Proposed revisions to the access arrangement for the Goldfields Gas Pipeline for 2020 to 2024

Issues Paper

1 March 2019

Economic Regulation Authority

WESTERN AUSTRALIA

Economic Regulation Authority

4th Floor Albert Facey House 469 Wellington Street, Perth

Mail to:

Perth BC, PO Box 8469 PERTH WA 6849

T: 08 6557 7900

F: 08 6557 7999

E: info@erawa.com.au

W: www.erawa.com.au

National Relay Service TTY: 13 36 77

(to assist people with hearing and voice impairment)

We can deliver this report in an alternative format for those with a vision impairment.

© 2019 Economic Regulation Authority. All rights reserved. This material may be reproduced in whole or in part provided the source is acknowledged

Contents

Summary	III
Invitation to make submissions	1
Introduction	2
Regulatory framework	4
Reference tariffs	5
Reference tariffs and charging parameters	5
Changes to GGT's tariff variation mechanism	7
Taxation 8	
Overview of GGT's proposal	11
Total revenue	11
Operating expenditure	11
Opening capital base for AA4	15
Past conforming capital expenditure	16
Projected capital base for AA4	18
Forecast conforming capital expenditure	19
Depreciation of the capital base	
Return on the regulatory asset base	22
Pipeline and reference services	
Total revenue allocation between reference services and other services	24
Terms and conditions	
Other policies and provisions	
Application procedures	
Capacity trading	
Extension and expansion requirements	
Receipt and delivery points	
Review and commencement dates	28
Appendix 1 Summary of Issues	30
Appendix 2 Access Arrangement Review Process	31
Appendix 3 Glossary	33

Tables

Table 1	GGT Proposed Revised Reference Tariff	6
Table 2	Estimated cost of tax and value of imputation credits (\$ million nominal)	9
Table 3	GGT proposed total revenue AA4 (\$ million nominal)	
Table 4:	GGT proposed forecast operating expenditure, 2020-2014 (real dollars at 31 December 2018)	15
Table 5	GGT proposed forecast operating expenditure, 2020-2014 (\$ million nominal)	
Table 6	ATCO proposed opening capital base for AA4 (\$ million nominal)	16
Table 7	ERA final decision forecast capital expenditure for AA3 and GGT proposed conforming capital expenditure for AA3 by asset class (\$ million nominal)	18
Table 8	GGT's projected capital base (\$ million nominal)	19
Table 9	Forecast AA4 conforming capital expenditure (\$ million nominal)	20
Table 10	GGT's forecast depreciation AA4 (\$ million nominal)	21
Table 11	GGT's rate of return estimate	23
Table 12	Summary of GGT's proposed amendments to the terms and conditions applying to the firm service	
Figure	es	
Figure 1	ERA approved forecast and GGT actual/forecast operating expenditure for AA3 and GGT's proposed operating expenditure for AA4 by year (Real \$ 2018)	12
Figure 2 O	verview of the access arrangement decision-making process	

Summary

On 21 December 2018, Goldfields Gas Transmission Pty Ltd (GGT) submitted proposed revisions to the access arrangement for the Goldfields Gas Pipeline (GGP) to the Economic Regulation Authority. GGT's proposal covers the five year period from 1 January 2020 to 31 December 2024 (otherwise referred to as the fourth access arrangement period or AA4).

The role of the ERA is to approve or not approve GGT's proposal, considering requirements of the National Gas Law and National Gas Rules as adopted in Western Australia. The National Gas Law and Rules may be amended during the ERA's assessment of the GGT proposal. The Australian Energy Market Commission is expected to make a final determination in March 2019 for some changes to the National Gas Rules. Also, in December 2018 the Council of Australian Governments Energy Council agreed to commence a Regulatory Impact Statement process on gas pipeline regulation reform and to consult on ways to improve gas market transparency.

GGT has proposed to increase reference tariffs by approximately 26 per cent, compared to the reference tariffs which applied during the period from 1 July 2016 to 31 December 2019. GGT has also proposed to change its reference tariff variation mechanism to remove the requirement for quarterly tariff variations. The proposed reference tariff variation mechanism will only comprise a cost pass-through variation and an annual scheduled variation.

GGT has proposed \$95.9 million¹ of operating expenditure for AA4. GGT has used the base-step-trend method to forecast its operating costs.

GGT has proposed to spend \$16.1 million² of capital expenditure for AA4. Projects accounting for a large proportion of this proposed capital expenditure include a compressor station replacement program (24.5 per cent of proposed capital expenditure), a site accommodation upgrade program (24.4 per cent of proposed capital expenditure), a remote terminal unit replacement program (20.7 per cent of proposed capital expenditure) and a cathodic protection unit replacement program (7.7 per cent of proposed capital expenditure).

GGT's proposed rate of return is 5.56 per cent (nominal after tax) and is based on the methods and values detailed in the ERA's Rate of Return Guidelines which were issued on 18 December 2018.³

The terms and conditions proposed by GGT for AA4 are not materially different from the terms and conditions in the access arrangement for AA3.

The main proposed changes from GGT are to the reference tariff variation mechanism, the proposed amounts of operating expenditure and capital expenditure and the proposed rate of return to comply with the ERA's Rate of Return Guidelines. The ERA is seeking submissions from interested parties on whether any further changes to the access arrangement should be considered, in addition to the proposed changes.

¹ Real dollars as at 31 December 2018.

² Real dollars as at 31 December 2018.

The Rate of Return Guidelines are available at https://www.erawa.com.au/gas/gas-access/guidelines/gas-rate-of-return-guidelines. The Rate of Return Guidelines are expected to become binding guidelines once the Western Australian Government makes changes to the National Gas Law and National Gas Rules as adopted in Western Australia. These changes are expected in early 2019.

Invitation to make submissions

Submissions are due by 4:00 pm WST, Wednesday, 27 March 2019

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:

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

Fax: 08 6557 7999

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

For further information please contact

General Enquiries

Tyson Self Ph: 08 6557 7900 info@erawa.com.au

Media Enquiries

Natalie Warnock
Ph: 08 6557 7933 | Mob: 0428 859 826
communications@erawa.com.au

Introduction

- 1. 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.
- 2. On 21 December 2018, Goldfields Gas Transmission Pty Ltd (GGT) submitted its proposed access arrangement revisions⁴, access arrangement information⁵ and access arrangement supporting information⁶ for the Goldfields Gas Pipeline (GGP) to the Economic Regulation Authority. GGT's proposal covers the five year period from 1 January 2020 to 31 December 2024 (otherwise referred to as the fourth access arrangement period or AA4). GGT's current access arrangement applies until a revised access arrangement is approved by the ERA.
- 3. The GGP is a 1,378-kilometre transmission pipeline that receives natural gas from offshore fields in the north west of Western Australia. The receipt points of the GGP are located in Yarraloola, and the pipeline extends to Kalgoorlie in the Goldfields-Esperance region. The 47-kilometre Newman lateral is also part of the GGP.
- 4. For the purposes of tariff regulation the GGP comprises two notional pipelines, which in reality are the same physical pipeline. Only 54.5 per cent of the capacity of the GGP is classified as a scheme pipeline for the purposes of the access regulatory regime of the *National Gas Access (WA) Act 2009.* GGP is required to have an access arrangement approved for this capacity, which is the subject of this access arrangement review process. The remaining 45.5 per cent of capacity of the GGP is not covered by the access regime, and is considered to be a non-scheme pipeline. The ERA has separate functions and powers applying to non-scheme pipelines.⁷
- 5. The Council of Australian Governments has agreed to implement a legislative reform process for gas pipelines whereby uncovered expansions of otherwise covered pipelines would become covered. Once these changes have been adopted the existing uncovered expansions (45.5 per cent of capacity) of the GGP will form part of the covered pipeline. The implementation of this reform may occur during the course of the ERA's review of GGT's access arrangement revision proposal. However, the exact timing is uncertain.
- 6. The GGP is owned by an unincorporated joint venture of three organisations. GGT operates the GGP on behalf of the joint venture owners. The joint venture owners are:
 - Southern Cross Pipelines Australia Pty Ltd (62.66 per cent)
 - Southern Cross Pipelines (NPL) Australia Pty Ltd (25.49 per cent)
 - Alinta Energy GGT Pty Ltd (11.84 per cent).

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Revised Access Arrangement 1 January 2020, 21 December 2018.

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information, 21 December 2018.

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Access Arrangement Revision Proposal Supporting Information, 21 December 2018.

The non-scheme pipeline framework is contained in Part 23 of the National Gas Rules and is contained in the Western Australian National Gas Access Law.

- 7. This issues paper has been prepared to assist interested parties to:
 - Prepare submissions to the ERA on GGT's proposal.
 - Understand some of the issues that the ERA will address when determining whether to approve or not approve GGT's proposal.
- 8. This issues paper is not an exhaustive review of the content of GGT's proposal or the matters that the ERA will address to make its determination. While this issues paper identifies issues for consideration, interested parties are invited to make submissions on any aspect of GGT's proposal and on the operation of the GGP access arrangement more generally during the current access arrangement period.
- 9. The ERA will consider all submissions received through the consultation period when making its draft decision on GGT's access arrangement proposal.

Regulatory framework

- 10. The requirements for an access arrangement are established by the National Gas Law (NGL) and National Gas Rules (NGR) as enacted by the *National Gas (South Australia) Act 2008* and implemented in Western Australian by the *National Gas Access (WA) Act 2009*.
- 11. 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.
- 12. The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interest of consumers of natural gas with respect to the price, quality, safety, reliability and security of supply of natural gas.
- 13. 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) ...
 - (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.
- 14. Appendix 2 outlines the access arrangement review process.
- 15. GGT is required to submit a "full access arrangement" for the GGP. The required content of a full access arrangement proposal is specified in NGR 48 and 72.
- 16. As stated, during the ERA's review of GGT's access arrangement revision proposal a legislative reform may be implemented whereby the uncovered expansions of otherwise covered pipelines would become covered. If these changes are adopted the existing uncovered expansions of the GGP will be subject to the access arrangement. If the changes to the NGL and NGR are made before the ERA makes a final decision on GGT's proposed revisions, the ERA will likely require additional information in order to consider a revision proposal.
- 17. The ERA has identified some important issues for consideration by interested parties. Interested parties are also invited to make submissions on any aspect of GGT's proposal.

- 18. The issues for consideration outlined in this section are:
 - · Reference tariffs
 - Taxation.

Reference tariffs

- 19. Rule 95 of the NGR sets out the requirements for the determination of reference tariffs for transmission pipelines, and determines how total revenue is apportioned to reference services and to a particular user or class of users. Rule 95(1) of the NGR states that a tariff must be designed:
 - To generate from the provision of each reference service the portion of total revenue referable to that reference service; and
 - As far as practicably consistent with the above point, 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.
- 20. Rules 92 and 97 of the NGR further set out requirements for an access arrangement to include a mechanism for variation of reference tariffs during an access arrangement period. Rule 97 of the NGR states that in deciding whether a particular reference tariff variation mechanism is appropriate, the ERA must have regard to relevant factors including:
 - The need for efficient tariff structures.
 - The administrative costs of the reference tariff variation mechanism.
 - The regulatory arrangements (if any) applicable to the relevant reference services before the commencement of the proposed reference tariff variation mechanism.
 - The desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction).

Reference tariffs and charging parameters

- 21. GGT has proposed retaining the three-part reference tariff which has been in place since the ERA first approved the access arrangement for the GGP in 2005. The three-part tariff comprises:
 - Toll charge (a price per GJ of a user's maximum daily quantity [MDQ] contracted capacity).
 - Capacity reservation charge (a price per GJ MDQ kilometre).
 - Throughput charge (a price per GJ kilometre).
- 22. GGT's toll charge and the capacity reservation charge are set to recover the fixed costs of the pipeline. The throughput charge is set to recover the variable costs.⁸

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Proposed Revised Access Arrangement Information*, 21 December 2018, p. 24.

- 23. GGT proposes to keep the same allocation of total revenue to reference tariff components as the current access arrangement period, allocating total revenue to reference tariff components as follows:
 - 11.3 per cent to the toll charge
 - 72.2 per cent to the capacity reservation charge
 - 16.5 per cent to the throughput charge.
- 24. Table 1 shows GGT's proposed revised reference tariff, which is determined from the total revenue and the forecasts of capacity and throughput for the Covered Pipeline.⁹

Table 1 GGT Proposed Revised Reference Tariff

Tariff Component	Tariff
Toll charge (\$/GJ MDQ)	0.139646
Capacity Reservation Charge (\$/GJ MDQ km)	0.000846
Throughput Charge (\$/GJ km)	0.000231

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information, 21 December 2018 p. 25

25. GGT provided a chart (see Figure 1 below) which shows two different tariff paths during the AA3 period (i.e. 2015-2019): the black line shows the tariff that actually applied in AA3 (2015-2019), and the green line indicates the tariff that would have applied in AA3 if there had been no delay in the commencement of AA3. During the delay (1 January 2015 to 30 June 2016), the existing tariffs, which were higher than the tariffs that would have been set if there had been no delay, continued to be charged. Therefore, the tariffs that were eventually approved for 1 July 2016 to 31 December 2019 were adjusted and were lower to ensure that customers and the service provider were no better or worse off as a result of the delay. The interval of delay was between 1 January 2015 and 30 June 2016 (see the shaded area in Figure 1).

Proposed revisions to the access arrangement for the Goldfields Gas Pipeline for 2020 to 2024

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, p. 96.

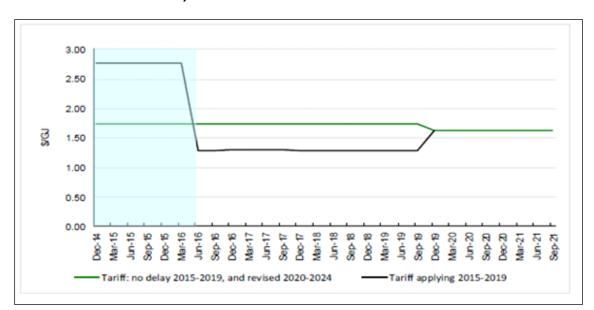


Figure 1: Reference Tariff 2015-2019 and proposed revised tariff (Kalgoorlie, load factor =1.0)

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, p. 97.

- 26. Based on GGT's example of a customer at Kalgoorlie with a load factor equal to 1, GGT's proposed revised reference tariff for AA4 is around \$1.60/GJ.¹⁰ This is approximately 26 per cent higher than the average tariff (\$1.30/GJ) applying during the period from 1 July 2016 to 31 December 2019.¹¹ GGT noted that this is a consequence of the higher tariff continuing to apply from 1 January 2015 to 30 June 2016 (as shown by the black tariff path in the shaded area).
- 27. GGT noted that if there had been no delay in the commencement of AA3, the proposed tariff for AA4 (\$1.60/GJ) would be approximately 6 per cent lower than AA3 (the green tariff path).¹²

Changes to GGT's tariff variation mechanism

- 28. GGT proposed to change the reference tariff variation mechanism of the revised access arrangement. The AA3 period reference tariff variation mechanism comprises two parts:
 - A scheduled reference tariff variation mechanism, which provides for quarterly scheduled variation and annual scheduled variation of the reference tariff.
 - A cost pass-through variation of the reference tariff.
- 29. For the AA4 tariff variation mechanism, GGT is proposing to remove the quarterly scheduled variation of the reference tariff, but retain the annual scheduled variation and

A load factor of 1 assumes the customer uses all of its capacity all of the time.

ERA analysis based on Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, p. 97.

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, p. 97.

cost-pass through variation mechanisms.¹³ GGT's view is that quarterly adjustment will be unnecessary if, during the access arrangement period, inflation is not expected to rise or fall significantly from the level assumed at the time of reference tariff determination. GGT has observed that the Reserve Bank of Australia has forecast relatively stable inflation up to mid-2020.¹⁴ Even if inflation varies significantly from the assumed level of inflation built into GGT's reference tariff model, GGT expects that the reference tariff will be adjusted for the effect of that variation through the inflation adjustment in the annual scheduled variation.

30. GGT has claimed that the proposed removal of the quarterly variation from the reference tariff variation mechanism should not change the efficiency of the GGP tariff structure while at the same time it will reduce administrative costs for GGT, the ERA and pipeline users. By removing the quarterly variation component, GGP also expects the revised tariff variation mechanism would align with: (1) the annual variation of tariffs for negotiated services provided using the GGP and (2) the variation of tariffs for reference services provided using the Dampier to Bunbury Natural Gas Pipeline (from which gas is delivered into the GGP).¹⁵

Issue 1 Tariff variation mechanism

Submissions are invited from interested parties on GGT's proposed changes to the reference tariff variation mechanism, including the proposed mechanism's effect on users of the GGP.

Taxation

- 31. The ERA will assess GGT's efficient costs to determine its total revenue requirements for AA4 using the 'building block approach'. The building block approach is described in paragraph 41. Efficient costs include a calculation of corporate income tax costs for a notional efficient entity.
- 32. Rule 87A of the NGR specifies that a service provider's estimated cost of corporate income tax for each regulatory year of an access arrangement period is to be estimated using the formula:

ETC_t = (ETI_t x
$$r_t$$
) (1 - γ) Where:

- ETC_t is the estimated cost of corporate income tax for regulatory year 't'
- ETI_t is an estimate of the taxable income for regulatory year 't' that
 would be earned by a benchmark efficient entity as a result of the
 provision of reference services if such an entity operated the business
 of the service provider.

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, p. 100.

Reserve Bank of Australia, Statement on Monetary Policy, August 2018, p. 63; cited in Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, p. 100.

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, p. 100.

- r_t is the expected statutory income tax rate for that regulatory year as determined by the ERA.
- γ is gamma, the value of imputation credits.
- 33. GGT has estimated its costs of corporate income tax for each year in AA4 using the above formula.
- 34. GGT has estimated its annual taxable income (ETI_t) for each year in AA4 by removing the cost of debt financing, operating expenses and tax depreciation from total revenue for each year.
- 35. GGT has applied a value for the expected statutory income tax rate for a regulatory year (r_t) of 30 per cent, which is the current statutory corporate income tax rate.
- 36. GGT has applied a value of 0.5 for gamma (γ), the value of imputation credits. This is the value of gamma required by the ERA's Rate of Return Guidelines published in 2018.
- 37. Table 2 shows GGT's estimated cost of corporate income tax and its components for AA4.

Table 2 Estimated cost of tax and value of imputation credits (\$ million nominal)

	2020	2021	2022	2023	2024	Total
Forecast revenue from reference service*	49.880	49.744	49.744	49.744	49.880	248.992
Less tax expenses:						
- Return on debt	10.131	10.209	10.13	10.027	9.904	50.401
- Tax depreciation	2.605	2.663	2.448	2.522	2.113**	12.351
- Operating expenditure	19.606	20.028	20.619	21.219	21.852	103.324
Equals Net income	17.538	16.845	16.546	15.977	16.012	82.918
Tax loss carried forward	-	-	-	-	-	-
Taxable income	17.538	16.845	16.546	15.977	16.012	82.918
Estimated cost of tax (tax rate = 30%)	5.261	5.053	4.964	4.793	4.803	24.874
Value of imputation credits	2.631	2.527	2.482	2.396	2.402	12.438

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information 1 January 2020, p. 22, Table 13.

38. The Australian Energy Regulator (AER) published its final report on the review of its approach to estimating the tax allowance in its regulatory determinations in December 2018. The AER's review was prompted by consumer concerns about a

^{*} The forecast revenue from reference service in 2020 and 2024 is higher than the other years in AA4 due to 2020 and 2024 being leap years.

^{**} The decline in tax depreciation in 2024 is because certain assets will have been fully written off at the end of 2023.16

Goldfields Gas Transmission Pty Ltd, PUBLIC AA tariff model 2020-2024, 1 January 2019.

material difference between the AER's regulatory forecast of tax costs for regulated electricity networks and gas pipelines, and the actual tax payments made to the Australian Taxation Office by those regulated businesses.¹⁷ The ERA will consider the AER's relevant final recommendations when assessing GGT's proposal. These recommendations address differences in depreciation timing between regulatory tax cost forecasting methods and the actual tax calculation methods applied by regulated service providers. The recommendations include:¹⁸

- The scope for immediate tax expensing of depreciation should be considered in forecasts of tax costs for regulatory determinations. Immediate expensing is not currently recognised in the AER's regulatory models, rather the AER's current regulatory models assume depreciation of capital assets over many years. The AER found that this does not reflect the actual tax practice of regulated service providers, which were shown to immediately expense an average of approximately \$50 million of depreciation annually for tax purposes.¹⁹
- The current regulatory tax approach should be adjusted to address depreciation mismatches arising from the use of the diminishing value approach. The AER's current regulatory model forecasts tax costs assuming that the straight line method is used. The AER found that this does not reflect the most common actual tax practice of regulated service providers, for whom the diminishing value approach is the most prevalent depreciation method.²⁰
- The current regulatory tax approach should be adjusted to reflect the application of a 20-year tax-life cap for new gas assets. The AER does not currently apply this cap, and as a consequence assigns gas asset lives of above 20 years to a significant proportion of gas assets in calculating the tax asset base for regulated service providers. The AER considered that this does not reflect the actual tax practice of regulated service providers, which were shown to generally apply the 20 year cap on the tax life of gas pipeline assets in the tax fixed asset register used to calculate depreciation for tax purposes.²¹
- 39. In the ERA's final decision for GGP for AA3, there was no forecast for immediate tax expensing of deprecation. The ERA also used straight line depreciation and not diminishing value. For the GGP, no tax asset lives exceeded a 20 year cap.

Issue 2 Taxation

Submissions are invited from interested parties on estimation of GGT's tax costs.

Proposed revisions to the access arrangement for the Goldfields Gas Pipeline for 2020 to 2024

Australian Energy Regulator, *Final report Review of regulatory tax approach,* December 2018, p. 2.

¹⁸ Australian Energy Regulator, Final report Review of regulatory tax approach, December 2018, p. 20.

¹⁹ Australian Energy Regulator, *Final report Review of regulatory tax approach,* December 2018, p. 15.

²⁰ Australian Energy Regulator, *Final report Review of regulatory tax approach,* December 2018, p. 16.

²¹ Australian Energy Regulator, *Final report Review of regulatory tax approach,* December 2018, p. 17.

Overview of GGT's proposal

40. The following overview of GGT's proposal for revisions to the GGP access arrangement is provided to assist interested parties understand the proposal and make submissions. It is not an exhaustive review of GGT's proposal or a complete list of matters that the ERA will address when making its determination.

Total revenue

- 41. Rule 76 of the NGR requires total revenue to be determined for each year of the access arrangement period using the building block approach, in which the building blocks are:
 - Operating expenditure.
 - Return on the projected capital base.
 - Depreciation on the projected capital base.
 - Estimated cost of corporate income tax.
 - Increments or decrements resulting from the operation of an incentive mechanism to encourage gains in efficiency.
- 42. GGT has applied the building block approach to derive its total revenue for each year of AA4. Table 3 details GGT's proposed building block components. Each of these building block components is discussed below.

Table 3 GGT proposed total revenue AA4 (\$ million nominal)

	2020	2021	2022	2023	2024	Total
Return on capital base	21.176	21.339	21.173	20.958	20.701	105.346
Depreciation	4.453	5.548	6.043	6.473	5.770	28.288
Operating expenditure	19.606	20.028	20.619	21.219	21.852	103.324
Cost of tax	5.261	5.053	4.964	4.793	4.803	24.875
Value of imputation credits	-2.631	-2.527	-2.482	-2.396	-2.402	-12.437
Total	47.865	49.441	50.317	51.046	50.725	249.395

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information 1 January 2020, p. 28, Table 16.

Operating expenditure

43. Rule 91 of the NGR states that "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". Further to rule 91, the ERA must also consider rule 71(1) of the NGR when assessing GGT's operating expenditure.

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.
- 44. Total operating expenditure for the AA3 period is estimated at \$93.9 million (real dollars at 31 December 2018) (\$92.1 million, nominal). GGT has forecast a 2.1 per cent increase in operating expenditure to a total of \$95.9 million (real dollars at 31 December 2018) (\$103.3 million, nominal) for the AA4 period.
- 45. Figure 1 shows the ERA's approved operating expenditure and GGT's actual/forecast expenditure for the AA3 period as well as GGT's proposed operating expenditure forecast for the AA4 period.

Figure 1 ERA approved forecast and GGT actual/forecast operating expenditure for AA3 and GGT's proposed operating expenditure for AA4 by year (Real \$ 2018)



Source: ERA's Reference Tariff Model 2016; GGT Access Arrangement Revision Proposal Supporting Information, 1 January 2019, Table 38 p. 75 and Table 42 p. 88.

- 46. GGT has split its forecast operating expenditure into five main categories:
 - APA Group operations
 - Major expenditure jobs
 - GGT operations
 - Commercial operations
 - Corporate costs.
- 47. GGT has used the base-step-trend method to forecast its operating costs. GGT has selected 2017 as the base year for assessing efficiency and prudency of forecast operating expenditure for 2020 to 2024. GGT's external auditor has reviewed operating expenditure attributed to the covered pipeline in 2017.
- 48. GGT chose the 2017 calendar year as it was the most recent calendar year for which complete financial information was available at the time of preparing its access arrangement proposal.
- 49. Before applying the base, step and trend method, GGT allocated the components of base year operating expenditure for the GGP to the covered pipeline using cost allocation principles.

- 50. GGT then reviewed that allocation of the base year to ascertain if a simple extrapolation of the base, step and trend method was appropriate for forecasting operating expenditure for the covered pipeline.
- 51. Removing irregular costs, which all show variability that precludes simple extrapolation, and expenditures that show significant reductions over time, referred to as changing operating expenditure, GGT notes that the remaining covered pipeline operating expenditures have been relatively stable over time and indicates that simple extrapolation can be used.
- 52. To forecast operating expenditure for the AA4 period, GGT starts from the base operating expenditure for the covered pipeline. Components of base expenditure identified as changing operating expenditure are reviewed to see if the base year cost is the most appropriate cost and adjusted if required while costs regarded as irregular costs are removed from the base and are forecast separately.
- 53. This leaves the underlying stable operating expenditure for the covered pipeline, which is projected forward for the AA4 period. The separately forecast irregular costs are then added back to the underlying stable expenditure.
- 54. If necessary, adjustments are then made for step changes, however, in the AA4 proposal no step changes were required. Finally the resulting forecast is adjusted for any real change in the price of labour to arrive at the forecast of operating expenditure for the access arrangement period.
- 55. Four components of operating expenditure were categorised as changing operating expenditure in GGT's proposal. These are costs that show significant reductions over time, namely field services, administration (commercial operations), marketing (commercial operations) and insurance.
- 56. For each of these categories, GGT has reviewed and concluded that the 2017 expenditure is the most appropriate amount to use in the base operating expenditure as changes between years are relatively small.
- 57. Irregular costs, which have been separately forecast, include major expenditure jobs, regulatory costs, carbon liability costs and corporate costs.
- 58. GGT proposes to spend \$2.8 million on major expenditure jobs in the AA4 period. Major expenditure jobs are classified by GGT as activities incurring large non-recurrent operating expenditures. In AA3, GGT's actual/forecast expenditure for major expenditure jobs was \$1.8 million.
- 59. The costs for major expenditure jobs are forecast "bottom up" from the type and scope of activities that are expected to occur in each year of the access arrangement period. The list of jobs forecast by GGT is set out in table 40 of its Access Arrangement supporting information document.²²
- 60. Regulatory costs, another component of the irregular costs, comprise GGT's internal regulatory costs, and the ERA's standing and service charges.²³ GGT notes that

.

Goldfields Gas Transmission Pty Ltd, *Access Arrangement Revision Proposal Supporting Information*, 1 January 2019, p. 81.

²³ ERA Standing and Specific charges form part of the ERA levy. This levy covers the costs of the ERA's gas access functions. Further information on this levy is set out in *Economic Regulation Authority (national Gas Access Funding) Regulations 2009.*

- regulatory costs are high during periods of an access arrangement revision and lower during the other times in an access arrangement time period.
- 61. GGT noted that regulatory costs were relatively low in 2017 and extrapolation of the 2017 base year may not lead to a forecast consistent with the requirements of rule 91(1) of the NGR, or the requirement under section 24 of the NGL.
- 62. As a result, GGT forecast its regulatory costs in two parts. GGT forecast the ERA standing and service charges from a pattern of those costs in previous years. This was then added to GGT's internal regulatory costs, which have been forecast as part of an estimation of corporate costs for a standalone business based on a report prepared by KPMG.²⁴
- 63. In AA3, the total actual/forecast expenditure for regulatory costs was \$3.3 million, being \$0.66 million a year on average. GGT forecasted a total expenditure of \$5.6 million for AA4, equating to an average of \$1.1 million a year for the period.
- 64. The irregular cost relating to the carbon liability has been removed from the AA4 forecast following the repeal of the Australian Government tax on carbon emissions on 1 July 2014.
- 65. In the ERA's Final Decision for AA3, corporate costs were determined using an estimate of the standalone corporate costs for operating the covered portion of the GGP.
- 66. GGT provided a report from its consultant, KPMG, benchmarking corporate costs for a standalone business based on the GGP. In its proposal, GGT used the median value of KPMG's range of benchmarked corporate costs.
- 67. GGT's actual corporate costs in its 2017 base year were \$2.9 million, while the forecast for the AA4 period using the KPMG report is \$4.8 million for each year.
- 68. Table 4 sets out GGT's proposed operating expenditure for the AA4 period broken into the five major reporting categories in real dollars at 31 December 2018 and Table 5 provides the AA4 proposed operating expenditure in nominal dollars.

_

²⁴ KPMG, Corporate Cost Benchmarking: Goldfields Gas Pipeline, June 2014

Table 4: GGT proposed forecast operating expenditure, 2020-2014 (real dollars at 31 December 2018)

Forecast operating expenditure	2020	2021	2022	2023	2024	Total
Pipeline operations	11.742	11.792	11.993	12.436	12.542	60.505
Major expenditure jobs	0.560	0.680	0.670	0.400	0.500	2.810
Commercial operation	0.591	0.593	0.603	0.625	0.631	3.043
Regulatory	1.211	1.091	1.091	1.091	1.091	5.575
Corporate costs	4.789	4.789	4.789	4.789	4.789	23.945
Total	18.893	18.945	19.147	19.341	19.553	95.879

Source: Goldfields Gas Transmission Pty Ltd, Access Arrangement Revision Proposal Supporting Information, 1 January 2019, p. 88, Table 42.

Table 5 GGT proposed forecast operating expenditure, 2020-2014 (\$ million nominal)

Forecast operating expenditure	2020	2021	2022	2023	2024	Total
Pipeline operations	12.186	12.466	12.916	13.643	14.017	65.227
Major expenditure jobs	0.581	0.719	0.722	0.439	0.559	3.019
Commercial operation	0.613	0.627	0.650	0.686	0.705	3.280
Regulatory	1.257	1.153	1.175	1.197	1.219	6.001
Corporate costs	4.970	5.063	5.157	5.254	5.352	25.796
Total	19.606	20.028	20.619	21.219	21.852	103.324

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Access Arrangement Revision Proposal – Supporting Information, 1 January 2019, p. 88, Table 43.

Issue 3 Operating Expenditure

Submissions are invited from interested parties on GGT's proposed operating expenditure for AA4, including whether the proposed expenditures align with good industry practice and whether the expenditure is reasonable.

Opening capital base for AA4

69. Rule 77(2) of the NGR establishes 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. The approach begins with the opening capital base of the earlier access arrangement period, adjusted for any difference between estimated and actual capital expenditure included in that opening capital base, and:

- Adds conforming capital expenditure made, or to be made, during the earlier access arrangement period.
- Adds any amounts to be added to the capital base under rule 82 (capital contributions by users to new capital expenditure), rule 84 (speculative capital expenditure account) or rule 86 (re-use of redundant assets).
- Subtracts depreciation over the earlier access arrangement period.
- Subtracts redundant assets identified during the course of the earlier access arrangement period.
- Subtracts the value of the pipeline assets disposed of during the earlier access arrangement period.
- 70. GGT proposes an opening capital base for AA4 of \$380.52 million.²⁵
- 71. GGT's calculated values of the capital base at the commencement of AA4 are shown in Table 6.

Table 6 ATCO proposed opening capital base for AA4 (\$ million nominal)

	Total (\$ million nominal)
Opening capital base for AA3	390.362
Plus: Conforming capital expenditure for AA3	8.962
Less: Depreciation for AA3	18.804
Closing capital base for AA3 / Opening capital base for AA4	380.521

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information, 21 December 2018, p. 10, Table 5.

Past conforming capital expenditure

- 72. Expenditure that meets the criteria detailed in rule 79 of the NGR is known as conforming capital expenditure. 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. It must also be justifiable on at least one of the following grounds:
 - The overall economic value of the capital expenditure is positive.
 - 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.
 - The capital expenditure is necessary to:
 - maintain and improve the safety of services
 - maintain the integrity of services
 - comply with a regulatory obligation or requirement, or
 - to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred.

²⁵ Nominal dollars.

- 73. GGT has proposed that the actual (2015 to 2017) and forecast (2018 to 2019) capital expenditure for AA3 is capital expenditure that conforms to the criteria under rule 79 of the NGR. Under rule 77(2) of the NGR, capital expenditure must be 'conforming capital expenditure' in order to be added to the capital base.
- 74. GGT has proposed to add \$8.962 million²⁶ of capital expenditure for the AA3 period to the opening capital base.²⁷ The \$8.962 million of conforming capital expenditure is \$0.452 million²⁸ or 10.62 per cent less than the forecast amount used in the ERA's final decision for AA3. GGT has explained that some of the underspend is due to certain activities forecast to be carried out in AA3 but not undertaken, including the development of an enterprise asset management system and overhaul of gas engine alternators.²⁹
- 75. The ERA's final decision forecast of capital expenditure for AA3 and GGT's proposed conforming capital expenditure for AA3 are shown in Table 7.

²⁶ Nominal dollars.

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Access Arrangement Revision Proposal Supporting Information, 21 December 2018, Table 8, p. 28.

²⁸ Nominal dollars.

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, Table 8, pp. 36-37.

Table 7 ERA final decision forecast capital expenditure for AA3 and GGT proposed conforming capital expenditure for AA3 by asset class (\$ million nominal)

Asset class	ERA final decision forecast AA3 (A)	Total actual expenditure AA3 (B)	Variation (C = B - A)
Pipeline and laterals	4.206	2.599	-1.607
Main line valve and scraper stations	0.537	0.111	-0.426
Compressor stations	2.089	2.496	0.407
Receipt and delivery point facilities	1.034	0.331	-0.703
SCADA, communications and electronic equipment*	0.516	2.135	1.619
Cathodic protection	0.243	0.075	-0.168
Maintenance bases and depots	0.167	0.357	0.19
Other depreciable assets	0.622	0.858	0.236
Non-depreciable assets	0	0	0
Total	9.414	8.962	-0.452

^{*}This asset class was previously "SCADA and communications". SCADA is the acronym for supervisory control and data acquisition. During AA3 GGT expects to replace certain electronic equipment which has an expected economic life of ten years, the same as SCADA and communications equipment. The forecast expenditure for this electronic equipment will be included in the renamed asset class "SCADA, communications and electronic equipment".

Source: Economic Regulation Authority. Final decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline, 30 June 2016, p.140, Table 57; Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Access Arrangement Revision Proposal Supporting Information, 21 December 2018, p.28, Table 8.

Projected capital base for AA4

- 76. Rule 78 of the NGR establishes the approach to determine the projected capital base for a particular period. The approach involves commencing with the opening capital base and:
 - Adding forecast conforming capital expenditure for the period.
 - Subtracting forecast depreciation for the period and the forecast value of pipeline assets to be disposed of in the course of the period.
- GGT proposed a projected capital base for AA4 of \$369.39 million³⁰ at 31 December 77. 2024.

Nominal dollars.

Table 8 GGT's projected capital base (\$ million nominal)

	2020	2021	2022	2023	2024
Opening capital base	380.521	383.457	380.467	376.611	371.995
Capital expenditure	7.389	2.558	2.187	1.857	3.162
Depreciation	4.453	5.548	6.043	6.473	5.77
Asset disposals	-	-	-	-	-
Closing capital base	383.457	380.467	376.611	371.995	369.387

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information 1 January 2020, 21 December 2018, p. 14, Table 9.

Forecast conforming capital expenditure

- 78. Forecast conforming capital expenditure must conform to the criteria detailed in rule 79 of the NGR (refer to paragraph 72 above). The forecast must also meet the requirements of rule 74, which requires:
 - Information that is in the nature of a forecast or estimate to be supported by a statement of the basis for the forecast or estimate.
 - A forecast or estimate to be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances.
- 79. GGT has forecast \$17.15 million³¹ of capital expenditure over AA4, which is 82.21 per cent (or \$7.74 million) higher than the capital expenditure approved for the five years of AA3 on a nominal basis.³² In real terms the increase is 66.71 per cent.³³ This increase is driven mostly by proposed increases in capital expenditure for AA4 for compressor stations, SCADA and communications, cathodic protection and maintenance bases and depots compared to the amounts forecast in the ERA final decision for AA3. Some of the increases across these categories are offset by decreases in proposed capital expenditure for AA4 for pipeline and laterals, main line valve and scraper stations, receipt and delivery point facilities and other assets compared to the amounts forecast in the ERA final decision for AA3. GGT's capital expenditure forecast is shown in Table 9.

2

³¹ Nominal dollars.

Economic Regulation Authority, *Final decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline,* 30 June 2016, p. 140, Table 57.

The percentage real increase has been calculated based on the actual consumer price index rates of inflation for 2015, 2016 and 2017 and expected consumer price index rate of inflation for 2018 reflected in GGT's tariff model. Goldfields Gas Transmission Pty Ltd, *PUBLIC AA tariff model 2020-2024,* 1 January 2019.

Table 9 Forecast AA4 conforming capital expenditure (\$ million nominal)

	2020	2021	2022	2023	2024	Total
Pipeline and laterals	0.4	-	-	-	0.224	0.624
Main line valve and scraper stations	-	-	-	-	-	0
Compressor stations	1.764	0.344	1.185	0.23	2.028	5.551
Receipt and delivery points	-	-	-	-	-	0
SCADA, communications and electronic equipment	0.99	1.69	0.653	1.144	0.848	5.325
Cathodic protection	0.24	0.186	0.35	0.483	0.061	1.32
Maintenance bases and depots	3.995	0.338	-	-	-	4.333
Other depreciable assets	-	-	-	-	-	0
Non-depreciable assets	-	-	-	-	-	0
Total	7.389	2.558	2.188	1.857	3.161	17.153

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information, 21 December 2018, p. 11, Table 6.

- 80. GGT has developed its forecast of capital expenditure as the sum of the forecast costs of a number of specific capital projects.
- 81. The proposed capital expenditure projects consist mainly of projects for renewing and upgrading parts of the covered pipeline. Projects accounting for a large proportion of GGT's total proposed conforming expenditure include:
 - Compressor station replacement program (\$4.20 million,³⁴ equal to 24.46 per cent of total proposed conforming capital expenditure).
 - Site accommodation upgrade program (\$4.18 million,³⁵ equal to 24.36 per cent of total proposed conforming capital expenditure).
 - Remote terminal unit replacement program (\$3.55 million,³⁶ equal to 20.67 per cent of total proposed conforming capital expenditure).
 - Cathodic protection unit replacement program (\$1.32 million,³⁷ or 7.70 per cent of total proposed conforming capital expenditure).
 - GGT has supplied the business cases for its proposed conforming capital works expenditure as Attachment 1 to its Access Arrangement Revision Proposal Supporting Information.³⁸

Nominal dollars.

³⁵ Nominal dollars.

³⁶ Nominal dollars.

Nominal dollars.

Goldfields Gas Transmission Pty Ltd, *Goldfields Gas Pipeline Access Arrangement Revision Proposal Supporting Information*, 21 December 2018, Attachment 1: CAPEX Business Cases.

Depreciation of the capital base

- 82. Rules 88 (depreciation schedule), 89 (depreciation criteria) and 90 (calculation of depreciation) of the NGR specify particular requirements for the depreciation of pipeline assets in the regulatory asset base.
- 83. The depreciation schedule sets out the basis on which pipeline assets constituting the capital base are to be depreciated for the purposes of determining a reference tariff. Under rule 88, the depreciation schedule may consist of a number of separate schedules, each relating to a particular asset or class of assets.
- 84. Rule 89 specifies that the depreciation schedule should be designed so that:
 - Reference tariffs will vary in a way that promotes efficient growth in the market for reference services.
 - Each asset or asset class is depreciated over its economic life.
 - The expected economic life of a particular asset or asset class can be adjusted.
 - 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.
 - The service provider's reasonable needs for cash flow to meet financing, non-capital and other costs can be allowed.
- 85. Rule 90 specifies that a full access arrangement must contain provisions governing the calculation of depreciation for establishing the opening capital base for the next access arrangement period. The provisions must resolve whether depreciation of the capital base is to be based on forecast or actual capital expenditure.
- 86. GGT's forecast depreciation for AA4 has been calculated by the current cost accounting approach, consistent with the ERA's Final Decision for the GGP for AA3.
- 87. GGT's projected capital base for AA4 includes total forecast depreciation of \$28.29 million³⁹. GGT's forecast depreciation for AA4 is shown in Table 10.

Table 10 GGT's forecast depreciation AA4 (\$ million nominal)

	2020	2021	2022	2023	2024	Total
Forecast depreciation	4.453	5.548	6.043	6.473	5.77	28.288

Source: Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Proposed Revised Access Arrangement Information, p. 12, Table 7.

Issue 4 Capital expenditure

Submissions are invited from interested parties on GGT'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.

Nominal dollars.

Return on the regulatory asset base

- 88. The rate of return, based on the weighted average cost of capital (WACC), provides for a return on the regulatory asset base.
- 89. Rule 87 of the NGR requires the ERA to make and publish rate of return guidelines. The guidelines must set out:⁴⁰
 - The methodologies that the ERA proposes to use in estimating the allowed rate of return.
 - The estimation methods, financial models, market data and other evidence the ERA proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits referred to in rule 87A.
- 90. On 18 December 2018, the ERA published its new Rate of Return Guidelines. The updated rate of return guidelines will be used to determine the rate of return for the GGP. At present, the guidelines are not binding in Western Australia. However it is expected that the Law will change in early 2019 in Western Australia to make these Guidelines binding.
- 91. The GGP Access Arrangement revision proposal has been prepared assuming⁴¹:
 - A binding rate of return instrument will come into effect in Western Australia in late 2018, or early 2019.
 - The rate of return specified in the binding instrument will be the rate of return determined from the ERA's Rate of Return Guidelines (2018), which were issued on 18 December 2018.
 - The binding rate of return instrument will apply in relation to any ERA economic regulatory decision made after the date of commencement of the relevant amendments to the NGL in Western Australia, even if the process leading to that regulatory decision commenced before that date.
- 92. GGT's proposed estimate of the rate of return is 5.56 per cent (vanilla nominal aftertax) and is based on the methods and values detailed in the ERA's rate of return guidelines and market data for 20 trading days to 28 September 2019. Table 11 details the individual rate of return components estimated by GGT for AA5 compared to the existing rate of return components approved in its previous final decision.⁴²

It is expected the rule 87 and 87A will be amended by the Western Australian Government in early 2019 as part of the reform process to introduce a binding guideline.

Goldfields Gas Transmission, *Goldfields Gas Pipeline Proposed Revised Access Arrangement Information*, 21 December 2018, p. 19.

Goldfields Gas Transmission, Goldfields Gas Pipeline Proposed Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, pp. 57-63; ERA, Final Decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline, June 2016, p. 298.

Table 11 GGT's rate of return estimate

WACC Component	AA3 Final Decision	AA4 Proposed
Return on equity		
Risk free rate	1.82%	2.25%
Beta	0.70	0.70
Market risk premium	7.40%	6.00%
Return on equity	7.00%	6.45%
Return on debt		
5-year interest rate swap	2.116%	2.31%
Debt risk premium	2.713%	2.32%
Debt raising costs	0.125%	0.1%
Hedging costs	0.114%	0.11%
Return on debt	5.07%	4.84%
Gearing	60%	55%
Rate of return	5.84%	5.56%
Value of imputation credits	0.4	0.5

Source: Economic Regulation Authority, Final decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline, 30 June 2016, p. 298, Table 90, and p. 343; Goldfields Gas Transmission, Goldfields Gas Pipeline Proposed Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, p. 62, Table 35 and p. 92, Table 44.

93. Consistent with the rate of return guidelines, GGT proposes that the return on debt will be updated annually, by updating the debt risk premium (which is estimated as a historical trailing average), and the reference tariff will be automatically updated.

Pipeline and reference services

- 94. The NGR require an access arrangement proposal to describe the pipeline services the service provider proposes to provide by means of the pipeline and specify the reference services.
 - Section 2 of the NGL defines a "pipeline service" as a service that is provided by means of a pipeline including a haulage service, an interconnection service, or an ancillary service.
 - Rule 101 of the NGR defines a "reference service" to be a pipeline service that is likely to be sought by a significant part of the market.
- 95. In its proposal, GGT provides a reference service using the covered pipeline, namely a firm gas transmission service. GGT has proposed to continue to provide a firm gas transportation service as a reference service during AA4.

96. GGT has proposed to continue also providing a non-reference service under its revised access arrangement for AA4. This non-reference service would be a negotiated service for the transportation of gas that meets the specific needs of users which cannot be satisfied through the reference service (firm gas transmission service).

Total revenue allocation between reference services and other services

- 97. Rule 93 of the NGR requires total revenue to be allocated between reference services and other services on the basis of an allocation of costs. As an alternative to cost allocation, rule 93 provides for some services other than reference services to be classed as rebateable services, with part of the revenue from the sale of these services to be rebated or refunded to users of reference services.
- 98. GGT has proposed that it will allocate costs between reference services provided using the Covered Pipeline and services provided using the uncovered GGP assets according to the same principles set out in the ERA's final decision for AA3.⁴³ However, the ERA did not allocate costs in its final decision for AA3 using rule 93 provisions.⁴⁴ The ERA determined that the proposed capital and operating expenditure did not represent the standalone cost for the covered pipeline. The ERA did use an allocation mechanism to determine a standalone cost for the covered pipeline for the purposes or rules 79 and 91 to attribute shared costs of the covered and uncovered pipeline. This was used to determine the best forecast of capital and operating expenditure in the circumstances.

Terms and conditions

- 99. The NGR require an access arrangement proposal to detail, in addition to the reference tariff, the terms and conditions for each reference service.
- 100. Schedule D and Schedule TC of GGT's proposed access arrangement set out the terms and conditions applying to the firm service. GGT is proposing to make several amendments to these terms and conditions, which are detailed in supporting information⁴⁵ to the access arrangement and shown in a marked-up copy of the access arrangement.
- 101. In summary, the proposed amendments comprise:
 - Formatting, referencing and typographical corrections.
 - Amendments to specific clauses, including the deletion of some clauses and the addition of new clauses.
 - Amendments to the defined terms, including the deletion of some terms and the addition of new terms.
- 102. Table 12 summarises the proposed amendments and GGT's reasons for the changes.

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, p. 19.

Economic Regulation Authority, Final decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline, 21 July 2016, p. 430, paragraph 1982.

Goldfields Gas Transmission Pty Ltd, Goldfields Gas Pipeline Revised Access Arrangement Revision Proposal Supporting Information, 21 December 2018, pp. 111-114, Table 48.

Table 12 Summary of GGT's proposed amendments to the terms and conditions applying to the firm service

Clause reference	Description of and reason for proposed amendment
D.8 A.4 D.8 A.5 D.9.2 D.9.3 D.9.4 D.12.1(b) D.32.2(e) D.34.3 T C1.1 Extension T C1.1 Receipt Point MHQ	 Amendments are proposed to these clauses to correct a formatting, referencing or typographical error. These amendments are administrative in nature and do not substantially alter the terms and conditions applying to the firm service. For example: The reference in clause D.8 A.4 to "clause D.5.45" is incorrect. The amended reference is to "clause D.5.5". The words "If the user request an" in clause D.8 A.5 is grammatically incorrect and is changed to "If the user requests an". The words "applicable Toll Tariff" in clause D.9.2 have changed to "Applicable Toll Tariff" to reflect the amended term in clause T C1.1 (Definitions).
D.9.5	Clause D.9.5 is deleted. This clause is made redundant by the new definitions of "applicable toll tariff", "applicable capacity reservation tariff" and "applicable throughput tariff".
D.24.5 D.25.4	Clause D24.5 is deleted. This clause is made redundant by the new definition of "receipt point". Consequently, the words "at the receipt facilities referred to in clause D.24.5" in clause D.25.4 are deleted.
D.34.5	Clause D.34.5 is deleted. The deleted clause is redundant given clause D.42, which substantially reproduces the clause with the exception of references to clauses D.34.1 and D.35.6.
D.40	Clause D.40 is amended to include provision for notices by email. Email has largely replaced communications formerly made by mail and facsimile.
D.48	New clause D.48 (Counterparts) is proposed to allow the transportation agreement to be executed in counterparts.
T C1.1 [new defined terms]	 New definitions are proposed for the following terms. Applicable Capacity Reservation Tariff Applicable Throughput Tariff Applicable Toll Tariff The definitions are the same definitions used in the access arrangement and are included to clarify that the tariff which applies is the tariff as varied from time-to-time in accordance with the reference tariff variation mechanism.
T C1.1 As Available Service	Defined term deleted from clause T C1.1. No such service is offered by means of the GGP. An "as available service" is a form of interruptible service, which can be provided as a non-reference service.
T C1.1: Delivery Point MDQ Firm MDQ Firm MHQ Receipt Point MDQ	In each of these defined terms the words "Order Form/Form of Agreement" are replaced with the words "Transportation Agreement". Delivery point MDQ, firm MDQ, firm MHQ and receipt point MDQ are all specified in the user's transportation agreement.

Clause reference	Description of and reason for proposed amendment
T C1.1 Receipt Point	Defined term has been expanded to clarify and more accurately reflect that there are two GGP receipt points, both located upstream of the Yarraloola Compressor Station. The extended definition is the same definition used in the access arrangement.
T C1.1 Relevant Date	Defined term has been updated to change the date <i>from</i> 1 August 2014 <i>to</i> 1 January 2019. This reflects the review submission date for AA4.

Source: GGP, Access Arrangement Supporting Information (Public), 1 January 2019, Table 48, pp. 111-114.

Issue 5 Terms and conditions

Submissions are invited from interested parties on:

- GGT's proposal to make amendments to the terms and conditions applying to the firm service.
- Whether any other amendments to the terms and conditions should be made.

Other policies and provisions

Application procedures

- 103. Rule 112 of the NGR details the requirements for requesting access to a pipeline service. Section 5 of GGT's proposed revised access arrangement details the processes to be followed when a prospective user seeks access to a pipeline service offered by means of the GGP.
- 104. GGT has not proposed any changes to the application procedures for AA4.

Issue 6 Application procedures

Submissions are invited from interested parties on whether any amendments to the application procedures should be made.

Capacity trading

- 105. Rule 48(1)(f) of the NGR requires that a full access arrangement must set out capacity trading requirements, which must provide for the transfer of capacity in accordance with rule 105 of the NGR:
 - If the service provider is registered as a participant in a particular gas market, in accordance with the Rules or procedures governing the relevant gas market.
 - If the service provider is not registered as a participant in a particular gas market, or if the relevant Rules or procedures do not deal with capacity trading, in accordance with rule 105 of the NGR.
- 106. Sub-Rules 105(2) and (3) of the NGR allow a user to transfer any of its contracted capacity with or without the service provider's consent, with different consequences:

- (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.

107. Rule 105 further states that:

- The service provider must not withhold its consent unless it has reasonable grounds, based on technical or commercial considerations, for doing so.
- An adjustment of rights and liabilities does not affect the rights or liabilities that had accrued under, or in relation to, the contract before the transfer took effect.
- The capacity trading requirements may specify in advance conditions under which consent will (or will not) be given, and the conditions to be complied with if consent is given.
- 108. GGT has not proposed any changes to the capacity trading requirements for AA4. The capacity trading requirements remain unchanged from the existing (AA3) requirements and are specified in section 6 of the proposed revised access arrangement.

Issue 7 Capacity trading

Submissions are invited from interested parties on whether any amendments to the capacity trading requirements should be made.

Extension and expansion requirements

109. A full access arrangement is required to set out extension and expansion requirements, which are detailed in rule 104 of the NGR.

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, or expansion of the capacity of, the pipeline or may allow for later resolution of that question on a basis stated in the requirements.

- (2) 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, deal with the effect of the extension or expansion on tariffs.
- (3) 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.
- 110. GGT has not proposed any changes to the extension and expansion requirements for AA4. The extension and expansion requirements remain unchanged from the existing (AA3) requirements and are specified in section 7 of the proposed revised access arrangement.

Issue 8 Extension and expansion requirements

Submissions are invited from interested parties on whether any amendments to the extension and expansion requirements should be made.

Receipt and delivery points

- 111. A full access arrangement is required to state the terms and conditions for changing receipt and delivery points. These terms and conditions must be in accordance with the principles listed in rule 106(1) of the NGR:
 - (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.
- 112. The access arrangement may specify in advance the conditions under which consent will (or will not) be given, the conditions to be complied with if consent is given (rule 106(2)).
- 113. GGT has not proposed any changes to the terms and conditions for changing receipt and delivery points for AA4. The terms and conditions remain unchanged from the existing (AA3) terms and conditions and are specified in section 6.4 of the access arrangement.

Issue 9 Receipt and delivery points

Submissions are invited from interested parties on whether any amendments to the terms and conditions for changing receipt and delivery points should be made.

Review and commencement dates

114. If there is to be a review submission date, a full access arrangement must state the review submission date and the revision commencement date. The NGR define 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.

- 115. GGT is proposing a five year period for AA4. AA3 also covers a five year period. The proposed:
 - review submission date is 1 January 2024
 - revision commencement date is 1 January 2025.

Issue 10 Review and commencement dates

Submissions are invited from interested parties on GGT's proposed:

- review submission date of 1 January 2024
- revision commencement date of 1 January 2025.

Appendix 1 Summary of Issues

The main proposed changes from GGT are to the reference tariff variation mechanism, the proposed amounts of operating expenditure and capital expenditure and the proposed rate of return (to comply with the ERA's Rate of Return Guidelines). The ERA is seeking submissions from interested parties on whether any further changes to the access arrangement should be considered, in addition to the changes proposed.

Issue 1 Tariff variation mechanism

Submissions are invited from interested parties on GGT's proposed changes to the reference tariff variation mechanism, including the proposed mechanism's effect on users of the GGP.

Issue 2 Taxation

Submissions are invited from interested parties on estimation of GGT's tax costs.

Issue 3 Operating expenditure

Submissions are invited from interested parties on GGT's proposed operating expenditure for AA4, including whether the proposed expenditures align with good industry practice and whether the expenditure is reasonable.

Issue 4 Capital expenditure

Submissions are invited from interested parties on GGT'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 5 Terms and conditions

Submissions are invited from interested parties on:

- GGT's proposal to make amendments to the terms and conditions applying to the firm service.
- Whether any other amendments to the terms and conditions should be made.

Issue 6 Application procedures

Submissions are invited from interested parties on whether any amendments to the application procedures should be made.

Issue 7 Capacity trading

Submissions are invited from interested parties on whether any amendments to the capacity trading requirements should be made.

Issue 8 Extension and expansion requirements

Submissions are invited from interested parties on whether any amendments to the extension and expansion requirements should be made.

Issue 9 Receipt and delivery points

Submissions are invited from interested parties on whether any amendments to the terms and conditions for changing receipt and delivery points should be made.

Issue 10 Review and commencement dates

Submission are invited from interested parties on GGT's proposed:

- review submission date of 1 January 2024
- review commencement date of 1 January 2025

Appendix 2 Access Arrangement Review Process

The following explanation of the access arrangement review process is a summary of the process detailed in the current National Gas Rules (NGR).

Proposal and initial consultation

A service provider must, on or before the review submission date of an applicable access arrangement, submit an access arrangement revision proposal (proposal) to the ERA in accordance with rule 52 of the NGR.

The service provider must also provide access arrangement information which contains information necessary to understand the proposal as well as the basis for deriving elements of the proposal (rule 43(1)). In addition, a service provider may wish to provide further information to support its proposal (that is, access arrangement supporting information).

Upon receipt of a service provider's proposal, the ERA must as soon as practicable publish an initiating notice, along with the service provider's proposal, on its website (rule 58). The initiating notice must include an invitation for written submissions on the proposal for a period of at least 20 business days.

Draft decision and further consultation

Following this initial consultation process, the ERA must make a draft decision and indicate whether the ERA is prepared to approve or not approve the service provider's proposal under rule 59 of the NGR. The draft decision represents the ERA's assessment of the proposal in light of legislative requirements, current access arrangement provisions, the service provider's proposed changes and submissions from interested parties.

Under rule 60, the service provider may, within the period allowed by the draft decision (at least 15 business days), submit additions or other amendments to its proposal to address matters raised in the draft decision. The service provider must provide any amendments to the ERA in a revised access arrangement proposal (revised proposal). The ERA must publish the revised proposal on its website as soon as practicable and invite submissions from interested parties on the revised proposal and draft decision for a period of at least 20 business days.

Final decision

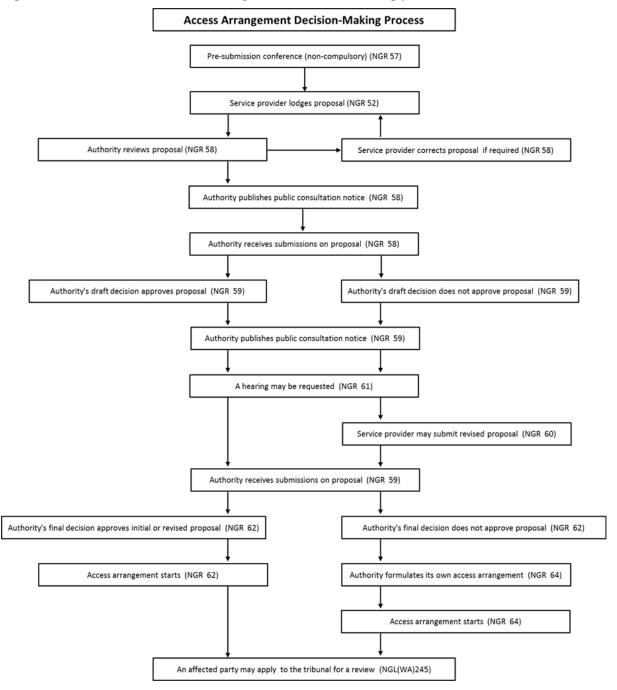
After the ERA considers the service provider's revised proposal (where submitted), further submissions from interested parties and any other relevant matters, the ERA must make a final decision as required under rule 62 of the NGR. The final decision is a decision to approve or refuse to approve the (initial or revised) proposal. If the ERA approves the proposal, the access arrangement takes effect on either a date fixed in the final decision or if no date is fixed, 10 business days after the final decision is made.

If the ERA's final decision refuses to approve the proposal (as initially submitted or as revised after the draft decision), the ERA must itself propose revisions to the access arrangement under rule 64 of the NGR. The ERA's proposal for revisions to the access arrangement must take into account:

- The matters that the applicable legislation requires an access arrangement to include.
- The service provider's access arrangement proposal.
- The ERA's reasons for refusing to approve the service provider's access arrangement proposal.

The ERA may, but is not obliged to, consult on its own revisions to the access arrangement. The ERA must make a final decision to give effect to its revisions, which will take effect on a date fixed in the decision or if no date is fixed, 10 business days after the decision is made.

Figure 2 Overview of the access arrangement decision-making process



Appendix 3 Glossary

AA3 third access arrangement period

AA4 fourth access arrangement period

AER Australian Energy Regulator

AEMC Australian Energy Market Commission

ERA Economic Regulation Authority

GGP Goldfields Gas Pipeline

GGT Goldfields Gas Transmission Pty Ltd

MDQ Maximum Daily Quantity

NGL National Gas Law

NGR National Gas Rules

SCADA supervisory control and data acquisition