



GOLDFIELDS GAS PIPELINE

Access Arrangement Revision Proposal

Supplementary Submission in response to ERA Draft Decision

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1 Introduction

This supplementary submission is made by Goldfields Gas Transmission (**GGT**) in response to the draft decision of the Economic Regulation Authority (**ERA**) relating to the Goldfields Gas Pipeline (**GGP**), which was published on 17 December 2015 (**Draft Decision**).

This submission is supplementary to the materials submitted to the ERA on 29 January 2016, which included revisions to the access arrangement proposal pursuant to rule 60 and other materials. This supplementary submission primarily concerns the issue of cost allocation, and should be read together with the material submitted on that issue on 29 January 2016. It also addresses about a risk of contraction in demand for services on the covered pipeline.

Accompanying this supplementary submission are:

- (a) a further expert report of Mr Greg Houston responding to matters raised in the Draft Decision in relation to cost allocation;
- (b) an expert report of Mr Geoff Swier, responding to matters raised in the Draft Decision in relation to depreciation and cost allocation, and addressing economic considerations for interpretation and application of the national gas objective; and
- (c) a statutory declaration of Mr Mark Fothergill, General Manager, Infrastructure Strategy and Engineering at APA Group, in relation to the capacity of the covered pipeline.

Each of these documents is discussed below.

On a broader note, GGT understands that the Australian Competition Tribunal (Tribunal) will deliver its decision in merits review proceedings concerning recent determinations made by the Australian Energy Regulator for the NSW and ACT electricity distributors, and NSW gas distributor, on 26 February 2016. Once the decision of the Tribunal has been published, GGT will review the decision and consider the implications, if any, of that decision for the determination that the ERA is required to make in respect of the GGP. To the extent GGT considers that the Tribunal's decision does have implications for the current access arrangement process, GGT will make any submissions to the ERA on those implications as soon as practicable following the publication of the Tribunal's decision.

2 ERA allocation of total revenue to reference services

This section of the supplementary submission responds to paragraphs 1501 to 1579 of the Draft Decision.

2.1 Initial capital base and capital expenditure in AA1

Pursuant to the provisions of the National Third Party Access Code for Natural Gas Pipeline Systems (**Code**), the initial capital base of the GGP for the purposes of the first access arrangement period (AA1) was determined by the ERA to be \$513.7 million as at 31 December 1999.¹ For the second access arrangement period (AA2), the initial capital base was rolled forward in accordance with the provisions of the Code to 19 August 2010, including to reflect the actual cost of new facilities investment (capital expenditure) that occurred during AA1. This gave a closing asset base for the covered pipeline as at 19 August 2010 of \$442.6 million (nominal).²

In accordance with rule 77, the opening capital base for AA3 is, in broad terms, calculated by taking the closing asset base from AA1, adding conforming capital expenditure made, or to be made, during AA2, and deducting depreciation. In the Draft Decision, the ERA determined an opening capital base as at 1 January 2015 of \$392.040 million (nominal).³ This is not materially different to the opening capital base set out in GGT's September 2014 proposed revisions, being \$393.341 million (nominal).⁴

However, in the Draft Decision, the ERA determined that the initial capital base and new facilities investment incurred in AA1 should be allocated to services provided by means of the covered pipeline in the proportion of covered capacity (109 TJ) to total capacity (200 TJ). There was one exception to this, being compressor stations in respect of which the ERA proposes to make no allocation.⁵ As made clear in Table 82 of the ERA's Draft Decision, extracted below, the consequence of this allocation is to in effect reduce the value of the asset base of the covered pipeline by close to 40 per cent.

Table 82 Authority's Adjustment for Allocation to Covered Services for ICB and AA1

Nominal \$ million	2015
Closing Value 31 December 2014	394.384
Allocation to uncovered services	169.003
Opening Value 1 January 2015 – allocated to covered services	227.121

¹ ERA, *Further Final Decision and Final Approval on the Proposed Access Arrangement for the Goldfields Gas Pipeline*, 14 July 2005, [44], p 13.

² Goldfields Gas Pipeline Access Arrangement Information, 5 August 2010, pp 3–4.

³ Draft Decision, Table 26, [378], p 83.

⁴ Goldfields Gas Transmission Access Arrangement Information (proposed), 28 August 2014, p 10.

⁵ Draft Decision, [1529] and Table 81, p 331.

GGT submits that the ERA's proposed approach to cost allocation is akin to a re-establishment of the initial capital base, and the opening capital base as at the commencement of AA2, which is not permitted by the NGR.

The asset base is relevant to the calculation of the return on assets building block, which in turn, is relevant to the calculation of total revenue pursuant to rule 76. The rate of return, which is determined in accordance with rule 87, is applied to the capital base, which gives the return on assets building block.

Rule 87 provides that the return on the projected capital base for each regulatory year of the access arrangement period is to be calculated by applying a rate of return that is determined in accordance with rule 87. Rule 87(2) provides that the allowed rate of return is to be determined such that it achieves the allowed rate of return objective. The allowed rate of return objective is that the rate of return for a service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the service provider in respect of the provision of reference services (rule 87(3)).

The rate of return is of direct relevance to the revenue and pricing principle set out in section 24(5) of the National Gas Law, which provides that a reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.

In order to meet the requirements of the regulatory framework, the allowed rate of return must be applied to the total value of the assets that are used to provide reference services. When the initial investment in the capital base was made (which is represented by the initial capital base determined as at 31 December 1999), 100% of the assets associated with the pipeline formed the covered pipeline and were to be subject to the regulatory obligation to provide reference services. The compensation to be provided for undertaking this investment was that investors would receive a return on, and of, 100% of the assets comprising the covered pipeline—the return on these assets being commensurate with the regulatory and commercial risks involved in providing reference services. Subsequent investments (with the exception of investments in providing uncovered capacity) have been undertaken on the same basis.

The regulatory and commercial risks involved in providing reference services by means of the covered pipeline are unchanged by the fact that unregulated services are now provided by means of the uncovered pipeline. All of the physical assets comprising the covered pipeline are required to provide regulated services by means of the covered capacity regardless of whether unregulated services are also provided. That is, the capital investment in the assets comprising the covered pipeline has been required to be undertaken in order to provide reference services, irrespective of whether unregulated services are provided. Despite this, the ERA is proposing to adopt an approach that would have the effect of reducing by some 60 per cent the regulated return that would be recovered through reference tariffs. GGT submits that such an approach is not authorised by the NGL or the NGR.

Even if such an approach was allowed under the NGL or the NGR (which it is not), the ERA's proposed allocation approach is inappropriate as it does not comply with

generally accepted principles for cost allocation and is inconsistent with the approach to cost allocation adopted by the ERA in AA2 (which is addressed further in the section below).

One of the most basic principles of cost allocation is that a cost allocator should provide for “efficient costs to be allocated on a basis that maintains the nexus between the efficient cost and the factors that cause that efficient cost to arise.”⁶ An allocation that is based on a ratio of covered capacity on a pipeline to total capacity on that pipeline does not maintain this nexus. This is because the capital costs on a pipeline are impacted by not only capacity but by the distance over which gas is to be transported. If the ERA’s proposed allocation approach were to be permitted under the NGL or the NGR (which it is not), then a capacity x distance allocator – such as TJ km – would maintain this nexus.

The ERA’s approach to allocating the initial capital base and AA1 capex is also inconsistent with the ERA’s approach – as recommended by the ERA’s expert Energy Market Consulting Associates (EMCa)⁷ – to allocating capex in AA2 (which is, as set out in the section below, an allocation that is not permitted under the NGL or NGR). The ERA’s approach to allocating capex in AA2 is to allocate a ‘justifiable proportion of the expenditure to the covered pipeline’ which ‘[f]or expenditure directed to assets that could be used in relation to the covered pipeline or other GGP assets [is]...80 per cent of the expenditure to the covered pipeline (in line with the TJ km ratio).’

2.2 Opening capital base for AA3

The ERA engaged Energy Market Consulting Associates (EMCa) to assist the ERA in assessing GGT’s proposed revisions to the access arrangement to apply to the GGP.⁸

The framework employed by EMCa to assess whether capital expenditure incurred by GGT in AA2, and capital expenditure forecast to be incurred in AA3, is conforming capital expenditure is set out on page 11 of its report. The relevance of capital expenditure being conforming capital expenditure is that:

- (a) if it is expenditure that was incurred in AA2, it forms part of the opening capital base for AA3 (rule 77(2)(b)); and
- (b) if it is expenditure forecast to be incurred in AA3, it forms part of the projected capital base for AA3 (rule 78(b)).

The primary difficulty with EMCa’s approach is its purported application of rule 93(2) of the NGR in assessing whether capital expenditure is conforming capital expenditure.

⁶ See, for example, *Telstra Corporation Limited – Review of Telstra’s Cost Allocation Methodology*, July 2014, Report prepared by KPMG, p 7, available at <
[https://www.accc.gov.au/system/files/KPMG%20July%20Report%20\(public%20version\).pdf](https://www.accc.gov.au/system/files/KPMG%20July%20Report%20(public%20version).pdf)>.

⁷ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement: Goldfields Gas Transmission’s Proposed Revised Access Arrangement for the Goldfields Gas Pipeline*, December 2014.

⁸ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement: Goldfields Gas Transmission’s Proposed Revised Access Arrangement for the Goldfields Gas Pipeline*, December 2014.

Step 4 of EMCa's capital expenditure assessment framework asks the question: Have the costs been appropriately allocated between reference and other services? If this question is answered yes, EMCa considers that the capex is conforming and is rolled into GGT's capital base. If this question is answered no, EMCa considers that the portion of the capex that fails to satisfy rule 93(2) is to be excluded, and is categorised as "non-conforming" capex, the consequence of which is that it is not rolled into GGT's capital base.⁹ EMCa treats forecasts and / or estimates that are found not to satisfy rule 93(2) as expenditure that a prudent service provider would not incur, and therefore should be excluded pursuant to rule 79(1)(a).

In short, and as set out in detail below, rule 93(2) has no role in the assessment of whether capital expenditure incurred in AA2, and forecast to be incurred in AA3, is or is not conforming capital expenditure.

Rule 79 governs when capital expenditure is to be regarded as conforming capital expenditure. Rule 79(1) provides:

79 New capital expenditure criteria

- (1) Conforming capital expenditure is capital expenditure that conforms with the following criteria:
 - (a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services;
 - (b) the capital expenditure must be justifiable on a ground stated in subrule (2).

Rule 79(2) then sets out the circumstances in which capital expenditure is justifiable. It provides as follows:

- (2) Capital expenditure is justifiable if:
 - (a) the overall economic value of the expenditure is positive; or
 - (b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or
 - (c) the capital expenditure is necessary:
 - (i) to maintain and improve the safety of services; or
 - (ii) to maintain the integrity of services; or
 - (iii) to comply with a regulatory obligation or requirement; or

⁹ EMCa, *Review of Technical Aspects of the Proposed Access Arrangement: Goldfields Gas Transmission's Proposed Revised Access Arrangement for the Goldfields Gas Pipeline*, December 2014, p 11.

- (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
- (d) the capital expenditure is an aggregated amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to in paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).

Rule 79(5) provides that if capital expenditure made during an access arrangement period conforms, in part, with the criteria laid down in rule 79, the capital expenditure is, to that extent, to be regarded as conforming capital expenditure. Rule 79(6) provides that the ERA's discretion under rule 79 is limited.

Therefore, what is required pursuant to rule 79 is an assessment of whether the capital expenditure: (a) is such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services; and (b) is justifiable on a ground in subrule (2). Where capital expenditure satisfies these criteria, the capital expenditure is conforming capital expenditure and no further inquiry or step is required.

2.3 Expert material

Together with this supplementary submission on the ERA's Draft Decision, GGT has provided two expert reports that respond to, amongst other things, the ERA's proposed approach to cost allocation.

The first is an expert report from Mr Greg Houston.¹⁰ This report notes that, in light of the fact that covered capacity on the GGP is fully contracted through to 2029, and largely contracted through to 2035, a material change in the method for allocating total revenue to be recovered from reference tariffs cannot promote allocative efficiency in the use of reference services because there is no different allocation of capacity that is both capable of improving economic efficiency and able to be induced by a different level of reference tariff.¹¹

Mr Houston's report also notes the following implications for dynamic efficiency of the ERA's proposed approach to cost allocation:

- (a) by allocating a share of joint costs to services provided by means of the uncovered pipeline, GGT would be precluded from setting tariffs by reference to the incremental costs of any future, uncovered pipeline capacity. The consequence of this is that some efficient potential future investments in uncovered pipeline capacity may not proceed, particularly in circumstances where those investments are only worthwhile at a tariff for that capacity set at, or close to, its incremental cost; and

¹⁰ HoustonKemp Economists, *Review of ERA's Draft Decision on Cost Allocation*, 26 February 2016 (HoustonKemp February 2016 Report).

¹¹ HoustonKemp February 2016 Report, p 13.

- (b) uncertainty in the potential for recovery of joint costs would reduce GGT's incentive to undertake new investments, particularly in relation to shared assets. That is, if the approach to allocating total revenue means that GGT is only able to recover a certain proportion of its costs when investing in shared assets, and the remainder would need to be recovered from other users for which there may be no mechanism to do so, GGT's incentive to invest will be compromised.¹²

The second is a report from Mr Geoff Swier.¹³ In relation to GGT's proposed approach to cost allocation, Mr Swier concludes that it provides GGT with the flexibility to charge prices for services on uncovered capacity that reflect marginal or incremental costs and that the ability to do so will promote the efficient use of, and investment in, the GGP because it:

- (a) ensures that GGP's willingness to supply new uncovered services is not distorted by previously incurred sunk common costs;
- (b) ensures that investments will not be abandoned simply because of the inclusion of a share of non-marginal sunk common costs;
- (c) avoids the situation in which customers inefficiently reduce their use of the GGP because of the inclusion of non-marginal sunk costs; and
- (d) enables GGT to signal the marginal costs of the new investment to the prospective users.¹⁴

Further, Mr Swier considers that GGT's proposed approach promotes allocative efficiency for services provided by means of the covered pipeline because it ensures that the resulting reference tariff for such services would:

- (a) at the lower bound, provide sufficient revenue to recover the costs of providing reference services; and
- (b) at the upper bound, not exceed the efficient, standalone costs of providing these services.¹⁵

In relation to the ERA's proposed approach to cost allocation, Mr Swier concludes that such an approach would be inefficient and deleterious to the achievement of the national gas objective.¹⁶

Both Mr Houston and Mr Swier identify incremental cost as the lower bound for a tariff which is consistent with allocative efficiency. If the ERA's proposed approach to cost allocation were to be adopted, GGT is concerned that the GGP reference tariff would

¹² HoustonKemp February 2016 Report, p 15.

¹³ Farrier Swier Consulting, *Economic Considerations for Interpreting the National Gas Objective*, 26 February 2016 (**Swier February 2016 Report**).

¹⁴ Swier February 2016 Report, [310].

¹⁵ Swier February 2016 Report, [311].

¹⁶ Swier February 2016 Report, [323].

be below the incremental cost of pipeline capacity: the reference tariff would be inconsistent with allocative efficiency.

3 Capacity and throughput forecasts for the covered pipeline

In the Draft Decision, the ERA expresses concern that there may be a material risk of contraction in demand for services on the covered pipeline in the near term. One reason given by the ERA for requiring use of a CCA depreciation approach is that the ERA considers that this will “help to avoid contraction of demand on the pipeline in the first half of the pipeline’s life”.¹⁷ The ERA also refers to the risk of covered capacity becoming, and remaining, under-utilised in support of its approach to cost allocation.¹⁸ The ERA notes that if all joint costs are allocated to services provided by means of the covered pipeline, then there is a risk that the use of these services could be dissuaded and existing covered capacity could become, and remain, idle.¹⁹

In the Draft Decision, the ERA notes that, in its August 2014 Access Arrangement Revisions Proposal, GGT had suggested that it was having some difficulty securing new customers for existing capacity on the covered pipeline.²⁰ It appears to be on this basis that the ERA concludes that there is a material risk of contraction in demand in the near term. As explained below, GGT is no longer facing any difficulty in securing customers for existing capacity on the covered pipeline. Consequently, GGT now expects that the covered pipeline will be at (or close to) full utilisation over the forthcoming access arrangement period.

3.1 Capacity of the covered pipeline

As the amended Proposed Revised Access Arrangement for the GGP advises, the physical capacity of the covered pipeline is approximately 102.5 TJ/d, not 109 TJ/d as assumed by the ERA in the Draft Decision.²¹ The reduction in covered pipeline capacity is due to the Government of Western Australia recently promulgating a reference specification for the GGP which includes a minimum higher heating value that is lower than previously assumed. A lower minimum higher heating value corresponds to a reduction in available capacity on the covered pipeline.

As noted in the Draft Decision, in March 2015, the Government of Western Australia amended the Gas Supply (Gas Quality Specifications) Regulations 2010 (WA) to include, for the first time, a reference specification for the GGP.²² The new reference specification for the GGP includes a minimum higher heating value of 35.5 MJ/m³.²³

At a heating value of 35.5 MJ/m³, the capacity of the covered pipeline is approximately 102.5 TJ/d. The calculation of covered pipeline capacity based on this heating value

¹⁷ Draft Decision, [1219].

¹⁸ Draft Decision, [1490].

¹⁹ Draft Decision, [1488].

²⁰ Draft Decision, [1218], [1490].

²¹ Amended Proposed Revised Access Arrangement, January 2016, section 1.5.

²² Western Australian Government Gazette, Perth, *Gas Supply (Gas Quality Specifications) Amendment Regulations 2015*, Tuesday 10 March, 2015, No 36, p. 836. This is noted in the Draft Decision, [93].

²³ *Gas Supply (Gas Quality Specifications) Regulations 2010 (WA)*, Schedule 2, clause 3A.

is explained in the accompanying statutory declaration of Mark Fothergill, General Manager, Infrastructure Strategy and Engineering at APA Group. Mr Fothergill states that at a minimum heating value of 35.5 MJ/m³, the capacity of the covered pipeline at Kalgoorlie is 102.0 TJ/day, while at the same heating value, the capacity of the covered pipeline at Newman is 103.7 TJ/day.

Only if the minimum higher heating value were 37.0 MJ/m³, as has previously been assumed for the GGP, would covered pipeline capacity be approximately 109 TJ/d.

3.2 Forecast demand and capacity utilisation on the covered pipeline

At the time of GGT's August 2014 Access Arrangement Revisions Proposal, GGT was encountering some difficulty in securing new customers for capacity that had recently become available on parts of the covered pipeline.

As previously noted:

(a) Apex Minerals' gold mining operations at Wiluna had failed in 2013, leading to 3.5 TJ/d of capacity becoming spare; and

(b) [REDACTED].

GGT had not been able to immediately secure new customers for the capacity that had become available in 2013 as a consequence of the failure of Apex Minerals' operations and [REDACTED]. Consequently, at the time of GGT's August 2014 Access Arrangement Revisions Proposal, contracted capacity in the covered pipeline was expected to be only around 95 TJ/d in 2015, below the available capacity of the pipeline.

However since mid-2014, GGT has been able to secure new customers for capacity that has recently become available. Specifically:

(a) [REDACTED]

- (b) [REDACTED]; and
- (c) [REDACTED].

With these new agreements accounting for much of the spare capacity that was made available following the failure of Apex Minerals' operations and [REDACTED], GGT now expects that the covered pipeline will be at (or close to) full utilisation over the forthcoming access arrangement period. As shown in GGT's initial response to the Draft Decision, the available capacity of the covered pipeline is forecast to be fully contracted in 2018 and 2019, and nearly so in 2016 and 2017.²⁴

The concern which the ERA expresses in the Draft Decision, that there may be a material risk of contraction in demand for services on the covered pipeline in the near term, is unfounded. The available capacity of the covered pipeline is now forecast to be fully contracted even though the reference tariff has been calculated from all costs, with the exception of those which are directly attributable to the provision and operation of uncovered assets, and using an HCA depreciation approach. There is no basis for assuming, as the ERA has done, that the risk of covered capacity becoming, and remaining, under-utilised supports its proposed approach to cost allocation, and supports a change in the approach to depreciation.

²⁴ GGT initial response to the Draft Decision, pp 106-107 (Table 6).