

 FINAL DECISION

Australian Gas Networks

Access Arrangement

2016 to 2021

Attachment 13 – Demand

May 2016

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Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: (03) 9290 1444
Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

1. 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

Attachment 13 - Demand

Attachment 14 - Other incentive schemes

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1. Shortened forms

| 1. Shortened form
 | 1. Extended form
 |
| --- | --- |
| 1. AA
 | Access Arrangement |
| 1. AAI
 | Access Arrangement Information |
| 1. AER
 | 1. Australian Energy Regulator
 |
| 1. AGN
 | Australian Gas Networks |
| 1. ATO
 | Australian Tax Office |
| 1. capex
 | 1. capital expenditure
 |
| 1. CAPM
 | 1. capital asset pricing model
 |
| 1. CCP
 | 1. Consumer Challenge Panel
 |
| 1. CESS
 | 1. Capital Expenditure Sharing Scheme
 |
| 1. CPI
 | 1. consumer price index
 |
| 1. CSIS
 | Customer Service Incentive Scheme |
| 1. DRP
 | 1. debt risk premium
 |
| 1. EBSS
 | Efficiency Benefit Sharing Scheme |
| 1. ECM
 | Efficiency Carryover Mechanism |
| 1. ERP
 | 1. equity risk premium
 |
| 1. Expenditure Guideline
 | Expenditure Forecast Assessment Guideline |
| 1. gamma
 | value of imputation credits |
| 1. GSL
 | Guaranteed Service Level |
| 1. MRP
 | 1. market risk premium
 |
| 1. NECF
 | National Energy Customer Framework |
| 1. NERL
 | National Energy Retail Law |
| 1. NERR
 | 1. National Energy Retail Rules
 |
| 1. NGL
 | 1. National Gas Law
 |
| 1. NGO
 | 1. National Gas Objective
 |
| 1. NGR
 | 1. National Gas Rules
 |
| 1. NIS
 | Network Incentive Scheme |
| 1. NPV
 | net present value |
| 1. opex
 | 1. operating expenditure
 |
| 1. PFP
 | partial factor productivity |
| 1. PPI
 | 1. partial performance indicators
 |
| 1. PTRM
 | 1. post-tax revenue model
 |
| 1. RBA
 | 1. Reserve Bank of Australia
 |
| 1. RFM
 | 1. roll forward model
 |
| 1. RIN
 | 1. regulatory information notice
 |
| 1. RoLR
 | retailer of last resort |
| 1. RPP
 | 1. revenue and pricing principles
 |
| 1. SLCAPM
 | 1. Sharpe-Lintner capital asset pricing model
 |
| 1. STPIS
 | Service Target Performance Incentive Scheme |
| 1. TAB
 | tax asset base |
| 1. UAFG
 | unaccounted for gas |
| 1. WACC
 | 1. weighted average cost of capital
 |
| 1. WPI
 | Wage Price Index |

# Demand

This attachment sets out our assessment of the demand forecasts for AGN for the 2016–21 access arrangement period. Demand is an important input into the derivation of AGN’s reference tariffs. It also affects operating expenditure (opex) and capital expenditure (capex) linked to network growth (new connections).[[1]](#footnote-1)

## Final decision

We are satisfied that AGN's proposed demand forecasts comply with rule 74(2) of the National Gas Rules (NGR).

## AGN's revised proposal

AGN's revised proposal incorporated the revisions to its demand forecasts required by our draft decision.[[2]](#footnote-2)

In our draft decision, we accepted AGN's forecast connection numbers for Tariff V residential and commercial customers and for Tariff D customers. We also accepted AGN's forecast for Tariff D MDQ. We did not accept AGN's forecast consumption per connection for Tariff V residential and commercial customers.[[3]](#footnote-3)

## AER’s assessment approach

Our assessment approach is the same as the draft decision.[[4]](#footnote-4)

### Interrelationships

We have considered the relevant interrelationships between different components of AGN's access arrangement as part of our analysis.

Several interrelationships exist. This includes the effect of forecast demand on the efficient amount of capex and opex and tariffs in the 2016–21 access arrangement period. In particular, the demand forecasts impact:

* approved Tariff V connections capex, given the number of new connections affects the amount of approved connections capex
* approved opex, given the forecast total connections numbers and total consumption (output growth) are used in deriving the additional opex required to service the larger network
* tariff prices, given they depend on forecast consumption (demand) per connection. Changes in these forecasts will change tariff prices. In simple terms, tariff prices are determined by cost divided by quantity (where quantity is measured by demand per connection). This means that an increase in forecast quantity has the effect of reducing the tariff price.

### Minimum, maximum and average demand

Under the NGR, AGN’s access arrangement information must include minimum, maximum and average demand for the earlier access arrangement period.[[5]](#footnote-5)

We consider that AGN’s access arrangement information satisfies the requirement of rule 72(1)(a)(iii) of the NGR.[[6]](#footnote-6)

### Forecast pipeline capacity and utilisation

The NGR require that to the extent practicable, the access arrangement information should include forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period.[[7]](#footnote-7) AGN did not provide information and submitted that:[[8]](#footnote-8)

Rule 72 of the National Gas Rules (NGR) requires AGN, to the extent it is practicable, to provide a forecast of pipeline capacity and utilisation over the next (2016/17 to 2020/21) AA period. As previously indicated to the Australian Energy Regulator (AER), such parameters are not relevant or have no meaning in the context of a natural gas distribution network. This reflects that the Network consists of a variety of inter-linked pipe materials, each with a different capacity (unlike natural gas transmission pipelines).

We recognise there are practical considerations which mean that calculating capacity is not straightforward.

## Reasons for final decision

In our draft decision, having regard to advice from our consultant ACIL Allen,[[9]](#footnote-9) we accepted AGN's forecast Tariff V connection numbers for residential and commercial customers, as well as AGN's forecast Tariff D MDQ. We are satisfied that these demand forecasts are consistent with rule 74(2) of the NGR.

However, we did not accept AGN's forecasts for Tariff V residential and commercial consumption per connection. We agreed with our consultants, ACIL Allen, that an error existed with the method Core Energy (AGN's consultant) used to forecast Tariff V residential and commercial consumption per connection. We therefore considered that AGN’s forecasts for Tariff V residential and business consumption per connection had not been arrived at on a reasonable basis and did not represent the best estimates in the circumstances.

AGN's revised proposal incorporated the revisions to its demand forecasts required by our draft decision.[[10]](#footnote-10)

On the basis that we have not identified any new information which impacts upon our reasoning as set out in the draft decision, we are satisfied that the demand forecasts in AGN's revised proposal, including its forecasts for capacity utilisation, are arrived at on a reasonable basis and represent the best estimate possible in the circumstances.[[11]](#footnote-11) This conclusion must be read in conjunction with our draft decision, which details our analysis of AGN's demand forecasts.[[12]](#footnote-12)

1. Our final decisions on AGN’s capex and opex are set out in attachments 6 and 7 of this decision. [↑](#footnote-ref-1)
2. AGN, Revised Access Arrangement Information for AGN's SA Natural Gas Distribution Network, January 2016 - Attachment 14.5 Demand , p. 1. [↑](#footnote-ref-2)
3. AER, Draft decision Australian Gas Networks access arrangement - Attachment 13 - Demand, November 2015, pp. 13-12 to 13-16. [↑](#footnote-ref-3)
4. AER, Draft decision Australian Gas Networks access arrangement - Attachment 13 - Demand, November 2015, pp. 13-8 to 13-10. [↑](#footnote-ref-4)
5. NGR, r. 72(1)(a)(iii)(A). [↑](#footnote-ref-5)
6. AGN, *Access Arrangement Information* for AGN's South Australian Natural Gas Distribution Network*,* July 2015, p. 79–81. [↑](#footnote-ref-6)
7. NGR, r. 72(1)(d). [↑](#footnote-ref-7)
8. AGN, Access Arrangement Information for AGN's South Australian Natural Gas Distribution Network*,* July 2015, p. 31. [↑](#footnote-ref-8)
9. ACIL Allen, Review of Demand Forecasts for the AGN South Australian Gas Networks, 11 November 2015. [↑](#footnote-ref-9)
10. AGN, Revised Access Arrangement Information for AGN's SA Natural Gas Distribution Network, January 2016 - Attachment 14.5 Demand, p. 1. [↑](#footnote-ref-10)
11. NGR, r. 74(2). [↑](#footnote-ref-11)
12. AER, Draft decision Australian Gas Networks access arrangement - Attachment 13 - Demand, November 2015. [↑](#footnote-ref-12)