DRAFT DECISION
ActewAGL Distribution Access Arrangement 2016 to 2021

Attachment 10 – Reference tariff setting

November 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on ActewAGL Distribution's access arrangement for 2016–21. It should be read with all other parts of the draft decision.

The draft 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

Contents

Shortened forms

Shortened form	Extended form
AA	Access Arrangement
AAI	Access Arrangement Information
AER	Australian Energy Regulator
ASA	Asset Services Agreement
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CCP	Consumer Challenge Panel
CESS	Capital Expenditure Sharing Scheme
CMF	construction management fee
CPI	consumer price index
DAMS	Distribution Asset Management Services
DRP	debt risk premium
EBSS	Efficiency Benefit Sharing Scheme
EIL	Energy Industry Levy
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
GSL	Guaranteed Service Level
GTA	gas transport services agreement
ICRC	Independent Competition and Regulatory Commission
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
NPV	net present value
opex	operating expenditure

Shortened form	Extended form
PFP	partial factor productivity
PPI	partial performance indicators
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
RoLR	retailer of last resort
RSA	Reference Service Agreement
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STTM	Short Term Trading Market
TAB	Tax asset base
UAFG	Unaccounted for gas
UNFT	Utilities Network Facilities Tax
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 ActewAGL Distribution (ActewAGL) against the requirements of the National Gas Rules. Our assessment focuses on the structure of reference tariffs and takes into account the revenue and pricing principles.[1]

10.1 Draft decision

We accept ActewAGL's proposed structure of reference tariffs for the 2016–21 access arrangement period. We are satisfied the proposed structure of the reference tariffs complies with the requirements of the NGR.[2]

Nevertheless, the quantum of the proposed reference tariffs must be amended to reflect the revised revenue allowance set out in this draft decision.

We have also provided ActewAGL with the ability to introduce and withdraw reference tariffs classes and tariffs after commencement of the 2016–21 access arrangement but only where they have been pre-approved by us.

Our reasons for the draft decision are set out below.

10.2 ActewAGL's proposal

ActewAGL proposed significant changes to its reference tariffs for the 2016–21 access arrangement period. It considered the changes:

- simplifies the charge components
- creates a tariff structure that recognises differences in which consumers use gas
- provides customers with cost reflective tariffs that encourage the efficient use and growth of the network overtime
- streamlines the process for major customers to seek additional gas capacity on the network, and
- creates a tariff assignment process to enable customers to respond to ActewAGL's reference tariffs.[3]

The reference tariffs proposed by ActewAGL are outlined in Table 10.1.

ActewAGL's proposed ancillary reference services are consistent with those in the current access arrangement. In addition it proposed a new service for the

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1 NGL, ss. 24(2), 24(5).
2 NGR, rr. 93; 94.
3 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 5.

decommissioning and removal of meters.[4] As noted in attachment 1 of our draft decision, ActewAGL has included the ancillary reference services in the haulage reference service. The proposed ancillary reference tariffs are outlined in Table 10.2.

Table 10.1 ActewAGL's proposed initial tariff classes and tariff charge components

Customer category	Tariff class	Tariff category	Charge components
Volume (V)	**Residential (R)**	Residential individually metered (VRI)	One fixed charge Four volume block charges Ancillary reference charges
		Residential individually metered with gas heating and other gas appliances (VRH)	One fixed charge Three volume block charges Ancillary reference charges
		Residential boundary metered (VRB)	One fixed charge Three volume block charges Ancillary reference charges
		Large scale generation principally for residential end customers (VRG)	One fixed charge Three capacity block charges Ancillary reference charges
	Business (B)	Small business individually metered (VBS)	One fixed charge Three volume block charges Ancillary reference charges
		Medium business individually metered (VBM)	One fixed charge Three volume block charges Ancillary reference charges
Demand (D)	**Business (B)**	Major customer capacity (DBC)	One provision of basic metering equipment charge Three demand capacity block charges Ancillary reference charges
		Major customer throughput (DBT)	One provision of basic metering equipment charge One volume charge Ancillary reference charges
		Demand business large scale generation (DBG)	One provision of basic metering equipment charge Three demand capacity block charges

[4] ActewAGL, *Access arrangement information, Attachment 2: Services policy*, June 2015, pp. 8–9.

Customer category	Tariff class	Tariff category	Charge components
			Ancillary reference charges

Source: ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 15; ActewAGL, *Access arrangement 2016–21*, July 2015, Schedule 3.

Table 10.2 ActewAGL's proposed ancillary reference services

Ancillary reference service	Description of service
Special meter reads	Meter reading for a delivery point that is in addition to the scheduled meter reading
Disconnections	Disconnection to prevent the withdrawal of gas at the delivery point (the method of disconnection is at the discretion of ActewAGL)
Reconnections	Reconnection to allow the withdrawal of gas at the delivery point but only where the equipment to allow the withdrawal of gas is still present at the delivery point
Decommissioning and meter removals (new)	Removal of a meter and the permanent decommissioning of a network connection (the method of disconnection is at the discretion of ActewAGL)
Request for service	Network users wishing to obtain a transport service for a delivery point must submit a request for service in accordance with the request-for-service procedure set out in the access arrangement.

Source: ActewAGL, *Access arrangement information, Attachment 2: Services policy*, June 2015, p. 8.

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 the proposed approach to the setting reference tariffs.[5] This is done by:

- explaining how revenues and costs are allocated, including the relationship between costs and tariffs[6]
- defining the tariff classes[7]
- comparing the revenue to be raised by each reference tariff with the cost of providing each individual reference service[8]
- explaining and describing any pricing principles it employed.[9][10]

5 NGR, rr. 48(1)(d)(i); 72(1)(j)(i); 72(1)(j)(ii).
6 NGR, r. 93(1)–(2).
7 NGR, r. 94(1)–(2).
8 NGR, r. 94(3).
9 NGR, r. 94(3)–(4).
10 NGR, rr. 48(1)(d)(i); 72(1)(j)(i); 72(1)(j)(ii).

We are required to assess ActewAGL's proposed reference tariffs.[11] Where we do not accept them, we must determine the initial reference tariffs to apply for each reference service.

In our assessment of the proposed reference tariff, we reviewed ActewAGL's:

- access arrangement information[12]
- access arrangement proposal[13]
- tariff structure statement[14]
- explanation of proposed revisions to the 2010 access arrangement.

We also had regard to submissions received in the course of our consultation on the proposed access arrangement.[15]

Identifying the reference service

Service providers are required by the NGR to specify a reference tariff for each reference service.[16] We first consider what is (or are) the reference service(s) for the purpose of the NGR when undertaking our review.[17] Our decision on what constitutes the reference service is set out in the services attachment—attachment 1.

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.[18]

Consequently, we consider how ActewAGL intends to charge for reference services by:

1. assessing how ActewAGL 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. Furthermore, costs must also be allocated to the reference service and other services to which the cost is directly attributable.[19]

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11 NGR, r. 97(4).

12 ActewAGL, *Access arrangement information: Overview*, June 2015, section 1.19; ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015.

13 ActewAGL, *Access arrangement for the ACT Queanbeyan and Palerang gas distribution network 1 July 2016 to 30 June 2021*, July 2015 (ActewAGL, *Access arrangement 2016–21*, July 2015).

14 ActewAGL, *Access Arrangement Information, Appendix 12.01: Tariff structures statement*, June 2015.

15 NGR, r. 59.

16 NGR, r. 48(1)(d)(i).

17 ActewAGL, *Access arrangement 2016–21*, July 2015, sections 2 and 3.

18 NGR, rr. 93, 94.

19 NGR, r. 93(2).

2. assessing how ActewAGL grouped its customers into tariff classes. ActewAGL is required to group together customers for reference services on an economically efficient basis and to avoid unnecessary transaction costs.[20] We consider the nature of the reference service (e.g. volume and demand tariff classes) are 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 to likely to respond to price signals.[21]

10.4 Reasons for draft decision

We accept ActewAGL's proposed new tariff structure. While it involves significant changes to the tariff structure in ActewAGL's current access arrangement, we note the new tariff structure is consistent with those applied by other gas distribution networks in recent years.[22] We also consider it is compliant with the requirements of the NGR.[23]

A number of submissions were concerned about ActewAGL's proposed new tariff structure. However, we found no compelling evidence in submissions that would lead us to not accept ActewAGL's proposed tariff structure.

We have also decided to permit ActewAGL to introduce or withdraw tariff classes and/or tariffs during the 2016–21 access arrangement. However, we note these will be limited to those we have pre-approved. Our discussion of these matters is set out below.

The remainder of this attachment sets out the reasons for our draft decision under the following headings:

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

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[20] NGR, r. 94(2).

[21] NGR, r. 94(3)–(4).

[22] For example see: Jemena Gas Networks (New South Wales), *Access arrangement: JGN's NSW gas distribution networks 1 July 2015–30 June 2020—(Incorporating revisions required by AER Final Decision 3 June 2015)*, June 2015, schedule 2.

[23] NGR, rr. 93, 94.

10.4.1 Tariff structure

We received a number of submissions on ActewAGL's proposed tariff structure with the following concerns:

- tariff structure complexity
- efficiency of declining block tariffs
- tariff categories for customers with multiple gas appliances
- impact of the tariff structure on vulnerable and disadvantaged customers.[24]

Our discussion of each of these concerns is set out below.

Tariff structure complexity

Origin Energy and the North Canberra Community Council raised concerns that ActewAGL's proposed tariff structure is overly complex and are not convinced it will result in a more efficient use of the gas network.[25]

The complexity of the proposed tariff structure is acknowledged by ActewAGL.[26] However, we agree with ActewAGL that although more detailed, the proposed tariff structure provides for tariff categories that better reflect the characteristics of end use customers. In doing so, the proposed tariff structure allows a more cost reflective approach to tariffs. This is an efficient outcome.

We also consider the increased cost reflectivity of the tariff structure means the underlying tariffs send more appropriate price signals to end use customers about their comparative costs for utilising the network. This will allow them to make more informed choices about how they utilise the network.

Therefore, we consider these potential benefits of the proposed tariff structure outweigh the cost of its increased complexity. Moreover, we observe that the proposed tariff structure is the same as that applied by gas distribution networks in other jurisdictions.[27]

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[24] ACTCOSS, *Submission on ActewAGL gas distribution pricing determination 2016–2021*, 3 September 2015; Alternative Technology Association, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015; North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015; Origin Energy, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015.

[25] Origin Energy, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 6; North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 2.

[26] ActewAGL, *Access arrangement information, Appendix 12.01: Tariff structure statement*, June 2015, p. 22.

[27] For example, see: Jemena Gas Networks (New South Wales), *Access arrangement: JGN's NSW gas distribution networks 1 July 2015–30 June 2020—(Incorporating revisions required by AER Final Decision 3 June 2015)*, June 2015, schedule 2.

Declining block tariffs

The North Canberra Community Council considered that ActewAGL's proposed declining block tariffs discourage energy efficiency and that ActewAGL should provide additional data justifying the size of the tariff blocks.[28] It also submitted that a simple dollar per gigajoule tariff could apply for all customers so that consumers pay in proportion to their usage of the network.[29]

We acknowledge that declining block tariffs can have efficiency concerns. This is of particular relevance in electricity, where declining block tariffs send relatively poor price signals to customer' about how their use of the network impacts peak demand and electricity network constraints. Resolution of these network constraints typically involves additional capital expenditure, which manifests in higher tariffs for all customers. In these instances, tariffs which send more appropriate price signals about network constraints should be employed.

Nonetheless, we note gas networks do not have the same peak load constraints and issues that befall electricity networks. Therefore, declining block tariffs for gas networks do not have the same efficiency concerns as they do for electricity networks.

We also note the structure of declining bock tariffs is well known to ActewAGL's customers because they have been applied in the current access arrangement. The structure of these tariffs allows customers to respond to the prices within each block (or band) by adjusting their consumption. Doing so reduces or increases their overall network charges.

As ActewAGL's proposed tariff structure better reflects the characteristics of customers, more appropriate price signals are provided to them about their comparative costs for utilising the network. These price signals will allow customers to make more informed choices about how they utilise the network.

In comparison, we consider the simple dollar per gigajoule tariff posited by the North Canberra Community Council would considerably dilute these cost reflective price signals because it does not take into account the specific costs for each tariff category. Rather it would harbour cross-subsidisation across customers, with some customers paying the costs of the network directly attributed to others. We consider this outcome to be inefficient.

As a result, we consider no compelling evidence has been provided that would lead us not to accept the continuation of ActewAGL's declining block tariffs.

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[28] North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, pp. 2–6.

[29] North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, pp. 2–6.

We are satisfied with the information ActewAGL provided to justify its tariff block structures.[30] However, we also note the North Canberra Community Council request for ActewAGL to provide additional data to support its tariff block structure. We encourage ActewAGL to include this information in its revised access arrangement proposal for stakeholders' consideration.

Tariff categories for customers with multiple gas appliances

ActewAGL's proposed tariff structure includes a number of tariff categories specifically for customers with more than one gas appliance (multi–appliance tariff categories[31]).[32] The multi–appliance tariff categories have a relatively higher fixed charge but lower usage (volumetric) charges compared to the default volume residential individually metered tariff category. These new tariffs are designed to encourage installation of additional gas appliances (such as gas cooking, gas powered washing machines and dryers) in an effort to bring about greater utilisation of the network throughout the year. It is deigned to make the gas network more attractive vis a vis the competing electricity sector.

For example, residential customers typically use gas during the winter mornings and afternoons predominantly for heating.[33] The intent of the residential multi–appliance tariff category is to encourage these customers to use gas over the low gas usage spring and summer periods, by installing additional gas appliances.[34]

Origin Energy raised concerns with the proposed multi–appliance tariff categories stating that tariff structures should be based on a customer's usage not the number of appliances installed.[35]

We note that overall, ActewAGL's proposed tariff structure has been based on customer usage characteristics. For example, a characteristic of difference between the volume and demand customer groups is whether the customer is expected to use equal to or more than 10 terajoules (TJ) of gas per year. Also, the underlying assumption of the multi–appliance tariff categories is that the customer's usage profile will be different to those on the default tariff. Therefore, we consider ActewAGL has considered customer's usage in designing its proposed tariff structures.

Relevantly, the proposed multi–appliance tariff categories are optional tariff categories for customers. That is customers are not automatically assigned to a multi–appliance tariff category. Rather they will be initially assigned to the default residential individually metered tariff category. The tariffs of the default tariff category have been designed to

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30 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, pp. 30–41.

31 Multi–appliance tariff category is the term we have used in our draft decision to distinguish these tariff categories from other types of tariff categories. We note ActewAGL simply refers to the multi–appliance tariff categories as 'other proposed tariff categories'.

32 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 28.

33 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 23.

34 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 24.

35 Origin Energy, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 6.

be consistent with the tariffs these customers incur in the current access arrangement period.

To be reassigned to a multi–appliance tariff category a customer must request this through their retailer. Simply having or installing multiple gas appliances does not necessitate this customer being assigned to a multi–appliance tariff category. On this basis, we consider that customers will not be discriminated against because they have choice about assignment to a multi–appliance tariff category.

We also consider the price signals of the multi–appliance tariff categories will allow customers to make more informed decisions about their gas usage. They may choose to install multiple gas appliances and transition to a multi–appliance tariff category if they consider there is benefit in them doing so.

However, as noted by the Alternative Technology Association the decision to choose gas appliances over electric is sensitive to range of interrelated factors such as the age of the gas and electricity appliances as well as comparable gas and electricity tariff structures.[36]

Origin Energy also noted it does not support the proposed requirement that evidence be provided for customer reassignment to a multi–appliance tariff category because it is unclear, onerous and would ultimately lead to additional costs for customers.[37] However, apart from providing evidence, it is unclear to us what other prudent process could be undertaken to ensure the customer has multiple gas appliances installed. We encourage ActewAGL to work with retailers to establish an administratively simple and cost effective process for demonstrating a customer's qualification for these tariffs.

The North Canberra Community Council raised concerns with the proposed multi–appliance tariff categories, noting that providing lower prices for larger gas users with multiple gas appliances will encourage increased gas use during peak periods.[38] As discussed, ActewAGL's gas network does not have the same peak load constraints and issues that befall electricity networks. Therefore, peak time usage is less of a concern for ActewAGL's gas network as it is for electricity networks.

The North Canberra Community Council also considered a more efficient use of the gas network could be achieved by establishing time of use tariffs and seasonal tariffs that use price signals to encourage gas use during non-peak periods.[39] We generally agree with this consideration and encourage ActewAGL to consider including tariffs of this or a similar nature in its revised access arrangement proposal. However, we

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36 Alternative Technology Association, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, pp. 3–6.

37 Origin Energy, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 6.

38 North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 2.

39 North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 2.

acknowledge the limitations upon ActewAGL to implement dynamic tariffs given the current metering technologies installed on ActewAGL's network.[40]

Impact on vulnerable and disadvantage customers

A number of stakeholders raised concern regarding the uncertain impact the proposed tariff structure may have on vulnerable and disadvantaged customers, such as low income households.[41] These stakeholders considered that stability in tariff structures and prices were highly desirable for such customers. We think that to the extent possible, ActewAGL's proposed tariff structure addresses these concerns. Initially ActewAGL will assign residential customers (unless otherwise instructed by the customer's retailer) to the residential individually metered tariff category.[42] ActewAGL has designed this tariff category to be similar to the tariffs these customers incur under the current access arrangement. Therefore, the proposed tariff structure takes account of possible adverse impacts on vulnerable customers. ActewAGL noted this initial tariff assignment process will be done to:

- minimise customer billing impacts across access arrangements
- enable customers to respond to the 2016–17 tariffs by requesting assignment to another tariff category through their retailer.[43]

ActewAGL also noted that it does not set retail gas prices, however it sets its tariff levels to minimise network price shocks.[44] Therefore, we are satisfied that to the extent possible ActewAGL has taken into consideration stable tariff structures and price impacts in establishing its proposed tariff structure.

Ability to add, vary or remove tariffs

ActewAGL proposed a mechanism to enable it to introduce or withdrawal reference tariffs via the annual tariff variation mechanism. This was so that it could respond in a timely manner to changes in customer preferences that may, for instance, necessitate introducing a new tariff class.

We accept ActewAGL's proposal that the introduction or withdrawal of reference tariffs be managed via the annual tariff variation mechanism, rather than reopening the access arrangement. In our determination for Jemena Gas Networks (NSW) we adopted the same approach as was proposed by ActewAGL.

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40 ActewAGL, *Access arrangement information, Appendix 12.01: Tariff structure statement*, June 2015, p. 22.

41 Alternative Technology Association, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 9; Care Inc., *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, p. 3; North Canberra Community Council, *Submission on ActewAGL access arrangement proposal 2016–21*, 10 August 2015, pp. 2–3.

42 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, pp. 28–29.

43 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 28.

44 ActewAGL, *Access arrangement information, Appendix 12.01: Tariff structure statement*, June 2015, p. 22.

This is administratively simpler and more efficient for network operators and customers, than reopening an access arrangement. The latter can be a lengthy process, generally only reserved for making amendments on account of errors in, or omissions from, access arrangements.

10.4.2 Allocation of revenues and costs to reference tariffs

We are satisfied ActewAGL's approach to allocating revenue and costs between reference services and non-reference services comply with the NGR[45] for the following reasons:

- its proposed costs relating to haulage reference service do not include costs incurred (and recovered) from the provision of its non-reference services.
- ActewAGL has not allocated the non-reference service revenue to a reference service because the underlying costs have not been included in ActewAGL's building block revenues
- ActewAGL's proposal included information outlining its stand-alone costs, long run marginal costs and incremental costs which we have no objection to.[46]

10.4.3 Establishment of tariff classes

ActewAGL groups its customers by the nature of the haulage reference service (volume or demand) and classifies them by the type of end user (residential or business). We consider that these characteristics are likely to be the driver of costs within ActewAGL's gas distribution network. Therefore, using them to group customers into tariff classes is appropriate. We note ActewAGL's proposed tariff classes are consistent with the tariff classes applied by other gas distribution networks.[47] The historical precedent is sound.

Based on the above reasons, we are satisfied that the proposed tariff classes are consistent with the requirements of the NGR.[48]

10.4.4 Tariff classes and revenue limits

We have assessed ActewAGL's proposed tariff classes and revenue limits against the following considerations of the NGR:[49]

(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

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45 NGR, rr. 93(1), (2).

46 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, pp. 43–47.

47 For example, see: Jemena Gas Networks New South Wales, *Access arrangement: JGN's NSW gas distribution networks 1 July 2015–30 June 2020—(Incorporating revisions required by AER Final Decision 3 June 2015)*, June 2015, schedule 2.

48 NGR, rr. 94(1)–(2).

49 NGR, r. 94.

(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.

Stand-alone and avoidable costs

We are satisfied that ActewAGL's proposed reference tariffs are consistent with the NGR requirements because the expected revenue to be recovered lie 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.[50]

We consider that ActewAGL's definitions of avoidable and stand-alone costs for the tariff classes are acceptable for assessing compliance with the NGR.[5152] We have also reviewed the methodology applied by ActewAGL to demonstrate that for each tariff, the expected tariff revenue lies on or between the avoidable and standalone costs.[53] This is comparable to the analysis we have undertaken for other energy businesses over a number of years, and the outcome is consistent.

Transaction costs

We are satisfied that to the extent possible, ActewAGL's proposed reference tariffs have taken into account transaction costs associated with the tariffs and the need to avoid them where possible.[54]

We consider ActewAGL has undertaken best endeavours to minimise transaction costs across access arrangements. However, we acknowledge that additional administrative costs will be incurred in the transition to the new tariff structure. We consider these to be one-off costs and are unavoidable. We also consider the benefits of the proposed tariff structure—such as more cost reflective pricing and increasing the customers' ability to respond to price signals—outweigh these incremental administrative costs.

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50 NGR, r. 94(3); ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, p. 43.

51 HoustonKemp, *Development of a cost of service model for the ACT, Queanbeyan and Palerang gas distribution network: A report for ActewAGL Distribution*, June 2015, p. 4.

52 NGR, r. 94(3).

53 HoustonKemp, *Development of a cost of service model for the ACT, Queanbeyan and Palerang gas distribution network: A report for ActewAGL Distribution*, June 2015, pp. 4–7, 17.

54 NGR, r. 94(2) and (4); ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, pp. 45–47.

Long run marginal cost

ActewAGL noted it used the average incremental cost approach to calculate the long run marginal cost (LRMC) by tariff class.[55]

We note our discretion under the NGR on LMRC is limited.[56] However, we consider the approach taken by ActewAGL is generally consistent with that applied by other gas distribution networks and has historical precedent in past access arrangements. At any rate we observe that the calculated values of LRMC are sensitive to the assumptions made around a number of different variables. As such, these should only be used as a guide when assessing price levels and structures, rather than be considered definitive.

Response to price signals

We are satisfied ActewAGL's proposed reference tariffs have been determined having regard to whether customers are able, or likely to respond to price signals.[57]

As discussed, the proposed tariff structure provides for more cost reflective tariffs which will send more appropriate price signals to end customers about their use of the network. These price signals will allow customers to make more informed choices about how they utilise the network.

We also consider the structure of declining bock tariffs is well known to ActewAGL's customers and their continuation in the 2016–21 access arrangement will allow them to respond to the prices within each block (or band) by adjusting their consumption. Doing so will reduce or increase their overall network charges.

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55 ActewAGL, *Access arrangement information, Attachment 12: Reference tariffs*, June 2015, pp. 43–44; HoustonKemp, *Development of a cost of service model for the ACT, Queanbeyan and Palerang gas distribution network: A report for ActewAGL Distribution*, June 2015, pp. 8–17.

56 NGR, r. 94(6).

57 NGR, r. 94(4)(b)(ii).