



DRAFT DECISION
AusNet Services
Gas access arrangement
2018 to 2022

Attachment 13 – Demand

July 2017

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Note

This attachment forms part of the AER's draft decision on the access arrangement for AusNet Services for 2018-22. 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

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Attachment 13 - Demand

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Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CESS	Capital Expenditure Sharing Scheme
CIE	Centre for International Economics
CPI	consumer price index
CCP	Consumer Challenge Panel
DRP	debt risk premium
EBSS	Efficiency Benefit Sharing Scheme
ERP	Energy for Regions Program
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
GSL	Guaranteed Service Level
MHQ	maximum hourly quantity
MRP	market risk premium
NGL	national gas law
NGO	national gas objective
NGR	national gas rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
RIN	regulatory information notice
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

13 Demand

This attachment sets out our assessment of the demand forecasts for AusNet for the 2018–22 access arrangement period. Demand is an important input into the derivation of AusNet's reference tariffs. It also affects operating expenditure (opex) and capital expenditure (capex), which are linked to network growth (new connections).¹

13.1 Draft decision

Based on all the information before us, we do not accept AusNet's Tariff V demand forecasts for the 2018–22 access arrangement period. We are satisfied that the overall demand forecasting methodology applied by AusNet's consultant, Centre for International Economics (CIE), is in most aspects consistent with rule 74(2) of the National Gas Rules (NGR). However, our draft decision not to accept AusNet's opex step change for a marketing program has a flow-on impact on demand forecasts, in particular forecast residential connection numbers.² Our alternative forecast of 71,783 net connections over the 2018-22 access arrangement period is 1.8 per cent lower than AusNet's forecast of 73,100 net connections.³

We encourage AusNet to update data where revised values are available, such as data sourced from the Victoria in Future⁴ and AEMO's 2016 National Gas Forecasting Report (NGFR), as part of its revised access arrangement proposal.

With respect to Tariff D and M, we are satisfied that forecast demand (MHQ) for these tariff classes is consistent with rule 74(2) of the NGR.

The reasons for our draft decision are discussed in Section 13.4 below.

13.2 AusNet's proposal

AusNet engaged CIE to prepare its demand forecasts for its Victorian network for the 2018–22 access arrangement period. A summary of the key aspects of AusNet's demand forecasts are set out in Table 13-1 (Tariff V - residential and commercial) and Table 13-2 (Tariff D and Tariff M)⁵.

¹ Our draft decisions on AusNet's capex and opex are respectively set out in Attachments 6 and 7 of this draft decision

² Attachment 7 sets out the reasons for our draft decision on the step change.

³ AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 76.

⁴ The Victoria in Future forecasts are an independent and publicly available data source used by the Victorian Government for projections of population: <https://www.planning.vic.gov.au/land-use-and-population-research/victoria-in-future-2016/victoria-in-future-data-tables>.

⁵ Tariff D and Tariff M are gas consumers who consume more than 10,000 GJ per annum or more than 10 GJ in one hour. They are not billed on the basis of their consumption, rather on the peak demand for gas in one hour, maximum hourly quantity. The difference between Tariff M and Tariff D is in the tariffing structure. See AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 72.

Demand for Industrial customers (Tariff D and Tariff M) is specified in maximum hourly quantities (MHQ) since this is the basis on which those customers are charged. Tariff D and Tariff M customers are not levied a fixed charge, therefore, forecasting the number of these customers in the forthcoming access arrangement period is not required.⁶

Table 13-1: AusNet demand forecasts for Tariff V for the 2018–22 access arrangement period

	2018	2019	2020	2021	2022
Residential connections ^a	14,296	14,499	14,749	15,039	14,517
Residential Demand (TJ) ^a	31,710	32,002	32,281	32,512	32,501
Commercial connections	162	165	168	171	165
Commercial Demand (TJ)	6,200	6,283	6,356	6,402	6,464

Source: AusNet Access Arrangement Information⁷

Notes: a. these values include the impact of AusNet Services' marketing step change

Table 13-2: AusNet's demand forecasts for Tariff D and Tariff M MHQ for the 2018–22 access arrangement period

	2018	2019	2020	2021	2022
MHQ (GJ)	7,160	7,125	7,119	7,094	7,022

Source: AusNet Access Arrangement Information⁸

AusNet also made a post-model adjustment to take account of the impact on the demand forecasts from the introduction of a proposed marketing program. The values in Table 1 include this impact which comes about from an estimate that 5 per cent of appliance rebates will result in new connections.⁹ In AusNet's network, this leads to an incremental increase of 1318 new connections, which equates to an increase of 1.6 per cent above CIE's gross connections forecast. This results in an incremental load of

⁶ Further, there is no expenditure associated with connecting new Tariff D and Tariff M customers that is not funded by the customers themselves. Any expenditure associated with the provision of assets to enable the connection is borne by the customer, either through a customer contribution, separate charges (Tariff D) or the Haulage Reference Service charge (Tariff M). See ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, p.10.

⁷ AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 71-76

⁸ AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 75.

⁹ AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 75.

1.33 PJ, which is a 0.84 per cent increase in demand over the 2018-22 access arrangement period.¹⁰

AusNet forecast total residential demand to increase by around 0.6 per cent per year over 2018–22 access arrangement period. This compares to 2.4 per cent per year growth in the current access arrangement period.

AusNet forecast total commercial demand to increase by 1 per cent over the 2018–22 access arrangement period. This compares to 1.9 per cent per year in the current access arrangement period.

Forecast residential consumption per connection is expected to increase by 0.16 per cent. Commercial consumption per connection is expected to increase by 1 per cent over the 2018–22 access arrangement period, which compares to 1.1 per cent and 1.3 per cent respectively in the current access arrangement period.

Residential connections are forecast to increase by 2.12 per cent.¹¹ Similarly, commercial connections are also forecast to increase by approximately 1 per cent over the 2018–22 access arrangement period, which compares to 2.16 per cent and 1.4 per cent respectively in the current access arrangement period.

Industrial demand (Tariff D and M) is forecast to decrease by 0.5 per cent over the 2018–22 access arrangement period. This compares to 1.0 per cent per year in the current access arrangement period.

13.2.1 Forecasting methodology

The forecasts for Tariff V gas demand were derived by multiplying the forecast of net customer numbers by the forecast consumption per connection.¹² This methodology was applied for both residential and commercial customer groups, albeit with different drivers.

13.2.1.1 Forecasting of Tariff V connections numbers

CIE undertook a number of steps to forecast residential customer numbers in existing service areas:

- CIE used customer data at the postcode level, and allocated them to Local Government Areas (LGAs);¹³

¹⁰ AusNet Services, *Appendix 7D - Axiom Economics, Consistency of Victorian gas distribution businesses joint marketing campaign with rule 91 of the NGR*, 20 December 2016, p.57.

¹¹ Noting this forecast includes the marketing step change. The forecast without the impact of marketing is 2.08 per cent increase per annum.

¹² AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 31.

¹³ ABS concordance (Cat 1270.055) was used to allocate customers from the LGA level down to the postcode level.

- The 2016 Victoria in Future (ViF) ¹⁴ growth rates for occupied private dwellings in the LGA are then used to grow the number of customers within that postcode; and
- CIE then applied a marginal penetration rate ¹⁵ by LGA to the LGA growth rate to forecast the number of net new gas connections in existing areas. The CIE assumed marginal penetration rates in line with recent values, which have been falling over 2007-2016. ¹⁶ CIE applied the marginal penetration rates in 2016 ¹⁷ on the basis that it would be similar to that experienced in 2016.

A different methodology was used to forecast customer numbers in new areas, referred to as the Energy for Regions Program (ERP) towns. ¹⁸ In the absence of any existing customers in the ERP towns, CIE forecast a target level of customers expected, which was based on ERP plans and an expected take-up rate. ¹⁹

Commercial customer numbers in existing and ERP towns are forecast based on the statistical relationship that exists between commercial and residential customer number growth in the LGA. CIE found this relationship to be 11.7 new commercial residential customers for each 1000 new residential customers. ²⁰

13.2.1.2 Forecasting of Tariff V consumption per connection

CIE used an econometric model using panel historical (2004-2015) data to forecast consumption per connection for residential customers. ²¹ Its forecasts of residential consumption per connection are based on the statistical relationship it found between historical residential consumption per connection and a number of explanatory

¹⁴ <https://www.planning.vic.gov.au/land-use-and-population-research/victoria-in-future-2016/victoria-in-future-data-tables>.

¹⁵ Defined as net number of new customer (new connection minus disconnections) divided by the net number of new occupied dwellings (new dwellings minus demolitions). See ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, p.8.

¹⁶ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 3.

¹⁷ This is was due to the assumption that it captures the most up-to-date consumer preference. See AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 41.

¹⁸ Energy for Regions Program is a Victorian Government program, which is aimed at supplying reticulated natural gas to communities across regional and rural Victoria. AusNet Services is expanding its network to three regional areas that do not currently have gas, being the townships of Winchelsea, Bannockburn and Avoca. See AusNet Services, *Access Arrangement Information 2018–22*, 21 December 2016, p.55.

¹⁹ This is due to the fact that there are no historical data (zero customer connections) to predict the penetration rate going forward.

²⁰ CIE has established a relationship between residential and commercial customers. The coefficient of determination was 0.56, which was deemed higher than other alternative drivers, particularly population growth. AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 71.

²¹ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 3.

variables, being Effective Degree Day (EDD),²² type of dwelling,²³ retail gas prices and energy efficiency.

As AusNet's customer data suggest that residential consumption per connection is higher for existing connections than for new connections, it forecast new and existing residential consumption per connection separately.²⁴

CIE investigated the impact of a post-model adjustment to take account for an anticipated increase in the rate of switching from gas to electricity appliances.²⁵ However, AusNet did not apply this adjustment (which would reduce residential consumption per connection).

For commercial consumption per connection, CIE used statistical analysis similar to that which it used to forecast residential consumption per connection. The only difference is the absence of the dwelling type variable because it is not applicable to commercial customers.

13.2.1.3 Forecasting of Tariff D and Tariff M

CIE forecast the MHQ for Industrial Customers based on AEMO's total Tariff D annual gas system demand projections.²⁶ The forecast took into account the expected closure of two automobile manufacturing companies in the 2018–22 access arrangement period. Therefore, CIE did not make a post-modelling adjustment to reflect these expected closures.

13.3 AER Assessment approach

The NGR require that the access arrangement information for a full access arrangement proposal for a distribution pipeline must include usage of the pipeline over the earlier access arrangement period showing:

- minimum, maximum and average demand for each receipt and delivery point; and customer numbers in total and by tariff class for each receipt or delivery point.²⁷

²² Effective Degree Day Index is an index previously developed to capture the combined impact of temperature, wind and sunshine on gas consumption. It attempts to take into account the weather-related parameters that may affect consumer behaviour in relation to gas consumption. Higher EDD corresponds to colder temperature and higher demand per connection, as more gas is required for heating.

²³ Type of dwelling distinguishes between flats and free standing houses.

²⁴ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 58

²⁵ CIE prepared two separate forecasts - one with no post-modelling adjustment and one with a post-modelling adjustment. The post-modelling adjustment forecast was intended to demonstrate the forecast which is in line with the expectation that appliance switching would accelerate in the 2018-22 period, relative to the historic trend. See AusNet Services, *Information request response #10*, 6 March 2017, p.2-3

²⁶ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 92

²⁷ NGR, r. 72(1)(a)(iii).

- 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.²⁸

The NGR also require that forecasts and estimates:²⁹

- are arrived at on a reasonable basis; and
- represent the best forecast or estimate possible in the circumstances.

We consider that there are two important considerations in assessing whether demand forecasts are arrived at on a reasonable basis and whether they represent the best forecasts possible in the circumstances.³⁰ These are:

- the appropriateness of the forecast methodology – this involves consideration of how the demand forecast has been developed; and
- whether or not relevant factors have been taken into account in developing demand forecasts.

To determine whether AusNet proposed demand forecasts are arrived at on a reasonable basis and are the best possible forecasts in the circumstances, we have reviewed:

- information provided by AusNet as part of its proposed access arrangement
- the data inputs used to implement the forecasting methodology
- CIE demand model and its report on AusNet's demand forecasts
- AusNet's Access Arrangement information and
- AusNet's responses to the regulatory information notice (RIN)³¹.

In making our draft decision, we have had regard to:

- information provided by AusNet as part of its proposed access arrangement information
- alternative methodologies for forecasting demand, while being cognisant of the idiosyncratic features of a given methodology when compared to other possible alternatives³²

²⁸ NGR, r. 72(1)(d).

²⁹ NGR, r. 74(2).

³⁰ NGR, r. 74(2).

³¹ AusNet Services, *GAAR 2018-22 Regulatory templates*, 16 December 2016

³² ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, p.A-2.

- advice from ACIL Allen in its review of AusNet's demand forecasts. ACIL Allen reviewed AusNet's demand forecasts and provided independent advice on CIE's methodology and assumptions
- additional information provided by AusNet in response to our information requests and
- public submissions during the consultation process.

13.3.1 Interrelationships

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

This includes the effect of forecast demand on the efficient amount of capex and opex and tariffs in the 2018–22 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
- impact approved opex, given the forecast total connections numbers and total consumption (output growth) is used in deriving the additional opex required to service the larger network
- impact tariffs, given they depend on forecast consumption (demand) per connection. In simple terms, tariffs 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.
- are impacted by AusNet's proposed marketing program.

13.4 Reasons for draft decision

Based on all the information before us, we are not satisfied that AusNet's forecasts for Tariff V demand are consistent with rule 74(2) of the NGR. This is because we have not accepted AusNet's proposed step change for a marketing program which has a flow-on effect on forecast new residential connection numbers, and therefore, Tariff V demand. Attachment 7 sets out our draft decision on the proposed marketing program.

AusNet made a post-model adjustment to reflect the effect of the marketing program. Other than this stand-alone adjustment, we consider that all other aspects of AusNet's forecasts have been arrived at on a reasonable basis, and are the best estimate in the circumstances. We were informed by ACIL Allen's review of CIE's methodology in coming to our position.

We agree with ACIL Allen's advice that whilst there are a number of issues in CIE's methodology, any additional effort spent in addressing these issues will not result in a more reliable forecast.³³

With respect to Tariff D and M, we are satisfied that the demand forecasts for these tariff classes are consistent with rule 74(2) of the NGR.

The reasons for our decision are discussed further below.

13.4.1 Minimum, maximum and average demand

Under the NGR, AusNet's access arrangement must include minimum, maximum and average demand for the earlier access arrangement period.³⁴ AusNet's access arrangement information and its response to our RIN satisfy these requirements.³⁵

13.4.2 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.³⁶

AusNet did not provide this information in its access arrangement information. However, AusNet's distribution network is a meshed network made up of interconnected pipes, and there are a number of practical considerations that mean that calculating forecast capacity and utilisation is not practicable.

13.4.3 Demand Forecast of Tariff V

Our draft decision is to not accept AusNet's forecast of Tariff V demand for the 2018-22 access arrangement period. This is because we consider that one input used to forecast Tariff V demand - forecast net new residential connection numbers - was not arrived at on a reasonable basis and therefore does not represent the best estimate possible in circumstances.

We accept all other forecasts that have been used to derive the demand forecast for Tariff V, being forecast net new commercial connection numbers and forecast consumption per connection for both residential and commercial customers.

³³ ACIL Allen has identified four methodological issues, namely, absence of dynamic in estimation, presence of endogenous variables among explanatory variables, non-linearities in demand and omitted variable bias. See ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 14-16.

³⁴ NGR, r. 72(1)(a)(iii)(A).

³⁵ AusNet Services, *Access Arrangement Information 2018-22*, 21 December 2016, pp. 33-36 and AusNet Services, *GAAR 2018-22 Regulatory templates*, 16 December 2016.

³⁶ NGR, r. 72(1)(d).

13.4.3.1 Forecast of consumption per connection

We are satisfied with CIE's methodology for estimating residential and commercial consumption per connection, and the resulting forecasts for the 2018-22 access arrangement period.

Weather normalisation

We agree with ACIL Allen's assessment that CIE's weather normalisation methodology is sound. CIE applied its estimated EDD index to account for the impact of weather and to establish the 'normal' weather trend. The results were an estimated declining rate of -8.5 EDD per year based on the work by CSIRO.³⁷ ACIL Allen noted that the CSIRO forecasts are based on long run climate change patterns and considered reliable.³⁸

In assessing CIE's weather normalisation process, ACIL Allen compared it against the results of other recent studies of weather trends in Victoria, including AEMO's weather analysis in the 2016 NGFR.³⁹ CIE's results are broadly consistent with AEMO's forecast of -6.8 decline in EDD per year for Victoria over the next 20 years.

We agree with ACIL Allen's assessment that CIE's weather normalisation methodology leads to a reasonable estimate of future 'normal' weather.

Assessment of the factors influencing the forecasts

Rather than forecast the retail gas price itself, CIE has relied on retail gas price projections used by AEMO in the 2015 NGFR. Based on panel regression results, CIE applied a short run own-price elasticity of -0.053 to forecast residential consumption.⁴⁰ Consistent with ACIL Allen's assessment, we consider that the results from CIE's analysis are reasonable.⁴¹ AusNet also notes that it will update the retail gas price forecasts (and therefore demand forecasts) in its revised access arrangement proposal for the 2016 NGFR.

Based on panel regression results, CIE applied a short run own-price elasticity of -0.265 to forecast commercial consumption per connection. ACIL Allen advised that a higher short run own-price elasticity for commercial customers than for residential customers is consistent with commercial customers being more likely to respond to price signals quickly.⁴²

³⁷ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 115-117

³⁸ ACIL Allen, *Review of demand forecasts for AusNet Services*, 23 May 2017, p.4.

³⁹ AEMO, *Forecasting Methodology Information Paper - National Gas Forecasting Report*, February 2017, p.53

⁴⁰ AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 55-6; ACIL Allen, *Review of demand forecasts for AusNet Services*, 23 May 2017, p.13.

⁴¹ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, p.13

⁴² ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, p.14.

ACIL Allen also assessed the overall reasonableness of CIE's forecast of Tariff V consumption per connection by comparing it to the historical 8 year period (2008–15). ACIL Allen found that the forecasts are consistent with the historical trend. The forecast for residential customers is a continued decline in average annual consumption at rates similar to the long-run historical downward trend.

For commercial customers, average consumption per connection is forecast to remain almost flat at around 360 GJ per annum, which is also close to the historical trend.⁴³

13.4.3.2 Forecast of new connections numbers

AusNet made a stand-alone post-model adjustment to forecast new residential connection numbers to reflect the effect of the marketing program. Consistent with our draft decision to not accept AusNet's proposed opex step change for its proposed marketing program (which impacts forecast new residential connection numbers), we do not accept that AusNet's forecast of new residential connection numbers represents the best estimate possible in the circumstances.

Our alternative forecast is 71,783 net new connections over the 2018-22 access arrangement period. This is 1.8 per cent lower than AusNet's forecast of 73,100 net new connections.⁴⁴

This is the only aspect of AusNet's demand forecast methodology we do not accept. We agree with ACIL Allen that, overall, CIE's reliance on the independent Victoria in Future's occupied private dwellings growth forecast and the derived penetration rate at the 2016 level is reasonable.⁴⁵ We would also encourage AusNet to update its forecasts to incorporate the latest Victoria in Future forecasts in its revised proposal.

We note that the Consumer Challenge Panel (CCP11) questioned whether AusNet has adequately allowed for decreases in penetration rates when forecasting residential connection numbers.⁴⁶ We are satisfied that CIE has considered the declining trend in penetration rates by investigating a post-modelling adjustment to incorporate appliance switching. Despite not including the post-modelling adjustment as part of the proposed demand forecast, AusNet expects that the future changes in gas consumption is already being captured in the historical time trend.⁴⁷

⁴³ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 4

⁴⁴ AusNet Services, *Access Arrangement Information 2018-22*, 16 December 2016, p. 76.

⁴⁵ Penetration rate were derived using actual customer numbers that occupied new dwellings in AusNet's service region.

⁴⁶ Consumer Challenge Panel (CCP11), *Response to proposals from AGN, AusNet and Multinet for the 2018-22 access arrangement*, 3 March 2017, pp.39-40

⁴⁷ AusNet Services, *Information request response #10*, 6 March 2017, p.2-3

Net new commercial connections

Consistent with ACIL Allen's observations, we did not identify any significant issues with CIE's methodology in forecasting net new commercial connections.⁴⁸ Therefore, based on the information before us, we consider that the commercial net new connections forecast is arrived at on a reasonable basis and represents the best forecast possible in the circumstances.

13.4.4 Demand forecasts for Tariff D and Tariff M

We are satisfied that AusNet's forecast for industrial customers, Tariff D and Tariff M is arrived at on a reasonable basis and represents the best forecast possible in the circumstances.⁴⁹

ACIL Allen compared the Tariff D and Tariff M MHQ forecast to the historical trend over the 2008–15 period. ACIL Allen noted that whilst the forecast shows a continued decline, this decline falls at an average rate that is less than the projected historical trend.⁵⁰ Nevertheless, given the small number of cohort that make up Tariff D and Tariff M and the significant uncertainty as to the forecast degree of usage, we agree with ACIL Allen's conclusion that AusNet's forecasts for these tariff classes are reasonable and thus represent the best forecast possible in the circumstances.⁵¹ In particular, CIE has examined the effect on forecast MHQ from expected plant closures in 2017-18 and beyond, and whether these are consistent with AEMO's forecasts for large industrial MHQ, which CIE's forecasts are based on.⁵²

We also agree with ACIL Allen that CIE should update its MHQ forecasts using AEMO's latest total Tariff D system usage forecast, for the purposes of the revised access arrangement proposal.⁵³

13.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable:

Revision 13.1 Make all necessary revisions to reflect this draft decision, as set out in Section 13.4.3.2.

⁴⁸ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 26.

⁴⁹ NGR, r. 74(2).

⁵⁰ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 25.

⁵¹ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 30.

⁵² AusNet Services, *Appendix 4A - Centre for International Economics, 2018-22 GAAR Consumption and Customer Forecasts*, 16 September 2016, p. 92.

⁵³ ACIL Allen, *Review of demand forecasts for AusNet Services*, 14 June 2017, pp. 10.