

GOLDFIELDS GAS PIPELINE

Proposed Revised

Access Arrangement Information

Review submission date: 1 January 2024



GOLDFIELDS GAS PIPELINE CONTACT DETAILS

Goldfields Gas Transmission Pty Ltd ACN 004 273 241

Principal Office:

Level 12 141 St Georges Terrace Westralia Square PERTH WA 6000 Level 12

Telephone: E-mail: +61 8 6189 4300 commercial.contracts@apa.com.au.



Contents

1.	Access Arrangement	1
	Overview	1
	Interpretation	1
	Structure and compliance	2
	Financial information	4
2.	Introduction	5
	About GGP	5
	History of GGP coverage	5
	Requirements to submit access arrangement revisions and access arrangement information	7
	Service provider	7
3.	Expenditure and pipeline usage over the earlier access arrangement period - No 72(1)(a)	
	Capital expenditure by asset class	9
	Operating expenditure by category	.10
	Pipeline usage	.10
4.	Opening capital base - NGR 72(1)(b)	12
5.	Projected capital base - NGR 72(1)(c)	.14
	Forecast conforming capital expenditure - NGR 72(1)(c)(i)	.14
	Forecast depreciation - NGR 72(1)(c)(ii)	. 16
	Projected capital base – NGR 72(1)(c)	. 18
6.	Forecasts demand - NGR 72(1)(d)	. 19
7.	Forecast of operating expenditure - NGR 72(1)(e)	.21
8.	Rate of return – NGR 72(1)(g)	. 22
9.	Estimated cost of corporate income tax - NGR 72(1)(h)	.24
10.	Efficiency Gains and/or Losses - NGR 72(1)(i)	.26
11.	Approach to setting the reference tariff - NGR 72(1)(j)	. 27
12.	Reference tariff variation mechanism - NGR 72(1)(k)	. 29
	NGR requirements	.29
	GGP access arrangement	.29
	Scheduled reference tariff variation mechanism	. 30
	Cost pass through variation	. 30
	Cost pass through events	.31
13.	Incentive mechanisms - NGR 72(1)(I)	32
14.	Total revenue - NGR 72(1)(m)	33



I. Access Arrangement

Overview

This document comprises the Access Arrangement Information (AAI) for the revised access arrangement for the Goldfields Gas Pipeline (GGP) for the fifth access arrangement period (AA5) – 1 January 2025 to 31 December 2029 (AA5 or 2025-29).

The purpose of this document is to set out the information necessary to enable users and prospective users to understand the plans for the GGP access arrangement for the 2025-29 period. The provision of AAI is necessary for compliance with the National Gas Rule (NGR) rule 72.

Further information is set out in the AA5 Proposal Overview and its attachments. This AAI should be read in conjunction with that further information.

The GGP is owned by an unincorporated joint venture. The owners comprise Southern Cross Pipelines Australia Pty Ltd, Southern Cross Pipelines (NPL) Australia Pty Ltd and Alinta Energy GGT Pty Ltd. 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.

Goldfields Gas Transmission Pty Ltd (GGT) controls and operates the GGP for and on behalf of each of the owners.

Interpretation

Unless the contrary intention is expressed, words or phrases in this document have the same meaning as those defined in Schedule C (Definitions and Interpretation) of the revised access arrangement for the GGP.

A reference in this document to:

- "access arrangement period" means the fifth access arrangement period or AA5 (1 January 2025 to 31 December 2029).
- "earlier access arrangement period" or "previous access arrangement period" means the fourth access arrangement period or AA4 (1 January 2020 to 31 December 2024) which preceded the access arrangement period.

Where a word or phrase has not been defined in this document then, unless the contrary intention is expressed, the word or phrase is to be given the meaning



prescribed in the National Gas Law (NGL), National Gas Rules (NGRs) or National Gas Regulations (as relevant and applicable in Western Australia).¹

Structure and compliance

This document follows the structure of rule 72(1) of the NGR, which sets out specific requirements for AAI relevant to revenue and price regulation.

Requirements in rule 72(1) are set out in Table 1.

Table 1: NGR Access Arrangement Information requirements

NGR 72	Specific requirements for access arrangement information relevant to price and revenue regulation	Section
72(1)(a)	 The access arrangement information for a full access arrangement proposal must include, if the access arrangement period commences at the end of an earlier access arrangement period, can access arrangement information must include: (i) capital expenditure (by asset class) over the earlier access arrangement period; and (ii) operating expenditure (by category) over the earlier access arrangement period; and (iii) usage of the pipeline over the earlier access arrangement period showing: (A) for a transmission pipeline, minimum, maximum and average demand; and (B) for a transmission pipeline, user numbers for each receipt or delivery point. 	Section 3
72(1)(b)	The access arrangement information must include how the capital base is arrived at and, if the access arrangement period commences at the end of an earlier access arrangement period, a demonstration of how the capital base increased or diminished over the previous access arrangement period.	Section 4
72(1)(c)	 The access arrangement information must include the projected capital base over the access arrangement period, including: (i) a forecast of conforming capital expenditure for the period and the basis for the forecast; and (ii) a forecast of depreciation for the period including a demonstration of how the forecast is derived on the basis of the proposed depreciation method. 	Section 5

¹ References to the NGL, NGRs and National Gas Regulations in this document relate to those instruments as applied in Western Australia.



72(1)(d) Section 6 The access arrangement information must include, to the extent it is practicable to forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period, a forecast of pipeline capacity and utilisation of pipeline capacity over that period and the basis on which the forecast has been derived. Section 7 72(1)(e) The access arrangement information must include a forecast of operating expenditure over the access arrangement period and the basis on which the forecast has been derived. Deleted NA 72(1)(f) 72(1)(g) The access arrangement information must include the allowed rate of Section 8 return for each regulatory year of the access arrangement period. The access arrangement information must include the estimated cost 72(1)(h) Section 9 of corporate income tax calculated in accordance with rule 87A, including the allowed imputation credits referred to in that rule. 72(1)(i) The access arrangement information must include, if an incentive NA mechanism operated for the previous access arrangement period, the proposed carry-over of increments for efficiency gains or decrements for efficiency losses in the previous access arrangement period and a demonstration of how allowance is to be made for any such increments or decrements. 72(1)(j) The access arrangement information must include the proposed Section 11 approach to the setting of tariffs including: the suggested basis of reference tariffs, including the i) method used to allocate costs and a demonstration of the relationship between costs and tariffs; and ii) a description of any pricing principles employed but not otherwise disclosed under this rule. Section 12 72(1)(k) The access arrangement information must include the service provider's rationale for any proposed reference tariff variation mechanisms. 72(1)(I) The access arrangement information must include the service Section 13 provider's rationale for any proposed incentive mechanism. 72(1)(m) The access arrangement information must include the total revenue Section 14 to be derived from pipeline services for each regulatory year of the access arrangement period. 72(2) This document The access arrangement information for an access arrangement variation proposal related to a full access arrangement must include so much of the above information (referred to in rule 72(1)) as is relevant to the proposal.



72(3) Where the ERA has published financial models under rule 75A, the NA access arrangement information for a full access arrangement proposal must be provided using the financial models.

Financial information

Rule 73 of the NGR specifies the basis on which financial information is to be provided.

Financial information in this document is provided on both a nominal and real basis. All real financial information is expressed in constant prices as at 31 December 2023.

Where necessary, to express financial values in dollar values of 31 December 2023, financial values prior to this date were escalated at the rate of inflation as measured by the Consumer Price Index (All Groups, Weighted Average of Eight Capital Cities) as published by the Australian Bureau of Statistics (CPI).

Financial values after 31 December 2023 are de-escalated using the forecast rate of inflation from the weighted average cost of capital (or WACC) parameter estimates. Table 2 shows actual consumer price index and forecast inflation values used to provide financial information in this document.

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	A	A	A	F	F	F	F	F	F	F
Dec CPI	117.2	121.3	130.8	136.4	140.8	144.4	148.1	151.9	155.9	159.9
Inflation rate %	0.86	3.50	7.83	4.25	3.25	2.58	2.58	2.58	2.58	2.58

Table 2: Actual and forecast inflation

Note: A (actual) F (forecast)

All financial information has been provided, and all calculations have been made, consistently on the same basis (NGR, rule 73(3)).



2. Introduction

About GGP

The GGP is a 1,378 kilometre transmission pipeline that receives natural gas from offshore fields in the north west of Western Australia. Two receipt points of the GGP are located at Yarraloola, and the pipeline extends to Kalgoorlie in the Goldfields-Esperance region. The 47 kilometre Newman Lateral is also part of the GGP.

In June 2023, the Northern Goldfields Interconnect commenced operations and connects to GGP approximately 40 kilometres south of Leinster. The NGI adds a third receipt point to the GGP. The NGI has the potential to add capacity to the GGP. Additional capacity created on the GGP by NGI is treated as covered capacity.

The Goldfields Gas Pipeline (GGP) is the gas transmission pipeline system defined in Pipeline Licence (PL) 24 issued under the Petroleum Pipelines Act 1969 (WA).²

The GGP comprises two notional pipelines, which are the same physical pipeline. During the 2025-29 period, because of the forecast capacity from the NGI, about 61% of the GGP capacity is treated as a scheme pipeline for the purposes of the access regulatory regime of the National Gas Access (WA) Act 2009. The GGP is required to have an access arrangement approved for the (fully regulated or covered) capacity. The remaining uncovered capacity is not regulated by the access regime.

Further information, including information about the Pipeline's regulatory status can be found on the Goldfields Gas Pipeline webpage of the APA Group website at <u>goldfields</u> <u>gas pipeline | APA Group</u>

History of GGP coverage

The gas transmission pipeline system defined in PL 24, as it was at the time the Gas Pipelines Access (Western Australia) Act 1998, came into effect (early in 1999), was a covered pipeline. It was subject to the scheme of access regulation of the National Third Party Access Code for Natural Gas Pipeline Systems (Code), which was implemented by the 1998 Act.

In 2006, the capacity of the GGP was expanded by installation of a second compressor at Paraburdoo. In 2009, compressors were installed at Wyloo West and Ned's Creek, further increasing the capacity of the pipeline. Elections were made, pursuant to the extensions and expansions policy of the Access Arrangement for the GGP (GGP Access Arrangement), which had been approved by the Western Australian Economic

² Pipeline Licence PL 24 is available from the Petroleum and Geothermal Register which can be accessed from the website of the Western Australian Department of Mines, Industry Regulation and Safety (at <u>http://www.dmp.wa.gov.au/Online-Systems-1527.aspx</u>).



Regulation Authority (ERA) on 14 July 2005, that the additional capacity provided by these compressors not be covered.

In January 2010, the National Gas Access (WA) Act 2009 came into effect, replacing the scheme of access regulation of the Code with the scheme of the National Gas Law (NGL) and the National Gas Rules (NGR).

A transmission pipeline which was covered under the Code (an old scheme covered transmission pipeline) was deemed, by clause 6 of Schedule 3 to the NGL, to be a covered pipeline on commencement of the NGL.

Those parts of the GGP which were a covered pipeline under the Code are now a covered pipeline under the access regime of the NGL and the NGR.

Amendments to the GGP Access Arrangement, in 2012, required that the ERA's consent be obtained for whether an expansion be treated as part of the covered pipeline, or not be treated as part of the covered pipeline.

On 4 November 2013, the ERA was notified of an expansion of the capacity of the GGP to deliver gas to iron ore mining operations in the Pilbara. The expansion comprised additional compressor units at Yarraloola and Paraburdoo, a new compressor station at Turee Creek, and custody transfer meter stations at Boonamichi Well and Yarnima. The ERA determined, on 30 May 2014, that the expansion not be covered.

The following parts of the pipeline system defined in PL 24 were covered at 1 January 2025:

- (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.



These parts of the pipeline system defined in PL 24, are the Covered Pipeline for which an applicable access arrangement, revised from time to time, is required by the NGL.

Requirements to submit access arrangement revisions and access arrangement information

Section 132 of the NGL requires that a covered pipeline service provider submit, for approval by the ERA under the NGR, in the circumstances and within the time period specified by the NGR, revisions to an applicable access arrangement.

Accordingly, an access arrangement revision proposal for the GGP Access Arrangement, GGT submitted to the ERA on 1 January 2024. As required by rule 52 of the NGR, the access arrangement revision proposal:

- (a) set out the amendments to the access arrangement that the service provider proposed for the next access arrangement period, and
- (b) incorporates the text of the access arrangement in the revised form.³

When submitting an access arrangement revision proposal for ERA approval, a service provider must submit, together with the proposal, access arrangement information for the proposal (NGR, rule 43(1)).

This document – GGP Access Arrangement Information – sets out the access arrangement information which GGT is required to submit to the ERA with its revision proposal for the GGP Access Arrangement.

Service provider

The GGP is owned by an unincorporated joint venture comprising:

- Southern Cross Pipelines Australia Pty Limited, ACN 084 521 997
- Southern Cross Pipelines (NPL) Australia Pty Limited, ACN 085 991 948, and
- Alinta Energy GGT Pty Limited, ACN 167 710 590.⁴

Goldfields Gas Transmission Pty Limited (GGT), ACN 004 273 241, is the operator of the Pipeline for and on behalf of each of the owners.

³ Subsequent references to specific rules of the NGR will be designated rule [number]. All references will be to Version 40 of the NGR.

⁴ 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.





As owners of the GGP, Southern Cross Pipelines Australia Pty Limited, Southern Cross Pipelines (NPL) Australia Pty Ltd and Alinta Energy GGT Pty Ltd, are service providers for the Covered Pipeline.

GGT controls and operates the Pipeline. GGT is also a service provider for the Covered Pipeline.

GGT is the complying service provider for the Pipeline (Service Provider).



3. Expenditure and pipeline usage over the earlier access arrangement period - NGR 72(1)(a)

Revisions to the GGP Access Arrangement are to commence at the end of an earlier access arrangement period – in this case the period 1 January 2020 to 31 December 2024 **(2020-24 period)**, and the access arrangement information must include:

- (a) capital expenditure (by asset class) over the earlier access arrangement period
- (b) operating expenditure by category over the earlier access arrangement period, and
- (c) usage of the pipeline over the earlier access arrangement period showing, for a transmission pipeline, minimum, maximum, and average demand, and user numbers for each receipt or delivery point.

Capital expenditure by asset class

Capital expenditure, by asset class, over the 2020-24 period are shown in Table 3.

The expenditure for 2020 to 2022 are actual expenditures; the expenditures for 2023 and 2024 are estimates.

Table 3: Capital expenditure by asse	t class: 2020-24 (Real \$2023, \$m)
--------------------------------------	-------------------------------------

Real \$2023 \$m	2020	2021	2022	2023	2024
Asset classes	Actual	Actual	Actual	Estimate	Estimate
Pipeline and laterals	0.112	0.034	0.000	0.000	0.000
Main line valve and scraper stations	0.000	0.000	0.001	0.208	1.066
Compressor stations	1.928	5.110	2.297	3.813	7.046
Receipt and delivery point facilities	2.587	0.403	0.685	0.768	1.455
SCADA and communications	0.789	0.101	0.066	0.934	0.557
Cathodic protection	0.000	0.000	0.001	0.207	0.104
Maintenance bases and depots	0.133	0.648	0.600	0.206	0.000
Other assets	0.578	0.058	0.251	0.427	0.548
Equity Raising Cost	0.020	0.000	0.000	0.000	0.000
Non-depreciable assets	0.000	0.000	0.000	0.000	0.000
Shared support assets - ITOT & cyber	2.326	2.327	4.585	6.451	6.393
Shared support assets (net ITOT & cyber)	0.925	1.344	3.265	1.398	1.398
Miscellaneous assets	0.000	0.000	0.000	0.000	0.000
Total	9.398	10.026	11.751	14.411	18.568



Operating expenditure by category

4.797

19.518

Operating expenditure, by category, over the 2020-24 period is shown in Table 4.

Again, the expenditures for 2020 to 2022 are actual expenditures; the expenditures for 2023 and 2024 are forecasts.

	2020	2021	2022	2023	2024	Total			
Real \$2023, \$m	Actual	Actual	Actual	Forecast	Forecast				
Pipeline operation	13.558	16.497	17.411	14.769	14.832	77.068			
Major expenditure jobs	0.034	0.299	0.496	0.239	0.598	1.665			
Commercial operation	0.565	0.798	0.951	0.742	0.746	3.803			
Regulatory	0.563	0.507	0.553	0.815	0.815	3.254			

Table 4: Operating expenditure by category	: 2020-24 (Real \$2023, \$m)
--	------------------------------

4.943

23.045

Pipeline usage

Corporate

costs Total

The ERA approved demand forecasts and the actual usage of the pipeline in 2020, 2021 and 2022 is shown in Table 5. The variances between forecast and actuals show an increase in actual throughput compared to forecasts.

7.909

27.321

3.190

19.755

3.190

20.180

24.029

109.818

Table 5:	Minimum,	maximum	and o	average	demands	by category
----------	----------	---------	-------	---------	---------	-------------

ERA approved forecast	Unit	2020	2021	2022
Maximum capacity	TJ/day	110.53	110.53	110.53
Average capacity	TJ/day	110.53	110.53	110.53
Average throughput	TJ/day	90.71	90.71	90.71
GGP Actuals	Unit	2020	2021	2022
Maximum capacity	TJ/day	108.53	111.42	115.67
Average capacity	TJ/day	108.53	109.49	110.77
Average throughput	TJ/day	96.78	94.57	97.23
Variance between forecast ar	nd actuals			
	Unit	2020	2021	2022
Maximum capacity	TJ/day	-2	0.89	5.14
Average capacity	TJ/day	-2	-1.04	0.24
Average throughput	TJ/day	6.07	3.86	6.52



Variance between forecast and actuals						
	Unit	2020	2021	2022		
Maximum capacity	%	-1.80%	0.80%	4.70%		
Average capacity	%	-1.80%	-0.90%	0.20%		
Average throughput	%	6.70%	4.30%	7.20%		

Numbers of receipt points, delivery points and users are summarised in Table 6.

Table 6: Numbers of receipt points, delivery points and users

	2020	2021	2022
	Actual	Actual	Actual
Receipt points	2	2	2
Delivery points	16	16	17
Users	9	9	9

Table 5 and Table 6 are an aggregation of actual demand by all covered GGP customers in 2020, 2021 and 2022.



4. Opening capital base - NGR 72(1)(b)

Where an access arrangement period follows immediately on the conclusion of a preceding access arrangement period, the opening capital base of the later access arrangement period is to be calculated as per NGR 77(2).

To derive the capital base at the commencement of the access arrangement period (1 January 2025):

- (a) conforming capital expenditure made during each year of the period 1 January 2020 to 31 December 2024 was added to the adjusted⁵ opening capital at the beginning of the year, less
- (b) depreciation for 2025.

The depreciation which was subtracted in deriving the capital base at the commencement of the access arrangement period was the forecast of depreciation used in determining the reference tariff applicable during the earlier access arrangement period.

During the period 1 January 2020 to 31 December 2024:

- (a) no amounts were added to the capital base under rules 82, 84 or 86
- (b) no redundant assets were identified or removed from the capital base, and
- (c) there were no asset disposals requiring a reduction in the capital base.

There are no relevant values in relation to existing extensions.

The derivation of the capital base at the commencement of the access arrangement period is shown in Table 7.

Real \$2023 \$m	2020	2021	2022	2023	2024		
Opening Capital Base	445.241	441.786	437.827	435.547	435.906		
Capital expenditure	9.398	10.026	11.751	14.411	18.568		
Depreciation	12.854	13.985	14.031	14.052	12.825		
Asset Adjustment (Rules 82, 84, 86)	0.000	0.000	0.000	0.000	0.000		
Closing Capital Base	441.786	437.827	435.547	435.906	441.649		

Table 7.	Capital base at	commencement of	access arran	gement period
Tuble 7.	Cupilal base a	commencement of	access anan	gemen penou

⁵ Adjusted for the difference between estimated and actual capital expenditure included in that opening capital base. This adjustment has removed any benefit or penalty associated with any difference between the estimated and actual capital expenditure. (As required by NGR 77(2)(a)). The adjustment is shown in the GGP Tariff model (filename: GGP-AA5-Tariff model-1 January 2024-Public)

Goldfields Gas Transmission Pty Ltd ACN 004 273 241

Proposed Revised Access Arrangement Information



Table 7 shows that the value of the capital base has fallen slightly from the opening value of \$445.2 million in 2020 to the closing value of \$441.6 million at the end of 2024. This represents a fall of \$4m or 0.8%.



5. Projected capital base - NGR 72(1)(c)

The access arrangement information for a full access arrangement proposal (other than an access arrangement variation proposal) must include the projected capital base over the access arrangement period. This includes:

(i) A forecast of conforming capital expenditure for the period and the basis for the forecast; and

(ii) A forecast of depreciation for the period including a demonstration of how the forecast is derived on the basis of the proposed depreciation method.

Forecast conforming capital expenditure - NGR 72(1)(c)(i)

Forecast conforming capital expenditure for the 2025-29 access arrangement period is summarised in Table 8.

Real \$2023 \$m	2025	2026	2027	2028	2029
Asset classes					
Pipeline and laterals	0.000	0.000	0.050	0.050	0.000
Main line valve and scraper stations	1.877	1.371	1.211	1.180	0.350
Compressor stations	11.373	4.213	4.307	5.404	3.294
Receipt and delivery point facilities	1.707	1.082	0.418	0.007	0.000
SCADA and communications	0.117	0.000	0.000	0.000	0.000
Cathodic protection	0.218	0.181	0.067	0.000	0.015
Maintenance bases and depots	0.000	0.157	0.406	0.249	0.000
Other assets	10.078	3.373	0.149	0.149	0.313
Equity Raising Cost	0.284	0.000	0.000	0.000	0.000
Non-depreciable assets	0.000	0.000	0.000	0.000	0.000
Shared support assets - ITOT & cyber	3.893	2.107	1.152	0.974	0.811
Shared support assets (net ITOT & cyber)	1.398	1.398	1.398	1.398	1.398
Miscellaneous assets	0.000	0.000	0.000	0.000	0.000
Total	30.943	13.882	9.158	9.412	6.182

Table 8: Forecast conforming capital expenditure: 2025-2029

The capital expenditure program has been developed to ensure the GGP continues to provide reliable, safe, and secure provision of gas to customers.

The forecast of conforming capital expenditure for the period has been based on approaches set out in:

• Asset Management Performance and Lifecycle Plan for the replacement/ stay in business programs •

Proposed Revised Access Arrangement Information



	n-up build of SIB forecasts for stay in business programs and ms are discussed in:
0	GGP-AA5-Attachment 10.8-Asset management performance and lifecycle plan-1 January 2024-Public
0	GGP-AA5-Attachment 10.8-Asset management performance and lifecycle plan-1 January 2024-Confidential
0	GGP-AA5-Attachment 10.10-SIB business case: In-line inspection- 1 January 2024-Public
0	GGP-AA5-Attachment 10.10-SIB business case: In-line inspection- 1 January 2024-Confidential
0	GGP-AA5-Attachment 10.10.1-SIB business case: In-line inspection-NPV model-1 January 2024-Confidential
0	GGP-AA5-Attachment 10.11-SIB business case: Rotating equipment major maintenance-1 January 2024-Public
0	GGP-AA5-Attachment 10.11-SIB business case: Rotating equipment major maintenance-1 January 2024-Confidential
0	GGP-AA5-Attachment 10.11.1-SIB business case: Rotating equipment major maintenance-NPV model-1 January 2024-Public
0	GGP-AA5-Attachment 10.12-SIB business case: End of equipment life-1 January 2024-Public
0	GGP-AA5-Attachment 10.12-SIB business case: End of equipment life-1 January 2024-Confidential
0	GGP-AA5-Attachment 10.12.1-SIB business case: End of equipment life-NPV model-1 January 2024-Public
0	GGP-AA5-Attachment 10.13-SIB business case: Wiluna wet seals- 1 January 2024-Public
0	GGP-AA5-Attachment 10.13-SIB business case: Wiluna wet seals- 1 January 2024-Confidential
0	GGP-AA5-Attachment 10.13.1-SIB business case: Wiluna wet seals-NPV model-1 January 2024-Confidential
0	GGP-AA5-Attachment 10.14-SIB business case: Physical security- 1 January 2024-Confidential



- GGP-AA5-Attachment 10.15-SIB business case: GEA replacement program-1 January 2024-Public
- GGP-AA5-Attachment 10.15-SIB business case: GEA replacement program-1 January 2024-Confidential
- GGP-AA5-Attachment 10.15.1-SIB business case: GEA replacement program-NPV model-1 January 2024-Public
- GGP-AA5-Attachment 10.16-SIB business case: Buried services-1 January 2024-Public
- GGP-AA5-Attachment 10.16-SIB business case: Buried services-1 January 2024-Confidential
- GGP-AA5-Attachment 10.16.1-SIB business case: Buried services-NPV model-1 January 2024-Public
- Forecast approach for Information Technology and Operational Technology is discussed in GGP-AA5-Attachment 10.5-ITOT plan-1 January 2024-Public; and GGP-AA5-Attachment 10.5-ITOT plan-1 January 2024-Confidential
- Forecast approach for program related to the Security of Critical Infrastructure is presented in GGP-AA5-Attachment 10.7-SoCI cyber plan-1 January 2024-Confidential.Forecast of shared corporate capital expenditure costs are based on historic costs.

Forecast depreciation - NGR 72(1)(c)(ii)

Forecast depreciation for the access arrangement period is summarised in Table 9.

The depreciation in Table 9 comprises:

- (a) depreciation on the initial capital base, and on the assets created by the capital expenditures which were added to that initial capital base during the period from 2000 to 2024; and
- (b) depreciation on the conforming capital expenditure by asset class during the period 2025 to 2029 (the forecast conforming capital expenditure shown in Table 8).



Table 9: Forecast depreciation: 2025-29

Real \$2023 \$m	2025	2026	2027	2028	2029
Asset class					
Pipeline and laterals	8.786	8.786	8.786	8.787	8.789
Main line valve and scraper stations	0.299	0.346	0.381	0.413	0.444
Compressor stations	1.976	2.379	2.519	2.663	2.843
Receipt and delivery point facilities	0.325	0.381	0.417	0.431	0.432
SCADA and communications	0.731	0.574	0.407	0.400	0.386
Cathodic protection	-0.006	0.036	0.048	0.053	0.053
Maintenance bases and depots	0.223	0.295	0.299	0.309	0.316
Other assets	0.378	1.386	1.670	1.667	1.666
Equity Raising Cost	0.001	0.009	0.009	0.009	0.009
Non-depreciable assets	0.000	0.000	0.000	0.000	0.000
Shared support assets - IOT & cyber security	7.909	6.362	5.620	4.322	2.904
Shared support assets (net IOT & cyber security)	0.462	0.532	0.602	0.671	0.741
Miscellaneous assets	0.000	0.000	0.000	0.000	0.000
Total	21.083	21.085	20.758	19.726	18.583

Depreciation has been calculated using the Current Cost Accounting Method. Using this method, the depreciation of an asset, in each year of its economic life, is:

- (a) the straight line depreciation of the asset escalated by inflation; less
- (b) the increment in asset value attributable to inflation in that year.

Escalating the straight line depreciation on the asset raises the allowance for depreciation in years when inflation is high. Subtracting the increment in asset value attributable to inflation reduces the depreciation allowance so that, over its economic life, the asset is depreciated only once. That is, depreciation over the economic life does not exceed the cost of the asset at the time it was acquired and its value added to the capital base.

As required by the GGP Access Arrangement, depreciation has been calculated from the forecast of capital expenditure used in determining the reference tariff for the period 2015 to 2024 (and not from actual capital expenditure during that period).



Projected capital base - NGR 72(1)(c)

Projection of the capital base over the access arrangement period is shown in Table 10.

Table 10 shows that the value of the capital base (in real terms) has fallen slightly from the opening value of \$441.6 million in 2025 to the closing value of \$410 million at the end of 2029. The represents of a fall \$31.7 m or 7.2%.

Table 10:	Projected	capital base	over 2025-29
-----------	-----------	--------------	--------------

Real \$2023 \$m	2025	2026	2027	2028	2029
Opening Capital Base	441.649	451.510	444.306	432.706	422.392
Capital expenditure	30.943	13.882	9.158	9.412	6.182
Depreciation	(21.083)	(21.085)	(20.758)	(19.726)	(18.583)
Asset Adjustment (Rules 82, 84, 86)	0.000	0.000	0.000	0.000	0.000
Closing Capital Base	451.510	444.306	432.706	422.392	409.991



6. Forecasts demand - NGR 72(1)(d)

The forecasts of pipeline capacity and utilisation (throughput) used in reference tariff determination are shown in Table 11.

Table 11: Forecast cap	acity and the	nroughput: 2	025-2029		
	2025	2026	2027	2028	2029
	TJ/d	TJ/d	TJ/d	TJ/d	TJ/d
Yarraloola receipt poir	nt				
Average contracted capacity	110.2	110.2	110.3	110.2	110.2
Maximum contracted capacity	110.2	110.2	110.2	110.2	110.2
Average throughput	93.3	93.3	93.3	93.3	93.3
NGI receipt point					
Average contracted capacity	22.8	27.8	32.8	32.8	32.8
Maximum contracted capacity	22.8	27.8	32.8	32.8	32.8
Average throughput	19.7	24	28.3	28.3	28.3
Total					
Average contracted capacity	133	138	143	143	143
Maximum contracted capacity	133	138	143	143	143
Average throughput	113	117.3	121.6	121.6	121.6

- ••

The proposed forecast for Yarraloola receipt point is based on:

- Current contracted capacity for the covered portion of GGP⁶ for the 2025-29 period
- Expectations about probable renewals of contracts that expire during the • 2025-29 period
- Throughput calculated using the average of actual load factors in the 2020-24 access arrangement period (resulting in a load factor of 0.9)7.

The proposed forecast for NGI receipt point is based on:

Currently contracted capacity plus highly probable contracted capacity (as provided by APA)

⁶ Most of these contracts are for negotiated under a separate Gas Transportation Agreement. The contracted information is used to calculate the reference service tariff.

⁷ At the time this report was prepared actual information was available for 2020, 2021, 2022.



- Removal of contract capacities that do not flow into GGP
- Expectations about renewals of contracts that expire during the 2025-29 period
- NGI throughput based on the Yarraloola receipt point average throughput (load factor 0.9).
- There is no history of use so average capacity has been assumed to be the same as maximum capacity.



7. Forecast of operating expenditure - NGR 72(1)(e)

Forecast operating expenditure for the period 1 January 2025 to 31 December 2029, is shown in Table 12.

Table 12: Forecast operating expenditure: 2025-29

	2025	2026	2027	2028	2029	TOTAL
Real \$2023 \$m						
Pipeline operations	14.806	14.903	15.000	15.098	15.197	75.004
Major expenditure jobs	0.506	0.510	0.513	0.516	0.520	2.565
Commercial operation	1.347	1.499	1.522	1.528	1.570	7.465
Regulatory	0.553	0.737	0.833	1.403	0.833	4.360
Corporate costs	8.309	8.328	8.292	8.245	8.229	41.402
OPEX: 2025-2029	25.521	25.977	26.160	26.790	26.348	130.796

GGT has applied the base-step-trend approach to forecast operating expenditure over the access arrangement period. This is the ERA's preferred forecasting methodology.

This approach projects forward, over the access arrangement period, the actual operating expenditure for the Covered Pipeline in 2022. This is the most recent year for which complete and audited financial information is available. When selecting 2022 GGT has also observed historic trends in operating expenditure to ensure that it is representative of costs in the future.

GGT has elected to forecast one expenditure item separately from the base-step-trend approach and are proposing three step changes for costs not accounted for in the 2022 base year.

Finally, GGT has applied a labour cost escalation to account for wage growth over the access arrangement period.



8. Rate of return – NGR 72(I)(g)

AAI must include the allowed rate of return for each regulatory year of the access arrangement period. The rate of return, based on the Weighted Average Cost of Capital (WACC), provides for a return on the regulatory asset base.

The rate of return to be applied to the projected capital base is to be calculated in accordance with the provisions of rule 87. The allowed rate of return must be calculated in the way stated in the rate of return instrument that is approved by the ERA under a separate process.

GGT has estimated the rate of return for the access arrangement period using ERA's 2022 Final Gas Rate of Return Instrument (RORI or instrument). The instrument sets out the methods ERA uses to estimate the allowed rate of return and value of imputation credits. The RORI fixes some parameters while allowing others to be updated with observed financial market information.

Table 13 shows the rate of return parameters for the access arrangement period.

The rate of return has been determined as a nominal vanilla weighted average of the return on equity and the return on debt, using a gearing of 55%, as required by the Rate of Return Instrument (2022).

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	1.986%
Debt risk free rate	4.285%
Debt raising costs	0.165%
Hedging costs	0.123%
Return on debt	6.559% = 1.986%+4.285%+0.165%+0.123%
Gearing	55%
WACC	
Post tax nominal WACC	7.41% = 45*8.46%+55%*6.559%
Post tax real WACC	4.71%

Table 13: Rate of return – weighted average cost of capital

The rate of return shown in Table 13 has been used to determine the total revenue and reference tariff of the access arrangement revision proposal for covered GGP.



The rate of return on the debt component of the rate of return will be updated annually, by updating the debt risk premium. The debt risk premium (which is estimated as a historical trailing average), and the reference tariff will be updated annually by December for the following calendar year.

Updating of the reference tariff will be in accordance with the scheme for annual scheduled variation of the tariff, which is part of the reference tariff variation mechanism of the GGP Access Arrangement. The scheduled reference tariff variation mechanism is described in Section 12.



9. Estimated cost of corporate income tax - NGR 72(1)(h)

AAI must include the estimated cost of corporate income tax, calculated in accordance with rule 87A of the NGR, including the allowed imputation credits referred to in that rule.

Under Rule 87A, the estimated cost of corporate income tax of a service provider for each Regulatory year of an access arrangement period (ETCt) is to be estimated in accordance with the following formula:

$$\mathsf{ETC}_{\mathsf{t}} = (\mathsf{ETI}_{\mathsf{t}} \times \mathsf{r}_{\mathsf{t}}) (1 - \gamma)$$

Where:

- ETI_t is an estimate of the taxable income for that regulatory year that would be earned by a benchmark efficient entity as a result of the provision of reference services if such an entity, rather than the service provider, operated the business of the service provider
- rt is the expected statutory income tax rate for that regulatory year, and
- γ is the allowed imputation credits for the regulatory year.

The cost of tax in each regulatory year of the access arrangement period has been estimated by multiplying an estimate of annual taxable income in the year by the expected statutory income tax rate.

Annual taxable income has been estimated as total revenue in each regulatory year less expenses allowed for income tax purposes. These expenses are:

- (a) the cost of debt financing the return on debt from the total revenue calculation;
- (b) operating expenses the forecasts of operating expenditure from the total revenue calculation; and
- (c) tax depreciation depreciation of the tax asset base, calculated using the straight line method for assets purchased before 1 January 2020 and the diminishing value method for assets purchased on or after 1 January 2020.

The cost of tax has been estimated from taxable income estimated, in turn, as the difference between:

- (a) the total revenue; and
- (b) expenses allowed for income tax purposes which are:



- (i) in the case of the cost of debt financing and operating expenses, the costs used to determine the total revenue of the benchmark efficient service provider; and
- (ii) in the case of tax depreciation, calculated by applying the rules for depreciation established by the Australian Taxation Office to a tax asset base determined using the capital expenditures of the benchmark efficient service provider.

Rule 87A requires that the estimated cost of corporate income tax be reduced by an amount which represents the value of the imputation or franking credits available under the dividend imputation provisions of Australian taxation law. The value of those credits has been estimated using an estimate of 0.50 for the factor gamma (γ) in the formula of rule 87A(1). This is the value of gamma required by the ERA's Rate of Return Guidelines (2022).

The estimates of the cost of tax in each year of the access arrangement period, and the corresponding estimates of the value of imputation credits, are shown in the summary of total revenue set out in Table 14 below.

Nominal \$m	2025	2026	2027	2028	2029
Forecast revenue from reference service	74.390	76.919	78.506	79.570	79.200
Tax expenses					
Opex	27.030	28.223	29.155	30.628	30.900
Interest on Debt	15.932	16.288	16.028	15.610	15.238
Tax Depreciation	11.525	14.619	14.127	12.825	11.986
Total Expenses	54.487	59.130	59.310	59.063	58.123
Тах					
Net Income	19.903	17.789	19.196	20.507	21.077
Tax Loss Carried Forward	0.000	0.000	0.000	0.000	0.000
Taxable Income	19.903	17.789	19.196	20.507	21.077
Income Tax Expense (tax rate =	5.971	5.337	5.759	6.152	6.323
30%)					
Imputation Credits (γ = 0.5)	-2.986	-2.668	-2.880	-3.076	-3.162
Net Tax Expense	2.986	2.668	2.880	3.076	3.162

Table 14: Estimated cost of tax and value of imputation credits



10. Efficiency Gains and/or Losses - NGR 72(1)(i)

If an incentive mechanism operated for the previous access arrangement period, AAI must include the proposed carryover of increments for efficiency gains, or decrements for efficiency losses, in the previous access arrangement period and a demonstration of how allowance is to be made for any such increments or decrements.

There was no incentive mechanism that operated in the previous (earlier) access arrangement period.



11. Approach to setting the reference tariff - NGR 72(1)(j)

AAI must include the proposed approach to the setting of tariffs including:

- The suggested basis of reference tariffs, including the method used to allocate costs and a demonstration of the relationship between costs and tariffs (rule 72(1)(j)(i)).
- A description of any pricing principles employed but not otherwise disclosed under rule 72 (rule 72(1)(j)(ii)).

GGT is proposing a three-part reference tariff for the GGP reference tariff. The three part-tariff structure was approved by the ERA in 2005 and has been retained.

This three-part tariff comprises:

- (a) toll tariff (a price per GJ of contracted capacity (MDQ))
- (b) capacity reservation tariff (a price per GJ MDQ kilometre), and
- (c) throughput tariff (a price for GJ kilometre).

The toll tariff and the capacity reservation tariff are effectively access fees recovering the fixed costs of the Covered Pipeline. The throughput tariff recovers variable costs.

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 (MDQ) 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.

The tariff structure aims to make the tariff reflective of the costs of the resources used to provide the firm transportation service.

The reference tariff has been established assuming allocation of the total revenue (Section 14 of the GGP Access Arrangement Information) to the components of the reference tariff in the proportions shown in Table 15

Table 15: Allocation of total revenue to reference tariff components

Tariff component	Proportion
Toll tariff	11.3%
Capacity reservation tariff	72.2%
Throughput tariff	16.5%

The toll tariff of the proposed reference tariff has been calculated as the price during the period 2025 to 2029 which sets the present value of the forecast revenue from the tariff



equal to 11.3% of the present value of the total revenue. The discount rate used in calculating the present values of the forecast revenue and the total revenue is the proposed allowed rate of return (7.41%).

Similarly:

- (a) the capacity reservation tariff has been calculated as the price during the period 2025 to 2029 which sets the present value of the forecast revenue from the tariff equal to 72.2% of the present value of the total revenue; and
- (b) the throughput tariff has been calculated as the price during the period 2025 to 2029 which sets the present value of the forecast revenue from the tariff equal to 16.5% of the present value of the total revenue.

The proposed revised reference tariff for the covered GGP is shown in Table 16.

Table 16: Proposed revised reference tariff

Reference tariff component	Unit	Tariff (\$nominal)
Toll tariff	\$/GJ MDQ	0.171836
Capacity reservation tariff	\$/GJ MDQ km	0.001323
Throughput tariff	\$/GJ km	0.000351





12. Reference tariff variation mechanism - NGR 72(1)(k)

NGR requirements

The AAI must include the GGT's rationale for any proposed reference tariff variation mechanism.

Rule 92 of the NGR requires the access arrangement for the GGP to include a reference tariff variation mechanism, which must be designed to equalise (in terms of present values) the forecast revenue from reference services over the access arrangement period and the portion of total revenue allocated to reference services for the access arrangement period.

An access arrangement must include a mechanism (a reference tariff variation mechanism) for variation of a reference tariff over the course of an access arrangement period.

Rule 97 of the NGR specifies the requirements (or mechanisms) for reference tariff variations. In summary, a reference tariff variation mechanism may provide for variation of a reference tariff:

- in accordance with a schedule of fixed tariffs; or
- in accordance with a formula set out in the access arrangement; or
- because of a cost pass through for a defined event (such as a cost pass through for a particular tax); or
- because of the application of a portion of the revenue generated from the sale of rebateable services to reduce the reference tariff as contemplated under rule 93(3); or
- by the combined operation of two or more of the above.

GGP access arrangement

Section 4.5 of the GGP access arrangement sets out the reference tariff variation mechanism. The reference tariff variation mechanism that applies for the access arrangement period. The mechanism comprises:

- A scheduled reference tariff variation mechanism, which provides for an annual variation of the reference tariff.
- A cost pass through reference tariff variation mechanism, which provides for the variation of the reference tariff in response to one or more cost pass through events.



Scheduled reference tariff variation mechanism

Schedule A of the revised access arrangement for the GGP details the operation of the scheduled reference tariff variation mechanism. This mechanism varies the reference tariff so it more closely reflects variations in the costs that the tariff is to recover. It is intended to maintain efficient cost recovery during the access arrangement period.

At the commencement of each year during the access arrangement period (that is, each 1 January) the scheduled reference tariff variation mechanism:

- Adjusts the reference tariff for inflation.
- Allows the service provider to vary the individual components of the reference tariff, by up to two per cent, within a constraint on the overall revenue that might be earned at the reference tariff (the weighted average tariff basket).
- Effects a change in the reference tariff following the annual adjustment of the return of debt.

Cost pass through variation

Section 4.5.2 of the revised access arrangement for the GGP details the operation of the cost pass through tariff variation mechanism. This mechanism ensures that costs resulting from material unforeseen events (cost pass through events) that affect the provision of the reference service and the costs can be recovered through the reference tariff. It is intended to maintain efficient cost recovery during the access arrangement period.

A cost pass through event is considered material where the cumulative costs of the event exceed 1% of the total revenue for covered GGP in the year(s) in which the costs are incurred (section 4.5.2(d) of the access arrangement for the GGP).

If one or more cost pass through events occur, or are expected to occur, during the access arrangement period, the cost pass through reference tariff variation mechanism allows the service provider to vary the reference tariff to recover the financial costs of the cost pass through event(s), to the extent that the costs have not already been accounted for in the reference tariff.

GGT is proposing to broaden the range of cost pass through events from only a change in law or tax change event. The rationale for this because in recent years, we have observed and experienced unexpected events more frequently including natural disaster events, cyber-attacks, and volatility due to global events.

Overall, our operating environment is becoming increasingly unpredictable and events beyond our control can materially change our expenditure within a regulatory period.



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 as discussed in section 12.5.

Cost pass through events

The cost pass through events proposed for the 2025-29 regulatory period include:

- change in law or service standard event
- change in tax change event
- insurance cap event
- insurer credit risk event
- natural disaster event
- carbon cost event
- a terrorism event, and
- regulatory change event.



13. Incentive mechanisms - NGR 72(1)(l)

AAI must include the service provider's rationale for any proposed incentive mechanism.

There is no proposed incentive mechanism for the access arrangement period.



14. Total revenue - NGR 72(1)(m)

NGR 76 provides that total revenue is to be determined for each regulatory year of the access arrangement period using the building block approach in which the building blocks are:

- (a) a return on the projected capital base for the year; and
- (b) depreciation on the projected capital base for the year; and
- (c) the estimated cost of corporate income tax for the year; and

(d) increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency; and

(e) a forecast of operating expenditure for the year.

The total revenue for the period 2025 to 2029 is summarised in Table 17.

Real \$2023 \$m	2025	2026	2027	2028	2029	Total
Building blocks						
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 ⁸	- 11.11	- 11.36	- 11.17	- 10.88	- 10.62	- 55.15
Орех	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	69.60	67.53	348.61

Table 17: Total revenue 2025-2029

The total revenue shown in Table 17 has been used to determine the proposed revised reference shown in Table 16.

⁸ Adjustment to avoid double-counting of inflation when nominal WACC is applied to nominal value of the asset base. The inflationary gain is forecast to be negative.