes of this Contract, any notice sent by email must be sent by and to the email addresses set out in the Access Request Form or, if an email address is substituted pursuant to clause 29.1(c) or 29.3(c), such substituted email address (Dedicated Email Address). Each Party agrees to configure the information systems on which emails are sent from and to the Dedicated Email Addresses so as to generate an automatic response message for each email received by the Dedicated Email Address. Any notice sent from a Dedicated Email Address is, subject to this clause 29.4, taken to be given and received at the time the sender receives an automatic response message to the email.
- ~~(e)~~[\(c\)](#) For the purposes of this Contract, a notice sent by certified mail ...
- ~~(f)~~[\(d\)](#) For the purposes of this Contract:
- (i) a notice sent by the CRS ...
- (ii) the other notices sent by the CRS ...

Schedule 6

Part A

Order of Priority	System Curtailment	Order of Priority	Point Specific Curtailment
1	Any Capacity Service insofar as it is for the Shipper's relevant share of the Distribution Networks' IPQ	1	Any Capacity Service insofar as it is for the shipper's relevant share of the Distribution Networks' IPQ*
2	Alcoa's Priority Quantity	2	Alcoa's Priority Quantity*
3	Alcoa's Exempt Delivery Entitlement (excluding Alcoa's Priority Quantity)	3	Alcoa's Exempt Delivery Entitlement (excluding Alcoa's

	and T1 Service (including Aggregated T1 Service), <u>P1 Service (including Aggregated P1 Service) and B1 Service (including Aggregated B1 Service)</u> , to the extent of, and apportioned in accordance with, the provisions of <u>item (a) of Part B of this Schedule 6</u>		Priority Quantity)* and T1 Service (in excluding Aggregated T1 Service), <u>P1 Service (excluding Aggregated P1 Service) and B1 Service (excluding Aggregated B1 Service)</u> , that is Contracted Capacity at the relevant point to the extent of, and apportioned in accordance with, the provisions of <u>item (a) of Part B of this Schedule 6</u>
4	The balance of Alcoa's Exempt Delivery Entitlement (excluding Alcoa's Priority Quantity) and T1 Service (including Aggregated T1 Service), P1 Service (<u>including Aggregated P1 Service</u>) and B1 Service (<u>including Aggregated B1 Service</u>), which is not dealt with under item 3 above, apportioned in accordance with the provisions of <u>items (b) and (c) of Part B of this Schedule 6</u>	4	The balance of Alcoa's Exempt Delivery Entitlement (excluding Alcoa's Priority Quantity)* and T1 Service (in excluding Aggregated T1 Service), P1 Service (<u>excluding Aggregated P1 Service</u>) and B1 Service (<u>excluding Aggregated B1 Service</u>), that is Contracted Capacity at the relevant point which is not dealt with under item 3 above, apportioned in accordance with the provisions of <u>items (b) and (c) of Part B of this Schedule 6</u>
5	Firm Service	5	Firm Service that is Contracted Capacity at the relevant point
6	<u>Other Reserved Service</u> (other than Tp Service)	6	Other Reserved Service (other than Tp Service) that is Contracted Capacity at the relevant point
7	Spot Capacity	<u>7</u>	<u>Aggregated T1 Service, Aggregated P1 Service and Aggregated B1 Service, at the relevant point</u>
		78	Other Reserved Service (if any) nominated by and scheduled to the shipper at the relevant point at which the shipper does not have Contracted Capacity in that Other Reserved Service in accordance with the provision of the shipper's contract for the Other Reserved Service
		89	Spot Capacity

* denotes amounts that are net of such quantities delivered at other inlet points or outlet points (as the case requires) on the relevant Gas Day

Part B

- (a) The amount of Capacity available after allowing for items 1 and 2 in Part A of this Schedule 6, up to the next 253.5 TJ/d of Capacity, must be apportioned as follows:
- (i) $\frac{1}{2}$ of the available Capacity must be apportioned to Alcoa; and

- (ii) ½ of the available Capacity must be apportioned to T1 Service, P1 Service and B1 Service ([including, in a relevant System Curtailment, Aggregated Service](#)) which, among shippers with Contracted Capacity for T1 Service, P1 Service and B1 Service must be apportioned in accordance with clause 17.9(c)(i).
- (b) The amount of Capacity available after allowing for items 1, 2 and 3 in Part A of this Schedule 6 must be apportioned as follows:
 - (i) the Alcoa Proportion of the available Capacity must be apportioned to Alcoa; and
 - (ii) the balance of the available Capacity must be apportioned to T1 Service, P1 Service and B1 Service ([including, in a relevant System Curtailment, Aggregated Service](#)) which, among shippers with Contracted Capacity for T1 Service, P1 Service and B1 Service must be apportioned in accordance with clause 17.9(c)(i), or if there is available Capacity after all T1 Service, P1 Service and B1 Service ([including, in a relevant System Curtailment, Aggregated Service](#)) has been provided for then to items below T1 Service, P1 Service and B1 Service in the applicable column of the table in Part A of this Schedule 6, which among shippers with the relevant Type of Capacity Service must be apportioned in accordance with clause 17.9(c)(i).
- (c) The Alcoa Proportion must be determined in accordance with the following:
 - ...

Appendix 6 Tariff Model – Public Version

This appendix is published separately on the ERA's website.