



FINAL DECISION
Australian Gas Networks
Access Arrangement
2016 to 2021

Attachment 10 – Reference
tariff setting

May 2016

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Note

This attachment forms part of the AER's final decision on the access arrangement for Australian Gas Networks South Australian distribution network for 2016–21. It should be read with all other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 1 - Services covered by the access arrangement

Attachment 2 - Capital base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency carryover mechanism

Attachment 10 - Reference tariff setting

Attachment 11 - Reference tariff variation mechanism

Attachment 12 - Non-tariff components

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Attachment 14 - Other incentive schemes

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Shortened forms

Shortened form	Extended form
AA	Access Arrangement
AAI	Access Arrangement Information
AER	Australian Energy Regulator
AGN	Australian Gas Networks
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CCP	Consumer Challenge Panel
CESS	Capital Expenditure Sharing Scheme
CPI	consumer price index
CSIS	Customer Service Incentive Scheme
DRP	debt risk premium
EBSS	Efficiency Benefit Sharing Scheme
ECM	Efficiency Carryover Mechanism
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	value of imputation credits
GSL	Guaranteed Service Level
MRP	market risk premium
NECF	National Energy Customer Framework
NERL	National Energy Retail Law
NERR	National Energy Retail Rules
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NIS	Network Incentive Scheme
NPV	net present value
opex	operating expenditure
PFP	partial factor productivity
PPI	partial performance indicators

Shortened form	Extended form
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
RoLR	retailer of last resort
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	Service Target Performance Incentive Scheme
TAB	tax asset base
UAFG	unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

10 Reference tariff setting

This attachment outlines our assessment of the reference tariffs proposed by Australian Gas Networks (AGN) against the requirements of the National Gas Rules (NGR). Our assessment focuses on the structure of reference tariffs and takes into account the revenue and pricing principles.¹

10.1 Final decision

We do not accept AGN's revised proposal structure of reference tariffs for the 2016–21 access arrangement. Our final decision applies the structure of reference tariffs initially proposed by AGN and accepted in our draft decision.² We are satisfied the structure of the reference tariffs accepted in our draft decision complies with the requirements of the NGR.³ The final decision reference tariffs are set out in Table 10.1 and the ancillary reference tariffs are set out in Table 10.2. The quantum of the reference tariffs has been amended to reflect our final decision total revenue requirement for AGN.

We have revised the access arrangement having regard to our reasons for refusing to approve AGN's proposal. Our revisions are reflected in Annexure B of the *Approved Access Arrangement for AGN's South Australian Gas Distribution Network 1 July 2016–30 June 2021*, which gives effect to this decision.

For the reasons set out in our draft decision, we accept AGN's proposed prudent discounts.⁴ The prudent discounts are consistent with those approved for AGN's past two access arrangements.

10.2 AGN's revised proposal

AGN's revised proposal largely accepted our draft decision.⁵ However, it made one change to the structure of reference tariffs accepted in our draft decision which is the addition of the Mount Barker region to the tariff category that was specific to Tanunda. This change was brought about due to AGN's proposed network extension to the Mount Barker region.

¹ NGL, ss. 24(2)–(7).

² AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 247–249; AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, p. 10-7.

³ NGR, rr. 93, 94.

⁴ NGR, r. 96.

⁵ AGN, *Revised Access Arrangement Information for AGN's SA Natural Gas Distribution Network: Attachment 15.2 – Response to draft decision: Reference tariffs*, January 2016, p. 2.

10.3 AER's assessment approach

In an access arrangement, a service provider is required to specify for each reference service the reference tariff and proposed approach to setting the reference tariffs.⁶ This is done by:

- explaining how revenues and costs are allocated, including the relationship between costs and tariffs⁷
- defining the tariff classes⁸
- comparing the revenue to be raised by each reference tariff with the cost of providing each individual reference service⁹
- explaining and describing any pricing principles it employed.¹⁰

We are required to assess AGN's proposed reference tariffs. Where we do not accept them, we must determine the initial (i.e. 2016) reference tariffs to apply for each reference service.

In our assessment of the proposed reference tariffs, we reviewed AGN's:

- access arrangement information¹¹
- access arrangement proposal¹²
- additional information provided in response to our information requests.¹³

We also had regard to submissions received in the course of our consultation on the proposed access arrangement.¹⁴

Identifying the reference service

Service providers are required by the NGR to specify a reference tariff for each reference service.¹⁵ We first consider what is (or are) the reference service(s) for the

⁶ NGR, rr. 48(1)(d)(i), 72(1)(j).

⁷ NGR, rr. 72(1)(j)(i), 93(1)–(2).

⁸ NGR, rr. 94(1)–(2).

⁹ NGR, r. 94(3).

¹⁰ NGR, r. 72(1)(j)(ii).

¹¹ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 245–256; AGN, *Revised access arrangement information for AGN's SA Natural Gas Distribution Network: Attachment 15.2 – Response to draft decision: Reference tariffs*, January 2016, pp. 1–3.

¹² AGN, *Access arrangement for AGN's South Australian Gas Distribution Network 1 July 2016 – 30 June 2021*, July 2015, cl. 2, 3 and 4; Annexure B; AGN, *Access arrangement for AGN's South Australian Gas Distribution Network 1 July 2016 – 30 June 2021*, January 2016, cl. 2, 3 and 4; Annexure B.

¹³ AGN, *Response to AER's information request no. 25—Cost allocation method [email to AER]*, 30 September 2015.

¹⁴ NGR, r. 59.

¹⁵ NGR, r. 48(1)(d)(i).

purpose of the NGR when undertaking our review.¹⁶ Our decision on what constitutes the reference service is set out in Attachment 1 to this final decision.

Assessing the tariff setting method for the reference service

The reference tariffs for a full access arrangement must be designed to meet the requirements of the NGR. Our discretion on tariff design is limited.¹⁷

Consequently, we consider how the service provider intends to charge for reference services by:

1. assessing how AGN intends to allocate costs and revenues between reference services and other services. It must demonstrate that total revenue is allocated between reference and other services in the ratio in which costs are allocated between reference services and other services. Costs must also be allocated to the reference service and other services to which the cost is directly attributable.¹⁸
2. assessing how AGN grouped its customers into tariff classes. AGN is required to group together customers for reference services on an economically efficient basis and to avoid unnecessary transaction costs.¹⁹ We consider the nature of the reference service (e.g. volume and demand tariff classes) is consistent with the need to group customers for reference services together on an economically efficiently basis and avoid unnecessary transaction costs.
3. assessing how:
 - (a) the expected average revenue of a tariff class compares with the stand alone cost and avoidable cost of providing the reference service to that tariff class
 - (b) whether the tariff takes into account transaction costs associated with developing and applying the tariff
 - (c) whether the tariffs take into account the long run marginal costs of providing reference services
 - (d) whether customers belonging to the relevant tariff class are able, or likely, to respond to price signals.²⁰

Prudent discounts

We also assessed whether AGN's proposed prudent discounts were necessary to respond to competition from other providers of pipeline services or other sources of

¹⁶ AGN, *Access arrangement for AGN's South Australian Gas Distribution Network 1 July 2016 – 30 June 2021*, July 2015, sections 2 and 3; AGN, *Access arrangement for AGN's South Australian Gas Distribution Network 1 July 2016 – 30 June 2021*, January 2016, sections 2 and 3.

¹⁷ NGR, r. 94(6).

¹⁸ NGR, r. 93(2).

¹⁹ NGR, r. 94(2).

²⁰ NGR, rr. 94(3)–(4).

energy or to maintain efficient use of the pipeline.²¹ The prudent discounts were provided to us by way of confidential mathematical calculations. We also assessed whether the provision of the discount is likely to lead to lower reference tariffs than would otherwise be the case.²²

10.4 Reasons for final decision

We do not accept AGN's revised proposal structure of reference tariffs for the 2016–21 access arrangement. The revised structure includes tariffs for the Mount Barker region.²³ This change was brought about due to AGN's proposed network extension to the Mount Barker region. However, our final decision on AGN's capital expenditure— see Attachment 6 to this final decision— is that we are not satisfied that that the capex for the proposed extension to the Mount Barker region is conforming capex. Therefore, the proposed Mount Barker tariffs have not been included in our final decision.

Our final decision is to apply the structure of reference tariffs initially proposed by AGN for the 2016–21 access arrangement and accepted in our draft decision.²⁴ AGN's revised proposal structure of tariffs is consistent with its initial proposal structure but for the addition of Mount Barker to the tariff category that was specific to Tanunda. We are satisfied the structure of the reference tariffs initially proposed by AGN and which we accepted in our draft decision complies with the requirements of the NGR.²⁵ The final decision reference tariffs are set out in Table 10.1 and Table 10.2 below.

Final decision reference tariffs have been amended to reflect our final decision total revenue requirement.

The remainder of this section summarises our final decision to apply the structure of reference tariffs initially proposed by AGN under the following headings:

- the allocation of revenues and costs to reference tariffs
- the establishment of tariff classes
- tariff classes and revenue limits.

²¹ NGR, r. 96(2)(a).

²² NGR, r. 96(2)(b).

²³ AGN, *Revised access arrangement information: Attachment 15.2 – Response to draft decision: Reference tariffs*, January 2016, p. 2.

²⁴ AGN, *Access arrangement information*, July 2015, pp. 247–249; AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, p. 10-7.

²⁵ NGR, rr. 93, 94.

Table 10.1 AER final decision for AGN's initial tariff classes and tariff charge components for the 2016–21 access arrangement period

Customer category	Tariff class	Tariff category	Charge components
Domestic	Tariff R – Residential	Residential (excluding Tanunda)	One fixed charge Three volume throughput block charges Ancillary reference charges
	Tariff R – Residential	Residential – Tanunda	One fixed charge Three volume throughput block charges Ancillary reference charges
Commercial	Tariff C – Commercial	Commercial (excluding Tanunda)	One fixed charge Four volume throughput block charges Ancillary reference charges
	Tariff C – Commercial	Commercial – Tanunda	One fixed charge Four volume throughput block charges Ancillary reference charges
Demand	Tariff D – Northern	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Central	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Southern	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Peterborough	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Port Pirie	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Riverland	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – South East	Tariff D	Five capacity throughput block charges Ancillary reference charges
	Tariff D – Whyalla	Tariff D	Five capacity throughput block charges Ancillary reference charges

Source: AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, p. 7; AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 247–249.

Table 10.2 AER final decision for AGN's proposed ancillary reference services for the 2016–21 access arrangement period

Ancillary reference service
Special meter read
Disconnection service
Reconnection service
Meter removal
Meter reinstallation
Meter gas and installation test

Source: AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, p. 10-8; AGN, *Revised access arrangement information for AGN's SA Natural Gas Distribution Network: Attachment 15.2 – Response to draft decision: Reference tariffs*, January 2016, p. 3.

10.4.1 Allocation of revenues and costs to reference services

For the reasons set out in our draft decision, we are satisfied AGN's approach to allocating revenue and costs between reference services and non-reference services complies with the NGR²⁶ because:

- AGN's proposed costs relating to its reference services do not include costs incurred (and recovered) from the provision of its non-reference services.
- AGN has not allocated the non-reference service revenue to a reference service because the underlying costs have not been included in AGN's building block revenues.
- AGN's proposal included information outlining its stand-alone costs, long run marginal costs and incremental costs which we have no objection to.²⁷

10.4.2 Establishment of tariff classes

AGN groups its customers by the nature of the haulage reference service (residential, commercial or demand tariff categories) and classifies them by their location on the distribution network.²⁸ We consider that these characteristics are likely to be the driver of costs within AGN's gas distribution network. Therefore, using them to group customers into tariff class is appropriate. We note AGN's proposed tariff classes are consistent with the tariff classes in the current access arrangement.

²⁶ NGR, rr. 93(1), (2).

²⁷ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 250–253.

²⁸ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 247–250.

Based on the above reasons, we are satisfied that the proposed tariff classes are consistent with the requirements of the NGR.²⁹

10.4.3 Tariff classes and revenue limits

Our draft decision considered AGN's initial proposed reference tariffs were consistent with the NGR requirements for tariff classes and revenue limits.³⁰ Our final decision maintains this consideration.

Our draft decision assessed AGN's tariff classes and revenue limits against the following NGR considerations:

- (a) whether the expected average revenue of a tariff class compares with the stand-alone cost and avoidable cost of providing the reference service to that tariff class
- (b) whether the tariff takes into account transaction costs associated with developing and applying the tariff
- (c) whether the tariffs take into account the long run marginal costs of reference services
- (d) whether customers belonging to the relevant tariff class are able, or likely, to respond to price signals.³¹

Stand-alone and avoidable costs

We maintain our draft decision³² that AGN's proposed reference tariffs are consistent with the NGR requirements³³ because the expected revenue to be recovered lies on or between:

- an upper bound representing the stand-alone cost of providing the reference service to customers who belong to that tariff class
- a lower bound representing the avoidable cost of not providing the reference service to those customers.³⁴

²⁹ NGR, rr. 94(1), (2).

³⁰ AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, pp. 10-11 to 10-13.

³¹ NGR, r. 94.

³² AER, *Draft decision: Australian Gas Networks access arrangement 2016 to 2021: Attachment 10–Reference tariff setting*, November 2015, p. 10-12.

³³ NGR, r. 94(3).

³⁴ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 250–251; AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, Attachment 15.1.

Transaction costs

In our draft decision we were satisfied that AGN's proposed reference tariffs took into account transaction costs associated with the tariff and the need to avoid them where possible.³⁵ We considered the continuation of the current access arrangement tariff classes and tariff structures will minimise any additional transaction costs across access arrangement periods, thereby avoiding any unnecessary transaction costs.

Long run marginal cost

AGN used the Average Incremental Cost approach to calculate the long run marginal cost (LRMC) by tariff class.³⁶ However, it noted that given data limitations it is not possible to obtain reasonable LRMC outcomes at the tariff class level, by geographical region or even at a whole-of-network level.³⁷

Our discretion under the NGR on LRMC is limited.³⁸ However, we consider the approach taken by AGN is generally consistent with that applied by other gas distribution networks and has historical precedent in past access arrangements.

Response to price signals

We are satisfied AGN's reference tariffs have been determined having regard to whether customers are able, or likely, to respond to price signals.³⁹ The existing structure of tariffs is well known to AGN's customers because it is based on historic precedent and allows them to respond to the prices within each block (or band) by adjusting their consumption and thereby alter their total charges.

10.4.4 Prudent discounts

As per our draft decision, we consider that the prudent discounts⁴⁰ AGN proposed to offer are necessary to respond to competition from other providers of pipeline services or alternative energy sources and to ensure the ongoing efficient use of its pipeline. AGN demonstrated that the negotiated revenue from each prudent discount service exceeds the estimate of the avoidable costs.⁴¹ Without a prudent discount a customer may bypass the network with the consequence that tariffs would be higher for all

³⁵ NGR, rr. 94(2), 94(4).

³⁶ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, pp. 251–252.

³⁷ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network*, July 2015, p. 253.

³⁸ NGR, r. 94(6).

³⁹ NGR, r. 94(4)(b)(ii).

⁴⁰ Service providers offer prudent discount to users in order to respond to competition from other providers of pipeline services or other services of energy. Alternatively, the service provider may offer prudent discounts in order to maintain the efficient use of the pipeline. Statistical data is provided on a confidential basis to the AER.

⁴¹ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network: Attachment 13.1 (confidential)*, July 2015.

remaining users. AGN's proposal is entirely consistent with the prudent discounts methodology we have approved for it previously.⁴²

The proposed prudent discounts will be offered to the same demand customers who have received these discounts during the past two access arrangements.⁴³ For each current prudent discount, AGN provided justification that the provision of the discount is likely to lead to lower reference tariffs than otherwise would have been the case.⁴⁴ Therefore, we are satisfied that the proposed prudent discounts are consistent with the NGR and are thus approved.⁴⁵

⁴² AER, *Final decision: Envestra Ltd Access arrangement proposal for the SA gas network*, June 2011, p. 114.

⁴³ AGN, *Access arrangement information for AGN's SA Natural Gas Distribution Network: Attachment 13.1 (confidential)*, July 2015.

⁴⁴ NGR, r. 96(2)(b).

⁴⁵ NGR, r. 96(2).