Final decision

AusNet Gas Services
Gas distribution access arrangement
1 July 2023 to 30 June 2028

Attachment 6 – Operating expenditure

June 2023

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6 Operating expenditure

Operating expenditure (opex) is the operating, maintenance and other non-capital expenses, incurred in the provision of pipeline services. Forecast opex is one of the building blocks we use to determine a service provider's total revenue requirement.

This attachment outlines our assessment of AusNet's proposed opex forecast for the 2023–28 access arrangement period.

6.1 Final decision

Our final decision is to include a total opex forecast of $349.8 million ($2022–23) for the 2023–28 access arrangement period, excluding ancillary reference services and including debt raising costs. Our final decision approves higher total forecast opex than in AusNet's revised proposal, because we have added $14.5 million ($2022–23) for forecast costs of small customer connection abolishments. We consider these costs meet the opex criteria[1] and forecasts and estimates criteria.[2] As in our draft decision, we remain satisfied that other elements of AusNet's opex forecast ($335.3 million ($2022–23)) reflect the opex criteria and the criteria for forecasts and estimates. AusNet adjusted its total opex by $0.4 million ($2022–23) for lower debt raising costs in its revised proposal compared to our draft decision.

Our final decision is:

- $40.8 million ($2022–23) (or 13.2%) higher than the opex forecast we approved in our final decision for the 2018–22 period
- $55.3 million ($2022–23) (or 18.8%) higher than AusNet's actual opex in the 2018–22 period.

In Figure 6.1 we compare our final decision opex forecast (the orange dashed line) to AusNet's revised proposal for the next access arrangement period (the blue dashed line). We also show the forecasts we approved for the last two access arrangement periods from 2013–2022 (the solid orange line) and AusNet's actual and estimated opex across that period (the blue bars).

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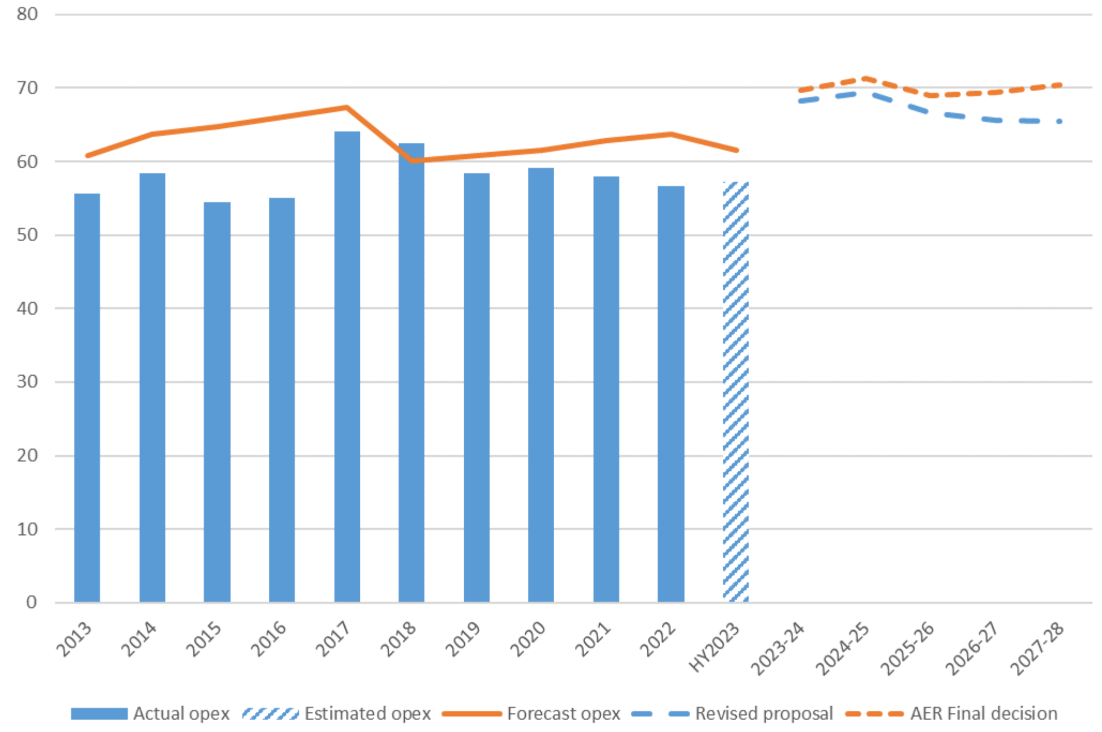
1 Under rule 91 of the National Gas Rules (NGR), opex 'must be such as would be incurred by service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.' Where opex satisfies the test in rule 91, in this decision we say it 'satisfies the opex criteria'.

2 Under rule 74 of the NGR, information in the nature of the forecast or estimate must be supported by a statement of the basis of the forecast/estimate. Further, forecasts and estimates must be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances. Where a forecast or estimate meets the requirements of this rule, in this decision we say it 'satisfies the forecasts and estimates criteria'.

Figure 6.1 Historical and forecast opex ($million, 2022–23)



Source: AusNet, *Regulatory accounts*, 2013 to 2021; AusNet, *Revised proposal 2023–28, PTRM*; AusNet, *Access arrangement, PTRM* (multiple periods: 2013–17, 2018–22, 2023–28); AER analysis.

Note: Includes debt raising costs and movements in provisions. The 6-month 2023 period (HY2023) has been annualised to make it comparable and consistent with other years.

The total opex forecast in AusNet's revised proposal, and our draft decision, was $40.8 million ($2022–23) higher than actual opex for the 2018–22 period (excluding ancillary reference services). This reflected the treatment of costs related to AusNet's move from current on-premises IT solutions to the cloud, and the transfer of 'Software as a Service' expenditure from the capital expenditure forecast to opex. This means that these costs will be recovered through revenues in the period incurred, rather than distributed across periods through the regulatory depreciation allowance. AusNet made corresponding changes to its capital expenditure forecast. AusNet's total opex forecast also reflected price and output growth, which are increasing in line with forecast changes to the consumer and wage price indices and forecast growth on the network.

Some stakeholders raised concerns around the total opex forecast approved in our draft decision. These concerns related particularly to increases in the total opex forecast at a time when demand is expected to fall, opex being allowed in excess of our alternative estimate in the draft decision, and the Priority Service Program being funded. As discussed in section 6.5.1, in our draft decision we tested AusNet's total opex forecast by developing an alternative estimate using our top-down 'base–step–trend' forecasting approach. We arrived at our alternative estimate in a different way to AusNet and found a material difference to AusNet's proposed opex forecast, which we subsequently rejected. This alternative estimate took into account forecast changes in demand and the Energy Safe Victoria levy, which we considered should be recovered via opex rather than through the price control mechanism. We also encouraged AusNet to continue to work with relevant stakeholders in preparing its revised proposal for the Priority Service Program. We are disappointed that AusNet did not provide further detail about a refined scope of this program in its revised proposal. However, consistent with the outcomes our *Towards Energy Equity Strategy* is seeking to achieve, we expect AusNet to be able to demonstrate tangible outcomes for vulnerable customers under this program at the start of its next access arrangement period.

Our final decision is $14.5 million ($2022–23) higher than AusNet's revised proposal, and our draft decision, as we have included additional opex for small customer abolishment costs. This reflects our final decision to socialise the bulk of small customer abolishment costs across haulage reference service tariffs, and establish a discounted standalone ancillary reference service tariff, to ensure the safe operation of the network (see Attachment 9). This means that a significant proportion of the small customer abolishment costs will be recovered via haulage reference opex and the associated charges. This results in higher forecast opex than AusNet included in its revised proposal.

AusNet's revised proposal re-stated its position that a standalone small customer abolishment cost reflective tariff was appropriate and did not include any small customer abolishment costs in its total opex forecast for haulage reference services.[3] In light of our decision to socialise the bulk of small customer abolishment costs and recover them via haulage reference service charges, we developed an estimate of the opex AusNet will require to recover its costs of undertaking small customer abolishments using:

- The abolishment costs to be socialised of $602 ($2022–23) which was determined via AusNet's cost reflective tariff for small customer abolishments of $822 ($2022–23)[4] *less* the $220 ($2022–23) ancillary reference service charge.
- Our forecast of the number of small customer abolishments that AusNet will need to perform over the next period, which is lower than AusNet's forecast,[5] as we have:
  - reprofiled AusNet's relatively flat profile of abolishment forecasts to increase steadily over time rather than through an initial and subsequent step change, to better reflect likely customer behaviour which we consider will gradually change over time.
  - lagged AusNet's abolishments forecast by two years, assuming a consistent gradual increase from AusNet's current abolishment volumes to its forecast abolishment volumes during this lag period, to again better reflect likely customer behaviour and responses to current and any future government initiatives incentivising electrification.
  - reduced AusNet's abolishments forecast by 26% to account for customers who electrify their homes but wish to retain their gas connection for the 'option value' it provides. AusNet suggested that this behaviour was likely to occur.

AusNet did not consider the reprofiling of its abolishment forecast or a two-year lag were required but accepted our position. We have set out our forecast of abolishments, and our reasons, in greater detail in section 6.5.2.

3 AusNet, *Revised Proposal, Access Arrangement 2024–28*, January 2023, p. 47.

4 AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update, 28 March 2023*.

5 AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update, 28 March 2023*.

Because of the significant uncertainty around these small customer abolishment costs we have also decided to include a true-up mechanism to ensure costs are only recovered for the actual number of connections abolished, and that any cost savings achieved are returned to customers. This is discussed further in Attachment 10.

6.2 AusNet's revised proposal

AusNet included a total opex forecast, excluding ancillary reference services and including debt raising costs, of $335.3 million ($2022–23) in its revised proposal. This is $0.4 million ($2022–23) lower than the amount we included in our draft decision, due to AusNet reducing debt raising costs.

6.3 Submissions on our draft decision and AusNet's revised proposal

We received 11 submissions on both our draft decision and AusNet's revised proposal, with those on opex related issues from the Brotherhood of St Laurence (BSL) and the AER's Consumer Challenge Panel, sub-panel 28 (CCP28). The Victorian Community Organisations also referred to opex in the context of its discussion around accelerated depreciation not being increased and instead the AER reviewing opex and capital expenditure to identify cost reductions suitable with falling demand.[6] We have taken these submissions into account in developing our final decision as set out in section 6.5.1.

BSL and CCP28's submissions both raised concerns with our opex draft decisions. BSL was concerned about the forecast opex the networks are proposing, which was approved in our draft decisions, at a time when demand is expected to fall.[7] It considered an appropriate assessment would have reviewed base year expenditure to consider declining demand forecasts, applied stringent standards to approving all step changes, disallowed non-compliant programs and responded to stakeholder and consumer feedback. It made the following specific recommendations:[8]

- opex should be re-evaluated for the final decision
- opex revenue in excess of the AER's alternative estimate should not be approved
- current opex spending that is not in the interest of consumers should be assessed, with adjustments made
- the Priority Services Program should not be funded
- the AER should work closely with gas networks and stakeholders to clarify that activities that prolong gas usage for customers, especially vulnerable consumers, are not acceptable.

6 Victorian Community Organisations, *Submission from Victorian community organisations to 2023–28 Victorian Distribution Access Arrangements*, February 2023, p. 2.

7 Brotherhood of St Laurence, *2023–2028 Victorian Gas Distributors' Access Arrangement – Draft decision and Revised Proposals submission,* February 2023, p. 20.

8 Brotherhood of St Laurence, *2023–2028 Victorian Gas Distributors' Access Arrangement – Draft decision and Revised Proposals submission,* February 2023, pp. 20–23.

Both BSL and CCP28 raised objections to our inclusion of opex for the Priority Service Program in the draft decisions.[9] They noted stakeholder submissions to the initial proposal were strongly opposed to additional funding being approved, considering while worthy activities, these should be a part of business as usual funding. BSL was concerned the allowance was granted before the AER was satisfied with the project's design, customer support and efficiency. It also considered the Priority Services Program must not subsidise continued gas use. CCP28 observed that it is unlikely the Priority Service Program will be up and running in Victoria as at 1 July 2023 and that customers will be paying for services they are not receiving from the network businesses. CCP28 also advised the AER to consider a mechanism for quarantining Priority Services Program funding and releasing the funds only when agreed services are available to be delivered.

6.4 Assessment approach

Our role is to decide whether or not to accept a business's forecast opex. We approve the business's forecast opex if we are satisfied that it meets the opex criteria and the criteria for forecasts and estimates. We set out in detail the approach we use to determine whether a proposal meets the opex criteria in section 6.3 of our draft decision.[10]

6.5 Reasons for final decision

Our final decision is to include a total opex forecast of $349.8 million ($2022–23) for the 2023–28 access arrangement period, excluding ancillary reference services and including debt raising costs. Our final decision approves higher total forecast opex than in AusNet's revised proposal, because we have added $14.5 million ($2022–23) for forecast costs of small customer connection abolishments. We consider these costs also meet the opex criteria[11] and forecasts and estimates criteria.[12] As in our draft decision, we remain satisfied that other elements of AusNet's opex forecast ($335.3 million ($2022–23)) reflect the opex criteria and the criteria for forecasts and estimates. AusNet adjusted it total opex by $0.4 million ($2022–23) for lower debt raising costs in its revised proposal compared to our draft decision.

The total opex forecast in AusNet revised proposal, and our draft decision, was $40.8 million ($2022–23) higher than actual opex for 2018–22 period (excluding ancillary reference services). This reflected price and output growth, which are increasing in line with forecast changes to the consumer and wage price indices and forecast growth on the network. Further, the treatment of costs related to AusNet's move from current on-premises IT solutions to the cloud, and the transfer of 'Software as a Service' expenditure from the capital expenditure forecast to opex. We have set out in section 6.5.1 our responses to the issues and concerns raised by stakeholders about our draft decision for total opex forecast.

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9 Brotherhood of St Laurence, *2023–2028 Victorian Gas Distributors' Access Arrangement – Draft decision and Revised Proposals submission,* February 2023, pp. 22. CCP28, *Advice to the AER – Draft decision and revised access arrangement proposals*, February 2023, p. 12.

10 AER, *AusNet 2023–28, Draft Decision, Attachment 6, Operating expenditure*, December 2022, pp. 8–12.

11 NGR, r. 91.

12 NGR, r. 74.

Our final decision is $14.5 million ($2022–23) higher than AusNet's revised proposal, and our draft decision, as we have included additional opex for small customer abolishment costs. This reflects our final decision to socialise the bulk of small customer abolishment costs across haulage reference service tariffs, and establish a discounted standalone ancillary reference service tariff for the abolishment service, to ensure the safe operation of the network (see Attachment 9). This means that a significant proportion of the small customer abolishment cost will be recovered via haulage reference opex and the associated charges, which results in higher forecast opex than AusNet included in its revised proposal. We have set out the basis for our decision regarding the additional opex for small customer abolishment costs in section 6.5.2.

6.5.1 Issues raised by stakeholder submissions in relation to the draft decision

We have considered the issues and concerns raised in stakeholder submissions as set out in section 6.3.

In determining our alternative estimate for all our opex decisions, we use a form of incentive-based regulation to assess the business's forecast opex over the access arrangement period at a total level. To do so, we develop an alternative estimate of total opex using a 'top-down' forecasting method, known as the 'base–step–trend' approach. Our alternative estimate of total opex must reasonably reflect the opex criteria which provides that our forecast must be that as would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.[13] In assessing this, where there is a material difference between our alternative estimate and the business' total opex forecast (generally less by more than 2%) we substitute our alternative estimate for the business's forecast in the decision we make.

Our draft decision alternative estimate of total opex for AusNet was forecasted applying this top-down 'base–step–trend' method. In doing this we considered the efficiency of base opex, the various aspects of the trend (including growth of base opex related to demand changes, price growth and productivity gains) and then considered the two opex step changes proposed by AusNet (relating to IT cloud and Software as a Service costs as well as Environmental Protection Act obligations). As a part of these considerations, we also examined AusNet's proposal to remove ESV levy costs and recover them annually via the price control mechanism. We arrived at our alternative estimate in a different way to AusNet, a key reason being because we included ESV costs in the base opex. As our alternative estimate was materially higher (9.6%) than AusNet's proposal, due to the inclusion of the ESV levy costs, we used our alternative estimate in the draft decision.

In this regard, we consider we did undertake an appropriate assessment of AusNet's total opex forecast, as in developing our alternative estimate we:

- Assessed its opex in the base year, including that this was lower than both the opex allowed in our last determination and the average opex for the previous three years. Further, considered economic benchmarking that compared AusNet's base year opex to

13 NGR, r. 91.

that of other gas distributors. This analysis showed that AusNet was one of the most efficient businesses in terms of opex multilateral partial factor productivity benchmarking over the 1999–2019 period. We did not identify any evidence of AusNet's 2021 base year being materially inefficient and considered it an appropriate choice of base year. See section 6.4.1 of our draft decision.

- Assessed average annual output growth to be lower than that forecast by AusNet (0.7% versus 1.1%) based on the most recent econometric study available. We considered the older studies, which forecast lower output growth net of productivity growth, were less relevant in the current circumstances. See section 6.4.2.2 of our draft decision.
- Assessed and included a step change for IT cloud and Software as a Service as we considered the capital expenditure / opex trade-off results in forecast expenditure that is likely to be prudent and efficient and reflects the accounting standard changes to expense all Software as a Service costs. We did not include the step change for the Environment Protection Authority obligations as we did not consider this prudent and efficient. See section 6.4.3.1 of our draft decision.

Furthermore we note, due to forecasting lower output growth than has been seen historically, we expect lower productivity growth of only 0.2% per year due to fewer economies of scale. This reflects that AusNet will need to operate a safe and reliable network in line with its current regulatory obligations.

We also note that while we arrived at our alternative estimate in a different way to AusNet, it is unlikely that there would have been a material difference between AusNet's proposed opex forecast and our alternative estimate if AusNet had included ESV levy costs in base opex. This same approach is used in section 6.5.2.5.1. There we conclude that our alternative estimate of total opex being 1.5% higher than AusNet's revised proposal, as a result of slightly higher customer number forecasts, is not materially different.

We also note that incentive-based regulation is designed to leave the day-to-day decisions to the network businesses. It allows the network businesses the flexibility to manage their assets and labour as they see fit to comply with the opex criteria and achieve the NGO.

Both BSL and CCP28 raised concerns about the inclusion of opex for the Priority Service Program in the draft decisions.[14] BSL and CCP28 considered stakeholders strongly opposed the additional funding, the AER had questions regarding the project's design, customer support and efficiency and also whether it would be up and running by 1 July 2023. Our draft decision to include the Priority Service Program costs in our alternative estimate as a category specific forecast was an on-balance decision that reflected:

- The Priority Service Program was similar to the Vulnerable Customer Assistance Program we approved for AGN (SA) as we considered the activities proposed resulted in a material increase in services

14 Brotherhood of St Laurence, *2023–2028 Victorian Gas Distributors' Access Arrangement – Draft decision and Revised Proposals submission,* February 2023, pp. 22. CCP28, *Advice to the AER – Draft decision and revised access arrangement proposals*, February 2023, p. 12.

- We recognised the genuine effort and processes undertaken to engage with customers to test their support of the Priority Services Program, noting the differing customer / stakeholder views on the program, in that:
  - the modest number of diverse, but not representative customers directly consulted were of the view that it was important or very important to support vulnerable customers in the context of a $1.30 annual cost per customer
  - the relevant stakeholders consulted via the Priority Services Program Advisory Panel, which, while not supportive of additional costs, appreciated the initiative.
- AusNet's efforts to research and minimise duplication of services and align with other networks for consistency.
- The alignment of the goals of the Priority Services Program with the *Towards Energy Equity Strategy*, in which we recognised the need to deliver better outcomes for customers experiencing vulnerability and avoid exacerbating harm, which is a core objective of the Priority Service Program.

We also encouraged AusNet, in preparing its revised proposal, to continue to work with customers and relevant stakeholders to potentially refine and revise the scope of the program, test customer support and demonstrate an efficient use of resources, as reasonable for the scale of the program.

We consider that our draft decision took into account all feedback from customers and stakeholders that AusNet received in preparing its Priority Service Program proposal. This included feedback opposing the program, but also feedback that was supportive, and was part of the reason for our on-balance decision. We are disappointed that further detail was not provided in AusNet's revised proposal about refining the scope of the program. However, we expect AusNet to be able to demonstrate tangible outcomes for vulnerable customers under this program, consistent with the outcomes our *Towards Energy Equity Strategy* is seeking to achieve, at the start of its next access arrangement period. We encourage AusNet to report on progress in implementing the Priority Service Program, and the outcomes achieved, to relevant customer and stakeholders within and at the end of the next access arrangement period.

In this regard, and consistent with our final decision for AGN(SA) 2021–26 access arrangement, we have included the Priority Service Program as a category specific forecast in the total opex forecast. This ensures the program can be reviewed and/or discontinued in the next access arrangement period determination. Inclusion as a category specific forecast also excludes the business from receiving any efficiency carry-over amounts, as a result of underspends on the program's allowance, through the Efficiency Carryover Mechanism. This is the extent to which we have quarantined the funding for the Priority Service Program. In response to CCP28's quarantining funding proposal, our standard AER base-step-trend opex assessment methodology does not contain any mechanisms to release the funds only when agreed services are available to be delivered. Further, as noted above, we do not consider this would be consistent with the operation of incentive-based regulation, which is designed to leave the day-to-day decisions to the network businesses.

6.5.2 Abolishments forecasts and the associated opex forecast

As set out in Attachment 9, our final decision is to socialise the bulk of small customer abolishment costs across haulage reference service tariffs, and establish a discounted stand-alone ancillary reference service tariff, to ensure the safe operation of the network. Specifically, we decided to cap the small customer connection abolishment ancillary reference service at $220 and socialise the balance across haulage reference service tariffs via an ex-ante opex allowance which is subject to an annual true-up via the control mechanism.

This contrasts with the approach proposed by AusNet in its revised proposal where the cost of the abolishment service was to be recovered from the requesting small customer and any unrecovered costs managed via a new pass through event (‘Unrecovered Abolishment Service Charges Event’).[15] The Unrecovered Abolishment Service Charges Event is discussed further in Attachment 10.

In coming to our final decision about the ex-ante opex allowance, we investigated the forecast haulage reference service customer and abolishment numbers provided by AusNet in its revised proposal.[16] Forecast customer numbers provide information about customers who are forecast to remain on the network and those who are forecast to leave the network (the latter represents the basis of AusNet’s abolishment forecast). Following our investigation, we have adjusted AusNet’s forecast abolishment volumes to account for:

- the impact of socialising part of the recovery of the abolishment costs, thereby lowering the cost of the abolishment service for small customers
- the impact of short-term partial electrification arising from government electrification initiatives, likely small customer behaviour patterns and their relationship to the profile of forecast abolishments and our judgement regarding the time it may take for these initiatives and behaviours to impact electrification of homes
- the preference of some small customers to electrify their homes but retain their gas connection for the ‘option value’ it provides.

We consider that accounting for these factors and applying the associated adjustments to AusNet’s abolishment forecast results in the best estimate of the abolishment volumes over the next access arrangement period. This estimate is lower than the abolishment forecast AusNet proposed.

We have used these forecasts, and the abolishment costs to be recovered via the haulage reference service tariffs, to determine the additional opex required to be included in our final decision to enable AusNet to recover its costs for performing abolishment services. On this basis we have included an opex allowance of $14.5 million ($2022–23) for abolishment service costs in our final decision opex, as a category specific forecast.

Below we set out AusNet’s abolishments forecast, along with the further information we have considered in our review of these forecasts. We then explain our view on the appropriate

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15 AusNet, *Revised Proposal, Access Arrangement 2024–28*, January 2023, p. 47.

16 This is further to our assessment of customer numbers used to forecast output growth.

abolishments forecast, which as noted above is lower than AusNet's forecast, the reasons for this and the associated opex forecast that we have included in this final decision.

6.5.2.1 AusNet's abolishments forecast

In its revised proposal, AusNet proposed a 'causer-pays' approach to the recovery of costs associated with its gas connection abolishment service.[17] This would mean abolishment costs would be fully recovered via ancillary reference service charges. It also proposed a new pass through event (the 'Unrecovered Abolishment Service Charges Event') to recover any associated costs not able to be recovered from the customer requesting the abolishment, under this approach.[18] As AusNet proposed a 'causer-pays' approach to recovery of abolishment costs in its revised proposal, it did not include any abolishment costs within its haulage reference service opex forecast.

In AusNet's revised proposal, it did not provide updated demand forecasts for the next access arrangement period. Instead, AusNet accepted our draft decision demand, as a placeholder, pending revision in response to Australian Energy Market Operator's (AEMO) 2023 Gas Statement of Opportunities. [19] After the release of the 2023 Gas Statement of Opportunities, AusNet revised its throughput demand and residential connection number forecasts to reflect the most recent data available for customer numbers, consumption, weather, and post-modelling adjustments from the 2023 Gas Statement of Opportunities.[20] AusNet used its forecast residential connections to forecast the number of abolishments it expected to undertake over the 2023–28 access arrangement period, which it provided alongside its post-Gas Statement of Opportunities demand update.[21] AusNet's abolishment forecast can be seen in Table 6.1.

Table 6.1 AusNet's abolishment service volume forecast

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
AusNet's abolishment service forecast	5,970	6,026	6,059	8,080	8,055	34,190

Source: AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update*, 28 March 2023.
Note: Numbers may not add up to total due to rounding.

6.5.2.2 Information we have taken into account to assess AusNet's abolishment forecast

Review of Victorian gas distribution network historical and forecast abolishment data

We reviewed the data available on historical abolishment service volumes (2018–2021) for the Victorian gas distribution networks to assess their abolishment forecasts. We had historical abolishment data available for AusNet, but for AGN and MGN, we relied on their

[17] AusNet, *Revised Proposal, Access Arrangement 2024–28*, January 2023, p. 14.

[18] AusNet, *Revised Proposal, Access Arrangement 2024–28*, January 2023, p. 47.

[19] AusNet, *Revised Proposal, Access Arrangement 2024–28*, January 2023, p. 4.

[20] AusNet, *CIE briefing – update to AusNet Services forecasts*, 28 March 2023, p. 1.

[21] AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update*, 28 March 2023.

meter removals service data, as it was the closest available service. AusNet's historical abolishment volumes were similar to AGN and MGN's historical meter removal service volumes in terms of the percentage of total customers. The historical data showed that annual abolishment service volumes, as a percentage of total customers, have remained relatively stable (between 0.3% and 0.6% per annum) for all Victorian gas distribution businesses over this period.[22] This indicated that customers have not been choosing to leave the gas network in significant numbers.

We found that AusNet's proposed forecast of abolishment volumes (in Table 6.1) represented a significant step up compared to its historic levels (0.7% of total customer numbers forecast in the first year of the next access arrangement period).[23]

The Gas Substitution Roadmap and the 2023 Victorian Gas Planning Report

We understand the Gas Substitution Roadmap encourages gas users to reduce gas usage via partial electrification rather than abolishment in the short term. This reflects the focus of the Gas Substitution Roadmap on providing greater choice to users wanting to transition off gas, rather than requiring or putting in place penalties for those continuing to use gas.[24] Further, as the Roadmap indicates, the Victorian Government operates the Victorian Energy Upgrades program to support households and businesses to reduce their energy costs by installing energy efficient equipment. The Government has stated that it will develop new incentives through the Victorian Energy Upgrades program to help customers replace their gas water heating and space heating with efficient low-emissions electric equipment.[25] Importantly, the Victorian Government has no stated plans to incentivise switching to electric stoves, unlike the plans it has for space and water heating. We note that gas stoves account for only a small proportion, about 2%, of household gas use in Victoria.[26] Incentivising switching away from gas stoves would have only a small impact on energy costs and gas emissions. However, we see the lack of an incentive to transition to electric stoves is likely to be a barrier for customers to fully move off gas. In turn, this is likely to limit the increases in abolishments. Consequently, we consider the forecast abolishment numbers are likely to take longer to occur than forecast by the Victorian gas distribution businesses.

We also examined the 2023 Victorian Gas Planning Report to understand any implications it might have via its customer number forecasts for abolishment forecasts.[27] We contacted AEMO to investigate the data underlying the 2023 Victorian Gas Planning Report customer number forecasts (which covers most of the next access arrangement period). This is because as outlined above, customer number forecasts will generally take into account abolishment forecasts. AEMO said that the customer number forecast in the 2023 Victorian Gas Planning Report was done to illustrate the number of connections required to electrify, assuming average gas usage per connection was held constant based on historical

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[22] AER analysis; AusNet, *Annual RIN responses,* 2018–2021*;* AGN, *Annual RIN responses,* 2018–2021*;* MGN, *Annual RIN responses,* 2018–2021*.*

[23] AER analysis; AusNet, *Annual RIN responses,* 2018–2021; AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update, 28 March 2023.*

[24] Victorian Government, *Gas Substitution Roadmap*, July 2022, p. 3.

[25] Victorian Government, *Gas Substitution Roadmap*, July 2022, p. 24.

[26] Grattan Institute, *Flame out: The future of natural gas*, November 2020, p. 43.

[27] AEMO, *Victorian Gas Planning Reporting*, March 2023.

observations. AEMO confirmed that the customer number forecast was not intended to predict the number of connections, disconnections or abolishments but rather a decline in the effective gas usage. AEMO also commented that it expects that some (perhaps most in the short term) connections will partially electrify instead of completely leaving the network.[28]

6.5.2.3 Further review of the abolishment forecast and additional related information

We have examined the Victorian gas distribution networks' abolishment forecasts by considering the following:

- Any relationship with the Gas Statement of Opportunities and 2023 Victorian Gas Planning Report
- The impact of socialising the recovery of part of the abolishment costs
- Likely small customer behaviour and the impact on the profile of abolishment forecasts
- The need to reprofile the abolishment forecasts with a two-year lag
- Some customers' preference to disconnect but not abolish due to 'option value'.

Our consideration of these issues and the views of the Victorian gas distribution networks, including AusNet, are set out below.

Relationship with the 2023 Gas Statement of Opportunities and Victorian Gas Planning Report

The Victorian Gas Planning Report provides information about the supply demand balance in Victoria over the next five years and complements the Gas Statement of Opportunities which assesses wider gas supply adequacy in central and eastern Australia.[29] While the Victorian gas distribution networks, including AusNet, did not directly link their abolishment and customer number forecasts to the 2023 Victorian Gas Planning Report data, they compared their abolishment forecasts to it, particularly in terms of customer numbers.[30]

The networks' forecasts of customer numbers are higher in total, leading to lower abolishments forecasts, than the customer number forecast indicated by the 2023 Victorian Gas Planning Report, under the *Orchestrated Step Change* scenario set out by the 2023 Gas Statement of Opportunities. The networks' forecasts also represented a more significant change from actual customer numbers in the last year of the current period to the first year of the next access arrangement period than the 2023 Victorian Gas Planning Report data. However, as discussed above, we now understand that AEMO's customer number forecasts (presented in the 2023 Victorian Gas Planning Report) are not fit to be used for forecasting purposes as they are illustrative only.

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28 AEMO, *Email RE: 2023 VGPR data*, 27 April 2023.

29 AEMO, *Victorian Gas Planning Report*, March 2023, p. 5.

30 AGN, *Victorian Gas Access Arrangement, Review of AEMO 2023 Gas Demand Forecast,* 30 March 2023; AusNet, *Response to IR#030 – Abolishments – Updated response for GSOO 2023*, 28 March 2023.

The impact of socialising part of the recovery of the abolishment costs

We also questioned the Victorian gas distribution networks on whether their forecast abolishment volumes would change under a socialised approach to the recovery of abolishment costs. This approach significantly reduces the cost to small customers of obtaining abolishment services. We asked the networks whether this would increase demand for those services. AusNet thought that its forecast abolishments would increase under a socialised approach.[31] This was because its abolishment forecast had assumed some customers would choose to leave the gas network via a disconnection service, rather than through an abolishment, due to the difference between the cost of an abolishment and the cost of a disconnection. Under our socialised approach, AusNet expected customers not to avoid abolishment for this reason.[32] On the basis of this assumption, we have adjusted AusNet's forecast to include all permanent disconnections under our socialised abolishment cost recovery approach in our revised abolishment forecast for AusNet.

AGN and MGN did not believe their forecasts would change under a socialised approach as their forecasts assumed all customers permanently leaving the network would do so via an abolishment.[33]

Likely small customer behaviour and the impact on the profile of abolishment forecasts

We engaged with the Victorian gas distribution networks to discuss the difference in the profile of their abolishment forecasts, including with our expectations. We expect the number of annual abolishments to increase steadily over time from current levels as customers swap more of their gas appliances for electric alternatives over the next access arrangement period in response to Victorian Government incentives (such as the Victorian Energy Upgrades program) and market conditions.

AusNet's abolishment forecast featured an initial step up from current abolishment levels in 2023–24, but then exhibited a flat profile with a subsequent step up in 2026–27. AusNet explained that it relied on historical averages for its forecast, which is why its abolishment forecast profile was relatively flat compared to the abolishment forecasts of AGN and MGN.[34] We consider customer behaviour is likely to change in a more progressive way in response to the current government electrification initiatives than forecast by AusNet. When we tested this with AusNet it did not agree but accepted our position regarding the profile of its forecast abolishments being a steadier increase from current levels.[35] As set out in section 6.5.2.4, we have used this assumption as an input to our revised abolishment forecast for AusNet.

AGN and MGN's abolishment forecasts displayed an initial step up from current abolishment volumes and then increasing abolishment volumes over the next period. We were concerned about the initial step up from the current abolishment levels (see the discussion below on reprofiling the abolishment forecast with a two-year lag) but we consider the steadier profile

31 AusNet, *Response to IR#033 – Abolishment*, 18 April 2023.

32 AusNet, *Response to IR#037 – Demand*, 8 May 2023.

33 AGN, *Response to IR#033 – Abolishment*, 24 March 2023; MGN, *Response to IR#030 – Abolishment,* 24 March 2023.

34 AusNet, *Response to IR#030 – Abolishments – Updated response for the GSOO 2023*, 28 March 2023.

35 AusNet, *Response to IR#037 – Demand*, 8 May 2023.

of AGN and MGN's abolishment forecasts are broadly consistent with likely customer behaviour.

Reprofiling the abolishments forecasts with a two-year lag

We also consulted the Victorian gas distribution networks regarding a lag of two years of their abolishment volume forecasts for the 2023–28 access arrangement period. We consider this two-year lag provides a more gradual increase in forecast abolishments in the initial years of the next access arrangement period, relative to current levels, rather than the step changes being proposed by all the Victorian gas distribution networks. This two-year lag reflects our judgement around the time it may take for current initiatives to have an impact, any further Government initiatives to be implemented and for customers to fully consider these initiatives in their decision to electrify their homes. We also believe that this lag period adjustment accounts for customers who choose initially to partially electrify their homes before choosing to proceed with an abolishment.

To adjust the networks' forecast for this two-year lag, we have taken the networks' forecasts for 2023–24 and set it as the forecast for 2025–26 and done likewise for the subsequent years of their forecasts. The new forecasts for 2023–24 and 2024–25 were developed by interpolating between the last historical value (2021) and the first year of the networks' abolishment forecasts (now in 2025–26). As set out in section 6.5.2.4, we have used this assumption as an input to our revised abolishment forecast for AusNet (and AGN and MGN).

AusNet did not consider the inclusion of a two-year lag period was required but accepted our position on it.[36] AGN and MGN also did not consider that the inclusion of a two-year lag was appropriate citing the introduction of new Victorian Government incentives for space and water heating and cooling, as well as new incentives for electric appliances scheduled to come into effect in 2023–24.[37]

In relation to AGN and MGN's views, while we agree that the introduction of these new incentives will increase the rate at which customers choose to start electrifying their homes, we do not consider that these incentives will cause the immediate step change in abolishments forecast by AGN and MGN (and AusNet). We understand that the transition to electric stoves represents the main barrier to customers fully moving off gas, and as there are no current or planned incentives for customers to switch over their gas cooking appliances, consider this will limit the number of abolishments in the short term.

Some customers' preference to disconnect but not abolish due to 'option value'

In reviewing forecasts of small customer abolishment numbers, we also investigated the likely impact of customers who leave the network via disconnection instead of an abolishment, not because of the abolishment cost but because the customers see 'option value' in retaining a gas connection. This reflected AusNet's anecdotal view that a dormant gas connection provides 'option value' for some customers.[38] This 'option value' may be

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36 AusNet, *Response to IR#037 – Demand*, 8 May 2023.

37 AGN, *Response to IR#040 – Abolishment and customer number changes*, 9 May 2023; MGN, *Response to IR#036 – Abolishment and customer number changes*, 9 May 2023

38 AusNet, *Response to IR#033 – Abolishment*, 18 April 2023.

perceived to protect future resale value of gas-connected properties, as some new purchasers may place a premium on having a gas connection (even if the current owner does not). Similarly for commercial or rented residential premises, where the usage could change considerably with a change in tenants, maintaining a gas option may be seen as valuable for future tenants. 'Option value' customers are likely to behave differently than customers who choose not to abolish their gas connection because of the relative difference between the cost of a disconnection service and the cost of an abolishment service. 'Option value' customers are likely to choose not to abolish their connection under a socialised approach and will only request an abolishment if they no longer perceive sufficient option value in retaining a dormant gas connection.

We consulted Victorian gas distributors on the 'option value' consideration. When questioned, AusNet noted its prediction of the impact of option value customers was based on the available anecdotal evidence. It estimated the equivalent of roughly 26% of its abolishment forecast under our 'socialised' approach would electrify but wish to retain their gas connection for the 'option value' it provides.[39] As set out in section 6.5.2.4, we have used this assumption as an input to our revised abolishment forecast for AusNet (and AGN and MGN) as we consider it reflects observed behaviour and represents the best estimate possible in the current circumstances.

AGN and MGN considered that all permanent disconnections will be abolishments noting that due to safety risks a disconnection should not be an option for a customer looking to leave the gas network.[40]

In response to AGN and MGN's view, the approach we are adopting of socialising part of the abolishment costs is being driven by the objective of mitigating safety risks. However, we consider some customers will still prefer not to abolish their gas connection when leaving the network for the perceived 'option value' the dormant gas connection provides. We also consider that the impact of this 'option value incentive' is likely to be consistent across customers of the three Victorian gas distributors. Therefore, we believe it is appropriate to assume that the networks would have a similar proportion of 'option value' customers.

6.5.2.4 Our abolishment forecast and the associated opex forecast

Taking into account the information and conclusions developed from our review of the abolishment forecasts discussed above, in this final decision we have adjusted AusNet's forecast to include all permanent disconnections under our socialised abolishment cost recovery approach. This is because AusNet's abolishment forecast had assumed some customers would choose to leave the gas network via a disconnection service due to the higher cost of an abolishment, but under a socialised approach we consider customers will not seek to avoid abolishment for this reason.

We have also reprofiled AusNet's abolishment volume forecast to feature increasing abolishments over the next access arrangement period and we have lagged this forecast by two years, assuming a consistent gradual increase from current abolishment volumes during

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[39] AER analysis; AusNet, *Response to IR#035 – Abolishments*, 26 April 2023.

[40] AGN, *Response to IR#038 – Abolishment*, 28 April 2023; MGN, *Response to IR#035 – Abolishment,* 28 April 2023.

this lag. As discussed above, we consider it is likely to take time for current electrification initiatives to have an impact, for any further electrification initiatives to be implemented, and for customers to fully consider these initiatives in their decision to electrify their homes. We also believe that this adjustment accounts for customers who choose initially to partially electrify their homes before choosing to proceed with an abolishment. It is our judgement that a two-year lag to AusNet's reprofiled forecast abolishments under a socialised approach appropriately accounts for these considerations.

Additionally, we have adjusted AusNet's forecast abolishment volumes to account for customers who electrify their homes but wish to retain their gas connection for the 'option value' it provides. We believe that accounting for the option value some customers perceive from their dormant gas connection provides a more accurate reflection of customer behaviour over the upcoming period. We also believe that AusNet's estimate for the number of option value customers (roughly 26% of its total forecast abolishments under our socialised approach) represents the best estimate possible in the current circumstances and have adjusted AusNet's abolishment forecast accordingly.

We consider that applying these adjustments to AusNet's abolishment forecast allows for the best estimate of the abolishment volumes over the 2023–28 access arrangement period. As a result, in this final decision, our forecast of abolishment volumes for AusNet (Table 6.2) includes 10,181 fewer abolishments than forecast by AusNet over the 2023–28 period.

Table 6.2 Final decision forecast abolishment volumes for AusNet over the 2023–28 period

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
AusNet's forecast abolishment volumes	5,970	6,026	6,059	8,080	8,055	34,190
AER's final decision forecast abolishment volumes for AusNet	2,463	3,194	3,925	6,117	8,310	24,009
Difference in forecast abolishment volumes	–3,507	–2,832	–2,134	–1,963	255	–10,181

Source: AER Analysis; AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update, 28 March 2023*.

Note: Numbers may not add up to total due to rounding.

We have used our forecast of abolishment volumes, along with the abolishment costs to be socialised via haulage reference service opex ($602 ($2022–23)) to determine the allowance needed to be added to the opex forecast for the next access arrangement period to account for AusNet's additional abolishment costs. The abolishment costs to be socialised are determined via AusNet's cost reflective tariff for small customer abolishments of $822 ($2022–23)[41] *less* the $220 ($2022–23) ancillary reference service charge.

Our final decision forecast opex allowance for abolishments is shown in Table 6.3. It results in a $14.5 million ($2022–23) opex allowance for abolishment service costs (included as a category specific cost). We consider that this amount represents the best estimate of the abolishment service costs AusNet is likely to incur over the 2023–28 period.

Table 6.3 Final decision forecast abolishments opex allowance for AusNet over the 2023–28 period ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
AER's forecast abolishment allowance	$1.5	$1.9	$2.4	$3.7	$5.0	$14.5

Source: AER Analysis.
Note: Numbers may not add up to total due to rounding.

We have included this abolishment opex allowance as a category specific forecast because it does not rely on actual costs in the base year to be forecast. It also enables these costs to be separated from the other more business-as-usual costs in the opex forecasts, which is required for the operation of a true-up mechanism. In this regard, we note there is some uncertainty associated with this forecast and as a result, we have included an adjustment mechanism in the tariff control formula for abolishment costs, referred to as a "true-up mechanism". This will adjust tariff revenue for abolishment costs where the annual number of abolishments undertaken by AusNet is higher or lower than our abolishment forecast, and also where the cost incurred by AusNet to perform each abolishment service is lower than approved in our final decision. The true-up mechanism is explained in more detail in Attachment 10.

6.5.2.5 Impact of abolishment forecasts on customer numbers and opex

In this final decision, we have assumed every abolishment removed from the AusNet's forecast due to the inclusion of a two-year lag is an existing customer remaining on the network (and therefore results in higher customer numbers). The other adjustments we made to AusNet's abolishment forecasts did not increase or decrease the total customer numbers forecast in the next access arrangement. This is because:

- Our adjustment to the profile of AusNet's abolishment forecast to reflect likely customer behaviour had no effect on the total forecast customer numbers over the period. It did result in lower abolishment (higher forecast customer) numbers for 2023–24 and 2024–25 and higher abolishment (lower forecast customer) numbers for 2026–27 and 2027–28, but these amounts offset each other.
- Our adjustment to account for the option value some customers perceived from a dormant gas connection did not increase customer numbers. This is because these

[41] AusNet, *GAAR 2024–28 ARS revenue & expenditure forecast HY23 and 2024–28 – GSOO Update, 28 March 2023*.

customers have indefinitely disconnected from the network via a disconnection and thus cannot be considered network customers unless a reconnection is requested.

- Our adjustment to account for the impact of lower cost for abolishment services arising from our socialised recovery approach increased our forecast of AusNet's abolishments. This is because we consider some customers AusNet forecast to disconnect from the gas network via a disconnection under its 'causer-pays' approach would instead leave the gas network via an abolishment under our 'socialised' approach (due to the lower cost to the customer of an abolishment). This increased our forecast of abolishments but did not change our forecast of customer numbers. This is because both disconnections and abolishments are removed from the customer numbers forecast (since both are no longer connected to the network). This partially offsets the reductions our other adjustments made to AusNet's forecast abolishments, and is the reason AusNet's forecast customer numbers, shown in Table 6.4, appear to increase by an amount greater than our reduction to its abolishment forecast.

Reflecting this, the adjusted customer numbers which we used in this final decision are 2.9% higher than those proposed by AusNet by the end of the next access arrangement period.

Table 6.4 Final decision change in customer numbers for AusNet due to the change in forecast abolishment volumes

	2023–24	2024–25	2025–26	2026–27	2027–28
AusNet's forecast customer numbers	795,981	803,507	807,879	807,975	805,459
AER's forecast customer numbers	803,030	816,672	826,202	830,509	829,210
Difference in forecast customer numbers	7,049	13,165	18,324	22,534	23,751

Source: AER Analysis; AusNet, *GAAR 2024–28 PTRM,* 28 March 2023.
Note: Numbers may not add up to total due to rounding.

6.5.2.5.1 Impact on opex rate of change and inclusion of abolishment allowance in our final decision opex

We have considered the impact of these slightly higher customer number forecasts on the total opex forecast AusNet included in its revised proposal. In particular, we considered the impact on the rate of change component of the opex forecasts. This is because customer numbers are one of the outputs used to forecast output growth.

We rejected AusNet's proposed opex in our draft decision and substituted it with our alternative estimate,[42] which it reproposed in its revised proposal (with a slight change for

[42] AER, *AusNet 2023–28 Draft Decision, Attachment 6 – Operating expenditure*, December 2022, p. 1.

debt raising costs).[43] Revising our alternative estimate of opex for the updated customer numbers would result in our alternative estimate being 1.5% higher than AusNet's revised proposal. As such, we do not consider the impact of altered customers on the rate of change used to develop our alternative estimate results in our estimate being materially different from AusNet's revised proposal and have not amended AusNet's revised proposal forecast opex for the changes to the customer number forecasts.

6.6 Revisions

We do not require any amendments be made to the drafting of AusNet's 2023–28 Access Arrangement for opex. However, as set out in our final decision overview for AusNet, we have approved AusNet's proposal that the Efficiency Carryover Mechanism continue to apply to its opex, during the 2023–28 period. For this to occur, we require the following revisions to make the Access Arrangement proposal acceptable as set out in Table 6.5.

Table 6.5 AusNet's efficiency carryover mechanism revisions

Revision	Amendment
Revision 6.1	In Part B of AusNet's Access Arrangement, clause 6.4 – Incentive Mechanisms: Amend clause 6.4.2(i)(3) of the access arrangement, to read: 3) any cost category that is not forecast using a single year revealed cost approach in the Seventh Access Arrangement Period. These costs may include debt raising costs, unaccounted for gas expenses, priority service program expenses, and any abolishment service costs included as haulage reference service opex;

43 AusNet, *Revised proposal – Access arrangement 2024–28*, January 2023, p. 12.

Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AGN (SA)	Australian Gas Networks (South Australia)
AusNet	AusNet Gas Services
Capex	Capital expenditure
CCP28	Consumer Challenge Panel 28
CPI	Cost price index
ECM	Efficiency carryover mechanism
MGN	Multinet Gas Networks
NER	National Energy Rules
NGO	National Gas Rules
Opex	Operating expenditure
PSP	Priority service program
RBA	Reserve Bank of Australia
SP3	Security Profile 3
UAFG	Unaccounted for gas
VCAP	Vulnerable customer assistance program
WPI	Wage price index