

Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for 2021 to 2025

Issues Paper

17 March 2020

Economic Regulation Authority

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Invitation to make submissions

Submissions are due by 4:00 pm WST, Tuesday, 31 March 2020

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

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

You can also send comments through:

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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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Executive summary

On 2 January 2020, Dampier Bunbury Pipeline submitted to the ERA proposed revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline. DBP's proposal covers the five-year period from 1 January 2021 to 31 December 2025 (referred to as the fifth access arrangement period or AA5).

The ERA's role is to consider DBP's proposed revisions and approve the access arrangement if it meets the requirements of the National Gas Law and National Gas Rules. The National Gas Law and National Gas Rules 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.

While the ERA will review all aspects of DBP's proposal, the ERA had identified two issues where it will seek broad stakeholder engagement because they have significant implications for current and future tariffs, and because similar issues may arise in other access arrangements in future.

Depreciation of pipeline assets

DBP has proposed to reduce the current economic lives of its assets, which will accelerate depreciation and increase DBP's forecast revenue by around \$194 million over AA5. The regulatory framework provides compensation to DBP through tariffs for the amount of depreciation over AA5. Assets can only be depreciated once and so the issue affects the timing of the compensation.

DBP proposes to accelerate depreciation to reduce the risk that it will not recover its past and future capital expenditure if customers switch to alternative energy sources. This is in the context of growing affordability of renewable energy sources and the Western Australian Government's commitment to work with industry towards achieving an aspirational target of net zero greenhouse gas emissions by 2050.

DBP's proposal is based on the economic life of the pipeline ending in 2059. To put DBP's proposal into context, if the asset lives were not changed during AA5, then the last asset installed during AA5 would not fully depreciate until 2095. Also, the significant expansion of the pipeline which occurred in the early 2010s would not be fully depreciated until 2082.

DBP has also re-categorised existing assets to proposed new asset categories with lower economic lives, which has the effect of accelerating depreciation and is included as part of the \$194 million increase in depreciation during AA5.

The ERA's decision on economic lives will affect the recovery profile of DBP's assets and also reference tariffs now and beyond AA5.

Incentive mechanism

DBP has proposed to introduce an operating expenditure carryover incentive mechanism in AA5, called the E Factor scheme. The purpose of the scheme is to remove the timing distortion in incentives to implement efficiency gains throughout the access arrangement period. By permitting DBP to retain the benefit of an efficiency saving for an extra five years, regardless of when the expenditure was incurred, DBP would have an opportunity to earn additional revenue in the next regulatory period equivalent to the amount carried over.

Similarly, if DBP underperforms against the E Factor benchmark, it will carry the cost burden for five years from the year in which the expenditure was incurred, further strengthening its incentive to pursue efficiency gains.

DBP identified two possible consequences of the E Factor scheme – DBP may be able to outperform the E Factor benchmark by shifting costs between operating and capital expenditure, or by allowing service reliability to decline.

The ERA will assess the cost of the scheme to customers and shippers, including any adverse consequences, against the possible benefit of DBP implementing efficiency gains earlier in the regulatory period.

Other notable matters

The ERA will consider DBP’s proposed capital and operating expenditure, forecast for demand and the proposed terms and conditions for each reference service.

DBP has provided supporting information, including confidential information, to support its capital and operating expenditure proposals and its forecast demand for AA5. On its demand forecast, DBP expects that contracted capacity will decrease by 16 per cent from AA4 levels. The fall in demand contributes to an increase in reference tariffs despite DBP’s revenue being around \$241 million lower during AA5 than AA4. DBP attributes this fall in contracted capacity to the growth in renewable electricity generation displacing gas use and customers using the Parmelia Gas Pipeline.

The ERA will calculate a rate of return consistent with the ERA’s rate of return guideline which is now a binding instrument.

A list of issues and questions on certain aspects of DBP’s proposal is provided below to assist interested parties with public submissions. However, this is not an exhaustive list and the ERA welcomes submissions from interested parties on all aspects of DBP’s proposed access arrangement for AA5.

List of issues and questions

Issue 1 DBP stakeholder consultation process

The ERA invites submissions on DBP's consultation process and whether DBP's submission to the ERA reflects, or otherwise addresses, the stakeholder feedback that was provided.

- Does DBP's submission align with stakeholder expectations following the engagement program?
- Was DBP's engagement program a useful approach for stakeholders to be actively involved in the development of the access arrangement submission?

Issue 2 Depreciation

The ERA invites submissions from interested parties on DBP's proposal to reduce the economic life of pipeline assets.

- Should a service provider be allowed to increase revenue to reduce the risk that it will not recover the cost of its existing assets?
- Given the uncertainty associated with future demand, should the economic lives of new investments be reduced?
- Should a mechanism be added to the Access Arrangement to provide for the redundancy of assets in the future if demand falls away?
- Are DBP's three new proposed asset categories appropriately defined to include assets with the same economic life? In undertaking the recategorisation process, should DBP have proposed that it review all assets to ensure that these assets are in the correct asset category?

Issue 3 Incentive mechanism (E Factor scheme)

The ERA invites submissions from interested parties on the E Factor scheme proposed by DBP.

The ERA is particularly interested in submissions 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.

Issue 4 Reference tariffs

The ERA invites submissions on DBP's proposed reference tariffs and the overrun charge of 1.15 times the reference tariff. The ERA is inviting submissions on the appropriateness of DBP's tariff structure and alternatives, including:

- The fixed and variable components of the reference tariff.
- Whether any revenue from the overrun charge should be considered in calculating reference tariffs.

Issue 5 Operating expenditure

The ERA invites submissions from interested parties on DBP's proposed conforming operating expenditure for AA5, including whether the proposed activities align with good industry practice and whether the associated expenditure is reasonable.

Issue 6 Conforming capital expenditure for AA4

The ERA invites submissions from interested parties on DBP's proposed conforming capital expenditure for AA4, including whether the proposed projects and work activities align with good industry practice and whether the associated expenditure is reasonable.

Issue 7 Forecast conforming capital expenditure for AA5

The ERA invites submissions from interested parties on:

- DBP's proposed forecast of conforming capital expenditure for AA5, including whether the proposed projects and work activities align with good industry practice and whether the associated expenditure is reasonable.

Issue 8 Demand

The ERA invites stakeholders to provide input into the assessment of DBP's demand forecasts. The main issues with DBP's demand forecast identified are:

- Do stakeholders require further explanation of how DBP's forecasts are derived for the reference services forecasts?
- The ERA is seeking views on the comparability of growth rates of the Australian Energy Market Operator's Gas Statement of Opportunities used to validate DBP's forecasts and DBP's forecasts.
- The ERA is seeking views on whether the proposed step change in DBP's demand forecast is due to growth in renewable electricity. In particular, whether the current and ongoing growth of renewable electricity (wind and solar) in the SWIS is displacing electricity generated from natural gas from the DBNGP.
- The ERA is seeking views on the adequacy of the stakeholder consultation undertaken by to derive DBP's bottom-up demand forecasts.

Issue 9 Pipeline and reference services

The ERA invites submissions on:

- DBP's proposal to keep the T1 Service, P1 Service and B1 Service as reference services under the access arrangement.
- DBP's amendments to the descriptions of the proposed reference services to be offered under the access arrangement.
- Whether any other pipeline services should be specified as reference services.

Issue 10 Terms and conditions for reference services

The ERA invites submissions on:

- DBP's proposed amendments to the terms and conditions for each reference service – the T1 Service, P1 Service and B1 Service.

- Whether any further consultation on DBP’s proposed terms and conditions has taken place, between DBP and shippers, since DBP’s submission to the ERA on 2 January 2020 and if so, the outcome(s) of the further consultation.
- Whether any further amendments should be made to the terms and conditions for each reference service.

Issue 11 Access and queuing requirements

The ERA invites submissions on:

- DBP’s proposed amendments to the procedures for making access requests and queuing requirements.
- Whether the queuing requirements need to be amended to give prospective shippers the ability to determine their actual position in the queue for access.
- Whether any further amendments to the procedures for making access requests and queuing requirements should be made.

Issue 12 Capacity trading

The ERA invites submissions on:

- DBP’s proposal to leave the capacity trading requirements unchanged from the current AA4 access arrangement.
- Whether any amendments to the capacity trading requirements should be made.

Issue 13 Extension and expansion requirements

The ERA invites submissions on whether the extension and expansion requirements should be amended to expressly meet the requirements of rule 104 of the NGR. Specifically, whether the extension and expansion requirements need to be amended to:

- Make direct reference to “incremental services”, as that term is defined in the NGR.
- State whether the access arrangement will apply to incremental services to be provided as a result of a particular extension to the pipeline, and if so and where required, deal with the effect of the extension on the opening capital base, description of reference services and tariffs.
- 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.
- Delete all references to the term “enhancement”.

Issue 14 Receipt and delivery points

The ERA invites submissions on:

- DBP’s proposal to leave the terms and conditions for changing receipt (inlet) and delivery (outlet) points substantively unchanged from the current AA4 access arrangement.
- Whether any further amendments to the terms and conditions for changing receipt (inlet) and delivery (outlet) points should be made.

Issue 15 Review and commencement dates

The ERA invites submissions on:

- DBP’s proposed review submission date of 1 January 2025.
- DBP’s proposed revision commencement date of 1 January 2026.

Introduction

1. On 2 January 2020, DBP submitted to the ERA proposed revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline (DBNGP). DBP's proposal comprises 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).
2. 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 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 owner and operator of the pipeline and is part of the Australian Gas Infrastructure Group.
4. 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.
5. The role of ERA is to consider and approve 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.
6. This issues paper has been prepared to assist interested parties to:
 - Prepare submissions to the ERA on DBP's proposal.
 - Understand some of the issues that the ERA will address when determining whether to approve DBP's proposal.
7. The issues paper is not an exhaustive review of the content of DBP's proposal or the matters that the ERA will address to make its determination. Any considerations expressed in this paper are preliminary considerations that may change subject to submissions from interested parties, additional information from DBP and further considerations of the ERA.
8. While this paper identifies issues for specific consideration, interested parties are invited to make submissions on any aspect of DBP's proposal and on the operation of the DBNGP access arrangement more generally during the current (AA4) access arrangement period.
9. The ERA will consider submissions received through this consultation period when making its draft decision on DBP's proposal. DBP can then submit a revised proposal in response to the ERA's draft decision.

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

² DBP, *2021-2025 Final Plan*, January 2020.

10. Interested parties will have the opportunity to make submissions on the ERA's draft decision and, if relevant and submitted, DBP's revised proposal.
11. The documents comprising DBP's proposal are available from the ERA's website, along with this issues paper.³

³ ERA, 'DBNGP Access Arrangement for period 2021-2025' ([online](#)) (accessed February 2020).

Regulatory framework

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

13. 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.

14. 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”.
15. 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

16. 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.⁴ The specific changes to the NGR are set out in *National Gas Amendment (Regulation of covered pipelines) Rule 2019 No. 1*.⁵
17. The amended rules:⁶
 - 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.
18. 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 of the NGR. 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.⁷

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

⁵ Australian Energy Market Commission, *National Gas Amendment (Regulation of covered pipelines) Rule 2019 No. 1* ([online](#)) (accessed January 2020).

⁶ Australian Energy Market Commission, ‘Regulation of covered pipelines’ ([online](#)) (accessed January 2020).

⁷ In the NGR a “reference service proposal” means 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.

(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;⁸ 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.”

19. 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

⁸ 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 modified rules.

20. 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.
21. For the next access arrangement review, where revisions to the access arrangement for the sixth access arrangement period (AA6) will be proposed by DBP and assessed by the ERA, 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.⁹

Required content of an access arrangement

22. DBP is required to submit a "full access arrangement" for the DBNGP. Section 2 of the NGL specifies a full access arrangement to be an access arrangement that:
 - (a) provides for price or revenue regulation as required by the Rules; and
 - (b) deals with all other matters for which the Rules require provision to be made in an access arrangement.
23. The required content of a full access arrangement proposal is specified in rule 48 of the NGR. As indicated at paragraph 20, a modified version of rule 48 applies to the DBNGP access arrangement for this access arrangement review.
24. Further to a full access arrangement proposal, rule 43(1) of the NGR requires DBP to submit "access arrangement information" with its proposal.
25. 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."
26. 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

⁹ DBP has proposed a review submission date of 1 January 2025 (refer to paragraph 252 of this paper), meaning that DBP will need to submit a reference service proposal to the ERA by 31 December 2024.

- (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.

Principal issues for consideration

27. This section details the principal issues that are under consideration by the ERA and include:
- DBP's general consultation process that was employed to develop its access arrangement proposal.
 - DBP's proposal to change the depreciation schedule of pipeline assets.
 - DBP's proposal to introduce an incentive mechanism – the E Factor.

DBP's consultation process

28. DBP's consultation process consisted of a four-stage engagement program with its major stakeholders to help develop its access arrangement proposal:¹⁰
- stage 1: strategy and research
 - stage 2: developing a draft plan
 - stage 3: consultation on a draft plan
 - stage 4: refinement and ongoing engagement.
29. DBP identified its primary stakeholders to be:¹¹
- shippers
 - government departments
 - gas marketers and producers
 - other pipeline owners
 - landowners and developers
 - the regulator.
30. As part of the first stage of DBP's consultation process, DBP published its proposed approach to engaging with customers and stakeholders and contacted its major stakeholders to seek feedback on matters to be considered in the future planning of the pipeline, other topics of interest and its engagement strategy.
31. During stages two to four of DBP's consultation process, DBP held nine shipper roundtable meetings. The roundtables were established by DBP as a forum to actively consult with its customers, to discuss major topics and subjects of interest. The meetings were facilitated and documented by an independent third party, KPMG. DBP also proposed holding general stakeholder roundtables; however, DBP said that several stakeholder representative groups did not want to be directly involved in the engagement program so DBP did not proceed with the stakeholder roundtables.¹²
32. Throughout DBP's consultation process, DBP kept all stakeholders informed via regular digital updates and fact sheets and held one-on-one meetings with stakeholders to document further feedback. Feedback received from customers and

¹⁰ DBP, *2021-2025 Final Plan*, January 2020, pp.30-31.

¹¹ DBP, *2021-2025 Final Plan*, January 2020, p.30.

¹² DBP, *2021-2025 Final Plan – Attachment 5.2: Stage 1 Stakeholder Engagement Report*, January 2020, p.16.

stakeholders throughout the consultation process were used to shape and inform DBP's submission.

33. DBP identified two topics that required further discussion and understanding by customers: demand forecasting for AA5 and depreciation. In response, DBP produced an information paper about its position on depreciation and engaged KPMG to undertake an independent assessment of the demand forecast.¹³
34. DBP provided a summary of all customer and stakeholder feedback received during the consultation process and stated that it has responded to all feedback. In the summary, DBP also indicated that it has full customer and stakeholder support for almost all aspects of its submission. DBP said it does not have full support for the proposed amendment of the overall asset life of the DBNGP to match a revised economic life, stating that some customers wanted to reserve their position on the matter until the final plan had been provided.¹⁴

Issue 1 DBP stakeholder consultation process

The ERA invites submissions on DBP's consultation process and whether DBP's submission to the ERA reflects, or otherwise addresses, the stakeholder feedback that was provided.

- Does DBP's submission align with stakeholder expectations following the engagement program?
- Was DBP's engagement program a useful approach for stakeholders to be actively involved in the development of the access arrangement submission?

Depreciation of pipeline assets

35. The calculation of depreciation of the capital base is based on the depreciation schedules of 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.

36. Rule 89 of the NGR specifies the criteria that should be used to design the depreciation schedule.

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

¹³ DBP, *2021-2025 Final Plan*, January 2020, p.39.

¹⁴ DBP, *2021-2025 Final Plan*, January 2020, pp.39-49.

- (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.
37. 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.

Proposed change to depreciation

38. DBP has proposed to reduce the current economic lives of its assets, which will accelerate depreciation and increase DBP's forecast revenue by around \$194 million over AA5.
39. DBP has proposed that the economic life of the pipeline will end in 2059. The current depreciation methodology effectively assumes that the pipeline will continue to operate indefinitely. If the asset lives are not changed during AA5, then the last asset installed during AA5 would not fully depreciate until 2095. Also, the significant expansion of the pipeline which occurred in the early 2010s would not be fully depreciated until 2082.
40. DBP considers that the usefulness of the DBNGP is highly uncertain as natural gas is replaced with renewable energy over the coming decades. DBP proposes to accelerate depreciation to reduce the risk that it will not recover its past and future capital expenditure if customers switch to alternative energy sources. This is in the context of growing affordability of renewable energy sources and the Western Australian Government's commitment to work with industry towards achieving an aspirational target of net zero greenhouse gas emissions by 2050. DBP considered that it would potentially face significant competition to the point where the primary factor that influences pricing would be competition and not the regulatory constraint.

41. The practical effect is that DBP is seeking to recover capital faster and reduce its exposure to stranded-asset risk in the event of a decline in the domestic market for natural gas. Submissions are therefore sought as to the reasonableness of DBP's assumptions and potential asset stranding and the proposed shorter economic life.
42. DBP noted that this was the one topic in its Final Plan that did not receive full support from all its customers.¹⁵
- There is broad recognition and acceptance by customers and stakeholders that the future of the DBNGP is uncertain given the rapidly changing renewable energy market, consistent with the challenges that many of our customers face. Some customers accepted the need to amend the overall asset life to match a revised economic life, however some customers reserved their position until we provide our Final Plan.
43. The proposed introduction of an end date of 2059 for the pipeline, adds around \$62 million to customer tariffs over AA5.
44. The remaining \$132 million increase in DBP's forecast revenue over AA5 for accelerated depreciation is due to DBP's proposed re-categorisations of existing assets to three additional new asset categories with lower economics lives and the lowering of asset lives for the existing 'Metering' and 'Other' asset categories.
45. DBP sought advice from Incenta Economic Consulting on the appropriateness of the new asset categories, and a review of the reclassification and calculation of past capital expenditure transferred to new asset categories. The economic lives used in AA4 and DBP's proposed economic lives for AA5 are shown in Table 1.

Table 1: DBP's proposed asset lives for AA5

Asset Category	AA4 Economic Life	AA5 Economic Life ¹⁶
Pipelines	70	70
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

46. DBP's consultant, Incenta Economic Consulting, noted that DBP did not review the appropriateness of assets in the existing asset categories apart from moving assets that fit within the new asset categories. For example, large generators and inlet scrubbers from expansion 5B are in the other asset category whereas these assets

¹⁵ DBP, *2021-2025 Final Plan*, January 2020, p.94.

¹⁶ Note that DBP is also proposing a cap on the asset lives based on its view of the overall economic life of the pipeline.

should be classified as compression assets. As compression and other assets had the same asset life of 30 years, there was no effect. However, now that DBP has proposed that the other asset category should have an asset life of 10 years, then this mistake in classification will have a depreciation recovery effect.

Similar regulatory proposals

47. There have been similar concerns by other gas service providers regarding asset stranding and the overall economic life of gas assets.
48. Jemena Gas Networks (Jemena) expressed similar concerns to DBP that there was uncertainty for the future of natural gas beyond 2020.¹⁷ In its regulatory proposal for 2020/21 to 2024/25, Jemena has proposed to the AER that the economic lives of 10 of its 24 asset categories are reduced for new assets only, to share the risk of asset stranding. Jemena noted that had it sought to apply the change retrospectively to existing investments then it could be characterised as adjusting the risk sharing between service provider and customer relative to when those investments were made. Jemena also noted:

Even for the new capital expenditure the risks of under-recovery is not fully mitigated for JGN [Jemena Gas Networks] as these assets continue to depreciate beyond 2050.

...

Overall it is expected that JGN will continue to have \$2.5B of unrecovered investment at RY50 [Regulatory Year 2050] even under the proposed new asset lives – the change in asset lives only reduces the unrecovered investment by \$0.37B.

49. The AER's review process on the Jemena access arrangement review is still in progress. However, the AER's draft decision did not accept Jemena's proposal. The AER noted that the NSW Government's planned net-zero carbon objective had not been legislated and that the "objective, by itself, is not sufficient evidence that the economic lives of the pipeline assets will be significantly shorter than their technical lives".¹⁸
50. The AER noted that it would "require evidence-based forecasts enabling us to form a judgement as to the likelihood of this risk eventuating in actuality, before we could make an adjustment to depreciation schedules which would otherwise conflict with the national gas objective and NGR."¹⁹
51. The AER did not consider that Jemena's proposed reductions to the standard asset lives would promote the long-term interests of consumers, as it would result in an inefficient tariff path as tariffs during the current access arrangement period would be set above the efficient cost of providing reference services.

Capital redundancy

52. Rule 85 of the NGR contains capital redundancy provisions which is one area in the NGR that considers the issue of a possible decline in demand for pipelines services.

¹⁷ Jemena Gas Networks operates a gas distribution network in New South Wales servicing 1.3 million residential business and industrial sites.

¹⁸ AER, *Draft decision – Jemena Gas Networks (NDS) Ltd Access Arrangement 2020-25 – Attachment 4: Regulatory depreciation*, November 2019, p. 20.

¹⁹ AER, *Draft decision – Jemena Gas Networks (NDS) Ltd Access Arrangement 2020-25 – Attachment 4: Regulatory depreciation*, November 2019, p. 21.

53. The NGR allows an access arrangement to include a mechanism to share the costs of a decline in demand for pipeline services between the service provider and users. These arrangements must be established in the access arrangement first before being applied in a subsequent access arrangement period. Rule 85(3) of the NGR states:

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.

54. DBP is already expecting a fall in demand during AA5 and as noted above, is expecting further declines in demand over time to the point where it will not be in operation beyond 2059 with certainty.

ERA consideration

55. The ERA's decision on economic lives will affect the recovery profile of DBP's assets and also reference tariffs now and beyond AA5. The role of the ERA in assessing DBP's proposal will be to consider whether the proposed changes to depreciation are consistent with the specific requirements of the NGR for depreciation and, more broadly, the long-term interests of consumers under the national gas objective. DBP considered that its revised asset categories and economic lives were consistent with other gas transmission businesses.
56. The ERA has appointed a technical consultant to review DBP's proposed asset lives. In considering whether the proposed asset lives and depreciation schedules meet the NGR, the ERA will consider DBP's proposal, any recommendations from the ERA's technical consultant, stakeholder feedback and any other relevant information.

Issue 2 Depreciation

The ERA invites submissions from interested parties on DBP's proposal to reduce the economic life of pipeline assets.

- Should a service provider be allowed to increase revenue to reduce the risk that it will not recover the cost of its existing assets?
- Given the uncertainty associated with future demand, should the economic lives of new investments be reduced?
- Should a mechanism be added to the Access Arrangement to provide for the redundancy of assets in the future if demand falls away?
- Are DBP's three new proposed asset categories appropriately defined to include assets with the same economic life? In undertaking the recategorisation process, should DBP have proposed that it review all assets to ensure that these assets are in the correct asset category?

Incentive mechanism

57. Under rule 98 of the NGR, the ERA may approve or require the inclusion of an incentive mechanism in a full access arrangement to encourage efficiency in the provision of pipeline services. The mechanism may provide for carrying over increments (or decrements) for efficiency gains (or losses) into a subsequent access

arrangement period and must be consistent with the revenue and pricing principles in the NGL:

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.
58. Under the revenue and pricing principles (section 24 of the NGL(WA)), 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 (see paragraph 15).

Proposed E Factor scheme

59. DBP proposed to introduce an operating expenditure carryover mechanism – the Efficiency Factor (or E Factor) scheme – to commence in AA5.²⁰
60. Under the proposed scheme, DBP would carry forward incremental operating expenditure savings (or overspending) for five years following the year in which the efficiency gain (or loss) occurred.
61. Incremental efficiency gains or losses (E Factor incentives) would be calculated relative to a benchmark allowance (E Factor benchmark) and realised expenditure in non-excluded cost categories in each year of the regulatory period.
62. Cumulative increments or decrements carried over from a prior regulatory period would comprise an additional ‘building block’ in the calculation of total revenue amounts for each year of the subsequent access arrangement period.
63. DBP also proposed to carry forward E Factor incentives in real dollars, using price indices consistent with those used to forecast operating expenditure.
64. At a discount rate of 6.0 per cent, DBP would retain approximately 30 per cent of recurrent efficiency gains or losses, which is equivalent to the proportion that would be retained if DBP implemented an efficiency gain in the fifth (final) year of the regulatory period.
65. The operation of the E Factor scheme was described in clause 15.2 of the proposed revised access arrangement:

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;

²⁰ DBP, *2021-2025 Final Plan*, January 2020, p.116.

- (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 (15.11) 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.
66. The proposed E Factor benchmark is the approved total annual operating expenditure forecast, less expenditure determined to be not reasonably within DBP's control, and non-recurrent or other expenditure not forecast using the top-down roll-forward method. The categories of expenditure that DBP proposed to exclude were listed in clause 15.11 of the revised 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:
 - (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.

67. 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.

68. DBP's proposed E Factor benchmarks and E Factor exclusion amounts for the AA5 period are shown in Table 2, below.

Table 2: Proposed E Factor benchmarks, 2021 to 2025 (\$ million real at 31 December 2019)

Cost category	2021	2022	2023	2024	2025
Total forecast opex	92.4	91.3	92.1	90.0	88.0
<u>Less excluded costs:</u>					
- Permits, licence fees, rates, taxes	4.3	4.3	4.3	4.3	4.3
- System use (fuel) gas	20.4	20.8	21.0	22.0	22.3
- Non-recurrent opex (turbine / GEA overhauls)	8.9	7.6	7.6	4.3	2.1
- Opex incurred to reduce capex	-	-	-	-	-
- Reclassified capex to opex	-	-	-	-	-
Total E Factor exclusions	33.5	32.6	32.9	30.6	28.7
E Factor benchmarks	58.9	58.8	59.3	59.5	59.4

Source: DBP, 2021-2025 Final Plan – Attachment 12.1: Proposed E-Factor Calculation Model, January 2020.

Why DBP has proposed the E Factor scheme

69. DBP stated that the E Factor scheme is needed to strengthen incentives for it to incur efficient operating expenditure, to seek recurrent savings, and to encourage continuous improvement in operating practices over the regulatory period.²¹ DBP also stated that the scheme would improve its focus on efficiency improvements as the business matured, and would be consistent with operating and regulatory practices across related entities under the jurisdiction of the Australian Energy Regulator (AER).
70. The purpose of an efficiency carryover mechanism is to provide a service provider with time-neutral incentives to achieve recurrent operating expenditure savings.²² Without a carryover incentive mechanism, the service provider's incentive to achieve efficiency gains diminishes over the regulatory control period as the benefit of savings

²¹ DBP, 2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor, January 2020, p. 4.

²² Australian Energy Regulator, *Efficiency Benefit Sharing Scheme for Electricity Network Service Providers, Better Regulation, Explanatory Statement*, November 2013, p. 6.

achieved in any year will only be retained until the forecast expenditure allowance is reset in the subsequent regulatory period.²³

71. By retaining recurrent cost savings or overspending for a period at least equivalent to the length of the regulatory control period, regardless of the year in which the expenditure was incurred, the carryover mechanism removes the cyclical distortion in the service provider's incentive to achieve efficiency gains and increases the likelihood that actual costs in any year reflect efficient costs.

Effect of the E Factor scheme

72. The effect of the proposed E Factor scheme is to provide DBP with a time-neutral incentive to achieve cost savings in each year of the regulatory period.
73. By permitting DBP to retain the benefit of an efficiency saving for an additional five years, irrespective of the year in which the expenditure was incurred, DBP would have an opportunity to earn incremental revenue in the next regulatory period equivalent to the amount carried over.
74. Preliminary analysis suggests the tariff impact of a cumulative carryover amount to be less than \$0.01 per GJ for each \$10 million carried over.
75. For hypothetical comparison, DBP achieved approximately \$8.6 million (estimated in real dollars, December 2020) in cumulative efficiency gains on total operating expenditure excluding system use gas in the AA4 period. These savings would have resulted in a cumulative carryover amount of approximately \$19.5 million in the AA5 period.
76. The cost of the scheme to customers and shippers will be considered against the potential benefit of DBP implementing efficiency gains earlier in the regulatory period, that it may otherwise have deferred.

Unintended outcomes of the E Factor scheme

77. DBP identified two potentially adverse consequences of an operating expenditure carryover incentive scheme:
 - Operating expenditure savings could be reported by shifting expenditure from operating to capital accounts.
 - Operating expenditure savings could be achieved by allowing service reliability to decline.

Capital expenditure bias

78. DBP stated that the risk of achieving savings in operating expenditure by incurring more capital expenditure was unlikely to be significant because its capital expenditure forecast on long-established pipeline assets was relatively low.²⁴ DBP also stated that

²³ Australian Energy Regulator, *Efficiency Benefit Sharing Scheme for Electricity Network Service Providers, Better Regulation*, November 2013.

²⁴ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 4.

its capital expenditure was tested internally, and externally by the ERA, for prudence and efficiency before it could be rolled into its capital base.

79. DBP also proposed to exclude from the E Factor benchmark any operating expenditure incurred as a more efficient alternative to capital expenditure.²⁵

Service reliability

80. DBP reported near 100 per cent system reliability in the AA4 period and intended to maintain that standard of reliability during the AA5 period, despite a proposed reduction in operating expenditure and an anticipated increase in demand volatility:

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 [South-West Interconnected System] 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.²⁶

81. DBP stated that strict conditions in shipper contracts and its operating licence would ensure that any operating expenditure savings achieved under the E Factor scheme would not compromise public safety, supply reliability and service quality.²⁷ DBP stated that the financial penalties that would be imposed for any deterioration in service performance would be likely to offset the benefit of any operating expenditure savings that may accrue under the E Factor scheme.
82. DBP also stated that, since gas was a discretionary commodity subject to regulation, it was in its interest to maintain a high standard of service and ensure that shippers and customers continue to choose to use natural gas.²⁸

Comparative incentive mechanisms

83. DBP stated that the E Factor scheme is similar in purpose and structure to the efficiency benefit sharing scheme applied by the AER to electricity and gas transmission and distribution businesses in its jurisdiction, and the gain sharing mechanism applied to Western Power under the *Electricity Networks Access Code 2004*.²⁹
84. The efficiency benefit sharing scheme is part of a package of incentive mechanisms applied to service providers by the AER to promote cost efficiency and maintain service performance.³⁰ All gas transmission and distribution businesses regulated by the AER are subject to an operating expenditure carryover mechanism. Only gas distribution businesses are subject to a capital expenditure sharing scheme.

²⁵ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 4.

²⁶ DBP, *2021-2025 Final Plan*, January 2020, p. 26.

²⁷ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 4.

²⁸ DBP, *2021-2025 Final Plan – Attachment 12.2: Proposed Opex Incentive Scheme Additional Information – E Factor*, January 2020, p. 4.

²⁹ DBP, *2021-2025 Final Plan*, January 2020, p. 117.

³⁰ Australian Energy Regulator, *Overview of the Better Regulation reform package*, April 2014.

85. The AER approved an efficiency benefit sharing scheme for the APA Victorian Transmission System in its 2013 to 2017 regulatory determination, and subsequently for its 2018 to 2022 regulatory period:

The opex incentive mechanism in APA's access arrangement provides an additional incentive to that provided under an incentive based regime for APA to pursue efficiency improvements in its opex over an access arrangement period. It does this by allowing APA to retain efficiency savings achieved within a particular period for a longer period of time.³¹

86. The AER imposed an efficiency carryover mechanism on the Amadeus gas transmission pipeline against the company's objections in its 2016 to 2021 regulatory determination. The AER considered the mechanism to be intrinsic to the operating expenditure forecast methodology:

APTNT did not agree with our draft decision to apply an ECM [Efficiency Carryover Mechanism] on the grounds that the existing long term contract for services already imposed incentives on it to improve its ongoing efficiency. APTNT argued the application of the ECM would introduce a regulatory burden without offsetting benefits.

We consider that benefits will accrue from the application of an ECM in the long term. In a regulatory framework that includes an ECM, cost shifting to inflate base year opex is penalised through negative carryover amounts. In such an environment, the efficiency of base year opex to be used for forecasting opex in future periods is a less intrusive top-down process, reducing regulatory burden in future years.

We have established APTNT's opex for the next access arrangement period using our top-down revealed cost methodology. The ECM is intrinsically linked to this methodology. This is because the ECM provides us with greater confidence that the base year is efficient and can be used to forecast opex for a future access arrangement period. It also provides confidence that a service provider has a continuous incentive to make efficiency gains. For these reasons we consider it is necessary to apply an ECM to APTNT in the 2016–21 period.³²

87. For similar reasons, the AER imposed an efficiency carryover mechanism on the Roma to Brisbane transmission pipeline in the 2017 to 2022 regulatory period, although the scheme was not proposed by the company:

An efficiency carryover mechanism did not apply to APTPPL during the 2012–17 access arrangement period. APTPPL did not propose to apply an efficiency carryover mechanism to its opex in the 2017–22 access arrangement period. Our draft decision however is to apply an efficiency carryover mechanism to APTPPL in the 2017–22 access arrangement period.

Our decision to apply an efficiency carryover mechanism to APTPPL is consistent with our approach for other regulated service providers. The efficiency carryover mechanism is an important component of our top-down, revealed cost forecasting approach for opex.³³

88. DBP also stated that the design of the proposed E Factor scheme is more akin to the gain sharing mechanism applied to Western Power.³⁴ In contrast with the above-benchmark surplus that may accrue to Western Power under the gain sharing

³¹ Australian Energy Regulator, *Final Decision, APA VTS Australia Gas access arrangement 2018 to 2022, Overview*, November 2017, p. 32.

³² Australian Energy Regulator, *Final Decision, Amadeus Gas Pipeline Access Arrangement 2016 to 2021, Overview*, May 2016, p. 39.

³³ Australian Energy Regulator, *Draft Decision, Roma to Brisbane Gas Pipeline Access Arrangement 2017 to 2022, Overview*, June 2017, p. 45.

³⁴ DBP, *2021-2025 Final Plan, Five year plan for the Dampier to Bunbury Natural Gas Pipeline*, January 2020, p. 117.

mechanism, the proposed E Factor incentive is not contingent on DBP maintaining a minimum standard of service performance.

89. Comparatively, the AER has applied a contingency payment mechanism to distribution pipeline operators only where a capital expenditure sharing scheme has also been applied. The contingency payment mechanism specifies a service performance threshold below which the company is unable to access efficiency gains under the capital expenditure sharing scheme.
90. The AER did not approve a capital expenditure sharing scheme for AGN (South Australia) in its 2016 to 2021 determination because the scheme did not include an offsetting incentive to maintain service performance:

Under the NER, the Service Target Performance Incentive Scheme (STPIS) balances the incentives the CESS [Capital Expenditure Sharing Scheme] creates to reduce capex with a financial incentive to maintain or improve on the performance levels funded through the approved forecast revenue requirement. By putting revenue at risk where performance falls below pre-defined targets, the STPIS discourages a business from seeking to maximise benefits from the CESS by reducing capex at the expense of the reliability, safety and security of its network. We find that AGN's proposal for a CESS—while it notes some potential balancing incentives—does not provide for a similar and sufficient counter balance. The absence of an equivalent revenue incentive in AGN's access arrangement is one of the key differences between the electricity and gas frameworks that AGN's original and revised proposals have not adequately addressed.³⁵

91. The AER approved the introduction of a capital expenditure sharing scheme in AusNet's 2018 to 2022 determination that was contingent on AusNet maintaining service performance:

The CESS that will be included in AusNet's access arrangement is based on the CESS we developed under the National Electricity Rules (NER). We are conscious of the risk that increased incentives could lead to inefficient deferral of capex in the interests of reducing costs within an access arrangement period. Recognising that there is no balancing service quality scheme like the STPIS under the NER, any reward to AusNet under the CESS will be contingent on AusNet maintaining current service standards. Service standards will be measured through a new network health index incorporating leaks on mains, services and meters, and system average interruption frequency and duration indices (SAIFI and SAIDI). If service standards decline, then AusNet will receive a reduced CESS reward or no reward at all.³⁶

92. DBP stated that customers did not support a draft proposal to introduce a capital expenditure efficiency scheme in AA5 because its annual stay-in-business capital expenditure is relatively small, at approximately 1.0 per cent of its capital base:

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.³⁷

³⁵ Australian Energy Regulator, *Final Decision, Australian Gas Networks Access Arrangement 2016 to 2021, Overview*, May 2016, p. 47.

³⁶ Australian Energy Regulator, *Draft Decision, AusNet Services Gas access arrangement 2018 to 2022, Overview*, July 2017, p. 44.

³⁷ DBP, *2021-2025 Final Plan*, January 2020, p. 116.

93. DBP also stated that customers did not support a service incentive scheme:

We also looked at a customer service incentive scheme, and an innovation scheme. However, as with the capex scheme feedback from customers indicated they do not support these types of incentives at this time. We are therefore not pursuing them for AA5.³⁸

94. DBP did not propose to introduce a capital expenditure carryover mechanism, or a contingency mechanism linking E Factor incentives to service reliability.

Issue 3 Incentive mechanism (E Factor scheme)

The ERA invites submissions from interested parties on the E Factor scheme proposed by DBP.

The ERA is particularly interested in submissions 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.

³⁸ DBP, *2021-2025 Final Plan*, January 2020, p. 116.

Overview of DBP's proposal

95. The following overview of DBP's proposal for revisions to the access arrangement is provided to assist parties in understanding the proposal and make submissions. It is not an exhaustive review of DBP's proposal or a complete list of matters that the ERA will address in making its determination.

Revenue and prices

Total revenue

96. 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).
97. DBP applied the building block approach to derive its total revenue for each year of AA5. For AA5, DBP proposed a total revenue requirement of \$1,659.66 million, which is \$220.75 million lower than AA4.³⁹ Table 3 details DBP's proposed building block components. Each of these building block components is discussed below.

Table 3: DBP's proposed total revenue AA5 (\$ million real as at 31 December 2019)

	Total AA4	2021	2022	2023	2024	2025	Total
Return on capital base	756.55	102.57	99.59	96.73	93.33	90.14	482.36
Depreciation	517.12	137.76	128.75	132.45	134.60	137.81	671.38
Operating expenditure	551.71	92.48	91.38	92.16	90.05	88.08	454.15
Cost of tax	91.72	22.71	20.67	18.57	20.68	20.92	103.55
Value of imputation credits	-36.69	-11.36	-10.33	-9.29	-10.34	-10.46	-51.78
Total	1,880.41	344.16	330.06	330.62	328.33	326.49	1,659.66

Source: DBP, AA5 Tariff Model, 2 January 2020

³⁹ \$ million real as at 31 December 2019.

Reference tariffs

98. DBP will recover its total revenue requirement through the tariffs that it charges. Rules 92, 95 and 96 of the NGR set out provisions for the determination of such tariffs.
99. Rule 92 requires the equalisation (in terms of present values) of the portion of total revenue allocated to reference services and the forecast revenue from reference services over the access arrangement period.
100. Rule 95 details specific requirements for determining 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
 - (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].
101. Rule 96 allows the service provider to propose a discount for a particular user or prospective user, or a particular class of users or prospective users. A discount may only be approved if it is necessary to respond to competition from other providers of pipeline services or other sources of energy or maintain efficient use of the pipeline. The provision of the discount must also likely lead to reference or equivalent tariffs being lower than they would otherwise have been.
 102. DBP's proposed reference price of \$1.43 (in December 2020 dollars) on 1 January 2021, is a 4 per cent increase from the current nominal reference price
 103. DBP stated that the capacity (or reservation) price is set to cover the fixed costs of delivering reference services and is determined by dividing the sum of the fixed cost elements of DBP's building block total revenue (determined as building block total revenue minus system use gas divided by the forecast capacity demand).
 104. DBP's proposed commodity (or throughput) price is set to cover the variable costs, being system use gas, of delivering reference services, and is determined by dividing

the variable cost components of DBP's building block total revenue by the forecast throughput.

105. DBP considered that as a result of reductions in system use gas costs, the proportion of fixed and variable costs has shifted in comparison to AA4. As a result of this reduction, the commodity component of the proposed DBP tariff (which recovers DBP's variable costs) is proposed to decrease from 10 per cent in AA4 to 6 per cent in AA5. The balance of 94 per cent reflects DBP's fixed costs and is recovered via the capacity component of its reference tariffs.
106. In line with stakeholder feedback, DBP has not proposed any changes in the way DBP allocated its costs between the full haul, part haul and back haul services. DBP first converts 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 sums all services to determine the tariff. This has the practical effect that the part haul and back haul services are the same as the full haul services on a per-km basis.
107. The ERA is inviting submissions from stakeholders on the tariff structure. Alternative tariff structures could be assessed based on the outcomes for customers. Also, the tariff structure can be assessed in terms of the relative changes in contracted versus uncontracted capacity. The current reference tariffs are based on the distance from the start of the pipeline. The fixed and variable costs of DBP are recovered through the reference tariffs. However, currently, any overrun revenue is not included in the tariff revenue calculation. The overrun capacity, which is the capacity utilised above contracted capacity, is currently charged at 1.15 times the reference tariff.

Issue 4 Reference tariffs

The ERA invites submissions on DBP's proposed reference tariffs and the overrun charge of 1.15 times the reference tariff. The ERA is inviting submissions on the appropriateness of DBP's tariff structure and alternatives, including:

- The fixed and variable components of the reference tariff.
- Whether any revenue from the overrun charge should be considered in calculating reference tariffs.

Operating expenditure

108. All dollar figures in this section are expressed in real dollars as of 31 December 2019 unless otherwise stated. Where the figures in this section are based on dollar figures supplied by DBP in real dollars as of 31 December 2020, the ERA has converted the supplied figures to real dollars as of 31 December 2019 using the inflation figures supplied by DBP in its tariff model.
109. 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.

110. Rule 93 of the NGR states:

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].
 - (d) ...

111. 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.

112. Operating expenditure for the AA4 period is estimated at \$473.7 million. DBP has forecast a decrease in operating expenditure for the AA5 period of \$19.5 million to a total of \$454.1 million for the AA5 period.

113. DBP's forecast operating expenditure is split into six main categories:
- Wages and salaries
 - Field expenses
 - Non-field expenses
 - Government charges
 - System use gas
 - Reactive maintenance
114. 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 a number of sub-categories of expenditure in the 'Field expenses' expenditure category.
115. DBP used the 2019 calendar year as its base year for forecasting operating expenditure for AA5. 2019 is the penultimate year of the current access arrangement period. At the time of submission of its proposed access arrangement, DBP provided for its 2019 base year, nine months of actuals and three months of forecasts.
116. DBP stated in its submission that it will provide a full year of 2019 actuals to the ERA by the time the ERA makes its draft decision.
117. DBP's proposal of \$454.1 million for AA5 is \$19.5 million less than its forecast AA4 spend of \$473.7 million. DBP stated this reduction was largely driven by forecast lower 'System use gas' costs from the previous access arrangement period.
118. Expenditure variances between AA4 and AA5 for the six main operating expenditure categories are as follows:
- Wages and salaries, down by \$4.2 million
 - Non-field expenses, down by \$10.3 million
 - Field expenses, up by \$19.6 million
 - Government charges, up by \$10.7 million
 - Reactive maintenance, up by \$0.5 million
 - System use gas, down by \$35.8 million
119. 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.
120. DBP used a five-year average of its consulting and reactive maintenance costs due to some 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.
121. DBP has not proposed inclusion of any step changes to its base year.
122. In its proposal, DBP has applied a real cost escalation of 0.69 per cent per annum to its labour costs. This is based on the latest WA Treasury data available at the time

- DBP prepared its submission, October 2019, and is consistent with the ERA's determination of real cost escalation for labour costs in the Goldfields Gas Pipeline Access Arrangement decision of December 2019.
123. DBP noted, while it considered a premium above the wage price index for the Electricity, Gas, Water and Wastewater Services is appropriate as it reflects actual empirical observations, DBP did not include a premium to remain consistent with its objective of submitting a plan capable of acceptance by the ERA.
 124. DBP has not included 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.
 125. DBP has forecast to spend \$106.5 million on 'System use gas' in the AA5 period, down by \$35.8 million from \$142.3 million in the AA4 period. This was forecast using a bottom up method and not using the base year. DBP noted the reduction is mainly driven by lower gas prices compared to when it last tendered for its system use gas requirements in 2014.
 126. DBP's forecast price for 'System use gas' is based on the weighted average price that it will achieve across its system use gas supply contracts secured in the market. DBP notes this is consistent with the ERA's approach in AA4 to adopt the weighted average price of DBP's two system use gas contracts.
 127. Within the sub-category 'Turbine and GEA overhauls' which forms part of the 'Field expenses' category, DBP has used a bottom-up method to prepare the forecast. In AA5, DBP is forecasting expenditure of \$30 million to overhaul eight turbine units and 20 gas engine alternators (GEA) units.
 128. Based on current run hours and utilisation rates for turbine units, DBP is forecasting to overhaul seven turbine units and has allowed for an overhaul of one additional turbine unit in the event of a premature failure at a cost of \$25 million. DBP is forecasting to overhaul 20 GEA units in AA5 at a cost of \$5 million.
 129. 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 notes the lower expenditure in the current period is 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 in identifying an asset for overhaul (replacement).
 130. In the AA4 final decision, the ERA approved an allowance for 'Turbine and GEA overhauls' of \$33 million as submitted by DBP at the time.
 131. Contributing to the forecast increase in the 'Field expenses' category between AA4 and AA5 was a change in capitalisation method by DBP. DBP has included \$11 million of 'asset inspections', 'other minor pipeline works' and 'small health and process safety initiatives' as operating expenditure from AA5.
 132. DBP in the past has treated these costs as capital expenditure but now considers they are better aligned to its operating expenditure activities. AGIG, the owner of DBP, noted that similar activities undertaken across its distribution networks, and by other pipelines and electricity networks, are treated as operating expenditure.

133. DBP has also provided as part of its proposal, expert accounting advice to confirm its treatment of these costs as operating expenditure is appropriate.
134. DBP's proposal includes an increase between AA4 to AA5 of \$10.7 million for 'Government charges', up to \$43.5 million proposed in AA5. DBP's final plan does not discuss this increase in 'Government charges' proposed for the AA5 period.
135. However, DBP has provided additional information in response to an information request from the ERA which noted the increase in 'Government charges' was a result of a recategorisation of regulatory costs from 'Non-field expenses' into 'Government charges'. DBP notes this increase in 'Government charges' is offset by the subsequent decrease in 'Non-field expenses' in the AA5 period.
136. DBP noted though that its AA4 expenditure for 'Government charges' is \$4 million, or 18 per cent, above its allowance.
137. DBP's proposed operating expenditure for the AA5 period is set out by year for the six main cost categories in Table 4.

Table 4: DBP's proposed forecast operating expenditure for AA5 (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025	Total
Wages and salaries	27.5	27.6	27.8	28.0	28.2	139.2
Non-field expenses	11.8	11.8	11.8	11.8	11.9	59.1
Field expenses	22.3	20.6	20.9	17.6	15.1	96.4
Government charges	8.7	8.7	8.7	8.7	8.7	43.5
Reactive maintenance	1.9	1.9	1.9	1.9	1.9	9.4
System use gas	20.4	20.8	21.0	22.0	22.3	106.5
Total	92.5	91.4	92.2	90.1	88.1	454.1

Issue 5 Operating expenditure

The ERA invites submissions from interested parties on DBP's proposed conforming operating expenditure for AA5, including whether the proposed activities align with good industry practice and whether the associated expenditure is reasonable.

Capital base

Opening capital base

138. All dollar figures in this section are expressed in real dollars as of 31 December 2019 unless otherwise stated. Where the figures in this section are based on dollar figures supplied by DBP in real dollars as of 31 December 2020, the ERA has converted the

supplied figures to real dollars as of 31 December 2019 using the inflation figures supplied by DBP in its tariff model.

139. Rule 77(2) of the NGR sets out the approach to determine the opening capital base for an access arrangement period that follows immediately on the conclusion of a preceding access arrangement period, as is the case for the DBNGP access arrangement:

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*.

140. DBP determined the opening capital base for AA5 to be \$3,330.89 million as shown in Table 5.

Table 5: DBP's proposed opening capital base for AA5 (\$ million real as at 31 December 2019)

	\$ million
Opening capital base for AA4	3,726.32
Plus: Proposed conforming capital expenditure for AA4	121.68
Less: depreciation for AA4	(517.12)
Proposed closing capital base for AA4 / Opening capital base for AA5	3,330.89

Source: DBP, 2021-25 Final Plan, January 2020, Table 9.2, p. 95.

141. To determine its proposed opening capital base for AA5, DBP added its actual capital expenditure for the years 2016 to 2018 and forecast capital expenditure for 2019 and 2020 to its opening capital base for AA4, and subtracted the forecast depreciation from the ERA's AA4 final decision. DBP did not propose that any of its assets would become redundant or be disposed of during AA4.
142. DBP's proposed conforming capital expenditure for AA4 is discussed at paragraph 150 and its depreciation method, including proposed asset lives, is discussed at paragraph 35 to 56.

Projected capital base

143. Rule 78 of the NGR sets out the approach 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.

144. DBP calculated the forecast capital base for each year of AA5 as shown in Table 6.

Table 6: DBP's proposed forecast capital base for AA5 (\$ million real as at 31 December 2019)

	2021	2022	2023	2024	2025
Opening capital base	3,330.89	3,234.07	3,141.13	3,030.89	2,927.05
Capital expenditure	40.94	35.82	22.21	30.76	28.94
Depreciation	(137.76)	(128.75)	(132.45)	(134.60)	(137.81)
Asset disposals	0.00	0.00	0.00	0.00	0.00
Closing capital base	3,234.07	3,141.13	3,030.89	2,927.05	2,818.18

Source: DBP, 2021-25 Final Plan, January 2020, Table 9.6, p. 99.

145. DBP's proposed forecast of conforming capital expenditure for AA5 is discussed at paragraph 154.

Capital expenditure

146. All dollar figures in this section are expressed in real dollars as of 31 December 2019 unless otherwise stated. Where the figures in this section are based on dollar figures supplied by DBP in real dollars as of 31 December 2020, the ERA has converted the supplied figures to real dollars as of 31 December 2019 using the inflation figures supplied by DBP in its tariff model.
147. The ERA must assess DBP's proposed conforming capital expenditure for the AA4 period, as well as DBP's forecast capital expenditure for the AA5 period, to determine the opening capital base for AA5 (see paragraph 138) and projected capital base over AA5 (see paragraph 143).
148. To assess DBP's actual and forecast capital expenditure, the ERA must determine whether the expenditure meets the new capital expenditure criteria as set out in rule 79 of the NGR.

79 New capital expenditure criteria

- (1) Conforming capital expenditure is capital expenditure that conforms with the following criteria:
- 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
 - the capital expenditure must be justifiable on a ground stated in subrule (2); and
 - 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:
- the overall economic value of the expenditure is positive; or
 - 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 two 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.

149. Rule 93 of the NGR states:

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].

...

Conforming capital expenditure for AA4

150. DBP proposed that its actual (2016 to 2018) and forecast (2019 and 2020) capital expenditure for AA4 satisfies the conforming capital expenditure criteria under rule 79 of NGR.
151. DBP's proposed total conforming capital expenditure for AA4 of \$121.68 million is distributed between seven depreciable asset classes as shown in Table 7. These seven asset classes comprise the existing four asset classes included in DBP's current access arrangement, and three new asset classes proposed by DBP as part of its proposed revised access arrangement for AA5. DBP's reasons for proposing these additional asset classes and how it intends to reallocate the existing assets in its regulatory asset base to these new asset classes is described at paragraphs 45 to 55.

Table 7: Proposed conforming capital expenditure for AA4 by asset class (\$ million real as at 31 December 2019)

Asset class	AA4 Total
Pipeline	0.33
Compression	14.60
Metering	26.85
Other depreciable assets	16.69
Computers and motor vehicles	17.48
Cathodic / corrosion protection	19.07
SCADA, ECI and communications*	26.67
Non-depreciable assets	0.00
Cost of raising equity	0.00
Total	121.68

Source: DBP, 2021-25 Final Plan, January 2020, Figure 8.13, p. 89.

* SCADA is supervisory control and data acquisition; ECI is electrical control and instrumentation

152. DBP's proposed conforming capital expenditure for AA4 exceeds the capital expenditure included in the AA4 final decision forecast by \$9.19 million. Direct comparison of DBP's proposed conforming capital expenditure for AA4 with the AA4 final decision forecast is not possible due to the new asset classes that DBP has proposed.
153. DBP submitted that its capital expenditure in AA4 was driven by the need to:
- Replace, repair and undertake preventative works on the DBNGP's compressor stations (\$25.80 million).

- Replace a large number of the DBNGP's end-of-life metering assets, repair piping at meter stations and upgrade odorant systems and over pressure protection (\$25.80 million).
- Replace the DBNGP's obsolete southern communications system (\$6.94 million).
- Undertake in-line inspections by pigging of the entire length of the pipeline (\$11.91 million).
- Refurbish/renovate original compressor station accommodation (\$1.98 million).
- Invest in IT security (\$0.99 million).⁴⁰

Issue 6 Conforming capital expenditure for AA4

The ERA invites submissions from interested parties on DBP's proposed conforming capital expenditure for AA4, including whether the proposed projects and work activities align with good industry practice and whether the associated expenditure is reasonable.

Forecast conforming capital expenditure for AA5

154. DBP proposed a forecast of \$158.67 million conforming capital expenditure for AA5. This is 29.47 per cent higher than the final decision capital expenditure forecast for AA4. DBP submitted that more replacements of the pipeline assets were due during AA5 than during AA4, leading to the proposed increase in capital expenditure.
155. The distribution of the proposed forecast capital expenditure between the asset classes DBP has proposed to be in effect during AA5 (described in paragraph 157) is shown in Table 8. DBP submitted that all forecast capital expenditure was for maintaining or improving its ability to deliver current reference services.⁴¹

⁴⁰ DBP, *2021-2025 Final Plan*, January 2020, pp. 70-71.

Table 8 Proposed forecast conforming capital expenditure for AA5 (\$ million real as at 31 December 2019)

Asset class	2021	2022	2023	2024	2025	Total
Pipeline	0.00	0.00	0.00	0.00	0.00	0.00
Compression	6.15	3.44	4.01	3.82	4.54	21.96
Metering	1.76	1.20	1.41	1.21	1.39	6.98
Other Depreciable	2.67	1.34	1.14	4.97	4.78	14.89
Computers and Motor Vehicles	7.38	5.23	3.95	5.69	3.67	25.91
Cathodic/Corrosion Protection	3.43	2.88	3.11	2.91	2.41	14.74
SCADA, ECI and Comms	19.55	21.73	8.59	12.17	12.15	74.19
Non Depreciable	0.00	0.00	0.00	0.00	0.00	0.00
Total	40.94	35.82	22.21	30.76	28.94	158.67

Source: DBP, 2021-2025 Final Plan, January 2020, p. 73.

156. DBP's proposal includes business cases for the projects comprising its forecast AA5 capital expenditure.⁴² Business cases accounting for a large proportion of DBP's total proposed conforming expenditure include:

- compressor stations (\$36.41 million)
- communications (\$30.56 million)
- compressor unit control systems (\$18.85 million)
- pipeline and main line valves (\$9.62 million)
- Jandakot site redevelopment (\$8.53 million)
- gas engine alternator unit control systems (\$8.33 million).⁴³

157. As discussed at paragraphs 45 to 55, DBP proposed to introduce three new depreciable asset classes in addition to the existing four depreciable asset classes under its current access arrangement.⁴⁴ These new asset classes are:

- Computers and motor vehicles (proposed economic life of five years).
- Cathodic/corrosion protection (proposed economic life of 15 years).
- SCADA, electrical, control and instrumentation and communications (proposed economic life of ten years).

158. DBP proposed to reclassify some of its capital expenditure incurred during and since 2005 into those 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

⁴² DBP, 2021-2025 Final Plan, January 2020, p. 73.

⁴³ DBP, 2021-2025 Final Plan, January 2020, Table 8.1, p. 70.

⁴⁴ Under the current access arrangement, the existing four depreciable asset classes are pipelines (economic life 70 years), compression (economic life 30 years), metering (economic life 50 years) and other (economic life 30 years).

AA5, and the total size of the regulatory asset base at the beginning of AA5, would be unchanged by its proposed reclassification of assets.

159. DBP submitted that the opening regulatory asset base as of the start of AA5 could not be traced back to individual assets for the following:
- Where an asset has been installed in a given access arrangement period, the depreciation on that asset within that period has been calculated based on the forecast expenditure in that asset class rather than actual expenditure.
 - Where an asset has been disposed of within a given access arrangement period, only information on DBP's aggregate disposals of assets from within the regulatory asset base is available.
160. DBP has proposed that the above items should be apportioned to the proposed new asset categories in the regulatory asset base according to the relative amounts of capital expenditure.

Issue 7 Forecast conforming capital expenditure for AA5

The ERA invites submissions from interested parties on:

- DBP's proposed forecast of conforming capital expenditure for AA5, including whether the proposed projects and work activities align with good industry practice and whether the associated expenditure is reasonable.

Return on the regulatory capital base

161. The rate of return, based on the weighted average cost of capital (WACC), provides for a return on the regulatory asset base.
162. Sections 30D and 30H of the NGL require the ERA to make and publish a rate of return guideline. The guideline 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 referred to in section 30E of the NGL.
163. On 18 December 2018, the ERA published its rate of return guideline, specifying its approach for determining the rate of return.
164. 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.
165. This binding instrument forms the basis for determining DBP's rate of return for AA5. DBP is to use market information to estimate the prevailing returns that compensate investors for holding assets with similar risk of return as the regulated asset. The ERA and DBP cannot depart from the binding instrument when reviewing the access arrangement for the DBNGP.

166. 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.

167. The nominal vanilla WACC provides for a simple weighted average of the nominal post-tax return on equity and the nominal return on debt. The ERA supports the use of the nominal vanilla WACC as it is simple, widely understood, commonly used by regulators and allows the separate calculation of tax effects.
168. The binding gas rate of return instrument sets out the approach for determining each WACC parameter.
169. The service provider must nominate an averaging period in advance, which must be close, and prior, to an access arrangement determination. The nominated averaging period will affect various rate of return parameters that are calculated using market data, including the risk free rate used to estimate the return on equity, and the base rate to be used in the estimate of the return on debt for the five-year period.
170. In addition, DBP nominates a 20-trading-day period for each year in an access arrangement period for the annual update of the debt risk premium. The ERA uses the annual estimate of the debt risk premium to calculate a 10-year trailing average for the debt risk premium. As the ERA estimates a new year’s debt risk premium, the oldest estimate in the 10-year series is removed.
171. Further information about the rate of return guidelines and relevant documents can be found on the ERA website.⁴⁵
172. DBP used the ERA’s updated rate of return guidelines to estimate the rate of return in its AA5 proposal.
173. DBP’s rate of return estimate for AA5 was 4.31 per cent (vanilla 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.

⁴⁵ ERA, Gas Rate of Return Guidelines ([online](#)) (accessed February 2020).

174. Table 9 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 AA4.⁴⁶

Table 9: 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
Corporate tax rate (%)	30	30
Franking credit	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.104-106.

Demand

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

⁴⁶ DBP, 2 January 2020, *Five year plan for the Dampier to Bunbury Natural Gas Pipeline: 2021-2025 Final Plan*, pp.104-106.
ERA, 30 June 2016, *Final Decision on Proposed Revision to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, p. 221.

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; ...

176. 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.

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

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

178. In its proposal, DBP outlined how recent energy industry changes are affecting its forecast of gas demand for the AA5 period. DBP identified two factors that have affected the transportation of gas on the DBNGP:

- growth in renewable electricity generation
- new sources of gas production using alternative pipelines to the DBNGP.

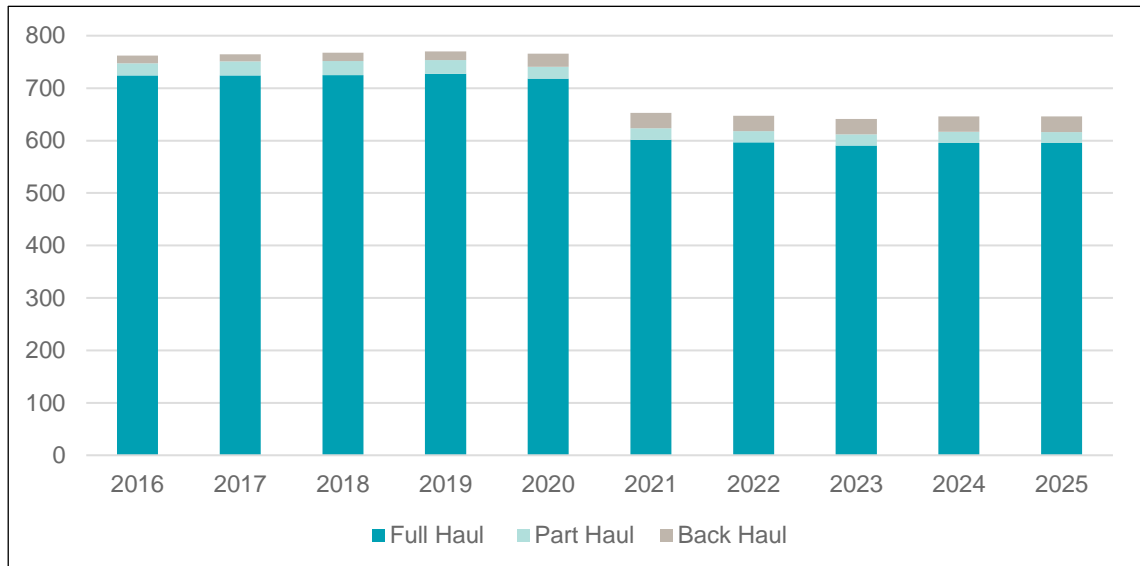
179. DBP considered that the current and ongoing growth of renewable electricity (wind and solar) in the South-West electricity market displaced electricity generated from natural gas.

180. DBP forecast average daily contracted capacity in AA5 is 647TJ/day on a full haul equivalent basis, which is 16 per cent lower than the contracted capacity in AA4. This represents a decrease in contracted capacity in both full haul and part haul, offset by

an increase to back haul when compared to levels in AA4. Figure 1 shows the comparison of contracted capacity on a full haul equivalent (TJ/d) basis.

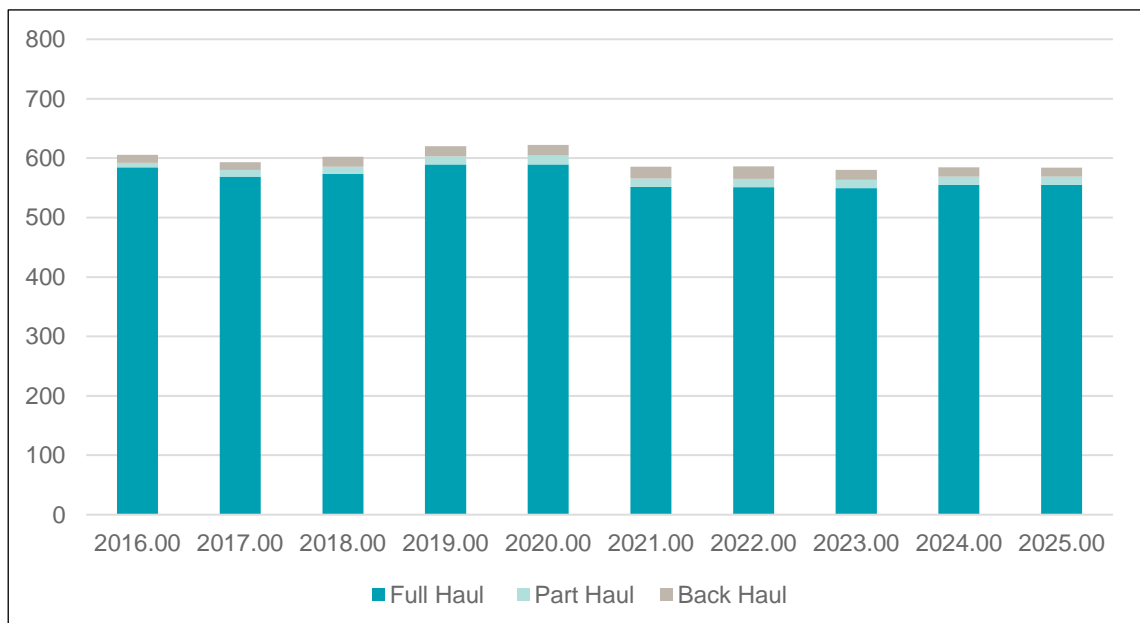
181. Figure 2 shows the throughput on a full haul equivalent (TJ/d) basis for AA4 and AA5.

Figure 1: Contracted capacity (full haul equivalent TJ/d) Actuals 2016-2019 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.

Figure 2: Throughput (full haul equivalent TJ/d) Actuals 2016-2019 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.

182. DBP considered that the decrease compared to AA4 reflected the significant change occurring in the Western Australian energy market. Renewable electricity penetration grew rapidly over AA4 and will continue over AA5, thereby displacing electricity

generated from natural gas. Further, with the development of new gas producing basins, another pipeline other than the DBNGP may be used to bring gas to Perth.

183. DBP in its proposal stated that it expected full haul throughput to increase from October 2022 with the staged retirement of Muja Power Station's two C units expected to increase demand for natural gas as additional sources of dispatchable electricity supplies.
184. DBP expected part and back haul capacity nominations to change very little, with small adjustments between shippers.
185. DBP stated that its forecasts were informed by two external reviews and feedback from its customers. DBP considered the demand forecast was arrived at on a reasonable basis and represented the best forecast possible in the circumstances.

DBP's forecasts for reference services

186. DBP's forecasts of both capacity and throughput in AA5 are provided in in Table 10.
187. In general terms these forecasts are based on a bottom-up model of demand for reference services of the pipeline. The forecasts are provided for full haul, back haul, and part haul services on a full haul equivalent basis.

Table 10: DBP's demand forecasts AA5 (TJ/d)

	2020*	2021	2022	2023	2024	2025
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 :

188. In its proposal, DBP considered that its demand forecasts were the best estimate because

- The forecasts were consistent with the Australian Energy Market Operator’s Gas Statement of Opportunities.
 - DBP undertook stakeholder consultation to derive customer contracted capacity and throughput forecasts.
 - A theoretical economic model was developed by Acil Allen Consulting to determine the optimal contracted capacity of customers.
189. DBP provided a confidential report by Acil Allen Consulting comparing the Gas Statement of Opportunities forecasts with DBP’s forecasts. The ERA has identified an issue with this analysis, as the customer base composition of DBP would have to reflect the entire gas market of Western Australia for these growth rates to be comparable. Further analysis is required to determine the validity of the comparison and the step decline in demand from AA4 to AA5.
190. The ERA will also review the theoretical model derived by Acil Allen Consulting to determine the optimal contracted capacity by customers, provided on a confidential basis.
191. The ERA needs to understand the stakeholder consultation that DBP undertook to derive the bottom-up demand forecasts. This consultation was used as a basis for the contracted capacity and throughput forecasts on a customer basis.

Issue 8 Demand

The ERA invites stakeholders to provide input into the assessment of DBP’s demand forecasts. The main issues with DBP’s demand forecast identified are:

- Do stakeholders require further explanation of how DBP’s forecasts are derived for the reference services forecasts?
- The ERA is seeking views on the comparability of growth rates of the Australian Energy Market Operator’s Gas Statement of Opportunities used to validate DBP’s forecasts and DBP’s forecasts.
- The ERA is seeking views on whether the proposed step change in DBP’s demand forecast is due to growth in renewable electricity. In particular, whether the current and ongoing growth of renewable electricity (wind and solar) in the SWIS is displacing electricity generated from natural gas from the DBNGP.
- The ERA is seeking views on the adequacy of the stakeholder consultation undertaken by to derive DBP’s bottom-up demand forecasts.

Pipeline and reference services

192. “Pipeline service” is defined in section 2 of the NGL:

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.

193. Modified rules 48(1)(a), (b), (c) and (d) of the NGR detail the requirements for identifying the pipeline to which the access arrangement relates, as well as pipeline and reference services.⁴⁷ The modified rules state:

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; 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

194. 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.

195. The “reference service factors” are specified in rule 47A(15):

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;
- (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;

⁴⁷ As set out in schedule 1 (rule 62) of the NGR.

- (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.

Identifying the pipeline

196. 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.⁴⁸
197. 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)).
198. A detailed description of the DBNGP, including a schematic of the pipeline, is provided at Attachment 1 to the access arrangement. Clause 17 of the proposed revised access arrangement indicates that this attachment is a description of the pipeline as at 1 January 2016. However, the attachment submitted by DBP as part of its submission to the ERA is a more recent description of the DBNGP as at 15 September 2019.⁴⁹

Identifying pipeline services

199. Clause 3 of the proposed revised access arrangement details the pipeline services to be offered under the access arrangement and are classified as either reference or non-reference services. DBP's proposed amendments to clause 3.1 of the access arrangement are set out below:
- 3.1 Operator, on its behalf and on behalf of Nominees, proposes to offer the following pipeline services on the DBNGP:
- (a) Reference Services
 - (i) Full Haul T1 Service (T1 Service)
 - (ii) Part Haul P1 Service (P1 Service)
 - (iii) Back Haul B1 Service (B1 Service)
 - (b) Non-Reference Services
 - (i) Operator proposes, subject to availability of Capacity (as determined by Operator as a reasonable and prudent service provider), to offer to Prospective Shippers the following pipeline services:
 - (A) Spot Capacity Service;

⁴⁸ <http://www.dbp.net.au>

⁴⁹ The document submitted by DBP is titled: *DBNGP Access Arrangement 2021-25 – Attachment 1: Description of the Dampier to Bunbury Natural Gas Pipeline System as at 15 September 2019*.

- (B) Park and Loan Service; and
- (C) [Other Reserved](#) Seasonal Service;
- (D) [Pipeline Impact Agreement Service](#);
- (E) [Data Services](#); and
- (F) [Inlet Sales Service](#).
- (ii) ~~Operator proposes, subject to Operational Availability (as determined by Operator as a reasonable and prudent pipeline operator), to offer to Prospective Shippers the following pipeline services:~~
- (A) ~~Peaking Service~~;
- (B) ~~metering information service~~;
- (C) ~~pressure and temperature control service~~;
- (D) ~~odorisation service~~;
- (E) ~~co-mingling service~~;
- (F) ~~pipeline impact agreement service~~; and
- (G) ~~interconnection service~~;
- ~~(iii)~~(ii) Non-Reference Services also include pipeline services provided by Operator under ~~Access C~~ contracts entered into prior to commencement of the Current Access Arrangement Period which are not for a Reference Service; and
- ~~(iv)~~(iii) Operator is prepared to negotiate to provide a Prospective Shipper with any other pipeline service.
200. DBP proposed to keep the three reference services that are being offered under the current AA4 access arrangement. As set out in clause 3.1(a) of the proposed revised access arrangement, these reference services are the full haul T1 Service (T1 Service), part haul P1 Service (P1 Service) and back haul B1 Service (B1 Service).
201. For non-reference services that are subject to the availability of capacity, DBP proposed to amend or add pipeline services and delete all pipeline services that were subject to operational availability. Under amended clause 3.1(b):
- Non-reference services will continue to include pipeline services provided under contracts entered into prior to AA5 that are not reference services.
 - DBP will continue to negotiate with prospective shippers to provide any other (non-reference) pipeline service.
202. Descriptions of the proposed reference services are set out in clauses 3.3, 3.4 and 3.5 of the proposed 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 (as discussed at paragraph 209 of this paper).
 - The proposed reference tariff, which will commence on 1 January 2021, for each of the reference services (as discussed at paragraph 98 of this paper).
 - The pipeline description document provided as Attachment 1 to the proposed revised access arrangement.

203. DBP submitted that, when specifying the proposed reference services it had regard to the reference service factors as required by modified rule 48(1)(c) of the NGR. Attachment 6.1 to DBP's proposal was provided in support of this claim.⁵⁰ DBP's assessment of each of the identified pipeline services against the reference service factors was presented in Table 1 of the attachment. DBP submitted:⁵¹

[Attachment 6.1] provides more detail to underpin our proposed reference services.

The reference services we propose for AA5 are consistent with those currently applied in AA4; full haul, part haul and back haul services. We assessed all pipeline services available on the DBNGP and, having regard to the reference service factors in the NGR and feedback from our customers and stakeholders, determined our reference services to apply over AA5. All other services have been specified as non-reference services.

We received feedback from customers during our consultations to develop our Draft Plan, as outlined in Chapters 5 and 6 [of our Final Plan]. Shippers valued the current reference services as the key services offered on the DBNGP and as supporting for negotiations. [sic]

204. In preparing its submission to the ERA, DBP sought feedback from its customers and stakeholders. The consultation outcomes on pipeline and reference services are discussed below, while a discussion on DBP's overall consultation approach is provided at paragraph 28 of this paper.

205. DBP submitted that it:⁵²

... 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).

206. DBP provided a summary of the customer and stakeholder feedback it received on pipeline and reference services and how it responded to the feedback.⁵³
207. DBP's proposed pipeline and reference services remain substantively the same as the services offered under the current (AA4) access arrangement. Subject to submissions from interested parties, there would not appear to be reasons for the reference services to change in AA5.
208. The ERA will consider DBP's proposed amendments to the descriptions of each of the proposed reference services (as set out in clauses 3.3, 3.4 and 3.5 of the proposed revised access arrangement) as part of its assessment of the terms and conditions for those reference services.

⁵⁰ DBP, *2021-2025 Final Plan – Attachment 6.1: Pipeline Service and Reference Services Supporting Information*, January 2020.

⁵¹ DBP, *2021-2025 Final Plan – Attachment 6.1: Pipeline Service and Reference Services Supporting Information*, January 2020, p. 1.

⁵² DBP, *2021-2025 Final Plan*, January 2020, pp. 50-51.

⁵³ DBP, *2021-2025 Final Plan*, January 2020, p. 52, Table 6.1.

Issue 9 Pipeline and reference services

The ERA invites submissions on:

- DBP’s proposal to keep the T1 Service, P1 Service and B1 Service as reference services under the access arrangement.
- DBP’s amendments to the descriptions of the proposed reference services to be offered under the access arrangement.
- Whether any other pipeline services should be specified as reference services.

Terms and conditions for reference services

209. Modified rule 48(1)(e)(ii) of the NGR requires the access arrangement to detail, in addition to the reference tariff, the other terms and conditions for each reference service.⁵⁴

210. Rule 100 of the NGR details 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.

211. Clause 4 of the proposed revised access arrangement details the terms and conditions for each reference service. DBP proposed to maintain the three reference services that are being offered under the current AA4 access arrangement, being the T1 Service, P1 Service and B1 Service (refer to paragraph 200 of this paper). The terms and conditions for each of the reference services are provided as attachments to the 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.

212. DBP submitted that it undertook “a wholesale review of reference service terms and conditions” with a focus on:⁵⁵

- 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);

⁵⁴ As set out in schedule 1 (rule 62) of the NGR.

⁵⁵ DBP, *2021-2025 Final Plan*, January 2020, pp. 126-127.

- 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 our ability to administer all of our contracts in a consistent manner.

213. Based on its review, DBP proposed amendments to the terms and conditions that would apply for AA5. DBP provided a detailed overview and justification for each of the proposed amendments as Attachment 14.1 to its proposal, with marked-up versions of the proposed terms and conditions also provided.^{56,57}

214. DBP submitted that the main changes to the terms and conditions included:⁵⁸

- 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.

215. 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.⁵⁹

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.

216. The ERA will assess DBP's proposed terms and conditions for each reference against the requirements of the NGR, with consideration given to DBP's reasoning for any proposed amendments (as set out in Attachment 14.1 to the proposed revised access arrangement) and any submissions from interested parties.

⁵⁶ DBP, *2021-2025 Final Plan – Attachment 14.1: Proposed Changes to Reference Service Terms and Conditions – Further Information*, January 2020.

⁵⁷ DBP, *2021-2025 Final Plan*, January 2020. Attachments 14.2 (T1 Service), 14.3 (P1 Service) and 14.4 (B1 Service).

⁵⁸ DBP, *2021-2025 Final Plan*, January 2020, p. 127.

⁵⁹ DBP, *2021-2025 Final Plan*, January 2020, p. 40, Table 5.7.

Issue 10 Terms and conditions for reference services

The ERA invites submissions on:

- DBP's proposed amendments to the terms and conditions for each reference service – the T1 Service, P1 Service and B1 Service.
- Whether any further consultation on DBP's proposed terms and conditions has taken place, between DBP and shippers, since DBP's submission to the ERA on 2 January 2020 and if so, the outcome(s) of the further consultation.
- Whether any further amendments should be made to the terms and conditions for each reference service.

Other access arrangement provisions

Access and queuing requirements

217. 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.

218. 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.⁶⁰

219. Rule 103 of the NGR details specific provisions for queuing requirements.

⁶⁰ Modified rule 48(1)(f) as set out in schedule 1 (rule 62) of the NGR.

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.
- (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.

Procedures for access requests

220. 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.⁶¹

- 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.⁶² The requirement for such forms to be executed by or on

⁶¹ The provisions for requesting access under rule 112 of the NGR were amended in March 2019 (refer to section 0 of this paper).

⁶² The use of a Spot Capacity Service Access Request Form and Non-Transportation Services Access Request Form has been deleted from the proposed revised access arrangement.

behalf of the prospective shipper in accordance with section 127 of the *Corporations Act 2001 (Cth)* and be submitted in duplicate was deleted.

- Clause 5.3 was amended to insert several new subclauses (5.3(b) to (f)) to reflect the changed procedures and timeframes for assessing access requests as set out in rule 112 of the NGR. The existing circumstances in which DBP may and must reject an access request was also amended (clause 5.3(g)).
221. DBP's proposed amendments to clause 5 of the access arrangement aim to address the changes that were made to rule 112 of the NGR. The provisions and timeframes set out in new subclauses 5.3(b) to (f) of the proposed revised access arrangement are substantively the same as the provisions and timeframes set out in rule 112. The other proposed amendments made to clauses 5.2 and 5.4 support the new subclauses.

Queuing requirements

222. 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. 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 on the date that they are received by DBP (this date being the "priority date").⁶³ 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.
223. DBP's proposed queuing requirements, as set out in clause 5.4, are substantively unchanged from the requirements set out in the current AA4 access arrangement. The queuing requirements establish a single queue which operates on a first-come-first-served basis, as contemplated by the NGR.
224. 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 only able to determine its relative 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).

⁶³ A "haulage service" is defined in the proposed revised access arrangement to mean "a Pipeline Service involving the contracting of capacity on the DBNGP".

Issue 11 Access and queuing requirements

The ERA invites submissions on:

- DBP's proposed amendments to the procedures for making access requests and queuing requirements.
- Whether the queuing requirements need to be amended to give prospective shippers the ability to determine their actual position in the queue for access.
- Whether any further amendments to the procedures for making access requests and queuing requirements should be made.

Capacity trading

225. Modified rule 48(1)(g) of the NGR requires the access arrangement to set out capacity trading requirements.⁶⁴

226. 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.

⁶⁴ As set out in schedule 1 (rule 62) of the NGR.

- (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.
- (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.
227. 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.
228. 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).
229. Clauses 6.2 to 6.5 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 (being the T1 Service, P1 Service and B1 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.⁶⁵
 - 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 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

⁶⁵ In the access arrangement, the term "pre-existing contractual right" means "a 'relevant protected contractual right' as defined in section 321 of the National Gas Law".

whether the transfer proceeds, provided DBP can demonstrate the costs have been reasonably and properly incurred.

- 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.

230. DBP's proposed capacity trading requirements remain the same as the requirements in the current (AA4) access arrangement. Subject to submissions from interested parties, there would not appear to be any reason for the capacity trading requirements to change in AA5.

Issue 12 Capacity trading

The ERA invites submissions on:

- DBP's proposal to leave the capacity trading requirements unchanged from the current AA4 access arrangement.
- Whether any amendments to the capacity trading requirements should be made.

Extension and expansion requirements

231. Modified rule 48(1)(h) of the NGR requires the access arrangement to set out extension and expansion requirements.⁶⁶

232. Rule 104 of the NGR details specific provisions for extension and expansion requirements. As indicated at paragraph 16, 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:

⁶⁶ As set out in schedule 1 (rule 62) of the NGR.

- (a) in the case of extensions made before the revision commencement date for the applicable access arrangement deal with:
 - (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.
233. Clause 7 of the proposed revised access arrangement sets out extension and expansion requirements. Except for amending clause 7.3 to change the date of “1 July 2016” to “1 July 2021”, clause 7 remains the same as clause 7 of the current AA4 access arrangement.
234. The ERA considers that the intent of DBP’s proposed date change was to amend the date to reflect the commencement date of the proposed revised access arrangement that is the subject of this review process. Clause 14.1 of the proposed 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.
235. Notwithstanding DBP’s proposal to amend the date in clause 7.3, the ERA notes Clause 7 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.
236. 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.
237. The extension and expansion requirements cannot require DBP to provide funds for work involved in making an extension or expansion unless DBP agrees.
238. The ERA seeks submissions on whether clause 7 of the proposed revised access arrangement, as currently drafted, is 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.

239. Further, clause 7 also provides that DBP may elect, by way of notice to the ERA, that an *extension* will not become part of the covered pipeline (clause 7.3(a) of the access arrangement). DBP may also elect that an *expansion* will not become part of the covered pipeline (clause 7.3(b)). 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.⁶⁷
240. Rule 104 of the NGR does not require 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)).
241. 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 for the access arrangement, the effect of the extension on the:
- opening capital base under rule 77(2)(c1) of the NGR
 - description of reference services specified in the access arrangement proposal.
242. 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.
243. 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.
244. Clause 7.5 further applies to an expansion or enhancement. The ERA questions whether the term “enhancement” should be used in the access arrangement as it is not expressly apparent what an “enhancement” is. The ERA notes that this matter

⁶⁷ Clause 7.3(b) of the access arrangement.

was previously considered in the final decision on amendments to the DBNGP access arrangement for AA4, where it was determined that the term should not be used.⁶⁸

Issue 13 Extension and expansion requirements

The ERA invites submissions on whether the extension and expansion requirements should be amended to expressly meet the requirements of rule 104 of the NGR. Specifically, whether the extension and expansion requirements need to be amended to:

- Make direct reference to “incremental services”, as that term is defined in the NGR.
- State whether the access arrangement will apply to incremental services to be provided as a result of a particular extension to the pipeline, and if so and where required, deal with the effect of the extension on the opening capital base, description of reference services and tariffs.
- 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.
- Delete all references to the term “enhancement”.

Receipt and delivery points

245. Modified rule 48(1)(i) of the NGR requires the access arrangement to state the terms and conditions for changing receipt and delivery points.⁶⁹

246. 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.

247. Clause 8 of the proposed revised access arrangement sets out provisions for changing inlet (receipt) and outlet (delivery) points. Except for amending clause 8.1 to replace the words “haulage service Access Contract” with the term “Service Access Contract”, clause 8 remains the same as clause 8 of the current AA4 access arrangement.

⁶⁸ ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, 30 June 2016, p. 435, paragraph 1843.

⁶⁹ As set out in schedule 1 (rule 62) of the NGR.

248. 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.
 - DBP must not withhold its consent to a change request unless it has reasonable grounds, based on technical or commercial considerations, for doing so.
249. 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.
250. DBP has proposed to replace the words “haulage service Access Contract” with the term “Service Access Contract”. However, the proposed term is not a defined term in the access arrangement. The term “Access Contract”, is defined in clause 16 of the access arrangement as meaning “a contract between (among others) Operator and a Shipper for a Pipeline Service”, would appear to be a better term to use.
251. DBP’s proposed terms and conditions for changing receipt and delivery points remain substantively the same as the terms and conditions under the current (AA4) access arrangement. Subject to submissions from interested parties, there would not appear to be reasons for the terms and conditions for changing receipt and delivery points to change in AA5.

Issue 14 Receipt and delivery points

The ERA invites submissions on:

- DBP’s proposal to leave the terms and conditions for changing receipt (inlet) and delivery (outlet) points substantively unchanged from the current AA4 access arrangement.
- Whether any further amendments to the terms and conditions for changing receipt (inlet) and delivery (outlet) points should be made.

Review and commencement dates

252. 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.

253. Rule 50 of the NGR 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).
254. Clause 14 of the proposed revised access arrangement sets out the revision and commencement dates. DBP proposed a five-year period for the fifth access arrangement, with a review submission date of 1 January 2025 and a revision commence date of 1 January 2026.
255. Consistent with rule 50(1) of the NGR, DBP's proposed revision commencement date of 1 January 2026 is 12 months after the proposed review submission date of 1 January 2025.
256. 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.

Issue 15 Review and commencement dates

The ERA invites submissions on:

- DBP's proposed review submission date of 1 January 2025.
- DBP's proposed revision commencement date of 1 January 2026.