



Economic Regulation Authority

Proposed revisions to the access arrangement for the Goldfields Gas Pipeline

Issues paper

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Contents

Invitation to make submissions	1
1. Introduction	2
2. Key areas for consideration	7
2.1 Changes to the legislative framework	7
2.2 Stakeholder engagement	8
2.3 Demand forecasts	9
2.4 Expenditure levels	11
2.5 Depreciation	13
2.6 Rate of return and inflation	18
2.7 Revenue and cost allocation	21
2.8 Tariffs and tariff variations (cost pass throughs)	25
2.9 Access and queuing	28

List of appendices

Appendix 1 List of Tables	31
Appendix 2 List of Figures.....	32
Appendix 3 Abbreviations	33
Appendix 4 Summary of questions for comment	34
Appendix 5 Regulatory framework and timeframes	35
Appendix 6 Summary of GGT's proposal	41

Invitation to make submissions

Submissions are due by Monday, 8 April 2024

The ERA invites submissions on this issues paper. Interested parties are encouraged to consider the questions raised in this paper and provide comments, including comments on any other matters of concern not yet raised.

Submissions should be lodged online using the ERA's submission portal:

<https://www.erawa.com.au/consultation>

Alternatively, submissions can be made via:

Email: publicsubmissions@erawa.com.au

Post: Level 4, Albert Facey House, 469 Wellington Street, Perth WA 6000

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 the ERA at info@erawa.com.au to discuss the nature of the information.

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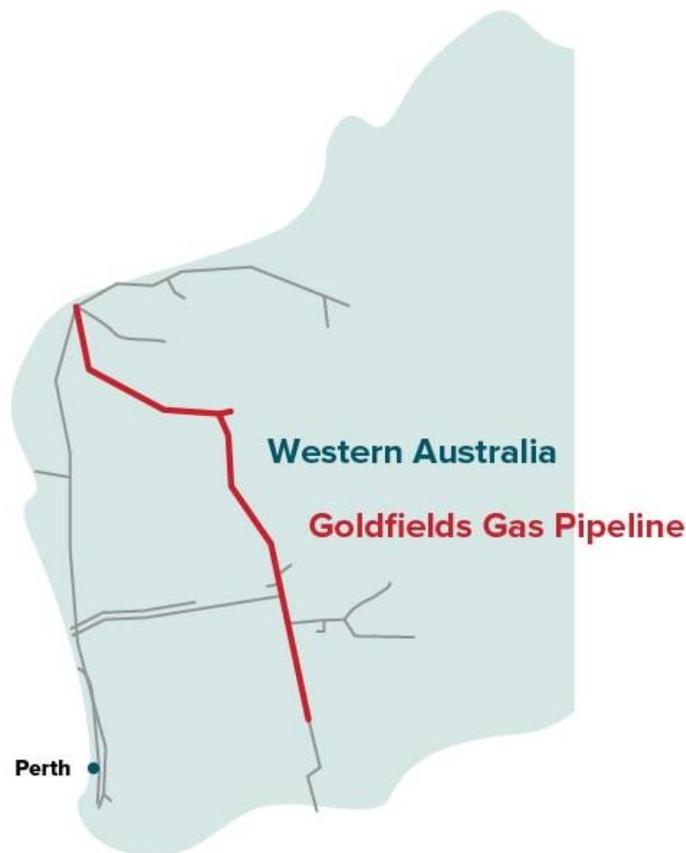
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1. Introduction

Goldfields Gas Transmission Pty Ltd (GGT) operates the Goldfields Gas Pipeline (GGP) as the manager of the Goldfields Gas Transmission Joint Venture. The pipeline is owned by the participants of the unincorporated joint venture: Southern Cross Pipelines Australia Pty Ltd; Southern Cross Pipelines (NPL) Australia Pty Ltd and Alinta Energy GGT Pty Ltd.¹

The GGP is a 1,378 kilometre transmission pipeline extending from Yarralooa in the Pilbara region to Kalgoorlie, in the Goldfields-Esperance region (Figure 1). The pipeline feeds into several lateral pipelines supplying natural gas to support mining operations throughout the Pilbara and Goldfields regions.²

Figure 1: Goldfields Gas Pipeline



Source: APA – Goldfields Gas Pipeline

The GGP receives natural gas from offshore fields north-west of Western Australia via two receipt points located at Yarralooa. In June 2023, the Northern Goldfields Interconnect (NGI) commenced operations. The NGI connects to the GGP about 40 kilometres south of

¹ On 1 November 2023, APA acquired Alinta Energy Pilbara Holdings Pty Ltd including Alinta's share of the GGP. APA Group now owns 100 per cent of GGP.

GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement Information*, 1 January 2024, pp. 7-8.

² The 47 kilometre Newman lateral forms part of the GGP; all other laterals do not.

Leinster and adds a third receipt point to the pipeline, which increases the potential capacity of the GGP.

Around half of the GGP is classified as a scheme (covered) gas transmission pipeline and is required to have an approved access arrangement.³ Once approved, the access arrangement remains in effect, with scheduled revisions to it, until coverage of the pipeline is revoked.⁴

The last scheduled revisions to the access arrangement for the GGP was approved in December 2019 for the fourth access arrangement period from 1 January 2020 to 31 December 2024 (AA4).⁵ On 21 December 2023, GGT submitted its access arrangement proposal for the fifth access arrangement period from 1 January 2025 to 31 December 2029 (AA5). GGT's proposal, access arrangement information and other supporting documentation is published on the [ERA website](#).

The ERA's review of GGT's proposal is taking place in an environment of rapid and ongoing transformation of the energy sector. There is a strong focus on emissions reductions with a shift towards renewable energy, such as solar and wind. GGT's proposal notes this energy transformation and seeks to take some initial steps to prepare the GGP for this future. For example, GGT has proposed to accelerate the return of its assets over the access arrangement period to mitigate possible stranded asset risks. While there may be risks to the use of this pipeline over time, it appears that GGT's customers are likely to maintain their capacity requirements given their needs for energy reliability in remote parts of Western Australia.

The uncertainty about the future use of natural gas and gas pipelines creates challenges for the ERA when making this decision.

Stakeholder submissions are an integral part of the ERA's considerations and decision-making process. The ERA's decision on GGT's proposal affects users and prospective users of the GGP for a five-year period. GGT has proposed a 31 per cent increase in the toll charge, 66 per cent increase in the capacity reservation charge and 63 per cent in the throughput charge on 1 January 2025 with tariffs remaining flat for the other years in the period.⁶ This makes it important for users and prospective users of the pipeline to have a say now on the proposed gas tariffs and the services provided by GGT over this period.

After an initial review of GGT's proposal, the ERA has identified some areas of interest and is seeking comments from interested parties on some specific matters. Submissions on these matters (summarised below) will assist the ERA with its decision making on certain elements of the access arrangement. While the ERA has identified areas of interest, comments on any other matters related to GGT's access arrangement proposal are encouraged.

³ GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement Information*, 1 January 2024, p. 5.

Taking into account forecast capacity from the NGL, approximately 61 per cent of the capacity of the GGP is treated as a scheme regulated pipeline under the legislative framework established by the *National Gas Access (WA) Act 2009*. GGT is required to have an access arrangement approved for this regulated capacity. The remaining capacity is classified as a non-scheme pipeline and is required to comply with a lighter form of regulation as set out in Part 23 of the National Gas Rules applicable in Western Australia.

⁴ The access arrangement for the GGP was first approved by the ERA in July 2005.

⁵ The AA4 access arrangement applies until the ERA approves a new (AA5) access arrangement.

⁶ Tariffs would vary in the other years of the period in accordance with GGT's tariff variation mechanism which updates for actual inflation, the debt risk premium and cost pass-through events.

Legislative changes

Legislative changes to the National Gas Law (NGL) and National Gas Rules (NGR) have been made (or are in the process of being made). Some of these changes apply in Western Australia. One notable change now in effect in Western Australia is the addition of an explicit emissions reduction objective to the national gas objective and the associated changes to the NGR to align with this new objective. The changes to the NGR to align to the new objective occurred following GGT's proposal and the ERA was given discretion to adopt either the old or new expenditure rules under transitional provisions. The ERA has decided to apply the new expenditure rule for capital expenditure that was incurred or is forecast to be incurred after 1 February 2024 and the old expenditure rule for capital expenditure that was incurred prior to 1 February 2024. Forecast operating expenditure for the next access arrangement period will be assessed based on the new expenditure rules.

GGT prepared its proposal under the regulatory framework that existed at the time and has not proposed expenditure that relies on assessment under the new framework. As a result, the ERA's decision to apply the new expenditure rules is likely to be inconsequential to GGT's current proposal.

As there are still further NGR changes yet to be adopted in Western Australia the ERA will apply the rules that are current at the time of making its draft and final decisions.⁷

Stakeholder engagement

GGT undertook various customer engagement activities to develop its access arrangement proposal. The outcomes from these activities were used by GGT to focus on areas and/or support elements of its proposal. The ERA seeks comments from stakeholders on GGT's engagement processes and whether there were enough opportunities to provide input and whether any input was given due consideration by GGT.

Demand forecasts

For AA5, GGT has included forecast demand from the NGI, which was commissioned in July 2023. The NGI adds a third receipt point on the GGP and is expected to increase the capacity of the GGP over the access arrangement period. The ERA seeks comments on the demand forecasting methodology used by GGT and whether the demand forecasts are reasonable and consistent with customer expectations.

Expenditure levels

GGT's actual AA4 capital and operating expenditure levels are significantly higher than the forecast expenditure levels approved in the ERA's AA4 final decision. GGT has cited various reasons for the increase in expenditure. For example, GGT's actual estimated capital expenditure for AA4 is \$64.1 million, which is significantly higher than the \$7.5 million approved in the ERA's AA4 final decision. The ERA will assess GGT's AA4 capital expenditure levels to ensure the investment was prudent and in the long-term interests of consumers. The ERA's consideration of GGT's AA4 expenditure may affect the forecast expenditures for AA5 (for example, GGT's operating forecasts for AA5 are derived using a base-step-trend method with the base year being 2022, and the base year may require adjustment).

⁷ Appendix 5 of this paper provides information on the regulatory framework, including anticipated timeframes for this review.

Depreciation

Decarbonisation policies are driving market, technological, social and regulatory changes that will affect the ongoing use of GGT's gas network. For AA5, GGT has proposed to change its approach to calculating the asset lives by capping asset lives to the weighted average remaining life of the pipeline and laterals asset class of 41 years. GGT considers that capping asset lives is justified as the pipelines and lateral classes represent the core assets of the GGP as the physical pipeline. If the physical pipeline ceased to operate then the remaining assets would also cease to have value.

While asset lives are capped, GGT applies the same straight-line approach to depreciation as applied in AA4. The proposed cap on asset lives has the effect of increasing total revenue over AA5 by \$340,000. The ERA seeks comments on GGT's depreciation proposal and the decarbonisation plans of GGT's customers which may influence the approach to depreciation.

Rate of return and inflation

The rate of return and inflation are key factors affecting GGT's proposed revenue increases for AA5. Approximately 57 per cent of the increase in GGT's calculated total revenue requirement for AA5 is attributable to a higher rate of return (27 per cent) and expected inflation (30 per cent). The method to set the financial parameters for the regulated gas pipelines is pursuant to the ERA's gas rate of return instrument, which was last reviewed in 2022. The increase in these financial parameters is predominantly a result of current financial market conditions which are outside of the control of both GGT and the ERA.

Revenue and cost allocation

The NGR set out specific requirements for the allocation of revenue and costs, which determine the reference tariffs that can be charged to users of the pipeline. GGT's revenue and cost allocation is somewhat complicated by the regulatory structure of the GGP, where only a portion of the pipeline is a scheme (covered) pipeline and is covered by the access arrangement. In addition, corporate service costs are generally provided by the APA Group across all its entities/operations, including the GGP, which requires GGT to determine an appropriate share of these corporate costs to allocate to the covered portion of the pipeline. The ERA seeks comments on GGT's cost allocation method and whether revenue and costs are being appropriately allocated between the covered and uncovered portions the GGP.

Tariffs and tariff variations

GGT proposes to retain the firm transportation service as the single reference service under the access arrangement. GGT has also retained the three-part tariff structure for the service. For 2025 the proposed tariff is significantly higher than the 2024 approved tariff (in real terms, there is a 27 per cent increase in the toll charge, a 62 per cent increase in the capacity reservation charge, and a 59 per cent increase in the throughput charge).

The reference tariff variation mechanism allows the reference tariff to vary over the course of the access arrangement period. For AA5, GGT has proposed several new cost pass through events. GGT claims that these additional cost pass through events are needed to mitigate the increasing operational risks it faces. The ERA seeks comments on GGT's proposed new cost pass through events that, if approved, will allow GGT to pass on specified costs through the reference tariff.

Access and queuing

GGT has proposed extensive amendments to the access and queuing provisions in Section 5 of the access arrangement. The amendments aim to simplify the process to obtain access to services and ensure the provisions are commercially fit for purpose. As part of the

proposed amendments, GGT will introduce new prudential requirements during the offer and acceptance stages of the queuing process. The ERA seeks comments on whether GGT's proposed access and queuing provisions for AA5 simplify the process to obtain access to services and whether the provisions will work operationally.

2. Key areas for consideration

To assist interested parties in making submissions, the ERA has identified several key areas for consideration. This is not an exhaustive list, and the ERA encourages interested parties to provide comments on any matters related to GGT's access arrangement proposal that, in their opinion, require consideration by the ERA.

2.1 Changes to the legislative framework

The NGL and NGR, as enacted by the *National Gas (South Australia) Act 2008*, establish the legislative framework for the independent regulation of certain gas pipelines in Australia. In Western Australia, the NGL and NGR are implemented through the *National Gas Access (WA) Act 2009*. Importantly, the legislative framework for the regulation of gas pipelines in Western Australia does differ in some respects to the legislative framework that applies in other Australian states and territories.

Over the past few years, Australian state and territory Energy Ministers have agreed to various reforms to the national gas regulatory framework. Notably, Energy Ministers have agreed to the following:

- In April 2022, a final package of gas pipeline regulatory amendments aimed at delivering a simpler regulatory framework, including setting out the powers the regulator will have when determining what form of regulation a pipeline should be subject to (that is, full or light regulation).⁸
- In October 2022, amendments to the NGL to extend the national gas regulatory framework to hydrogen blends and renewable gases.⁹
- In May 2023, amendments to the national energy laws to incorporate an emissions reduction objective into the National Electricity Objective, National Gas Objective and National Energy Retail Objective (collectively known as the national energy objectives).¹⁰

As the gas regulatory framework in Western Australia is implemented through specific local legislation, amendments to national gas legislation that have passed through the South Australian Parliament must be specifically adopted in Western Australia by ministerial order.

The gas pipeline regulatory amendments came into effect in Australia (except Western Australia) on 2 March 2023, with supporting amendments made to the NGR on 16 March 2023.¹¹ While these amendments have not been adopted in Western Australia at the time of writing this paper, they may be adopted sometime during this review process.

The incorporation of an emissions reduction objective commenced in Australia on 21 September 2023, and in Western Australia on 25 January 2024.^{12, 13} The NGR were

⁸ Department of Climate Change, Energy, the Environment and Water, 'Energy Ministers agree final package of gas pipeline regulatory amendments' ([online](#)) (accessed February 2024).

⁹ Department of Climate Change, Energy, the Environment and Water, 'Extending the national gas regulatory framework to hydrogen blends and renewable gases' ([online](#)) (accessed February 2024).

¹⁰ Department of Climate Change, Energy, the Environment and Water, 'Incorporating an emissions reduction objective into the national energy objectives' ([online](#)) (accessed February 2024).

¹¹ South Australian Government Gazette, *Statutes Amendment (National Energy Laws) (Gas Pipelines) Act (commencement) Proclamation 2023*, 2 March 2023, p. 464.

¹² South Australian Government, *Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023*, 21 September 2023.

amended on 1 February 2024 to align the rules with the emissions reduction objective.¹⁴ The amendments to the rules make clear that gas network service providers can now propose expenditure that contributes to meeting emissions reductions targets set by governments. Transitional provisions for access arrangement reviews that commenced prior to 1 February 2024 allow the ERA to adopt either the old expenditure rules or the new expenditure rules.¹⁵

The amendment to extend the national gas regulatory framework to hydrogen blends and renewable gases was endorsed by Energy Ministers in October 2022 and passed through the South Australian parliament in November 2023. While these amendments have not been adopted in Western Australia at the time of writing this paper, they may be adopted sometime during the review process.

As indicated earlier, GGT's proposal was developed prior to Western Australia's adoption of the new national gas objective and the new capital and operating expenditure assessment rules. The ERA will assess GGT's proposal under the regulatory framework that is current at the time of making each of its decisions (draft and final). With respect to the amendments to align the NGR with the emissions reduction objective and the transitional provisions that allow the ERA to apply either the old or new expenditure rules for this review, the ERA has decided to apply the new expenditure rule for capital expenditure that was incurred or is forecast to be incurred after 1 February 2024 and the old expenditure rule for capital expenditure that was incurred prior to 1 February 2024.¹⁶ Forecast operating expenditure for the next access arrangement period will be assessed based on the new expenditure rules.

2.2 Stakeholder engagement

To develop its access arrangement proposal, GGT undertook various engagement activities. Overall, GGT's engagement approach centred around engagement opportunities with key customers in individual (confidential) settings.

Over a two-month period (September and October 2023), GGT conducted 13 individual customer interviews. The interviews covered the following areas:¹⁷

- Overview of the GGP access arrangement: GGT provided information on the access arrangement and the requirement to have the arrangement reviewed by the ERA. The customer was asked whether they understood the regulatory process.
- Pipeline performance: GGT explored pipeline performance in relation to safety, reliability, gas delivered and capacity growth. The customer was asked to prioritise aspects significant to the pipeline services used for their operations.
- Key considerations for the next access arrangement period: GGT discussed key considerations for the AA6 period, including decarbonisation and the role of gas in supporting decarbonisation.
- New regulatory obligations: GGT discussed the new obligations required under the *Security of Critical Infrastructure Act 2018* and the anticipated additional investments

¹³ *Western Australian Government Gazette 24 January 2024 No.8* ([online](#)) (accessed February 2024).

¹⁴ AEMC, *National Gas Amendment (Harmonising the national energy rules with the updated national energy objectives) Rule 2024*, 1 February 2024.

¹⁵ NGR, Schedule 1 (Transitional Provisions), rule 103.

¹⁶ NGR, rule 79 (new expenditure rule to apply from 1 February 2024 and old expenditure rule to apply before 1 February 2024).

¹⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 20.

required for compliance. The customer was asked about the importance of supply security for their operations.

- Future engagement opportunities: GGT outlined the process going forward and the opportunities for future customer engagement.

GGT published a positions paper in late November 2023 for comment.¹⁸ The positions paper was prepared using the information obtained through GGT's customer interviews. GGT submitted that it focused its engagement on priority issues where customers could have the greatest impact and where customer opinions would "genuinely influence and guide the access arrangement."¹⁹ The priority areas identified by GGT as set out in its proposal are access arrangements, reliability, tariffs, decarbonisation, the safeguard mechanism, critical infrastructure, affordability and safety.²⁰

Questions

1. Did GGT provide reasonable opportunities for stakeholders to provide input into the development of its access arrangement proposal? Where stakeholders provided comments/feedback to GGT, did GGT give due consideration to and adequately address the comments/feedback?

2.3 Demand forecasts

Demand forecasting is a critical area the ERA assesses when considering an access arrangement proposal. Demand forecasts directly affect the levels of capital and operating expenditure needed to provide pipeline services during the access arrangement period and are a primary input into the revenue model that is used to determine the network tariffs that the service provider can charge.

GGT's demand forecasts for contracted capacity are based on both actual and highly probable contracted capacities. Demand forecasts for throughput are based on a three-year average actual load factor. The demand forecasts included volumes from:

- The Yarraloola receipt point:
 - existing contracts for AA5
 - existing contracts expiring during AA5 that are expected to be renewed.
- The new Northern Goldfield Interconnect (NGI) receipt point:
 - existing contracts and highly probable contracts for AA5
 - existing contracts expiring during AA5 that are expected to be renewed
 - excluding volumes not contracted under the covered GGP.

The NGI was commissioned in July 2023, connecting the DBNGP and GGP. Some volumes from the NGI are expected to flow into GGP and will be considered part of the covered GGP. GGT noted that the level of contracting on the NGI since it became operational has been

¹⁸ GGT, *Goldfields Gas Pipeline 2025-29 Access Arrangement: First look at positions*, November 2023.

¹⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 22.

²⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, pp. 22-25.

slower than anticipated. GGT further noted that the positive market sentiment and more confident outlook justified the inclusion of highly probable contracts in the forecast.²¹ Volumes from the NGI receipt point is expected to increase the average maximum capacity on the covered GGP by an average of 30TJ/day (approximately 27 per cent) for AA5.

Most customers using the covered GGP are mining and mineral processing operations in iron ore, gold and nickel. Demand is strongly correlated with mining and mineral processing operations. GGT has forecast healthy mining and industrial production activities for AA5. GGT noted that AEMO's Western Australia Gas Statement of Opportunities has forecast four committed mining projects for gold, iron ore, lithium and nickel; and two committed lithium processing projects. GGT has forecast a growth in demand for iron ore and lithium, and steady demand for gold and nickel during AA5.²²

While GGT has noted that some of its customers have started decarbonisation processes, these customers have indicated that they are likely to require firm (gas) capacities as back-up.

GGT's demand forecasts for AA5 are shown in Table 1.

Table 1: GGT demand forecasts for 2025-29

	2025	2026	2027	2028	2029
	Forecast	Forecast	Forecast	Forecast	Forecast
Total contracted capacity (TJ/day)					
Yarraloola	110.2	110.2	110.2	110.2	110.2
NGI (Case 2)	22.8	27.8	32.8	32.8	32.8
Total	133.0	138.0	143.0	143.0	143.0
Throughput (TJ/day)					
Yarraloola	93.3	93.3	93.3	93.3	93.3
NGI (Case 2)	19.7	24.0	28.3	28.3	28.3
Total	113.0	117.3	121.6	121.6	121.6

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 35, Table 5-2.

²¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 34.

²² GGT, *Goldfields Gas Pipeline 2025-29 Access Arrangement*, January 1, 2024, p. 11.

Questions

2. Considering the factors that affect demand, are GGT's demand forecasts for AA5 reasonable? The ERA is interested in receiving submissions that address the following questions:
 - a. Are there any existing volumes on the covered GGP that might be redirected via the Northern Goldfields Interconnect?
 - b. A commodity price shock could impact gas demand during AA5. How sensitive is your gas demand to a commodity price shock?
 - c. Given an increasing focus on decarbonisation strategies, what are the likely impacts of such strategies on throughput volumes for AA5?
 - d. Will there be any new projects starting within the GGP service area during AA5?

2.4 Expenditure levels

Capital expenditure (capex)

AA4 capex

GGT's actual estimated capex for the previous access arrangement period (AA4) is \$64.1 million, which is significantly higher than both GGT's AA4 forecast (\$17.6 million) and the ERA's AA4 final decision (\$7.5 million).²³

GGT highlighted the following factors for the AA4 forecasting inaccuracy:²⁴

- Exclusion of key expenditure categories: Entire categories of expenditure were not anticipated in the forecast. This included all information technology (IT) (and operational technology (OT) costs, all cyber security expenditure, costs to maintain the physical security of the pipeline and shared corporate costs (such as office fit outs and APA wide programs of work). Over AA4 these cost \$30.4 million or just about half of actual capex.
- Scope uncertainty in key programs: While equipment failures (which put reliability at risk) were known when the AA4 forecast was prepared, investigations into the cause of these issues had not yet been completed. For example, given the source of failures regarding equipment failures of the gas engine alternators was not known at the time of submission and hence a forecast of \$4.9 million included, the final cost came in at about \$6.9 million as a new gas skid, enclosure and battery room needed to be included.²⁵
- Supplier cost pressures: Global and local supply chain constraints have increased the cost of specialised equipment, support, and labour, particularly in the remote areas in which the GGP operates. As a result, there has been a step change in the cost to undertaken works across the GGP.

GGT acknowledged that during the AA4 review process, the ERA raised concerns regarding the accuracy of GGT's capex forecasts and forecasting approach.²⁶ GGT has since acknowledged that its capex forecasting approach needs to improve and has submitted that

²³ GGT, *Goldfields Gas Pipeline AA5 – Attachment 10.1: Capital Expenditure Overview*, 1 January 2024, p. 11.

²⁴ GGT, *Goldfields Gas Pipeline AA5 – Attachment 10.1: Capital Expenditure Overview*, 1 January 2024, p. 12.

²⁵ GGT, *Goldfields Gas Pipeline AA5 – Proposal Overview*, 1 January 2024, pp. 64, 65.

²⁶ ERA, *Goldfields Gas Pipeline AA4 – Final Decision*, 19 December 2019, p. 112.

the lessons learnt from the AA4 review process have been incorporated into the forecast for AA5.

Noting the significant increase in GGT's AA4 actual estimated expenditure compared to what was forecast, the ERA will carefully scrutinise the actual (AA4) expenditures in accordance with the provisions of the NGR for inclusion in the capital base.²⁷

AA5 forecast capex

GGT submits that its forecast capex for the AA5 period covers the investment needed to ensure safe, secure, and reliable operation of the GGP. GGT has proposed to invest a total of \$69.3 million for replacement and stay in business programs, IT and OT, and security of critical infrastructure programs. While GGT's proposed capex for AA5 is 8 per cent higher than the actual estimated capex for AA4 (\$64.1 million), it is substantially higher than GGT's AA4 proposal (\$17.6 million) and the ERA's AA4 final decision (\$7.5 million).²⁸

GGT's proposed capex for AA5 includes major asset replacement and maintenance programs, as well as a significant inline inspection program that is scheduled for 2025. Stay-in-business investments make up 77 per cent of the total forecast capex for the 2025 to 2029 period. IT and OT costs, together with cyber costs, account for 13 per cent of the proposed capex. The balance is related to shared corporate costs, such as property and national programs.

GGT noted that an internal driver for increased capex in AA5 is that the GGP is now entering a new lifecycle phase as it approaches 30 years of age and many of its mechanical, electrical, and control components are nearing the end of their useful life. Investment requirements are also growing due to the increasingly complex external environment. Over the last five years, GGT has seen significant cost increases and supply shortages (particularly in remote areas), a greater focus on emissions reductions and heightened focus on cyber and physical security.²⁹

The ERA will review GGT's proposed (AA5) expenditures in accordance with the provisions of the NGR for inclusion in the capital base.³⁰

Operating expenditure (opex)

To ensure the ongoing provision of secure and dependable services to its customers, GGP proposes opex of \$130.8 million for the 2025 to 2029 period. While GGT's proposed opex is \$21.0 million (19.1 per cent) higher than actual and estimated opex for the current AA4 period, it is \$30.6 million higher than ERA's AA4 final decision.

GGT's opex for AA5 is distributed across five categories: pipeline operations; corporate costs; regulatory costs; commercial operations; and major expenditure jobs. The largest portion, 57 per cent, is allocated to pipeline operations, encompassing essential daily activities like engineering, field services, administration, and management.

The second largest portion of opex is corporate costs at 32 per cent, which encompass various functions and services provided by APA, including IT, Security of Critical Infrastructure compliance, and legal, finance and other corporate activities. The remaining

²⁷ NGR, rule 79.

²⁸ GGT, *Goldfields Gas Pipeline AA5 – Attachment 10.1: Capital Expenditure Overview*, 1 January 2024, pp. 5 and 11.

²⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 63.

³⁰ NGR, rule 79.

opex is split between commercial operations (6 per cent), regulatory costs (3 per cent) and major expenditure jobs (2 per cent).

GGT notes that the increase in AA5 opex from AA4 can be attributed to rising labour costs for the maintenance of ageing assets, increased corporate expenses primarily driven by IT, and the necessary expenditure to meet new legislative requirements, such as Security of Critical Infrastructure.

GGT has forecast opex for the AA5 period using the base-step-trend method. GGT has used the 2022 year operating costs as its base year and has proposed three step changes to cover safeguard mechanism initiatives, costs for the AA6 regulatory proposal and an enterprise resource planning system.

The ERA will review GGT's proposed opex for AA5 in accordance with the provisions of the NGR.³¹

2.5 Depreciation

For AA5, GGT has proposed the recovery of \$51 million (nominal) in regulatory depreciation, which includes a proposal for capping asset lives. This depreciation amount is equivalent to 11 per cent of the regulatory asset base (RAB) and amounts to 13 per cent of total proposed revenue.

Depreciation allocates the cost of an asset over its useful life. The ERA includes an amount for depreciation of the RAB in GGT's total revenue, which allows for the recovery of past approved efficient investments in the network. In past access arrangements, regulatory depreciation was calculated through the straight-line depreciation of the real RAB (asset values do not include the effect of inflation) and separately adjusted for indexation of the RAB for inflation. This method allows consumers to pay the same real dollar amount of depreciation each year over the life of the asset.

GGT submits that since its last access arrangement, technology and policy developments have created increasing levels of uncertainty around the future of natural gas. These developments include:

- The introduction of federal, state and corporate targets and policies to drive emissions reduction targets.³²
- Improvements in technologies that can be used as substitutes for natural gas usage.

For AA5, GGT has proposed to change its approach to calculating the asset lives by capping asset lives to the weighted average remaining life (WARL) of the pipeline and laterals asset class. While asset lives are capped, the straight-line approach of depreciation is maintained.

GGT considered that this was a modest change in recognition of the energy transition and the gradual shift away from fossil fuels to more renewable sources among its customers.

³¹ NGR, rule 91.

³² For example, GGT's customers are large gas users and some of which now fall under the Federal Government's Safeguard Mechanism. The Safeguard Mechanism sets a schedule of emissions targets to 2050.

GGT noted that this change was proposed in response to its customers detailing their plans to decarbonise their operations.³³

GGT's proposal for depreciation

GGT's proposed regulatory depreciation amounts as calculated by GGT's tariff model is presented in Table 2.

Table 2: GGT proposed regulatory depreciation for AA5

Nominal \$m	2025	2026	2027	2028	2029	Total
Straight-line depreciation	22.29	22.86	23.07	22.48	21.70	112.40
Add: Changes due to capping asset life	0.04	0.05	0.06	0.08	0.09	0.32*
Less: Inflationary gain	(11.76)	(12.34)	(12.45)	(12.44)	(12.46)	(61.46)
Regulatory depreciation	10.56	10.57	10.68	10.11	9.33	51.26

Source: ERA analysis from GGT Tariff Model.

* 0.34 including the effect of smoothing.

GGT's proposal to cap asset lives to the WARL of the pipeline and laterals asset class has the effect of increasing total revenue by \$340,000.³⁴

For AA5, GGT proposed that the AA4 straight-line method be adopted but with a change to the way that asset lives are calculated from 2025 onwards. The proposed method can be summarised as follows:³⁵

1. Create a distinction between all assets prior to AA5 and the forecast capital expenditure for AA5 (regulatory depreciation) onwards.
2. Calculate the WARL of the pipelines and laterals asset class.
3. Cap the lives of all assets prior to AA5 to the WARL.
4. Cap the asset lives for new capital expenditure to the WARL.

GGT considered that capping asset lives at the WARL was justified as the pipelines and lateral classes represents the core assets of the GGP as the physical pipeline, where if this ceased to operate then the remaining assets would also cease to have value.³⁶

GGT stated that the cap on asset lives can be reassessed at each access arrangement determination to consider market changes such as renewable gases.³⁷ For example, in subsequent access arrangements the asset life cap could be reconsidered in light of further detail on GGT's customers' future decarbonisation plans and with a better understanding on the commercial progress of renewable gases.

³³ GGT, *2025-29 Access arrangement revision proposal overview*, January 2024, p. 96.

³⁴ GGT has advised that the \$100,000 effect of depreciation referred to in its Proposal Overview (page 103) was an error. The amount should have been \$340,000.

³⁵ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 101.

³⁶ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 101.

³⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 101.

GGT has calculated the WARL, as shown in Table 3, according to the Australian Energy Regulator's (AER) WARL formula.³⁸ Applying GGT's proposed method will result in new capital being capped at the WARL for the given year in the access arrangement, such that all assets will converge towards the pipelines and laterals class. As the pipelines and laterals asset class has the highest WARL, other asset lives may not be capped and will be calculated as per the previous method. This mostly affects investments in pipeline and laterals, main line valve and scraper stations, and maintenance bases and depots asset classes.

Table 3: Capital expenditure affected by GGT's depreciation proposal

	2024 RAB value (\$m, nominal)	Proposed capital investment for AA5 (\$m, nominal)	AA4 new economic life (years)	WARL (years)	Proposed AA5 new economic life (years)
Pipeline and laterals	355.94	0.11	70	41	41 (reduced)
Main line valve and scraper stations	5.59	6.59	50	21	41 (reduced)
Compressor stations	24.50	31.46	30	14	30 (unchanged)
Receipt and delivery point facilities	5.39	3.46	30	22	30 (unchanged)
SCADA and communications	2.53	0.12	10	7	10 (unchanged)
Cathodic protection	0.10	0.52	15	11	15 (unchanged)
Maintenance bases and depots	7.38	0.91	50	32	41 (reduced)
Other assets	0.01	15.04	10	5	10 (unchanged)
Equity raising cost	0.22	0.30	32	30	32 (unchanged)

Source: GGT Tariff Model

GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, Table 12-1, p. 102.

The net effect of GGT's proposal is to ensure that no asset class will have an asset life greater than the pipeline and laterals asset class WARL, but ones which have a life below the WARL are unaffected.

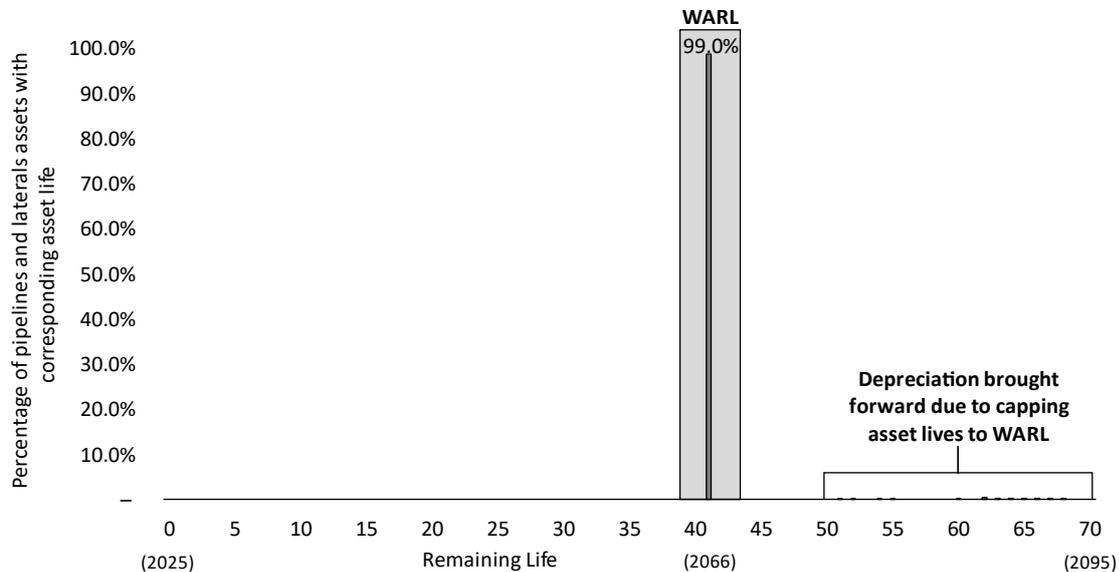
Approximately \$7.6 million (nominal) of capex would be affected by this proposed change, which amounts to 10 per cent of total AA5 capital investment.

Figure 2 shows the distribution of asset lives for the pipelines and laterals asset class. This indicates that the proposed cap only affects 1 per cent of all pipeline and lateral assets. It also demonstrates that, under existing arrangements, a small new pipeline investment in 2025, which may for example be needed for required maintenance, would use a 70-year

³⁸
$$\text{WARL} = \frac{(\text{Net Capex}_{ICB} \times \text{Remaining Life}_{ICB}) + \sum_{i=1}^N (\text{Net Capex}_i \times \text{Remaining Life}_i)}{\text{Net Capex}_{ICB} + \sum_{i=1}^N \text{Net Capex}_i}$$

economic life and only be fully recovered by 2095. This is in contrast to the majority of the pipeline having a remaining 41-year life and all the assets being recovered by 2066.

Figure 2: Asset life distribution for pipelines and laterals



Source: ERA analysis of GGT Tariff Model.

GGT's reasoning for capped asset lives

GGT's stated reason for capping asset lives was to "proactively prevent future price shocks as the energy sector reduces emissions which will help smooth out future prices."³⁹ GGT considered that the energy transition has resulted in increased uncertainty for the future of gas due to government policy, corporate decarbonisation, technological changes and increasing competitiveness of renewables.⁴⁰

GGT noted that it was facing these uncertainties at the present time, with a high number of GGP customers indicating their decarbonation plans.⁴¹ However, GGT also conceded that renewables penetration has not yet resulted in reductions in demand such as the maximum daily quantity throughput.⁴²

GGT stated that the NGR allows for a change in the economic life for a relevant asset.⁴³ Further, GGT has submitted that both the ERA and AER have accepted that there is a likelihood that both the role of gas and its transportation will decline in the future.⁴⁴

GGT referred to the Western Australian Government's policy commitment to achieving net zero emissions by 2050.⁴⁵ In particular, GGT pointed to net zero emissions mining and decarbonisation projects via the adoption of alternative energy sources and energy efficient

³⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 49.

⁴⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 98.

⁴¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 98.

⁴² GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 98.

⁴³ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, pp. 102-103.

⁴⁴ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 103.

⁴⁵ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 104.

processes. GGT also conducted a customer survey which indicated that at least 65 per cent of respondents were considering plans to decarbonise, where two customers currently have on-site renewable sources.⁴⁶

GGT considered that it is accepted that the future of gas is uncertain, and as a prudent operator GGT would take steps to mitigate the risk of stranded or under-used assets. GGT concluded that the proposed method would avoid situations where new conforming capex would have a greater asset life than the related pipeline to which it is attached. Additionally, GGT considered that its proposal would result in more stable prices going into the future.

GGT conceded that its proposal to cap asset lives will result in capital being returned to investors quicker than retaining the standard lives, but submitted that while their near-term future appears healthy, the medium to longer term outlook is uncertain.⁴⁷ GGT further submitted that its proposed depreciation method is a precautionary approach to manage the risk of under-use or asset stranding which would have financial consequences for gas pipeline investors.⁴⁸

GGT also considered that under rule 89(1)(a) of the NGR, the provision of accelerated depreciation will promote economic growth in the market for reference services as it would allow for gas pipelines to compete with alternative sources of energy. GGT stated that the “economic efficient outcome is to maximise the use of GGP relative to other fossil-based fuels.”⁴⁹

GGT stated that it is prudent to cap asset lives now rather than do nothing as GGT considers that it is a modest change in response to an uncertain future role of gas.⁵⁰ Further, GGT submitted that as a prudent operator it should take measures to reduce uncertainty, where its proposal is a “pragmatic and least regrets approach to managing that potential risk.”⁵¹

GGT’s proposal to cap the asset life at 2066 was influenced by the ERA’s final decision for the Dampier to Bunbury Natural Gas Pipeline (DBNGP) access arrangement, where the ERA capped the life of the pipeline to 2063. GGT considered that while GGP and the DBNGP serve different types of customers, their futures are aligned and share the same fate of uncertainty about their future roles.⁵²

In 2021, the ERA considered the increased gas network uncertainty in its decision for the DBNGP access arrangement. At that time, the ERA considered that there was a likelihood that the usage of the DBNGP would decline over time due to technological and policy changes, and accepted DBP’s proposed reduction in the economic life of the pipeline. In its proposal, DBP did not seek a change to the depreciation profile.⁵³

Other economic regulators, such as the AER, have explored the regulation of gas networks under uncertainty.⁵⁴ In its review, the AER expressed a preference for using accelerated

⁴⁶ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 105.

⁴⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 105.

⁴⁸ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 105.

⁴⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 104.

⁵⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 105.

⁵¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 105.

⁵² GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 104.

⁵³ ERA, *Final decision on proposed revisions to the Dampier to Bunbury Natural Gas Pipeline access arrangement 2021 to 2025*, April 2021, pp. 313-357.

⁵⁴ AER, *Information Paper: Regulating gas pipelines under uncertainty*, November 2021.

depreciation to manage depreciation and has recently allowed it for the Victorian gas transmission network service provider.⁵⁵

Questions

3. What are the decarbonisation objectives and plans of GGT's customers that may affect future gas demand?
4. Is the proposed depreciation approach to cap asset lives to 2066 appropriate when recognising the potential gradual shift away from fossil fuels?

2.6 Rate of return and inflation

Changing economic and financial conditions are outside the control of both GGT and the ERA yet are important factors in determining GGT's cost of capital and inflation of the capital base and drive a large change in the proposed revenue.

Higher levels of inflation have increased the value of the AA4 asset base, which has led to a total revenue requirement that is 20 per cent above the approved AA4 requirement. Updated rates of return account for 40 per cent of the change of AA5 revenue.

The rate of return provides service providers with the funding to pay interest on loans and give a return on equity to investors. The rate of return is expressed as a weighted average cost of capital (WACC).

A gas rate of return instrument is required under the NGL.⁵⁶ The gas instrument sets out the methods the ERA and service providers will use to estimate the allowed rate of return and value of imputation credits for gas transmission and distribution service providers.

The ERA published the current gas instrument on 16 December 2022.⁵⁷ On 12 September 2023, the rate of return instrument was amended due to the cessation of the Reserve Bank of Australia's (RBA) F16 statistical table.⁵⁸ The amended instrument applies to this current review of GGT's access arrangement.

GGT's proposed rate of return and inflation

GGT's rate of return and inflation estimates are consistent with the methods detailed in the gas rate of return instrument.⁵⁹

GGT's proposed WACC and inflation are materially higher than those in AA4 due to changes in market conditions that have increased the cost of finance over the past few years.

GGT has proposed an average nominal post-tax WACC of 7.41 per cent for the AA5 period, compared with 4.09 per cent approved in AA4.⁶⁰ GGT has estimated inflation of 2.58 per cent for the AA5 period, compared with 1.14 per cent that was approved in AA4.⁶¹

⁵⁵ AER, *Final decision: APA VTS access arrangement 2023-2027 Overview*, December 2022, pp. 17-19.

⁵⁶ NGL, section 30D, 30E.

⁵⁷ ERA, *Notice – 2022 gas rate of return instrument review: Publication of final gas instrument and explanatory statement*, 16 December 2022 ([online](#)) (accessed February 2024).

⁵⁸ ERA, *2022 final gas rate of return instrument*, 16 December 2022 (Amended 12 September 2023), p. 16 and p. 22.

⁵⁹ GGT, *Proposed Revised Access Arrangement Information*, January 2024, p. 22.

GGT has used placeholder values for the average of the 20 trading days to 31 August 2023 for its proposed WACC calculation. These placeholders will be replaced with the most current values closer to the time of the ERA's final decision.⁶² GGT must nominate an averaging period in advance, which must be close and prior to the access arrangement final decision.

The nominated averaging period will affect various rate of return parameters that are calculated using market data.

GGT's proposed change to the WACC, consistent with the gas rate of return instrument, is set out in Table 4, which compares GGT's AA5 proposal with the ERA's AA4 final decision. GGT's proposal increases revenue from return on assets by approximately \$42 million compared to the AA4 final decision.

Table 4: GGT rate of return estimate for AA5 and approved AA4 values

Component	GGP's AA5 proposal	ERA approved AA4
Forecast inflation (%)	2.58	1.14
Cost of equity (%)	8.46	4.92
Cost of debt (%)	6.56	3.41
Nominal after-tax WACC (%)	7.41	4.09
Average regulated asset base over regulatory period (\$m)	438.5	422.9
Total WACC revenue (\$m)	103.3	61.7

Source: ERA analysis; GGP proposed revised Access Arrangement Information, p. 33.

Economic and financial conditions have changed significantly since the ERA's AA4 final decision in December 2019:

- The risk free rate has been volatile and uncertain as the economy recovers from the COVID-19 pandemic, and there is uncertainty around central bank monetary policy given the emergence of inflation.
- Inflation has increased, with central banks tightening monetary policy conditions to meet inflation targets. Other shocks (such as geopolitical conflicts) have added to uncertainty of the inflationary environment, along with contributing to global supply shortages that affect prices.
- The RBA has been progressively increasing the cash rate since May 2022. These monetary policy changes are illustrated in Figure 3.

Increases in inflation and interest rates have led to a large increase in target revenue from GGT's last access arrangement and are responsible for the largest increase in proposed revenue.

⁶⁰ GGT, *AA5 Tariff Model (Public)*, January 2024.

⁶¹ GGT, *AA5 Tariff Model (Public)*, January 2024.

⁶² GGT, *2025-29 Access arrangement revision proposal overview*, January 2024, p. 52.

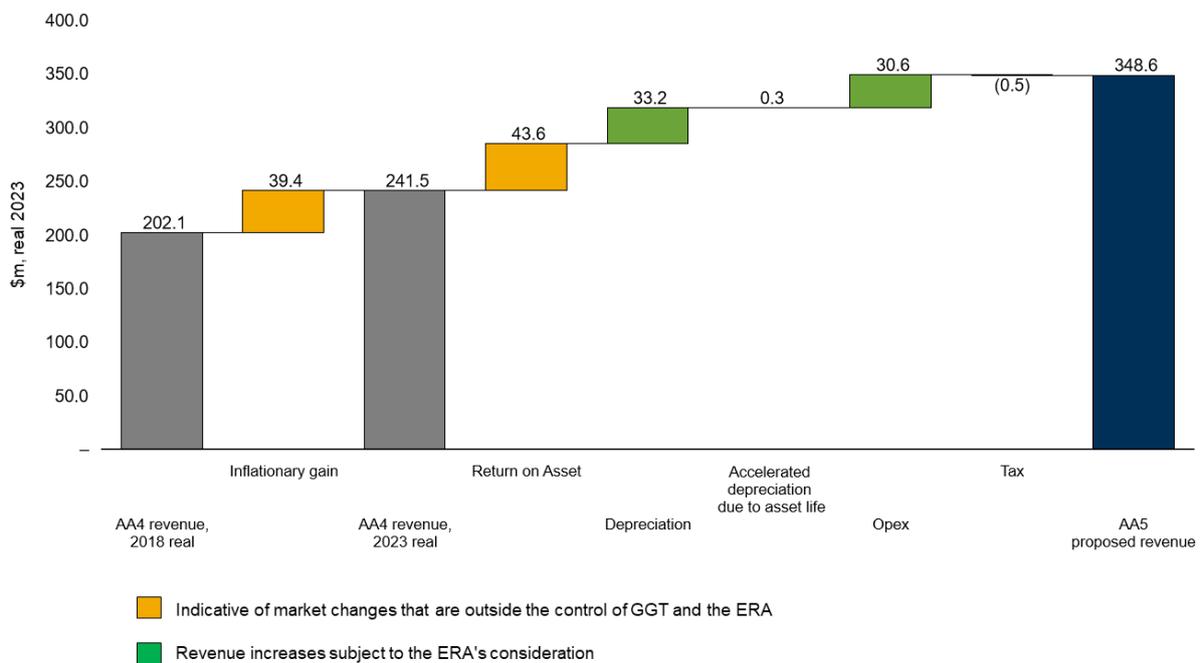
Figure 3: Reserve Bank of Australia cash rate target



Source: ERA analysis based on Reserve Bank of Australia F1 statistical tables.

The ERA estimates that the impact of the WACC and expected inflation on the change in AA5 proposed revenue is approximately 27 per cent and 30 per cent respectively, shown in Figure 4.

Figure 4: Change in revenue (unsmoothed) from AA4 to AA5, by building block (\$million real as at December 2023)



Source: GGT Tariff Model.

2.7 Revenue and cost allocation

The gas regulatory framework contains revenue and pricing principles, which establish a framework for the construction of reference tariffs.⁶³ Fundamental to this framework is the requirement for the price control in an access arrangement to enable the service provider to earn sufficient revenue to cover its efficient costs of providing reference services, including a return on investment commensurate with the commercial risks involved.

The service provider must allocate its total revenue and costs in accordance with the provisions set out in the NGR.⁶⁴ These provisions require that total revenue is allocated between reference and other services so that:

- Costs directly attributable to reference services are allocated to those services.
- Costs directly attributable to pipeline services that are not reference services are allocated to those services.
- Other costs are allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the regulator.

Further to these provisions, rule 95 of the NGR sets out allocation provisions specific to transmission pipeline tariffs. The tariff for a reference service provided by means of a transmission pipeline must be designed to generate the portion of total revenue related to that reference service; and as far as practicable, generate this revenue from the user (or class of user) to which the reference service is provided.

GGT's proposed revenue

GGT has calculated its total revenue requirement for AA5 using the building block approach in accordance with rule 76 of the NGR.⁶⁵

GGT's forecast total revenue for AA5 is \$348.6 million (real \$2023) (Table 5). This is an increase of \$123 million (54 per cent) in real terms compared to the approved total revenue for AA4.

⁶³ The revenue and pricing principles are set out in section 24 of the NGL.

⁶⁴ NGR, rule 93.

⁶⁵ The building block of 'increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency' is not applicable to the GGP access arrangement as there is no incentive mechanism.

Table 5: GGT AA5 forecast total revenue (\$ million, real \$2023)

Building block	2025	2026	2027	2028	2029	Total
Return on asset	31.92	32.64	32.11	31.28	30.53	158.48
Depreciation	21.08	21.09	20.76	19.73	18.58	101.24
Inflationary gain	-11.11	-11.36	-11.17	-10.88	-10.62	-55.15
Opex	25.52	25.98	26.16	26.79	26.35	130.8
Tax (net)	2.82	2.46	2.58	2.69	2.70	13.24
Total revenue	70.24	70.80	70.44	69.60	67.53	348.61

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 47, Table 7-1.

GGT's cost allocation

GGT has submitted that its approach to cost allocation for AA5 is consistent with the approach that was used (and approved by the ERA) for AA4. The approach takes into account the nature of the pipeline in terms of its regulatory status. GGT submitted:

Currently, about half of GGP is subject to full regulation (covered), the other half to light regulation. As such, for regulatory purposes the GGP is two notional pipelines - the covered pipeline and the uncovered pipeline. The cost allocation approach for GGP requires several steps including the allocation of costs between the covered and uncovered portions of the GGP, and an allocation of shared corporate costs from the APA Group (APA).⁶⁶

...

The GGT Cost Allocation Method (CAM) is used to allocate GGT costs between covered and uncovered GGP, and to allocate shared corporate costs from the APA Group (APA) to covered GGP. The allocation of costs between covered and uncovered GGP is used for:

- Allocation of actual costs for reporting information to the regulator and other internal reporting, and preparation of access arrangement revisions
- Allocation of forecast costs for access arrangement revisions.

The forecast costs are used for the determination of regulated tariffs for reference services. In the case of GGP, all costs allocated to covered GGP are used to determine the regulated tariff for the reference service – the firm transportation service. There are no other reference services provided by covered GGP.⁶⁷

GGT's allocation of operating expenditure, capital expenditure and shared corporate expenditure between covered and uncovered portions of the GGP is summarised in Table 6.

⁶⁶ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 38.

⁶⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 39.

Table 6: GGT allocation of operating, capital and shared corporate expenditures between covered and uncovered portions of the Goldfields Gas Pipeline

Allocation	Summary of allocation approach (method)
Allocation of operating expenditure (opex)	<p>Opex is classified as either:</p> <ul style="list-style-type: none"> • APA operations costs – expenditures that GGT incurs through its sourcing of engineering and field services for the GGP under an Operating Agreement with APT Pipelines (WA) Pty Ltd. • GGT operations costs – expenditures that GGT incurs through its direct sourcing of services to support the provision of pipeline services using the GGP. • APA commercial operations – expenditures that GGT incurs through its sourcing of commercial and related services for the GGP through a Commercial Services Agreement with APT Goldfields Pty Ltd. • Shared corporate expenditure – corporate expenditures for head office and national services. <p>The allocation method for opex is as follows:</p> <ul style="list-style-type: none"> • APA operations costs (except for engineering and field services) and commercial and GGT operations costs (except for regulatory expenditure) allocated to the covered pipeline according to the ratio of the number of terajoules per day (TJ/d) of contracted capacity provided using the covered pipeline to the number of TJ/d of contracted capacity provided using the whole GGP (covered and uncovered pipelines) in the year in which the expenditure was incurred. • Regulatory costs are allocated 75% to the covered pipeline. • APA operations expenditures within the engineering and field services categories allocated to the covered pipeline based on the expected relative direct costs of those services.
Allocation of capital expenditure (capex)	<p>Where it is possible to assign GGP capital expenditure to the covered or uncovered portion of the pipeline, such expenditures allocated to the covered and uncovered portion accordingly.</p> <p>Where it is not possible to assign GGP capital expenditure to the covered or uncovered portion of the pipeline, allocation of the expenditure to each portion to be carried out as follows:</p> <ul style="list-style-type: none"> • Compressor related capital expenditure: Where there are both covered and uncovered compressor units installed at a compressor station, the allocation of capital expenditure between services provided using the covered pipeline and services provided using the uncovered GGP assets is the ratio of (a) the number of covered pipeline compressor units at that compressor station to (b) the total number of compressor units at the station. • Non-compressor related capital expenditure: Capital expenditures are allocated to the covered pipeline in the following ratios: <ul style="list-style-type: none"> – For distance related assets, the ratio between the number of TJ/km/day of contracted capacity provided using the covered pipeline to (b) the number of TJ/km/day of contracted capacity provided using the GGP (the covered pipeline plus the uncovered GGP assets) during the year. – For all other assets, the ratio between the number of TJ/day of contracted capacity provided using the covered pipeline to (b) the number of TJ/day of contracted capacity provided using the GGP (the covered pipeline plus the uncovered GGP assets) during the year.

Allocation	Summary of allocation approach (method)
Allocation of shared corporate expenditure [includes both opex and capex]	<p>A share of corporate operating expenditure has historically been allocated to the covered pipeline under the 'corporate costs' opex category. However, the covered portion of the GGP has never been allocated a share of APA's corporate capital expenditures for regulatory purposes. ... APA has begun apportioning these costs in the current access arrangement (2020 to 2024) and will continue to in the future.</p> <p>APA shared corporate expenses are allocated to each asset on a revenue basis. That is, the revenue earned by GGP relative to the total revenue of all of APA's assets. APA applies this approach consistently for all assets, including other regulated assets.</p>

Source: Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, pp. 40-44.

Impact of the NGI

The NGI has increased demand forecasts (contracted capacity and throughput) for AA5. The additional capacity provided by the NGI is treated as covered capacity under the GGP access arrangement. GGT has amended the proportion of GGT costs allocated to the covered GGP to reflect this increase in capacity and throughput (Table 7).

Table 7: GGT cost allocation percentages between covered and uncovered GGP

Ratio of contracted covered capacity to total capacity		TJ/day	%
Yarraloola Receipt Point and Northern Goldfields Interconnect	Covered capacity	141.5	61
	Uncovered capacity	90.7	39
	Total capacity	232.2	100
Ratio of terajoules kilometres of contracted covered capacity to terajoules kilometres total contracted capacity)		TJ*Km	%
Yarraloola Receipt Point and Northern Goldfields Interconnect	Covered capacity	117,607.3	70
	Uncovered capacity	49,622.3	30
	Total capacity	167,229.7	100

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 44, Table 6-1.

Questions

- Is GGT's cost allocation method reasonable in that it accurately allocates revenue and costs between the covered and uncovered portions of the GGP?

2.8 Tariffs and tariff variations (cost pass throughs)

For AA5, GGT will provide the firm transportation service as the only reference service. The reference tariff for this service is calculated from GGT's forecast total revenue requirement and demand for AA5.

GGT's proposed tariffs

GGT's forecast tariff for the firm transportation service is set out in Table 8 (real dollars) and Table 9 (nominal dollars). GGT submitted that the tariff structure remains the same as the tariff structure used in the current (AA4) access arrangement. The forecast tariff increase in 2025 (from the 2024 approved tariff) is directly related to the increase in GGT's total revenue requirement for AA5.

Table 8: 2024 ERA approved and 2025 GGT proposed reference tariff (real \$2023)

Tariff component	Unit	2024 (ERA approved)	2025 (GGT proposed)	Variance
Toll	\$/GJ MDQ	0.127527	0.162241	27%
Capacity reservation	\$/GJ MDQ km	0.000773	0.001249	62%
Throughput	\$/GJ km	0.000208	0.000332	59%

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, Table 9-1, p. 61.

Table 9: 2024 ERA approved and 2025 GGT proposed reference tariff (nominal)

Tariff component	Unit	2024 (ERA approved)	2025 (GGT proposed)	Variance
Toll	\$/GJ MDQ	0.131672	0.171836	31%
Capacity reservation	\$/GJ MDQ km	0.000798	0.001323	66%
Throughput	\$/GJ km	0.000215	0.000351	63%

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, Table 9-2, p. 62.

GGT submitted that its three-part tariff structure reflected “the underlying capital and operating cost structures used to provide pipeline services to individual customers at different locations along the GGP.”⁶⁸ GGT further submitted:

The three-part tariff structure is applied to signal the amount of the pipeline capacity, distance, and volume of the pipeline used by each customer. The tariffs recover costs from customers based on how much capacity (Maximum Daily Quantity) is contracted for, the distance from the contracted receipt and deliver point, and the volume of gas transported on the pipeline. The current structure allocates cost in a way that reflects use of the pipeline.⁶⁹

⁶⁸ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 58.

⁶⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 61.

To calculate the tariff components, GGT allocates a percentage of its total revenue requirement (in present value terms) to each tariff component, as set out in the following explanation:

To calculate each component of the reference tariff, the present value* of the building block revenue is allocated to each tariff component in a way that reflects the underlying costs.

The present value building block revenue is allocated in the following way:

- 11.3 per cent is allocated to the toll component.
- 72.2 per cent is allocated to the capacity reservation component.
- 16.5 per cent is allocated to the throughput component.

**The present value is lower than future value to account for the time value of money.⁷⁰*

This percentage allocation to each tariff component has remained the same since the first access arrangement period.

While GGT has retained the three-part tariff structure for AA5, GGT has acknowledged that there may be a need to reconsider the tariff structure in the future to address the effects of decarbonisation measures. GGT submitted:

Based on the insights gathered from our customers, we anticipate that capacity demanded will remain consistent in the short term.

If volumes of throughput do start to fall because of customers shifting to renewables, then GGT may consider changing the tariff structure to more to capacity based charging relative to throughput.

...

We intend to engage with customers about any intentions to redesign the tariff structures in advance of the next access arrangement revision.⁷¹

Questions

6. Is GGT's proposed tariff structure reasonable in sending efficient price signals to customers on the use of the pipeline?

GGT's proposed tariff variations (cost pass throughs)

The NGR requires the access arrangement to include a mechanism (the reference tariff variation mechanism) to vary the reference tariff over the course of the access arrangement. Such a mechanism may, among other things, provide for variation of the reference tariff because of a cost pass through for a defined event (such as, for example, a cost pass through for a particular tax).⁷²

For AA5, GGT has proposed a wider range of cost pass through events to mitigate risks. GGT submitted:

⁷⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 58.

⁷¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 62.

⁷² NGR, rule 97.

Our operating environment can be unpredictable and events beyond our control can materially change our expenditure within a regulatory period. In recent years, we have observed unexpected events more frequently including natural disaster events, cyber security events, and volatility due to global events.

As a result, the insurance market is also becoming more volatile and unpredictable for assets like the GGP and other infrastructure assets in APA's portfolio.

To mitigate these risks, we propose a wider range of cost pass through events for high cost events that could not have reasonably been forecast ahead of time.⁷³

GGT's proposed cost pass through events for AA5 are set out in section 4.5.2 of the access arrangement.⁷⁴ The proposed events include the two existing cost pass through events from AA4 (that is, change in law event and tax change event) and six new cost pass through events (Table 10).

Table 10: GGT proposed new cost pass through events for the reference tariff variation mechanism for AA5

Proposed new cost pass through event	Purpose of / reason for the proposed event
Insurance cap (coverage) event	An insurance coverage event mitigates the risk of liability losses that exceed our insurance coverage. This event protects GGP in the event an insurer is not liable to pay all, or part, of a large or catastrophic event that could have a financially significant impact.
Insurer credit risk event	An insurance credit risk event mitigates the risk of an insurer becoming insolvent, and as a result forcing APA/GGT to insure with another provider and incurring substantial additional costs beyond our control. Additional costs may include higher premiums, a lower claim payment or higher deductible.
Natural disaster event	A natural disaster event mitigates the risk of not being able to obtain insurance coverage for natural disaster events and materially increasing [GGT's] efficient costs that are unable to be recovered by GGT. GGT cannot prevent this type of event from occurring and cannot substantially mitigate the cost impacts of this type of event (both prior to and after the occurrence of the event).
Terrorism event	A terrorism event mitigates the risk of liability arising from devastating and deliberate damage caused to our network which risks our ability to deliver prescribed transmission services to customers.
Carbon cost event	In Western Australia, two businesses have been approved to pass through costs incurred as a result of actions taken to comply with obligations to reduce greenhouse gas emissions. We are proposing similar provisions for the GGP access arrangement. We consider that a carbon cost mechanism offers flexibility in the dynamic and complex energy sector.

⁷³ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 114.

⁷⁴ GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement*, 1 January 2024, section 4.5.2, pp. 24-29.

Proposed new cost pass through event	Purpose of / reason for the proposed event
Regulatory change event	In recognition of the changing regulatory and policy we are proposing a regulatory event as a catch all for changes that do not fall within any of the other categories. This proposal will enable GGT to recover the efficient costs of providing service for unforeseen and unanticipated events.

Source: *Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, pp. 121-124.*

Questions

7. The effect of a cost pass through event is to pass on costs for a defined event by increasing the reference tariff during the access arrangement period.
 - a. Has GGT adequately justified why the costs associated with the respective cost pass through events should be allowed to be passed through to its customers via changes to the reference tariff?
 - b. Should there be a materiality threshold for each proposed cost pass through event?
8. Are GGT's proposed cost pass through events reasonable and/or necessary to ensure the tariffs paid by current and prospective users remain cost reflective during the access arrangement period?

2.9 Access and queuing

As a transmission pipeline, the GGP access arrangement must contain queuing requirements that:

- 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 are treated on a fair and equal basis; and
- Are sufficiently detailed to enable prospective users to understand the basis on which an order of priority has been or will be determined; and where an order of priority has been determined, to determine their position in the queue.⁷⁵

GGT's proposal

GGT has proposed to amend the queuing requirements in the access arrangement "to simplify the provisions and ensure that they are commercially fit for purpose."⁷⁶ As part of the proposed amendments, GGT will introduce new prudential requirements during the offer and acceptance stages of the queuing process. The following principles have guided the proposed amendments:

- alignment with the requirements of the NGR
- better alignment with commercial practice
- fair and equal opportunity to access services

⁷⁵ NGR, rules 48(1)(e) and 103.

⁷⁶ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 125.*

- tightening of prudential requirements
- administrative simplicity.⁷⁷

GGT's proposed amendments are summarised in Table 11. The specific drafting amendments can be viewed in a marked-up version of the access arrangement.⁷⁸

Table 11: GGT proposed amendments to access and queuing requirements (section 5 of the access arrangement)

Amendment	Summary / Description
Overarching statement and information from existing users	<p>New overarching statement to the access and queuing provisions (section 5 of the access arrangement) to encourage prospective users to discuss their service requirements with GGT prior to lodging a formal access request.</p> <p>New provision to allow GGT to seek information ('continuation of service information request') from an existing user within 24 months of the expiry date of an existing Transport Service Agreement.</p>
Registration of interest	<p>Amendments to clarify the circumstances where a registration of interest may be used and the required form for a registration of interest:</p> <ul style="list-style-type: none"> • GGT may invite a prospective user to lodge a registration of interest for services where GGT is unable to provide access to an initial request for service. • A registration of interest: <ul style="list-style-type: none"> – Must be made in the form set out in Schedule B of the access arrangement. – Will no longer require distinction between a service to be provided by spare capacity or developable capacity. – Will remain valid for 12 months from receipt by GGT.
Procedure when spare capacity becomes available	<p>Amendments to simplify the process when spare capacity becomes available. In summary, the amended process will consist of a 'Spare Capacity Notice' to notify all prospective users in the queue and invite expressions of interest for the spare capacity. The responses to the expression of interest will largely determine what subsequent process is taken by GGT.</p> <p>The amended provisions will provide for the following:</p> <ul style="list-style-type: none"> • GGT considering various platforms to publish the Spare Capacity Notice (such as GGT's website, newspapers and social media platforms) to enhance information sharing. • Where the available spare capacity <i>can</i> meet all expressions of interest, GGT making reasonable access offers. • Where the available spare capacity <i>cannot</i> meet all expressions of interest, GGT notifying all prospective users that lodged an expression of interest that it is accepting bids for the spare capacity via a 'Notice of Auction for Spare Capacity'. <ul style="list-style-type: none"> – Prior to lodging a bid in the auction for spare capacity, GGT providing the prospective user an opportunity to engage with GGT to discuss possible terms and conditions. – GGT being able to reject a bid in the auction for spare capacity for

⁷⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 128.

⁷⁸ GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement (marked-up version)*, 1 January 2024, section 5, pp. 31-45 ([online](#)) (accessed February 2024).

Amendment	Summary / Description
	terms that are not acceptable to it (for example, terms that will limit the ability of GGT to satisfy service obligations to other shippers; or do not reflect the actual capacity usage profile expected to be used by the customer; or that would change the allocation of risk compared to standard terms and conditions). ⁷⁹
Service provider reporting to regulator	New requirement for GGT to inform the regulator (ERA), in writing, about the outcomes of a Notice of Spare Capacity and, if relevant, a Notice of Auction for Spare Capacity.
Prudential requirements	<p>New provisions to tighten prudential requirements for prospective users who accept an access offer from GGT; and reduce potential gaming and nuisance requests that are intended to block other prospective users from gaining access to services or to create uncertainty about timing for access to services.</p> <p>The proposed provisions provide for:</p> <ul style="list-style-type: none"> • The payment of a 'Capacity Deposit' when the prospective user accepts an access offer from GGT, and the subsequent refund of this deposit when the prospective user enters into a transportation agreement with GGT. • The ability for GGT to withdraw an access offer in circumstances where the Capacity Deposit is not paid within the required timeframe.
Prospective user acceptance of access proposal	New provision to require GGT and prospective user to negotiate in good faith to reach agreement on the terms and conditions of the transportation agreement once the prospective user accepts an access offer.
Developable capacity	Amendments to the developable capacity obligations to remove duplication in the access arrangement. The current provision setting out requirements to undertake expansions to be amended to refer to the provisions specified in Section 7 of the access arrangement, which specifically covers extensions and expansions.

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, pp. 129-132.

Questions

9. Do GGT's proposed amendments to the access and queuing requirements in section 5 of the access arrangement simplify the process for current and prospective users to obtain access to services?
10. Do GGT's proposed access and queuing processes work operationally?
11. Are there any further amendments that need to be made to the access and queuing requirements that will apply for AA5?

⁷⁹ The ERA has confirmed that GGT's proposed inclusion of the words "For example, terms that ... Terms & Conditions." in section 5.8.1(d)(iii) of the access arrangement is an error. These proposed words should form part of the words for section 5.8.1(e), which should read: "Service Provider may reject a bid request for service on terms that are not acceptable to the Service Provider. For example, terms that will limit the ability of Service Provider to satisfy service obligations to other shippers; or do not reflect the actual capacity usage profile expected to be used by the customer; or that would change the allocation of risk compared to standard Terms & Conditions."

ERA, *Query to GGT*, 6 February 2024.

Appendix 1 List of Tables

Table 1:	GGT demand forecasts for 2025-29.....	10
Table 2:	GGT proposed regulatory depreciation for AA5	14
Table 3:	Capital expenditure affected by GGT’s depreciation proposal	15
Table 4:	GGT rate of return estimate for AA5 and approved AA4 values	19
Table 5:	GGT AA5 forecast total revenue (\$ million, real \$2023).....	22
Table 6:	GGT allocation of operating, capital and shared corporate expenditures between covered and uncovered portions of the Goldfields Gas Pipeline	23
Table 7:	GGT cost allocation percentages between covered and uncovered GGP	24
Table 8:	2024 ERA approved and 2025 GGT proposed reference tariff (real \$2023)	25
Table 9:	2024 ERA approved and 2025 GGT proposed reference tariff (nominal).....	25
Table 10:	GGT proposed new cost pass through events for the reference tariff variation mechanism for AA5	27
Table 11:	GGT proposed amendments to access and queuing requirements (section 5 of the access arrangement)	29
Table 12:	Timeframes for the review of GGT’s access arrangement proposal	39
Table 13:	GGT customer engagement priorities (feedback and response)	43
Table 14:	GGT demand forecasts for 2025-29.....	46
Table 15:	GGT cost allocation percentages between covered and uncovered GGP	48
Table 16:	GGT forecast total revenue for AA5 (\$ million, real \$2023)	48
Table 17:	GGT rate of return estimate for AA5.....	49
Table 18:	GGT consumer price index and inflation values.....	49
Table 19:	GGT operating expenditure categories for AA5	51
Table 20:	2024 approved and 2025 proposed reference service tariff (nominal).....	53

Appendix 2 List of Figures

Figure 1:	Goldfields Gas Pipeline	2
Figure 2:	Asset life distribution for pipelines and laterals	16
Figure 3:	Reserve Bank of Australia cash rate target	20
Figure 4:	Change in revenue (unsmoothed) from AA4 to AA5, by building block (\$million real as at December 2023)	20
Figure 5:	Required content of an access arrangement proposal.....	36
Figure 6:	Requirements for access arrangement information relevant to price and revenue regulation	37

Appendix 3 Abbreviations

AA4	fourth access arrangement period
AA5	fifth access arrangement period
AAI	Access Arrangement Information
DBNGP	Dampier to Bunbury Natural Gas Pipeline
ECMC	Energy and Climate Change Ministerial Council
GGP	Goldfields Gas Pipeline
GGT	Gas Transmission Pty Ltd
ITOT	Information Technology & Operational Technology
NGI	Northern Goldfields Interconnect
NGL	National Gas Law
NGR	National Gas Rules
RAB	Regulatory Asset Base
RBA	Reserve Bank of Australia
WACC	Weighted Average Cost of Capital
WARL	weighted average remaining life

Appendix 4 Summary of questions for comment

Note: The questions listed below are asked throughout this paper as part of the ERA's consideration of key issues. Interested parties are encouraged to consider these questions when making their submissions, in addition to providing comments on any other matters related to GGT's access arrangement proposal.

1. Did GGT provide reasonable opportunities for stakeholders to provide input into the development of its access arrangement proposal? Where stakeholders provided comments/feedback to GGT, did GGT give due consideration to and adequately address the comments/feedback?
2. Considering the factors that affect demand, are GGT's demand forecasts for AA5 reasonable? The ERA is interested in receiving submissions that address the following questions:
 - a. Are there any existing volumes on the covered GGP that might be redirected via the Northern Goldfields Interconnect?
 - b. A commodity price shock could impact gas demand during AA5. How sensitive is your gas demand to a commodity price shock?
 - c. Given an increasing focus on decarbonisation strategies, what are the likely impacts of such strategies on throughput volumes for AA5?
 - d. Will there be any new projects starting within the GGP service area during AA5?
3. What are the decarbonisation objectives and plans of GGT's customers that may affect future gas demand?
4. Is the proposed depreciation approach to cap asset lives to 2066 appropriate when recognising the potential gradual shift away from fossil fuels?
5. Is GGT's cost allocation method reasonable in that it accurately allocates revenue and costs between the covered and uncovered portions of the GGP?
6. Is GGT's proposed tariff structure reasonable in sending efficient price signals to customers on the use of the pipeline?
7. The effect of a cost pass through event is to pass on costs for a defined event by increasing the reference tariff during the access arrangement period.
 - a. Has GGT adequately justified why the costs associated with the respective cost pass through events should be allowed to be passed through to its customers via changes to the reference tariff?
 - b. Should there be a materiality threshold for each proposed cost pass through event?
8. Are GGT's proposed cost pass through events reasonable and/or necessary to ensure the tariffs paid by current and prospective users remain cost reflective during the access arrangement period?
9. Do GGT's proposed amendments to the access and queuing requirements in section 5 of the access arrangement simplify the process for current and prospective users to obtain access to services?
10. Do GGT's proposed access and queuing processes work operationally?
11. Are there any further amendments that need to be made to the access and queuing requirements that will apply for AA5?

Appendix 5 Regulatory framework and timeframes

Regulatory framework

The National Gas Law (NGL) and National Gas Rules (NGR), as enacted by the *National Gas (South Australia) Act 2008*, establish the legislative framework for the independent regulation of certain gas pipelines in Australia.⁸⁰ The *National Gas Access (WA) Act 2009* implements the NGL and NGR in Western Australia.⁸¹

The legislative framework for the regulation of gas pipelines includes a central objective, being the national gas objective, which 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—

- (a) price, quality, safety, reliability and security of supply of natural gas; and
- (b) the achievement of targets set by a participating jurisdiction—
 - (i) for reducing Australia’s greenhouse gas emissions; or
 - (ii) that are likely to contribute to reducing Australia’s greenhouse gas emissions.

Note—

The AEMC must publish targets in a targets statement: see section 72A.⁸²

Under the legislative framework, the ERA is responsible for regulating third party access to gas pipelines in Western Australia. GGT’s gas transmission pipeline is one of three regulated pipelines that require an access arrangement to be approved by the ERA under the legislative framework.⁸³

An access arrangement provides details of the terms and conditions, including prices, for the provision of pipeline services to a third party to transport and/or receive gas. Once approved, the access arrangement may serve as a benchmark for negotiating access to pipeline services that are offered by means of the regulated pipeline.

As the service provider, GGT is responsible for developing and proposing a relevant access arrangement for its distribution pipeline. As the regulator, the ERA is responsible for assessing the proposed access arrangement against the legislative requirements set out in the NGL and NGR and approving a compliant access arrangement.

⁸⁰ Extracts of the NGR that are referenced in this document are provided in Appendix 5 for information.

⁸¹ The NGL as implemented in Western Australia is set out as a note in the *National Gas Access (WA) Act 2009*. This note does not form part of the Act but shows the text that applies as the *National Gas Access (Western Australia) Law*. In this paper, references to the “NGL” are references to the Western Australian National Gas Access Law text, unless otherwise specified.

⁸² NGL, section 23.

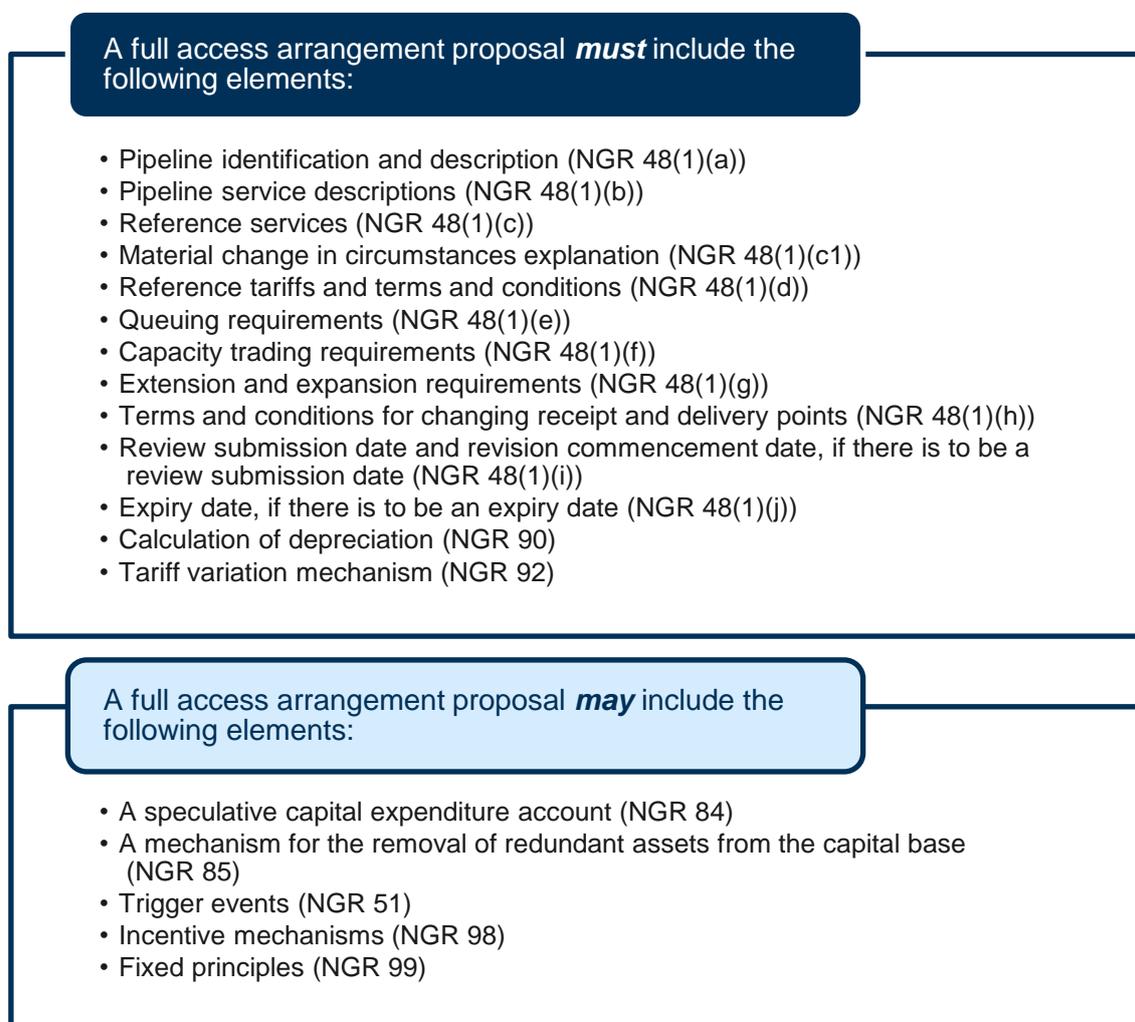
The national gas objective has changed since the last review of GGT’s access arrangement. The amended objective came into effect in Western Australia on 25 January 2024. See: *Western Australian Government Gazette 24 January 2024 No.8* ([online](#)) (accessed February 2024).

⁸³ The other pipelines which require an approved access arrangement in Western Australia are the Dampier to Bunbury Natural Gas Pipeline (a transmission pipeline) and the Mid-West and South-West Gas Distribution Systems (a distribution pipeline).

Access arrangement requirements

The NGR sets out the required content for an access arrangement proposal, including additional requirements relating to the calculation of depreciation and revenue equalisation.⁸⁴ These requirements are summarised in Figure 5.

Figure 5: Required content of an access arrangement proposal



Source: ERA, [Gas Access Arrangement Guideline](#), 25 July 2022, Figure 12.

Access arrangement information (AAI) must accompany the access arrangement proposal, along with any other documentation that the service provider chooses to submit to support its proposal. AAI is information that is reasonably necessary for users and prospective users to understand the background to the proposal and the basis and derivation of its various elements.⁸⁵ There are specific requirements for AAI relevant to price and revenue regulation,⁸⁶ which are summarised in Figure 6.

⁸⁴ NGR, rules 48, 90 and 92.

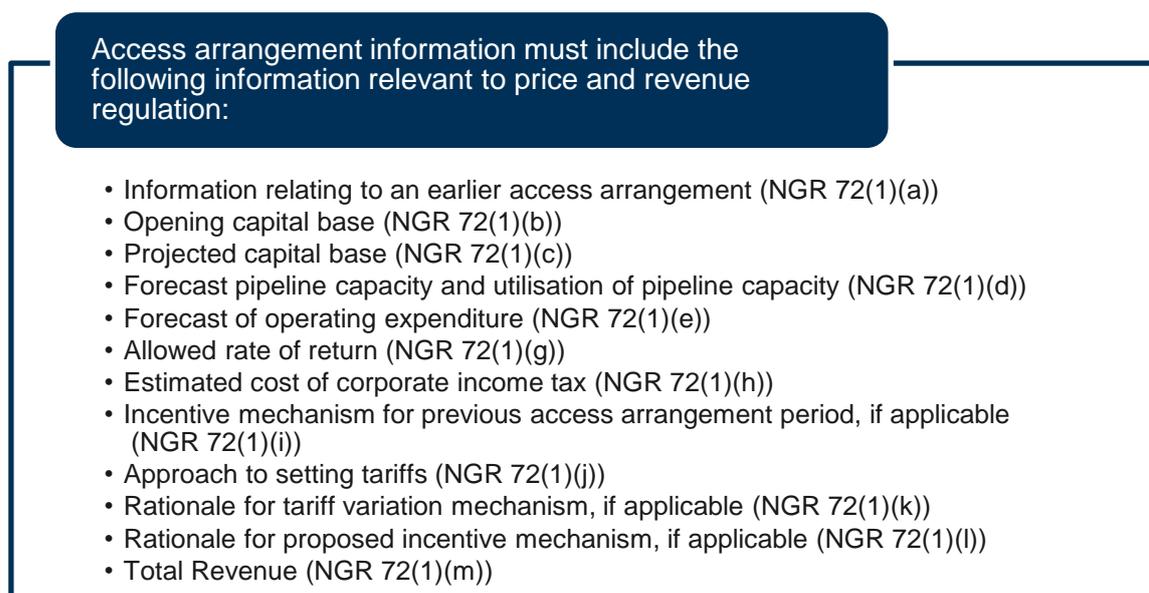
⁸⁵ NGR, rule 48.

⁸⁶ NGR, rule 72.

The NGR also provides for the following general requirements for all financial information:⁸⁷

- All financial information must be provided on a nominal or real basis, or some other recognised basis for dealing with the effects of inflation.
- All information in the nature of a forecast or estimate must be supported with a statement explaining it. A forecast or estimate must be arrived at on a reasonable basis and must represent the best forecast or estimate possible.
- Information that is of the nature of an extrapolation or inference must be supported by the primary information on which the extrapolation or inference is based.

Figure 6: Requirements for access arrangement information relevant to price and revenue regulation



Source: ERA, [Gas Access Arrangement Guideline](#), 25 July 2022, Figure 13.

Review process and timeframes

There are two key stages involved in the assessment process for an access arrangement:

- Stage A: Reference service proposal submission and assessment.
- Stage B: Access arrangement proposal submission and assessment.

Reference service proposal

The NGR requires the service provider to submit a reference service proposal to the ERA 12 months before submitting an access arrangement proposal.⁸⁸ The reference service proposal is focused on identifying the full range of pipeline services that can be offered by means of the pipeline and determining which of these services should be specified as a reference service under the access arrangement.

⁸⁷ NGR, rules 73, 74, 75, respectively.

⁸⁸ NGR, rule 47A(3).

A “reference service” is a pipeline service that has a reference tariff that is set (approved) by the regulator under the access arrangement framework, with the reference tariff being the price that a pipeline operator can charge its customers.

On 21 June 2023, the ERA approved the reference services set out in GGT’s reference service proposal.⁸⁹ The ERA’s decision and all related documents are published on the [ERA website](#).

In its access arrangement proposal, GGT has now set out its proposed terms, conditions and prices for the approved reference services, along with proposed revisions to other access arrangement provisions.⁹⁰

Access arrangement proposal and timeframes

On 21 December 2023, GGT submitted its access arrangement proposal for the next access arrangement period, 1 January 2025 to 31 December 2029 (AA5).⁹¹ The ERA will assess the proposal in accordance with the provisions of the gas regulatory framework.

In most cases, individual processes within the review are subject to legislated timeframes. These timeframes may change over the course of the review, to the extent the legislation allows, depending on the circumstances at the time.

The ERA undertakes public consultation as part of its decision-making process when assessing GGT’s access arrangement proposal. The ERA will conduct two rounds of consultation and invite written submissions from interested parties.⁹²

- First round consultation: after receipt and publication of GGT’s proposal, with the submission period being at least 20 business days.
- Second round consultation: after publication of the ERA’s draft decision, with the submission period comprising two separate sub-periods:
 - A period (the “revision period”) for GGT to submit a revised proposal in response to the draft decision, which must be at least 30 business days.
 - A period for interested parties to make submissions on the ERA’s draft decision and GGT’s revised access arrangement proposal, which must be at least 20 business days after the revision period.

Further to the specified consultation processes to facilitate written submissions, the NGR provides for a hearing (public forum) on the ERA’s draft decision to be held.⁹³ The ERA may choose to hold a hearing on its own initiative, or in response to an interested party making a

⁸⁹ ERA, *Reference service proposal decision – Proposed reference service for the Goldfields Gas Pipeline submitted by Goldfields Gas Transmission*, 21 June 2023 ([online](#)) (accessed February 2024).

⁹⁰ Rules 48(1)(c) and (c1) of the NGR allow GGT to specify different reference services in its access arrangement proposal if there has been a material change in circumstances since the ERA’s reference service proposal decision.

⁹¹ GGT submitted its proposal prior to the required review submission date of 1 January 2024 to take into account the Christmas and New Year period.

⁹² NGR, rules 58 and 59.

⁹³ NGR, rule 61.

request for one. Under the NGR's provisions, the ERA can decline a request for a hearing if it has reasons to do so.⁹⁴

While not required under the legislative framework, the ERA generally publishes an issues paper to facilitate stakeholder engagement during the early stages of an access arrangement review. An issues paper (such as this paper) aims to highlight the key areas of interest, with comments being sought on specific matters.

Table 12 sets out the timeframe for the review of GGT's access arrangement proposal, including indicative dates for future stages.

Table 12: Timeframes for the review of GGT's access arrangement proposal

Review process stage	Legislated timeframe ^{Note1}	Actual date (Indicative date)
Stage A: Reference service proposal (completed)		
GGT reference service proposal submitted to ERA	12 months prior to the review submission date for the access arrangement	21 December 2022
Public consultation on GGT's proposal	A period of at least 15 business days	10 February 2023 to 10 March 2023
ERA reference service proposal decision published	No later than 6 months prior to the review submission date for the access arrangement	21 June 2023
Stage B: Access arrangement proposal (in progress)		
GGT access arrangement proposal submitted to ERA	By the review submission date in the current access arrangement	21 December 2023
Initiating notice published by ERA to notify of GGT's proposal	As soon as practicable after receipt of proposal (a delay of up to 30 business days is allowed if the ERA finds the proposal to be deficient and requires GGT to correct the deficiency)	29 January 2024
Public consultation (1 st round) on GGT's proposal	A period of least 20 business days after publication of initiating notice	29 January 2024 to 8 April 2024
ERA issues paper published	Not applicable	12 March 2024
ERA draft decision published	No legislated timeframe	(August 2024)
Hearing about the ERA draft decision (if, requested by a person and/or provided by ERA)	If a hearing is to be requested by a person, the request must be made within 10 business days after the publication of the draft decision	To be advised if requested/provided
Revision period for GGT to submit a revised proposal in response to the ERA draft	A period of at least 30 business days after publication of the draft decision	(September 2024)

⁹⁴ A request for a hearing must be made in accordance with rule 61(2). The ERA may refuse the request for a hearing if it has reasons to do so and subject to it providing written reasons to the applicant in accordance with rule 61(3).

Review process stage	Legislated timeframe ^{Note1}	Actual date (Indicative date)
decision		
Public consultation (2 nd round) on ERA draft decision and GGT's revised proposal	A period of at least 20 business days from the end of GGT's revision period	(September/October 2024)
ERA final decision published	Within 8 months from the receipt of GGT's access arrangement proposal, with an extension of up to an additional 2 months (i.e. 10 months in total)	(December 2024)
Access arrangement start date	Date specified in the final decision (or otherwise 10 business days after the date of the final decision)	(1 January 2025)

Note 1: When calculating time elapsed the NGR provides that certain time periods ('stop-the-clock' periods) can be disregarded (see rule 11).

Appendix 6 Summary of GGT's proposal

GGT's proposed revisions to the access arrangement for the GGP are detailed in its Proposal Overview.⁹⁵ Subject to the ERA's approval, the proposed revisions will apply for the fifth access arrangement period: 1 January 2025 to 31 December 2029 (AA5).

GGT summarised the main highlights of its proposal as follows:

Revenue and reference service tariffs

Proposed total revenue for the 2025-29 period is forecast to be \$348.6 million (real \$2023). This is an increase of \$123 million (54 per cent) in real terms compared to the approved total revenue for 2020-24. The proposed increases are primarily driven by higher interest rates compared to the previous period.

The total revenue is used to calculate the reference service tariff. The reference service tariff is structured into three parts and the changes from the 2024 regulator approved tariff to the proposed 2025 tariff shows significant increases.⁹⁶

Reference service

Of the services identified in GGT's reference service proposal, in December 2022, we proposed to specify the firm transportation service as the single reference service on the GGP. The ERA accepted GGT's proposal.

Demand forecasts

The proposed demand forecasts ... include forecasts from the Yarraloola receipt points and the receipt point from the recently commissioned NGI [that connects into the GGP]. The forecast capacity flowing from NGI to GGP has been treated as covered capacity. This has increased the demand forecasts [for AA5 compared to AA4].

Operating expenditure

To ensure the ongoing provision of secure and dependable services to our customers, we propose operating expenditure of \$130.8 million for the 2025-29 period [AA5]. This is ... \$31 million (31%) higher than the \$100 million approved by the regulator in the 2020-24 period [AA4].

The operating expenditure is for activities related to maintaining an ageing asset, increased expenditure on Information Technology, and a step up in cost related to new Security of Critical Infrastructure legislation.

Capital expenditure

We are proposing to invest of total of \$69.4 million for replacement and stay in business programs, Information Technology & Operational Technology (ITOT), and security of critical infrastructure programs.

A key internal driver is that GGP is now entering a new lifecycle phase as it approaches 30 years of age and many of its components are nearing the end of their useful life. ... Over the last five years we have seen significant cost increases and supply shortages, particularly in remote areas, greater focus on emissions reductions, heightened focus on cyber and physical security.

Depreciation and asset lives

GGT is proposing to retain the current accounting approach to determining depreciation. We are proposing to change the approach to calculating the asset lives by capping asset lives to the weighted average remaining life of the pipeline and laterals class. This is a modest change in recognition of the energy transition and the potential

⁹⁵ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024 ([online](#)) (accessed February 2024).

⁹⁶ "Toll", "Capacity Reservation" and "Throughput" tariff components to increase (in real terms) by 27%, 62% and 59%, respectively.

gradual shift away from fossil fuels to more renewable sources amongst GGP customers.

Tariff variation – cost pass through events

Our operating environment can be unpredictable and events beyond our control can materially change our expenditure within a regulatory period. In recent years, we have observed unexpected events more frequently including natural disaster events, cyber security events, and volatility due to global events.

To mitigate these risks, we propose a wider range of cost pass through events for high cost events that could not have reasonably been forecast ahead of time.

Access and queuing

The access arrangement sets out procedures for customers seeking access to services provided by the covered GGP. We are proposing changes to streamline and simplify the provisions and ensure that they are fit for purpose for customers and better reflect a commercial environment.⁹⁷

Covered pipeline

Under the legislative framework, GGT's proposed access arrangement revisions apply only to the covered portion of the GGP ("covered GGP"). For AA5, GGT has assumed approximately 61 per cent of the pipeline is the covered GGP. GGT's access arrangement information (or "AAI") provides a history of the GGP and its coverage status.⁹⁸

As at 1 January 2025, the following parts of the GGP, as defined in *Pipeline Licence PL24*, form part of the covered GGP:

- (a) the pipeline between the meter station located at the eastern end of the Varanus Island to DBNGP Onshore Pipeline (PL 17) and the Yarraloola Compressor Station (Varanus-GGP Interconnect Pipeline),
- (b) part of the DBNGP-GGP Interconnect Pipeline upstream of the Yarraloola Compressor Station,
- (c) the GGP mainline between the Yarraloola Compressor Station and the inlet to the Newman Lateral,
- (d) Compressor Units 1 and 2 at Yarraloola, and Compressor Unit 1 at Paraburdoo,
- (e) the Newman Lateral (the lateral pipeline which extends from the GGP mainline to Newman),
- (f) compressor stations at Ilgarari and Wiluna, and
- (e) the GGP mainline between the inlet to the Newman Lateral and the delivery point at Kalgoorlie South.⁹⁹

⁹⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, pp. 5-7.

⁹⁸ GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement Information*, 1 January 2024, pp. 5-7.

⁹⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposed Revised Access Arrangement Information*, 1 January 2024, p. 6.

Stakeholder engagement

GGT details the stakeholder engagement that it undertook to develop its access arrangement proposal in section 3 (pages 17 to 25) of its Proposal Overview. GGT stated that its engagement approach “centred on engaging individually with key customers in a confidential face to face environment [to] better understand the value they attach to the GGP and their future energy supply plans”.¹⁰⁰ Key stages of GGT’s engagement included:

- **Reference service proposal:** GGT prepared and submitted a reference service proposal in December 2022.¹⁰¹ In preparing this proposal, GGT engaged with customers to assess the services offered by GGT and decide that the firm transportation service was to be the single reference service for the next (AA5) access arrangement period.
- **Stakeholder engagement plan:** In March 2023, GGT prepared and published a draft stakeholder engagement plan.¹⁰² The plan sought feedback from customers on GGT’s proposed engagement approach. GGT reported that no feedback was received.
- **Customer interviews:** GGT undertook a series of customer interviews during September / October 2023. The individual interviews sought to obtain detailed views on the access arrangement and pipeline services received.
- **Positions paper:** GGT released a ‘first look positions’ paper in November 2023, which took into account the views obtained from prior customer interviews.¹⁰³ The paper outlined GGT’s key strategies and investment plans to maintain safe, secure, and reliable service delivery.

GGT submitted that it focused its engagement on priority issues where customers could have the greatest impact and where customer opinions would “genuinely influence and guide the access arrangement”.¹⁰⁴ GGT’s priority areas are summarised in Table 13.

Table 13: GGT customer engagement priorities (feedback and response)

Priority	Customer feedback	GGT response
Understanding of access arrangements	Most customers had an understanding of access arrangements and did not require additional information. Some customers expressed minimal concerns about the access arrangement due to having negotiated service agreements in place.	Customers that needed additional information to aid their understanding of access arrangements received this information.
Reliability	All customers stressed the importance of reliability and security.	To maintain levels of reliability, stay-in-business (replacement) capital expenditure programs will continue.

¹⁰⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 19.

¹⁰¹ The ERA subsequently approved GGT’s reference service proposal on 21 June 2023. See: ERA, Notice – *Reference service proposal for the Goldfields Gas Pipeline: Decision*, 21 June 2023 ([online](#)) (accessed February 2024).

¹⁰² GGT, *Goldfields Gas Pipeline 2025-29 Access Arrangement: Stakeholder Engagement Plan – Draft for consultation*, March 2023 ([online](#)) (accessed February 2024).

¹⁰³ GGT, *Goldfields Gas Pipeline 2025-29 Access Arrangement: First look at positions* ([online](#)) (accessed February 2024).

¹⁰⁴ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 22.

Priority	Customer feedback	GGT response
		Forecast total capital investment needed for AA6 is \$69.3 million.
Tariffs	One customer queried whether GGT will offer a Maximum Hourly Quantity (MHQ) product/service under the access arrangement.	Due to the evolving landscape of renewable energy, MHQ products and services are better addressed on a case-by-case basis.
Decarbonisation	Nearly half of customers expressed distinct decarbonisation goals and are anticipating potentially lower gas consumption overall but increased capacity requirements and higher maximum hourly quantities.	<p>Based on customer insights, capacity demand is anticipated to remain consistent. Hence, there are no expansion programs proposed to increase capacity.</p> <p>To mitigate future price shocks as the energy sector seeks emissions reductions, changes to cap asset lives will be proposed to accelerate depreciation of the pipeline and smooth future tariffs.</p> <p>Consideration may be given to changing the tariff structure in the next access arrangement period (2030-2034).</p>
Safeguard Mechanism	One customer was interested in gaining a deeper understanding of how the GGP aligns with the Safeguard Mechanism and how it is applied across the covered and uncovered portions of the pipeline.	<p>The Federal Government's Safeguard Mechanism places an obligation on GGT to achieve emissions reduction targets for the GGP.</p> <p>GGT will implement various programs to reduce emissions, including changes to the way in which compressors are operated. Carbon credits may also need to be purchased.</p> <p>Preliminary cost estimates are about \$3.5 million for the covered portion of the GGP, which constitutes about 60% of the total expenditure allocated to the covered GGP in accordance with GGT's cost allocation method.</p>
Critical infrastructure	<p>All customers highlighted the importance of a secured gas supply.</p> <p>Any interruption to gas supply would impact operations with immediate and substantial financial repercussions. There would also be potential for safety implications.</p>	<p>The GGP is now subject to Security of Critical Infrastructure (SoCI) legislation. The new obligations result in increased investments in cyber and physical security.</p> <p>The pipeline will be allocated a share of corporate-wide (APA Group) cyber program costs to meet obligations and protect pipeline services.</p>
Affordability	<p>While all customers considered reliability was important, a subset of customers noted affordability must also be given priority.</p> <p>Some customers highlighted challenges when trying to balance the volatility of gas and commodity prices and the</p>	<p>The proposed increases in the reference service tariff are primarily driven by higher interest rates and inflation. Interest rates and inflation are key inputs into the calculation of revenue allowances and tariffs.</p>

Priority	Customer feedback	GGT response
	operational life of their facilities against the feasibility of investing in renewables to support decarbonisation. One customer noted a future need for the pipeline to support higher maximum hourly quantities while transporting less gas overall. Another customer had concerns that increases to the reference tariff might also affect negotiated tariffs.	
Safety	Several customers raised concerns about potential safety repercussions that would result from a disruption of gas supply.	Asset management is aligned with good industry practice to minimise risk to as low as reasonably practical to provide safe, reliable, and secure services. Investment in capital expenditure programs will ensure the continued safe and reliable operation of the pipeline.

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, pp. 22-25.

See section 3 (pages 17 to 25) of GGT's Proposal Overview for detailed information on GGT's engagement approach.



Stakeholder engagement is a key area for consideration (see section 2.2 of this paper).

Reference service

For AA5, GGT will retain the “firm transportation service” as the only reference service under the access arrangement. GGT's proposal is materially consistent with its approved reference service proposal that was approved by the ERA in June 2023.¹⁰⁵

See section 4 (pages 26 to 30) of GGT's Proposal Overview for detailed information on GGT's reference service.

Demand forecasts

GGT's proposed demand forecasts for the covered GGP includes forecasts from the Yarraloola receipt points and the recently commissioned Northern Goldfields Interconnect (NGI) receipt point. GGT submitted:

The APA-owned NGI is a separate pipeline that connects into the GGP. The forecast contracted capacity flowing from NGI into GGP has been treated as covered capacity. This has increased the demand forecasts for covered GGP over 2025-29 compared to

¹⁰⁵ At the time of approval, GGT had named the proposed reference service as the “firm service”. GGT has renamed this service in the access arrangement to the “firm transportation service” to better clarify the nature of the service, being a transportation service.

forecasts for 2020-24.¹⁰⁶

GGT outline the impact of the NGI on demand as follows:

The NGI will enable gas to flow from the west coast to the GGP. The capacity of the NGI is listed as ~76 TJ/day on the WA Gas Bulletin Board¹⁰⁷ ... the flow of gas from NGI, may create additional capacity on the GGP. We have treated the forecast contracted capacity from the NGI to GGP as covered capacity based on provisions in the GGP access arrangement.

To date, level of contracting for the NGI services has been slower than anticipated, and slower than experienced on other pipelines. The slow uptake has been due to several unforeseen circumstances including Covid related issues, higher costs of operations, lags in planning approvals, and supply chain problems. These factors have impacted the viability of several mining projects.

This makes forecasting the NGI capacity for the purposes of the GGP access arrangement challenging.

GGT has considered two cases for NGI forecasts:

- Case 1 – Base current contracted capacity for injections from NGI into GGP
- Case 2 – Base case plus highly probable contracting.

Case 1 reflects the current contracted positions of the NGI. Case 2 reflects Case 1 and a forecast of highly probable contracted capacity. Based on cautious but positive market sentiment, we have chosen to use Case 2 which is a more confident outlook.¹⁰⁸

GGT's demand forecasts are shown in Table 14. See section 5 (pages 31 to 37) of GGT's Proposal Overview for detailed information on GGT's demand forecasts, including forecast methodology.

Table 14: GGT demand forecasts for 2025-29

	2025	2026	2027	2028	2029
Total Contracted Capacity (TJ/day)					
Yarraloola	110.2	110.2	110.2	110.2	110.2
NGI (Case 2)	22.8	27.8	32.8	32.8	32.8
Total	133.0	138.0	143.0	143.0	143.0
Throughput (TJ/day)					
Yarraloola	93.3	93.3	93.3	93.3	93.3
NGI (Case 2)	19.7	24.0	28.3	28.3	28.3
Total	113.0	117.3	121.6	121.6	121.6

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 35, Table 5-2.

¹⁰⁶ GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 31.

¹⁰⁷ As viewed on 6 December 2023.

¹⁰⁸ GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, pp. 33-34.



Demand forecasting is a key area for consideration (see section 2.3 of this paper).

Cost allocation and total revenue

Cost allocation

The cost allocation approach for the GGP requires the allocation of costs between the covered and uncovered portions of the GGP, and an allocation of shared corporate costs from the APA Group (APA). GGT submitted that its cost allocation principles and approach were developed to align with the requirements of the NGR, and that the cost allocation complies with the ERA's cost allocation approach set out in the ERA's 2019 final decision for AA4.¹⁰⁹ Most costs fall into two categories:

Directly contributable costs to the pipeline service provider

Expenses that are clearly associated with a specific asset. Such costs are coded to the asset or to a project relating to the asset. This is done through creation of a purchase order at the time of purchase or direct employees charging their time to the asset or project. The employees charge their times using an hourly rate derived from employee payroll costs.

Other directly attributable costs to the pipeline service provider

Expenses that are directly attributable to a number of the service providers. To give a true reflection of the cost of running an asset, it is necessary to allocate a portion of such costs to the relevant assets that have benefited from the activity provided. For example, APA's Integrated Operations Centre (IOC) assets.¹¹⁰

GGT details the allocation of its operating and capital expenditure costs in sections 6.4.1 and 6.4.2 of its Proposal Overview, respectively. Section 6.4.3 details the allocation of shared corporate costs.

The recently commissioned NGI has increased demand forecasts for contracted capacity and throughput for AA5 – the additional capacity from the NGI is being treated as covered capacity under the GGP access arrangement. As a result, GGT has changed the proportion of costs allocated to the covered portion of the GGP to reflect this increase in contracted capacity. The updated cost allocation percentages are shown in Table 15.

See section 6 (pages 38 to 45) of GGT's Proposal Overview for detailed information on GGT's cost allocation method.

¹⁰⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 39.

¹¹⁰ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 40.

Table 15: GGT cost allocation percentages between covered and uncovered GGP

Ratio of contracted covered capacity to total capacity (TJ/day)			
Yarraloola Receipt Point and Northern Goldfields Interconnect	Covered capacity	141.5	61%
	Uncovered capacity	90.7	39%
	Total capacity	232.2	100%
Ratio of terajoules kilometres of contracted covered capacity to terajoules kilometres total contracted capacity (TJ x KM)			
Yarraloola Receipt Point and Northern Goldfields Interconnect	Covered capacity	117,607.3	70%
	Uncovered capacity	49,622.3	30%
	Total capacity	167,229.7	100%

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 44, Table 6-1.

Total revenue

GGT has calculated the total revenue requirements for the GGP using the building block approach in accordance with the NGR. GGT's total revenue requirement is used to calculate the reference tariff for the firm transportation service (reference service).

GGT submitted that its forecast total revenue for AA5 has increased \$123 million (54 per cent) in real terms compared to the approved revenue for AA4, with the increase mainly due to higher interest rates and operating costs. GGT's forecast total revenue is shown in Table 16.

See section 7 (pages 46 to 50) of GGT's Proposal Overview for detailed information on GGT's revenue building blocks.

Table 16: GGT forecast total revenue for AA5 (\$ million, real \$2023)

Building blocks	2025	2026	2027	2028	2029	Total
Return on Asset	31.92	32.64	32.11	31.28	30.53	158.48
Depreciation	21.08	21.09	20.76	19.73	18.58	101.24
Inflationary Gain	-11.11	-11.36	-11.17	-10.88	-10.62	-55.15
Opex	25.52	25.98	26.16	26.79	26.35	130.80
Tax (net)	2.82	2.46	2.58	2.69	2.70	13.24
Total Building Block Revenue	70.24	70.80	70.44	69.6	67.53	348.61

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 47, Table 7-1.



Cost allocation and total revenue are key areas for consideration (see section 2.7 of this paper).

Return on capital and inflation

The rate of return is expressed as a weighted average cost of capital (WACC). GGT has applied an estimated WACC of 7.41 per cent (Table 17), which was determined in accordance with the ERA's 2022 Final Gas Rate of Return Instrument.

The inflation rates used by GGT are set out in Table 18. Forecast inflation will be updated with actual consumer price index information as it becomes available.

Table 17: GGT rate of return estimate for AA5

Component	Value
Rate of return on equity	
Risk free rate	4.19%
Equity beta	0.7
Market risk premium	6.10%
Return on equity	8.46% = 4.19% + (6.10% * 0.7)
Rate of return on debt	
Debt risk premium	1.99%
Debt risk free rate	4.29%
Debt raising costs	0.17%
Hedging costs	0.12%
Return on debt	6.559% = 1.986% + 4.285% + 0.165% + 0.123%
Gearing	55%
Post tax nominal WACC	7.41% = 45 * 8.46% + 55% * 6.559%
Post tax real WACC	4.71%

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 53, Table 8-1.

Table 18: GGT consumer price index and inflation values

Year	Period end CPI	Period end inflation	Deflation factor (convert nominal to real 31 December 2023)
2020	117.200	0.86%	1.163
2021	121.300	3.50%	1.124
2022	130.800	7.83%	1.043
2023	136.359	4.25%	1.000
2024	140.791	3.25%	0.969

Year	Period end CPI	Period end inflation	Deflation factor (convert nominal to real 31 December 2023)
2025	144.423	2.58%	0.944
2026	148.149	2.58%	0.920
2027	151.971	2.58%	0.897
2028	155.892	2.58%	0.875
2029	159.914	2.58%	0.853

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 55, Table 8-2.



The rate of return and inflation are key factors that affect the calculation of reference tariffs (see section 2.6 of this paper).

Capital expenditure

GGT has proposed to invest a total of \$69.3 million of capital expenditure (capex) in AA5 to ensure safe, secure, and reliable operation of the GGP. This is an 8 per cent increase from the expenditure levels for AA4. GGT stated that the increase was “primarily due to the in-line inspection program, where costs are only incurred every ten years.” If the in-line inspection program was removed from AA5 capex, GGT states that there would be a decrease of 12 per cent from the expenditure levels for AA4.¹¹¹

See section 10 (pages 63 to 75) of GGT’s Proposal Overview for detailed information on GGT’s capital expenditure.

Operating expenditure

GGT forecast a total of \$130.8 million of operating expenditure (opex) in AA5. This is a 17 per cent increase on the expected level of opex for AA4. GGT gave the following explanation for the increase:

This increase can be attributed to rising labour costs related to the maintenance of ageing assets, increased corporate expenses, primarily driven by information technology, and the necessary expenditure to meet new legislative requirements, such as [the Security of Critical Infrastructure Act 2018].¹¹²

GGT’s forecast opex for AA5 covers five expenditure categories, which remain unchanged from AA4 (Table 19). The forecast was derived using a ‘base-step-trend’ approach. GGT has detailed this approach in section 11.7 of its Proposal Overview.

¹¹¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 67.

¹¹² GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 76.

Table 19: GGT operating expenditure categories for AA5

Category	Description (and types) of expenditure
Pipeline operations	APA operations costs: <ul style="list-style-type: none"> - Administration (business services) - Engineering - Field services GGT operating costs: <ul style="list-style-type: none"> - Administration (GGT) - APA operations labour recoverable - APA operations management fee - APA operations commercial fee - Newman lateral expenditure - Projects/operations expenditure
Major expenditure jobs	APA operations costs: <ul style="list-style-type: none"> - Suppliers of services under the operating agreement also undertake large scale non-recurrent maintenance activities referred to a major expenditure jobs
Commercial costs	APA commercial operations: <ul style="list-style-type: none"> - Administration - Legal - Marketing - Demand side management (new) - Public relations - Carbon liability - Communications equipment lease and maintenance - Insurance
Regulatory costs	APA commercial operations: <ul style="list-style-type: none"> - Regulatory - ERA charges - GGT regulatory expenditure
Corporate costs	Shared corporate costs: <ul style="list-style-type: none"> - Information technology - Security of critical infrastructure - Executive management - Legal and corporate affairs - Finance - External relations - Contract management

Source: GGT, Goldfields Gas Pipeline AA5 - Proposal Overview, 1 January 2024, p. 79, Figure 11-2.

See section 11 (pages 76 to 94) of GGT’s Proposal Overview for detailed information on GGT’s operating expenditure.



Expenditure levels are a key factor that affects elements of the access arrangement (for example, total revenue and reference tariffs (see section 2.4 of this paper)).

Depreciation

For AA5 GGT has proposed a change to the way in which assets are depreciated. GGT submitted:

GGT is proposing to change the approach to calculating the asset lives by capping asset lives to the weighted average remaining life of the pipeline and laterals class. This is a modest change in recognition of the energy transition and the potential gradual shift away from fossil fuels to more renewable sources amongst GGP customers.

The rules themselves focus on encouraging efficient growth in the market for reference service. What this means in the energy transition needs to be carefully considered.¹¹³

...

The proposed approach is intended to accelerate the depreciation of assets. Capping the asset lives, effectively shortens the timeframe over which assets are depreciated. This allows the ‘return of asset’ cost recovery to occur earlier than under the current technical life approach. The earlier cost recovery is intended to address the risk of uncertainty about what will happen in the future.

We consider the proposal to cap asset lives and accelerate the depreciation to be a prudent in an uncertain environment where the role of gas may change.¹¹⁴

GGT has estimated the impact of its depreciation proposal to be less than \$340,000 of total revenue for AA5.¹¹⁵

GGT has also proposed two new asset classes for AA5 to account for information technology and operational technology; and cyber security programs.

See section 12 (pages 95 to 106) of GGT’s Proposal Overview for detailed information on GGT’s depreciation and asset lives.



Depreciation is a key area for consideration (see section 2.4 of this paper).

¹¹³ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 95.

¹¹⁴ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 96.

¹¹⁵ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 103.

The estimated impact is referenced as \$100,000 in GGT’s proposal overview. The ERA has confirmed that this is an error and should be a reference to \$340,000 (*ERA Information Request ERA4*, 29 January 2024).

Emissions reductions

GGT has considered emissions reductions as part of its proposal for AA5 following the Federal Government's Safeguard Mechanism reforms. GGT submitted:

On 1 July 2023, the Federal Government's Safeguard Mechanism reforms came into effect. The Safeguard Mechanism is the Federal Government's policy to achieve Australia's 2030 and 2050 emissions reduction targets. GGP is one of the 215 facilities captured by the Safeguard Mechanism.

The Safeguard Mechanism is a regulatory obligation with the production variable for national gas transmission pipelines settled as recently as October 2023. Meeting the emission reduction obligations will require both capital and operating expenditure. GGT is proposing to undertake capital programs as part of the stay in business program. The capital expenditure program alone is not likely to be sufficient to meet the emissions reduction target set for GGP.¹¹⁶

GGT's strategy to meet Safeguard Mechanism targets comprises three main programs that seek to:

- Reduce emissions through changes to the operation of compressors.
- Integrate emissions reductions into the development of stay-in-business projects.
- Purchase ACCUs or SMCs only when there is a gap between onsite emissions and the target.

See section 13 (pages 107 to 113) of GGT's Proposal Overview for detailed information on GGT's emissions reductions.

Tariffs and tariff variation

Tariffs

GGT's proposed reference tariff for the single reference service (the 'firm transportation service') has been derived from its calculated total revenue requirement and demand forecasts. The proposed AA5 (2025) tariff has increased from the AA4 (2024) tariff due to the increase in total revenue, which GGT has attributed to the higher interest rate and inflationary environment along with higher operating expenditure forecasts (Table 20).¹¹⁷

Table 20: 2024 approved and 2025 proposed reference service tariff (nominal)

Component	Unit	2024 (ERA approved)	2025 (GGT proposed)	Variance
Toll	\$/GJ MDQ	0.131672	0.171836	31%
Capacity reservation	\$/GJ MDQ km	0.000798	0.001323	66%
Throughput	\$/GJ km	0.000215	0.000351	63%

Source: GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 62, Table 9-2.

¹¹⁶ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 107.

¹¹⁷ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 56.

In setting the reference tariff for AA5, GGT has considered the revenue and pricing principles in section 24 of the NGL.

GGT will retain the three-part reference tariff structure for AA5 as it “reflects the underlying capital and operating cost structures used to provide pipeline services to individual customers at different locations along the GGP”. The tariff structure “recovers costs from customers based on how much capacity (maximum daily quantity) is contracted for, the distance between the contract receipt and delivery point, and the volume of gas transported on the pipeline”.¹¹⁸

GGT has acknowledged customers seeking ways to decarbonise by investing in renewable energy sources. It submitted that:

- some customers are anticipating potentially lower overall gas consumption but increased capacity requirements and higher maximum hourly quantities in the longer term; and
- “if volumes of throughput do start to fall because of customers shifting to renewables, then [it] may consider changing the tariff structure to more to capacity based charging relative to throughput”.¹¹⁹

GGT intends to engage with customers about any intentions to redesign the tariff structure in advance of the next (AA6) access arrangement review.

See section 9 (pages 56 to 62) of GGT’s Proposal Overview for detailed information on GGT’s reference service tariff.

Tariff variations

Under the current access arrangement, and subject to the ERA’s approval, the reference service tariff can be adjusted if one or more cost pass through event(s) materially change, or is reasonably expected to materially change, the cost of providing the reference service.¹²⁰ The cost pass through events are limited to a change in law event or tax change event.

For AA5, GGT has proposed additional cost pass through events to mitigate operational risks. GGT submitted:

Our operating environment can be unpredictable and events beyond our control can materially change our expenditure within a regulatory period. In recent years, we have observed unexpected events more frequently including natural disaster events, cyber security events, and volatility due to global events.

As a result, the insurance market is also becoming more volatile and unpredictable for assets like the GGP and other infrastructure assets in APA’s portfolio.

To mitigate these risks, we propose a wider range of cost pass through events for high cost events that could not have reasonably been forecast ahead of time.¹²¹

¹¹⁸ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 58 and p. 61.

¹¹⁹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 62.

¹²⁰ For the purposes of the access arrangement a cost pass through event is considered material where the cumulative costs of the event exceed 1 per cent of the total revenue for the covered GGP in the years in which the costs are incurred.

¹²¹ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 114.

GGT has proposed a total of eight cost pass through events for AA5:

- Regulatory change event [new]
- Law change event [existing]
- Tax change event [existing]
- Insurance coverage event [new]
- Insurer credit risk event [new]
- Natural disaster event [new]
- Terrorism event [new]
- Carbon costs event [new]

See section 14 (pages 114 to 124) of GGT's Proposal Overview for detailed information on GGT's cost pass through events that form part of the tariff variation mechanism.



Tariffs and tariff variations are key areas for consideration (see section 0 of this paper).

Access and queuing

GGT has proposed to amend the queuing provisions in the access arrangement to simplify and align them with the access and queuing provisions in the NGR. GGT stated:

Our intention is to ensure that there is a clear and straightforward process for prospective users seeking access to the GGP pipeline services. There are several reasons for seeking amendments to the queuing section of the access arrangement.¹²²

The reasons given by GGT for the amendments include:

- **Alignment with the NGR:** the proposed amendments simplify and clarify the requirements for customers seeking access to services by aligning with the provisions of the NGR.
- **Alignment to the commercial environment:** the access arrangement currently offers a process for access to services that does not always reflect the commercial reality.
- **Interconnection of the NGI to the GGP:** the interconnection of the NGI to the GGP requires reconsideration of the queuing arrangements.

GGT summarised its proposed amendments to the queuing provisions in the access arrangement as follows.

- Including an overarching principle for prospective users to discuss their options with GGT prior to lodging a formal access request.
- Amending the access provisions in section 5 [of the access arrangement] so that they more closely align with NGR Rule 112 and Rule 103 by distinguishing

¹²² GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, p. 126.

between the access and queuing provisions, respectively. Adopting the approach in Rule 112 will make the access request process simpler and more transparent by streamlining the access process for any service regardless of whether it is provided by spare or developable capacity. This will simplify the access request process for prospective users.

- Retain the registration of interest provision but remove reference to type of capacity (spare or developable) customers are required to nominate.
- Prospective users who submit a registration of interest are placed on the register.
- If capacity becomes available and there are no registrations of interest, then there is no requirement on the service provider to issue a public notice of spare capacity.
- If capacity becomes available and there are registrations of interest, then the GGT will be required to provide those on the register with a **notice of spare capacity**. The notice seeks **expressions of interest** for the spare capacity. We are proposing that the GGT has discretion about whether to publish the notice.
- Provide greater ability for GGT to set criteria in the notice of spare capacity.
- Retain the auction for spare capacity for situations where expressions of interest in capacity exceed the available spare capacity (**Notice of auction for spare capacity**).
- Add requirement on GGT to provide the ERA with outcomes of the notice of spare capacity and notice of auction of spare capacity.
- Tighten prudential requirements. Where a prospective user has accepted the service provider's access proposal, the prospective user will be required to provide the service provider with a capacity deposit.
- Where there is acceptance of an offer, service provider and a prospective user must negotiate in good faith to reach agreement on the Terms and Conditions of the Transportation Agreement.¹²³

See section 15 (pages 125 to 132) of GGT's Proposal Overview for detailed information on GGT's proposed access and queuing requirements.



Access and queuing are key areas for consideration (see section 2.9 of this paper).

Other access arrangement provisions

Rule 98 of the NGR provides for an access arrangement to include one or more incentive mechanisms to encourage efficiency in the provision of services.

The current (AA4) access arrangement for the GGP does not include any specific incentive mechanisms and no incentive mechanism is proposed for AA5.

¹²³ GGT, *Goldfields Gas Pipeline AA5 - Proposal Overview*, 1 January 2024, pp. 128-129.