

Final decision

**Jemena Gas Networks (NSW) access
arrangement 2025 to 2030
(1 July 2025 to 30 June 2030)**

Attachment 6 – Operating expenditure

May 2025

© Commonwealth of Australia 2025

This work is copyright. In addition to any use permitted under the *Copyright Act 1968* all material contained within this work is provided under a Creative Commons Attributions 4.0 Australia licence with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website as is the full legal code for the CC BY 4.0 AU licence.

Important notice

The information in this publication is for general guidance only. It does not constitute legal or other professional advice. You should seek legal advice or other professional advice in relation to your particular circumstances.

The AER has made every reasonable effort to provide current and accurate information, but it does not warrant or make any guarantees about the accuracy, currency or completeness of information in this publication.

Parties who wish to re-publish or otherwise use the information in this publication should check the information for currency and accuracy prior to publication.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601
Email: aerinquiry@aer.gov.au
Tel: 1300 585 165

AER reference: AER22005460

Amendment record

Version	Date	Pages
1	May 2025	22

List of attachments

This attachment forms part of our Final decision on the access arrangement that will apply to Jemena Gas Networks (NSW) for the 2025–30 access arrangement period. It should be read with all other parts of this Final decision.

For some issues that had draft decision attachments, and which were settled at the draft decision stage or required only minor updates, the reasons in the draft decision attachments and, where relevant, in the final decision Overview set out our reasons for our final decision on the issue. In these circumstances, we have not prepared all attachments, and our draft decision reasons form part of this final decision. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision.

The Final decision includes the following documents:

Overview

Attachment 2 – Capital base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 9 – Reference tariff setting

Attachment 10 – Reference tariff variation mechanism

Attachment 12 – Demand

Attachment 13 – Capital expenditure sharing scheme

Contents

List of attachments	iii
6 Operating expenditure	1
6.1 Final decision	1
6.2 JGN's revised proposal	3
6.3 Assessment approach.....	4
6.4 Reasons for Final decision	5
6.5 Revisions	16
Glossary	18

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 Jemena Gas Networks’ (JGN) (NSW) proposed opex forecast for the 2025–30 access arrangement period.

6.1 Final decision

Our final decision is to include a total opex forecast of \$1,144.9 million (\$2024–25)¹ for the 2025–30 access arrangement period, excluding ancillary reference services and including debt raising costs and socialised customer abolishment costs.²

We are satisfied that JGN’s revised opex forecast, excluding socialised customer abolishment costs and debt raising costs, of \$1,122.6 million,³ satisfies the opex criteria⁴ and the criteria for forecasts and estimates.⁵ This is because our alternative estimate of these elements of JGN’s total forecast opex, excluding socialised abolishment costs, is not materially different (0.3% or \$3.6 million lower) from JGN’s revised proposal. This difference from JGN’s revised proposal is mainly driven by mechanical updates to reflect current forecasts, including:

- a more recent inflation forecast from the Reserve Bank of Australia (RBA)⁶
- an updated rate of change – in calculating output growth and labour price growth forecasts we have relied on customer number and Wage Price Index (WPI) forecasts from our consultants, ACIL Allen and Deloitte Access Economics, respectively.
- updated forecasts of unaccounted for gas costs to reflect the demand forecast set out in Attachment 12 of this final decision.

We have therefore included JGN’s revised opex forecast, excluding socialised customer abolishment costs and debt raising costs, of \$1,122.6 million in our total opex forecast. We

¹ All numbers are in \$2024–25 unless otherwise indicated.

² JGN proposed to split its current reference service into the Transportation Reference Service and Ancillary Reference Service. This section relates only to opex for gas transportation. For more details, please see: AER, *Final decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020–25 – Attachment 1: Services covered by the access arrangement*, June 2020, pp. 5–6.

³ This is JGN’s total opex forecast excluding socialised customer abolishment costs and debt raising costs.

⁴ 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, we say it satisfies the opex criteria.

⁵ Under rule 74 of the NGR, information in the nature of a 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, we say it satisfies the forecasts and estimates criteria.

⁶ RBA, *Statement on Monetary Policy – Appendix: Forecast*, February 2025.

have also included \$9.7 million of debt raising costs based on our final decision post tax revenue model (PTRM) calculation (see section 6.4.4.3 below).

We are not satisfied that JGN's forecast of \$16.3 million for socialised customer abolishment costs meets the opex criteria because, for the reasons discussed in Attachment 9 of this final decision, we have determined a lower cost to be socialised per abolishment. This means that a lower forecast opex amount meets the opex criteria. Our final decision total opex forecast therefore includes a forecast of \$12.7 million to reflect the approved socialised customer abolishment costs discussed in Attachment 9 of this final decision.

Table 6.1 sets out JGN's revised proposal for opex forecast and our alternative estimate, excluding the socialised costs of small customer connection abolishments, and the difference between these forecasts.

Table 6.1: AER's alternative estimate compared to JGN's proposed opex forecast, excluding socialised abolishments opex (\$million, 2024–25)

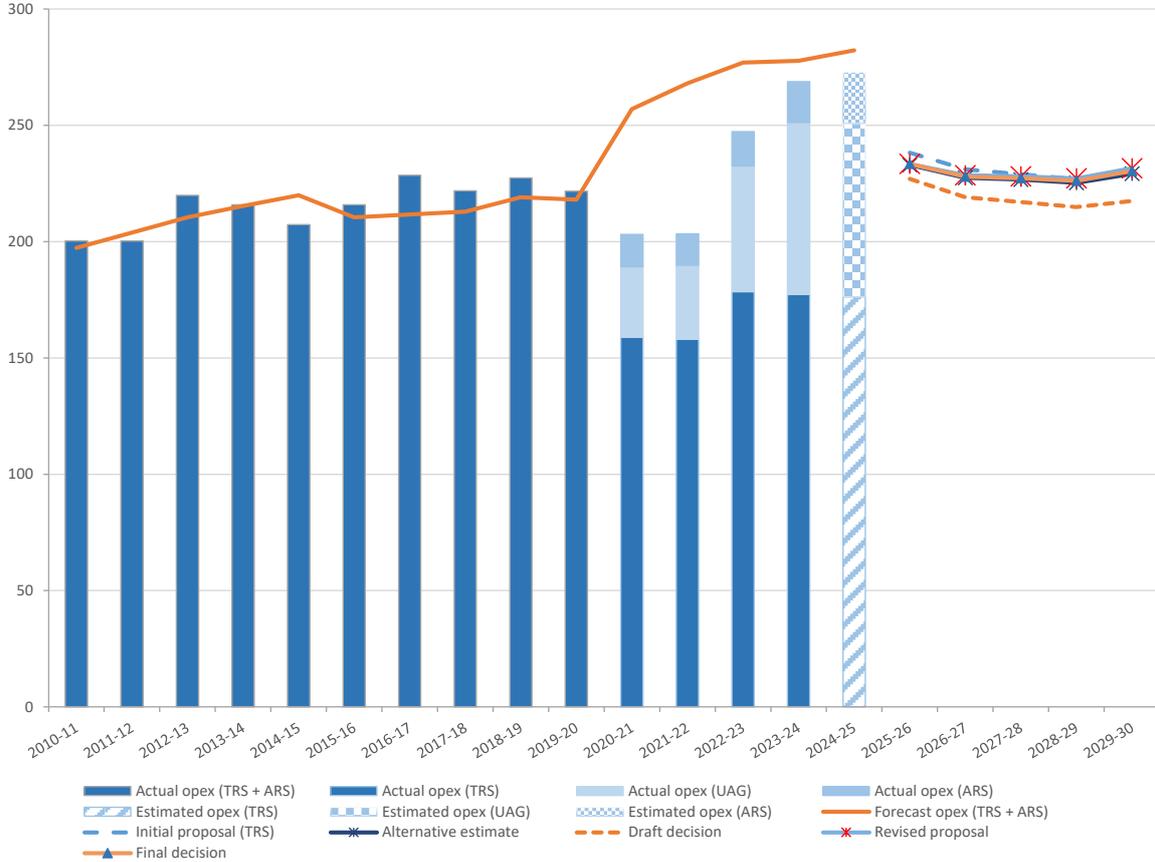
	JGN revised proposal	AER alternative estimate	Difference
Based on reported opex in 2023–24	1,245.3	1,244.1	-1.2
Base year adjustment New IFRS treatment – SaaS implementation costs in base year	10.5	10.5	–
Base year adjustment Incremental ICT project opex	10.7	10.7	0.0
Total base year adjustments	21.2	21.2	0.0
2023–24 to 2024–25 increment	22.5	22.5	-0.0
Remove category specific forecasts	-388.6	-388.3	0.4
Trend: Output growth	15.3	10.4	-5.0
Trend: Price growth	17.1	15.9	-1.2
Trend: Productivity growth	-23.2	-23.2	0.0
Total trend	9.2	3.1	-6.1
Step change: ICT services for new recurrent projects	14.6	14.6	–
Step change: Emissions measurement – Picarro leak detection services	15.3	15.0	-0.4
Step change: Pipeline Integrity Management Program	17.0	17.0	–
Step change: Licence fees	–	24.1	24.1
Total step changes	46.9	70.7	23.8
Category specific forecast: UAG	139.3	143.0	3.7
Category specific forecast: Licence fees	24.1	–	-24.1
Category specific forecast: customers experiencing vulnerability	2.7	2.7	–
Total Category specific forecasts, excluding socialised abolishment costs	166.1	145.6	-20.5
Total opex, excluding debt raising costs and socialised abolishment costs	1,122.6	1,119.0	-3.6
Debt raising costs	9.6	9.7	0.1
Total opex, including debt raising costs, excluding socialised abolishment costs	1,132.2	1,128.7	-3.6

Source: JGN, *2025–30 Access arrangement revised proposal* – Att 5.2M – Operating expenditure forecasting model – 20250115 – Public, January 2025; AER analysis.

Note: Numbers may not add up to total due to rounding. Differences of '0.0' and '-0.0' represent small variances and '-' represents no variance.

Figure 6.1 compares our alternative estimate of opex (including socialised abolishment costs) to JGN’s proposal.⁷ We also show the forecasts we approved for the last two access arrangement periods and JGN’s actual and estimated opex.

Figure 6.1: Comparison of actual and forecast opex (\$million, 2024–25)



Source: JGN, *Regulatory accounts*, 2010 to 2023; JGN, *2025–30 Access arrangement proposal – Att 6.3M – Operating expenditure forecasting model*, June 2024; JGN, *2025–30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model*, January 2025, JGN, *Access arrangement, PTRM (multiple periods: 2010–15, 2015–20, 2020–25)*; AER analysis.

Note: Includes debt raising costs and movements in provisions.

A key difference between our final decision and our draft decision is that we have included JGN’s revised step change for emissions measurement – Picarro leak detection in the final decision. We are satisfied that JGN has sufficiently justified the inclusion of this step change in its revised proposal. We discuss this further in section 6.4.3.2.

6.2 JGN’s revised proposal

JGN included a total opex forecast, excluding ancillary reference services and including debt raising costs and socialised abolishment costs, of \$1,148.5 million in its revised proposal.

⁷ JGN’s proposed opex did not include abolishment opex. It proposed abolishments as an ancillary reference service, which we have not accepted. This is further discussed in Attachment 9 of this determination.

JGN largely accepted our draft decision other than:

1. using revised customer number forecasts to forecast output growth
2. socialising only standard residential abolishments where the request does not relate to potential construction, rather than all small customer connection abolishments
3. including a revised step change for additional Picarro cars used for gas leakage monitoring, which we did not include in our draft decision
4. categorising JGN's licence fees and government levies as a category specific forecast rather than as a step change as we did in our draft decision.⁸

6.2.1 Stakeholder views

We received three submissions on the revised proposal, which supported JGN's updated step change for Picarro leak detection services.

- The Consumer Challenge Panel (CCP31) stated that the Picarro vehicle option improves safety of the gas system and reduces fugitive greenhouse gas emissions. It noted that JGN engaged with customers on its proposal to invest in Picarro technology and customers strongly supported the proposal on the basis that it would enable JGN 'to reduce carbon emissions rather than rely on the purchase of carbon credits.'⁹
- Energy Networks Australia (ENA) considered that JGN's revised proposal on this matter aligns with the intended National Gas Law (NGL) and National Gas Rules (NGR) amendments on emissions reduction expenditure. It also highlights the high consumer support for this proposal.¹⁰
- The Justice and Equity Centre (JEC) supported JGN implementing robust measures which enable more effective emissions tracking and reduction across its operations. It also noted the broad consumer support for the Picarro step change.¹¹

6.3 Assessment approach

Our role is to decide whether or not to accept a business's total 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.¹²

⁸ JGN, *2025-30 Access arrangement revised proposal – Att 5.1 – Operating expenditure – 20250115 – Public*, January 2025, p. iii.

⁹ CCP31, *Advice to the AER – JGN 2025–30 revised access arrangement and draft decision*, February 2025, pp. 19–20.

¹⁰ ENA, *ENA – Submission and attachment on JGN's 2025–30 revised proposal and draft decision – February 2025*, February 20, p. 2–3.

¹¹ JEC, *Submission on JGN's 2025–30 revised proposal and draft decision*, February 2025, p. 8.

¹² AER, *Draft Decision, JGN access arrangement 2025–30, Attachment 6, Operating expenditure*, November 2024, pp. 7–11.

6.4 Reasons for final decision

Our final decision is to include a total opex forecast of \$1,144.9 million, excluding ancillary reference services and including debt raising costs and socialised abolishment costs.¹³ We are satisfied that JGN's revised opex forecast, excluding socialised abolishment costs and debt raising costs, of \$1,122.6 million satisfies the opex criteria and the criteria for forecasts and estimates.¹⁴ The difference between our alternative estimate of these elements of forecast opex and JGN's proposal is not material (0.3% or \$3.6 million). We have also included \$9.7 million of debt raising costs based on our final decision post tax revenue model (PTRM) calculation (see section 6.4.4.3 below).

We have assessed JGN's forecast of socialised abolishment costs separately because these costs are subject to a true up for the actual number of abolishments. Treating these costs separately ensures that the forecast prices and volumes used for the true up calculation are consistent with those reflected in the approved opex forecast.

We are not satisfied that JGN's forecast of \$16.3 million for socialised customer abolishment costs meets the opex criteria because, for the reasons discussion in Attachment 9 of this final decision, we have determined a lower cost to be socialised per abolishment. This means a lower forecast opex amount meets the opex criteria. Our final decision total opex forecast therefore includes a forecast of \$12.7 million to reflect the approved socialised customer abolishment costs discussed in Attachment 9 of this final decision.

We set out the main drivers for the difference between our alternative estimate of opex forecast and JGN's revised proposal in section 6.1 and we discuss them further below. Full details of our alternative estimate are set out in our opex model, which is available on our website.

6.4.1 Base year opex

JGN's revised proposal accepted¹⁵ our draft decision on the below adjustments to base year opex. These remain unchanged for our final decision:

- **Software as a service (SaaS) implementation costs re-allocation:** a \$10.5 million addition (over the regulatory period) to base year opex to recognise the re-classification of SaaS implementation costs in accordance with recent International Financial Reporting Standards (IFRS) accounting guidance, adjusted for actual expenditure in the base year.
- **New non-recurrent ICT costs:** a \$10.7 million addition (over the regulatory period) to base year opex for the non-recurrent implementation expenditure associated with new ICT projects.

¹³ JGN proposed to split its current reference service into Transportation Reference Services and Ancillary Reference Services. This section relates only to opex for gas transportation. For more details, please see: AER, *Final decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020–25 – Attachment 1: Services covered by the access arrangement*, June 2020, pp. 5–6.

¹⁴ This is JGN's total opex forecast excluding socialised a customer abolishment costs and debt raising costs.

¹⁵ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pp. 3–4.

6.4.2 Rate of change

Having estimated opex in the final year of the 2020–25 period, we then applied a forecast annual rate of change to forecast opex for the 2025–30 access arrangement period. We have applied an average annual rate of change of 0.0% to derive our alternative estimate of opex. This is lower than JGN's forecast of 0.3%. We compare both forecasts in Table 6.2.

Table 6.2: Forecast annual rate of change in opex, %

	2025–26	2026–27	2027–28	2028–29	2029–30
JGN's proposal					
Output growth	0.7	0.6	0.5	0.4	0.3
Price growth	0.8	0.6	0.5	0.6	0.7
Productivity growth	0.9	0.9	0.9	0.9	0.9
Rate of change	0.6	0.3	0.1	0.2	0.1
AER alternative estimate					
Output growth	0.6	0.5	0.3	0.1	-0.1
Price growth	0.6	0.5	0.5	0.6	0.8
Productivity growth	0.9	0.9	0.9	0.9	0.9
Rate of change	0.4	0.1	0.0	-0.1	-0.3
Difference	-0.2	-0.2	-0.2	-0.3	-0.4

Source: JGN, *RP – Att 5.2M – Operating expenditure forecasting model*, January 2025; AER analysis.

Note: The rate of change = $(1 + \text{price growth}) \times (1 + \text{output growth}) \times (1 - \text{productivity growth}) - 1$.

Numbers may not add up to totals due to rounding.

Amounts of '0.0' and '-0.0' represent small non-zero values and '-' represents zero.

The difference between our forecast rate of change and JGN's is that:

- we have used more recent wage price index (WPI) forecasts to forecast labour price growth
- we have used a different forecast of customer numbers to forecast output growth.

We discuss each of these issues below.

6.4.2.1 Forecast price growth

JGN's revised proposal accepted our draft decision with respect to price growth,¹⁶ and included average annual price growth of 0.6%, which increased its total opex forecast by \$17.1 million. For our alternative estimate in our final decision, we have used marginally different annual price growth rates, reflecting more recent inflation and WPI data. This increased our alternative estimate of total opex by \$15.9 million.

¹⁶ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pp. 7–8.

6.4.2.2 Forecast output growth

JGN's revised proposal included average annual output growth of 0.5%,¹⁷ which increased its proposed opex forecast by \$15.3 million. We have forecast average annual output growth of 0.3%. This increases our alternative estimate of total opex by \$10.4 million for our final decision.

The difference between JGN's revised proposal output growth rate, and the one used in our alternative estimate is due to using different customer number forecasts. JGN used customer number forecasts that included disconnected customers,¹⁸ reflecting the ongoing opex costs associated with maintaining and servicing disconnected customers. Our alternative estimate used customer number forecasts from our consultant, ACIL Allen, that do not include disconnected customers.

JGN included disconnected customers on the basis that these connections still incur opex costs. However, the customer numbers used in the econometric studies that establish the opex cost functions we use to test forecast opex do not include these connections. In effect, JGN has used a different definition of a customer to forecast opex than was used to establish the opex cost function it has used. We consider it is important to maintain a consistent definition of a customer and thus have not included disconnected customers in the customer number forecast we have used in our alternative estimate.

We have therefore continued to use the customer number forecasts provided by our consultant, ACIL Allen, which do not include disconnected customers, in our alternative estimate. We consider this to be the more prudent and efficient forecast for JGN.

6.4.2.3 Forecast productivity growth

JGN forecast average annual productivity growth of 0.9% in its revised proposal, unchanged from its initial proposal and our draft decision. We have also included forecast average productivity growth of 0.9% in our final decision alternative estimate.

6.4.3 Step changes

We have included \$70.7 million of step changes in our alternative estimate of total forecast opex for: ICT services for new recurrent projects; emissions measurement – Picarro leak detection services; pipeline integrity management program; and licence fees, as set out in Table 6.3 below. This is \$23.8 million higher than JGN's revised proposal because, for the reasons set out below, we have maintained our draft decision to include licence fees as a step change in total forecast opex and applied a small adjustment to the step change for emissions measurement – Picarro leak detection services.

¹⁷ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pg. 7.

¹⁸ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pp. 5–6.

Table 6.3: Step changes (\$million, 2024–25)

Step change	JGN revised proposal	AER alternative estimate	Difference
ICT services for new recurrent projects	14.6	14.6	–
Licence fees	–	24.1	24.1
Emissions measurement – Picarro leak detection services	15.3	15.0	–0.4
Pipeline Integrity Management Program	17.0	17.0	–
Total	46.9	70.7	23.8

Source: JGN, *2025-30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model – 20250115 – Public*, January 2025; AER analysis.

Note: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

6.4.3.1 Licence fees

We have maintained our draft decision, which was to include licence fees in our alternative estimate as a step change, rather than a category specific forecast combined with a true up mechanism as proposed by JGN. In the draft decision we considered that providing a true-up in the tariff variation formula effectively funds these costs on a cost-of-service basis.

Furthermore, we considered that the cost pass through arrangements are sufficient to deal with any material change in costs associated with licence fees. We have applied this approach in recent gas distribution decisions such as for AusNet Gas Services.¹⁹ Our view on this matter has not changed.

In its revised proposal, JGN did not accept our draft decision for the following reasons:

- JGN submitted that licence and government fees are out of its control, and therefore, should continue to be treated as category specific forecast, consistent with the approach applied in the 2020–25 access arrangement period. It considered it to be in the best interests of consumers if licence fees are treated as a category specific forecast because this type of expense is uncontrollable and lumpy.²⁰
- JGN stated that our draft decision approach to treating licence fees as a step change rather than a category specific forecast is not consistent with our treatment of similar items under the NER.²¹ In particular, it drew on our AusNet Gas Services decision to highlight that, for this network service provider, there is a discrepancy between treatment

¹⁹ AER, *AusNet 2023–28 – Draft Decision – Attachment 6 – Operating Expenditure*, December 2022, pp.18–19.

²⁰ JGN, *Revised 2025–30 Access arrangement proposal, Attachment 5.1 Operating expenditure*, 15 January 2025, p. 27.

²¹ JGN, *Revised 2025–30 Access arrangement proposal, Attachment 5.1 Operating expenditure*, 15 January 2025, p. 27.

of ESV (Energy Safe Victoria) levies and the opex incentive schemes between gas and electricity, which JGN believe to be an unnecessary discrepancy.²²

We maintain the inclusion of licence fees in our alternative estimate of total opex as a step change. Our approach is consistent with the broader incentive framework applied in our access arrangement determination. It ensures that licence fees are also forecast using a single year revealed cost approach that we apply to opex forecasting. This approach implies that the forecasting risk associated with these costs would be shared with customers through the efficiency carryover mechanism (ECM). In contrast, JGN's proposed approach to include the licence fees as category specific forecasts combined with a true up factor in the tariff variation mechanism places the forecasting risk of these costs entirely on consumers.

Our explanatory statement for the efficiency benefit sharing scheme considered the treatment of both uncontrollable and lumpy costs, and the impacts they may have on ECM carryover amounts.²³ We stated that by including uncontrollable costs in the ECM, uncontrollable cost decreases or increases are shared between networks and consumers in the same way as any efficiency gain or loss (that is, approximately 30:70 with a five year carryover period). If we excluded such costs, uncontrollable cost increases would be shared in the same way as an efficiency loss would be without an ECM. Without an ECM, networks' share of cost increases differs across the access arrangement period. We saw no reason why uncontrollable cost increases should be shared differently between networks and consumers in different regulatory years. Relevantly, any material risks can be managed through pass-through events and contingent projects. We did not think there is a compelling argument to share the cost of uncontrollable events differently to all other costs facing networks.²⁴ We remain of this view.

Regarding the lump nature of costs, we stated that using a single year revealed cost forecasting approach for overall opex provides a robust forecast consistent with the opex criteria, such that few categories would need exclusion from the ECM. In considering a forecasting approach in this context, the question is not whether individual cost categories are lumpy but whether total opex is lumpy. A 'hybrid' forecasting approach, where some cost categories are forecast bottom up, while other are forecast using revealed cost, risks resulting in upwardly biased forecasts. Networks would have an incentive to only use an alternative forecasting approach for those lumpy cost categories where expenditure is atypically low in the base year. For categories where expenditure is higher than usual in the base year, they have an incentive to forecast using revealed costs. Further, networks will have a greater incentive to only propose deviating from revealed costs for those cost categories where volumes are forecast to increase but not for those categories where volumes are forecast to decrease. Consequently, there is a risk that a 'hybrid' forecasting approach will give upwardly biased total opex forecasts. If total opex is not materially lumpy

²² JGN, *Revised 2025–30 Access arrangement proposal, Att 5.1 – Operating Expenditure*, January 2025, p. 28.

²³ AER, *Explanatory Statement – Efficiency Benefit Sharing Scheme*, November 2013, pp. 19–22; The efficiency benefit sharing scheme is an incentive scheme that applies to electricity network service providers. This incentive scheme is referred to as efficiency carryover mechanism for gas network service providers.

²⁴ AER, *Explanatory Statement – Efficiency Benefit Sharing Scheme*, November 2013, pp. 19–21.

then a revealed cost forecast is appropriate, regardless of whether individual categories are lumpy or not.²⁵

We also disagree with JGN that our draft decision approach to treating licence fees as a step change rather than a category specific forecast is not consistent with our treatment of similar items under the NER. We note that for electricity distribution businesses, unlike for gas distribution businesses, there are express provisions in the NER which deal with the recovery of jurisdictional scheme costs. It was in this context that we approved the recovery of jurisdictional scheme costs (e.g., the ESV levies) through the price control mechanism for the Victorian electricity distribution businesses. Similar provisions do not exist within the NGR. Our consideration on this matter is discussed in our AusNet Services' 2023–28 draft decision.²⁶

For the above reasons, we have included JGN's licence fees as a step change, not as a category specific forecast. These are also the reasons why we have not included a true up factor in the tariff variation mechanism for licence fees (see attachment 10).

6.4.3.2 Emissions measurement – Picarro leak detection services

We have included \$15.0 million for Picarro in our alternative estimate of forecast opex for the final decision. This is \$0.4 million lower than JGN's revised proposal of \$15.3 million.²⁷ This reflects that we are largely satisfied that the proposed costs are prudent and efficient.

Table 6.4: JGN's Picarro leak detection services step change (\$million, 2024–25)

	2025–26	2026–27	2027–28	2028–29	2029–30	Total
JGN's revised proposal	3.1	3.1	3.1	3.1	3.1	15.3
AER alternative estimate	3.0	3.0	3.0	3.0	3.0	15.0
Difference	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4

Source: JGN, *2025-30 Access arrangement revised proposal - Att 5.2M - Operating expenditure forecasting model*, January 2025; AER analysis.

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

JGN's initial proposal included \$20.8 million to acquire 5.75 Picarro advanced mobile leakage detection technology units (Picarro, or vehicles with advanced monitoring sensors) in addition to the 2.25 units that were already reflected in the JGN's base year.²⁸ Our draft decision did not include costs for this step change, as we were not satisfied the uplift to 8 Picarro units (2.25 plus 5.75) was prudent and efficient. We considered the stated benefits, particularly arising from the assumed changes to the reporting approach, were not sufficiently supported and were inappropriate to include in the business case modelling at this stage. Instead, and based on the information provided, we considered that JGN's existing fleet of 3 units, including an uplift received through rate of change, was the prudent level to realise

²⁵ AER, *Explanatory Statement – Efficiency Benefit Sharing Scheme*, November 2013, pp. 21–22.

²⁶ AER, *JGN 2025–30 – Draft Decision – Attachment 6 – Operating expenditure*, November 2024, p. 32; AER, *AusNet 2023–28 – Draft Decision – Attachment 6 – Operating expenditure*, December 2022, p. 19.

²⁷ The difference between \$15.3 and \$15.0 million comes to \$0.4 million due to rounding.

²⁸ JGN, *Att. 6.2 – Opex step changes justification*, June 2024, pp. 20–21.

the given benefits. We discuss this step change, our assessment and the reasons for not including this step change in further detail in our draft decision.²⁹

In its revised proposal, JGN included a lower step change amount of \$15.3 million for Picarro, or \$5.5 million (26.4%) lower than its initial proposal. This reflected a reduction of the number of proposed Picarro vehicles from 5.75 to 3.75.³⁰ JGN reaffirmed that Picarro will enable it to better identify and manage leaks across its network, including improving the network's safety, achieve emissions reduction, and lower network bills to its customers.³¹ JGN further clarified that the revised amount was in response to feedback from our draft decision, which JGN considered by undertaking further analysis on its Picarro program. This analysis resulted in JGN instead proposing to adopt a staged approach of utilising Picarro based on spatial-temporal extrapolation across its network in the short-term, before moving to annual network surveys in the longer term.³² Specifically, JGN stated that this will involve using 6 Picarro vehicles (2.25 in base + 3.75 proposed) based on spatial-temporal extrapolation during the 2025–30 period, before moving to an annual survey approach using 8 Picarro vehicles in the 2030–35 access arrangement period.³³

We assessed the information provided in JGN's revised proposal, the documents and business case provided, including the Picarro NPV model and information received through our request for additional information. We are satisfied that the revised Picarro step change largely represents prudent and efficient expenditure. We consider JGN has appropriately addressed our concerns raised in the draft decision. JGN updated its modelling and inputs to reflect achievable consumer benefits based on existing policy and regulation, rather than undefined future potential policy directions. This means that Picarro may therefore also have direct and immediate impact on lowering network tariffs both in the short-term, as well as increased benefits in the long-term, should future emissions accounting and reporting changes be realised.³⁴ These savings may be achieved through two complementary methods:

1. Firstly, Picarro will enable JGN to better manage and repair its gas leaks, thus directly reducing the volume of gas losses, or unaccounted for gas, across the network. The unaccounted for gas and relevant costs are currently passed through to customers via tariffs. Any reduction in these volumes therefore results in savings to customers through lower tariffs.
2. Secondly, JGN confirmed in its revised proposal that it will change its carbon accounting approach, to one that is based on actual unaccounted for gas.³⁵ Currently, JGN has an obligation to purchase carbon offset certificates (e.g. Australian Carbon Credit Units) to manage its carbon footprint. The associated costs for carbon offset certificates are also

²⁹ AER, *Draft decision, JGN access arrangement 2025–30 – Attachment 6 – Operating expenditure*, November 2024, pp. 29–30.

³⁰ JGN, *RP – Att. 5.1 – Operating expenditure*, 18 January 2025, p. 13.

³¹ JGN, *Revised 2025 Plan*, 15 January 2025, p. 29; JGN, *RP – Att. 5.1 – Operating expenditure*, 18 January 2025, pp. 12–13.

³² JGN, *Revised 2025 Plan*, 15 January 2025, p. 29.

³³ JGN, *Revised 2025 Plan*, 15 January 2025, p. 31.

³⁴ JGN, *Revised 2025 Plan*, 15 January 2025, pp. 30–31.

³⁵ JGN, *response to AER information request – IR#028 Q1.1 – Confidential*, 10 February 2025, p. 4; Clean Energy Regulator, *National Greenhouse and Energy Reporting (Measurement) Determination 2008 – Compilation No. 17*, 1 July 2024, p. 197.

passed through to customers via tariffs. This means a reduction in unaccounted for gas will reduce both JGN’s reported emissions and the quantity of offset certificates JGN is required to purchase.

Our assessment of this step change takes stakeholder submissions into account. As stated in section 6.2.1, the three submissions we received were supportive of JGN’s revised step change for Picarro.

For the reasons discussed above, we have included \$15.0 million for the Picarro step change in our alternative estimate for the final decision. This is \$0.4 million lower than JGN’s revised proposal. Our alternative estimate is slightly lower than JGN’s revised proposal as we were not satisfied this component reflects costs necessary to operate the proposed 6 Picarro vehicles in the 2025–30 period. For the avoidance of doubt, we note that our final decision, which provides for an uplift to JGN’s Picarro fleet to 6 vehicles, relates to the 2025–30 period. Should JGN propose costs to further uplift its fleet beyond this level in the subsequent access arrangement period, we will assess the prudence and efficiency of any proposed costs at the time of our 2030–35 access arrangement assessment.

6.4.3.3 Recurrent expenditure for new ICT projects

JGN accepted our draft decision in its revised proposal with respect to its proposed step change for new recurrent ICT expenditure³⁶. JGN’s revised proposal included a \$14.6 million step change for the ongoing operation and maintenance expenditure associated with a set of new ICT projects.

In our draft decision, we had flagged three projects that we sought further clarification around in respect of any potential opex savings. JGN satisfactorily addressed these queries in its revised proposal³⁷ and so we have maintained our draft decision placeholder estimate for this step change in our final decision, which also aligns with JGN’s revised proposal.

Table 6.5: Recurrent expenditure for new ICT projects (\$million, 2024–25)

	2025–26	2026–27	2027–28	2028–29	2029–30	Total
JGN’s proposal	0.8	2.2	3.7	3.8	4.2	14.6
AER alternative estimate	0.8	2.2	3.7	3.8	4.2	14.6
Difference	–	–	–	–	–	–

Source: JGN, *RP - Att 5.2M – Operating expenditure forecasting model*, January 2025; AER analysis.; AER analysis.

Note: Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

6.4.4 Category specific forecasts

We have included \$168.0 million of category specific forecasts in our alternative estimate of total forecast opex for unaccounted for gas (UAFG), socialised small customer abolishment costs, support for customer experiencing vulnerability, and debt raising costs as set out in Table 6.6 below. This is \$24.0 million lower than JGN’s revised proposal because we have:

³⁶ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pp. 9–10.

³⁷ JGN, *RP – Att 5.1 – Operating Expenditure*, January 2025, pp. 14–26.

- adjusted UAFG to reflect the approved demand forecast set out in Attachment 12 of this final decision (see section 6.4.4.1)
- maintained our draft decision to include licence fees as a step change in total forecast opex, rather than as a category specific forecast, as discussed in section 6.4.3.1
- adjusted socialised small customer abolishment costs to reflect the amount of approved socialised small customer abolishment costs discussed in Attachment 9 of this final decision (see section 6.4.4.2)
- adjusted debt raising costs to reflect the amount resulting from our PTRM in this final determination (see section 6.4.4.3).

Table 6.6: Category specific forecasts (\$million, 2024–25)

Category specific forecasts	JGN Revised proposal	AER alternative estimate	Difference
Unaccounted for gas	139.3	143.0	3.7
Licence fees	24.1	–	–24.1
Socialised small customer abolishment costs	16.3	12.7	–3.6
Support for customer experiencing vulnerability	2.7	2.7	–
Debt raising costs	9.6	9.7	0.1
Total	192.0	168.0	–24.0

Source: JGN, 2025–30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model, January 2025; AER analysis.

Note: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

6.4.4.1 Unaccounted for gas costs

We have included forecast UAFG costs of \$143.0 million in our alternative estimate. This is \$3.7 million higher than JGN's revised proposal of \$139.3 million³⁸ because we have applied mechanical adjustments to reflect the approved demand forecast set out in Attachment 12 of this final decision.

Table 6.7: Unaccounted for gas costs (\$million, 2024–25)

	2025–26	2026–27	2027–28	2028–29	2029–30	Total
JGN's revised proposal	34.0	30.7	26.6	24.3	23.7	139.3
AER alternative estimate	34.2	31.1	27.3	25.3	25.1	143.0
Difference	0.3	0.4	0.6	1.0	1.4	3.7

Source: JGN, 2025–30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model, January 2025; AER analysis.

³⁸ JGN, 2025–30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model – 20250115 – Public, January 2025.

Note: Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

6.4.4.2 Socialised abolishments opex

As set out in Attachment 9, our final decision is to socialise the bulk of small customer abolishment costs for standard abolishments where the request does not relate to potential construction. These costs will be socialised across transportation reference service tariffs, and those customers will pay a discounted stand-alone ancillary reference service tariff, to ensure the safe operation of the network. Where the request does relate to construction, or for non-standard abolishments, the customers will pay a cost-reflective tariff.

Specifically, we decided to cap the small customer connection abolishment ancillary reference service at \$250 and socialise the balance across transportation reference service tariffs via an ex-ante opex forecast. This forecast will be subject to an annual true-up via the control mechanism.

In coming to our final decision on the ex-ante opex forecast, we investigated the forecast abolishment numbers provided by JGN in its proposal.³⁹ We have also had regard to the efficient cost of providing abolishment services and the amount to be socialised.

We have used these forecasts, and the abolishment costs to be recovered via ancillary reference service tariffs, to determine the additional opex required to be included in forecast opex for transportation services. On this basis we have included an opex forecast of \$12.7 million for abolishment service costs in our final decision opex, as a category specific forecast.

Below we set out JGN's forecast of the abolishments opex to be socialised, along with the further information we have considered in our review of these forecasts. We then explain our view on the appropriate forecast of the abolishments opex to be socialised, which is lower than JGN's forecast. Our forecast is lower than JGN's because we have determined a lower cost to be socialised per abolishment.

Forecast number of abolishments to be socialised

In our draft decision, the forecast of socialised abolishments opex included a portion of the cost of all forecast abolishments. However, we also suggested splitting the abolishment service into a cost reflective temporary abolishment service for renovation or rebuild sites, and a partially socialised permanent abolishment service to encourage households permanently leaving the network to opt for abolishment.⁴⁰

In its revised proposal, JGN proposed three different abolishment services for small customers:

1. Standard Residential Connections where the request does not relate to potential construction (new partially socialised reference tariff)

³⁹ JGN, *Revised 2025–30 Access arrangement proposal, Attachment 6.1, Demand forecast*, 15 January 2025, p. 30.

⁴⁰ AER, *Draft decision – JGN (NSW) access arrangement 2025 to 2030, Attachment 9 – Reference tariff setting*, November 2024, p. 12.

2. Standard Residential Connections where the request does relate to construction (existing cost-reflective reference tariff)
3. Individually priced for all other abolishments (existing cost-reflective reference tariff).

In its revised proposal, JGN provided a forecast for the 2025–30 access arrangement period of the number of disconnections, abolishments, reconnections and new connections.⁴¹ This included forecasts of the number of abolishments for standard residential connections where the request does not relate to potential construction (see Table 6.8).

Table 6.8: Forecast number of abolishments where the request does not relate to potential construction

2025–26	2026–27	2027–28	2028–29	2029–30	Total
1,513	2,283	3,051	3,809	4,547	15,203

Source: JGN, *Revised 2025–30 Access arrangement proposal, Attachment 5.1, Operating expenditure*, 15 January 2025, p. 30.

We again engaged ACIL Allen to review JGN’s proposed customer number forecasts. We discuss this review in more detail in Attachment 12. We and ACIL Allen are satisfied that JGN’s forecast of the number of net disconnections, which includes abolishments, is reasonable. Our reasons for reaching this view are set out in section 12.4.1.2 of Attachment 12.

Forecast of opex to be socialised

We have used the forecast of the number of abolishments, along with the abolishment costs to be socialised via haulage reference service opex (\$925.43), to determine the forecast of abolishments opex to be socialised. We discuss the basis of the abolishment costs to be socialised in Attachment 9.

Our final decision forecast opex for abolishments, totalling \$12.7 million, is shown in Table 6.9.

Table 6.9 Forecast of socialised abolishments opex (\$million, 2024–25)

	2025–26	2026–27	2027–28	2028–29	2029–30	Total
JGN’s revised proposal	–	2.7	3.6	4.5	5.4	16.3
AER final decision	–	2.1	2.8	3.5	4.2	12.7
Difference	–	–0.6	–0.8	–1.0	–1.2	–3.6

Source: AER analysis; JGN, *Revised 2025–30 Access arrangement proposal, Attachment 5.1, Operating expenditure*, 15 January 2025, p. 30.

Note: Numbers in the table may not sum to total due to rounding.

Our forecast is lower than JGN’s because we have determined a lower cost to be socialised per abolishment. We discuss our reasons for this in Attachment 9.

⁴¹ JGN, *Revised 2025–30 Access arrangement proposal, Attachment 6.1, Demand forecast*, 15 January 2025, p. 30.

We have included this abolishment opex forecast 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. We note there is significant uncertainty associated with this forecast and as a result, we have included a true-up in the tariff control mechanism for abolishment costs. We discuss this true-up in more detail in Attachment 10.

6.4.4.3 Debt raising costs

We have included debt raising costs of \$9.7 million in our alternative estimate. This is \$0.1 million more than the \$9.6 million proposed by JGN.⁴²

Table 6.10: Debt raising costs (\$million, 2024–25)

	2025–26	2026–27	2027–28	2028–29	2029–30	Total
JGN's revised proposal	1.9	1.9	1.9	1.9	1.9	9.6
AER alternative estimate	2.0	2.0	1.9	1.9	1.9	9.7
Difference	0.0	0.0	0.0	0.0	0.0	0.1

Source: JGN, *2025-30 Access arrangement revised proposal – Att 5.2M – Operating expenditure forecasting model*, January 2025; AER analysis.

Note: Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

Debt raising costs are transaction costs incurred each time a business raises or refinances debt. Our preferred approach is to forecast debt raising costs using a benchmarking approach rather than a service provider's actual costs in a single year. This provides consistency with the forecast of the cost of debt in the rate of return building block.

We used our standard approach to forecast debt raising costs.

6.5 Revisions

As set out in our final decision overview for JGN (section 3.6), we have approved JGN's proposal that the Efficiency Carryover Mechanism continue to apply to its opex during the 2025–30 period. The revisions set out below relate both to opex and the Efficiency Carryover Mechanism, with the following reasons for the changes:

- revision 6.1 is consistent with our final decision on the treatment of licence fees set out in section 6.4.3.1
- revision 6.2 is consistent with our draft decision amendment to clause 12.1(h)(iv), for the reasons set out in our draft decision⁴³

⁴² JGN, *2025–30 Access arrangement proposal – Att. 6.3M – Operating expenditure forecasting model*, June 2024.

⁴³ AER, *Draft decision – JGN (NSW) access arrangement 2025 to 2030, Attachment 8 – Efficiency carryover mechanism*, November 2024, p. 6.

- revision 6.3 is consistent with our draft decision, and revisions that we have included in past decisions, for the reasons set out in our draft decision⁴⁴
- revision 6.4 corrects a numbering error on page 25 of JGN’s Access Arrangement
- revision 6.5 separates clause 12.1(h) into 2 individual clauses, for clarity.

We have proposed the following revisions to the access arrangement as set out in Table 6.11.

Table 6.11 Efficiency Carryover Mechanism and Opex revisions

Revision	Amendment
Revision 6.1	Delete clause 12.1(h)(ii)
Revision 6.2	Amend clause 12.1(h)(iv) to read: <i>the Safeguard Mechanism costs that appear in opex and are recovered through the reference tariff variation mechanism true-up</i>
Revision 6.3	Amend clause 12.1(h)(x) to read: <i>any cost that the AER determines to exclude from the operation of the efficiency carryover mechanism in the relevant period, which would not promote the National Gas Objective.</i>
Revision 6.4	Amend the second clause 12.1(i) on page 26, which reads as: <i>The incremental efficiency gains (or losses) are carried over from year to year in real dollars to ensure that these gains (or losses) are not eroded by inflation. The price indices used in this calculation are to be consistent with those used to forecast operating expenditure for the Access Arrangement Period.</i> to instead be clause 12.1(k).
Revision 6.5	Include a new clause, clause 12.1(l), which reads: <i>For avoidance of doubt, the forecast operating expenditure amounts that are used as the basis for measuring efficiencies are equal to the approved forecast operating expenditure in the most recent JGN Revenue Model published by the AER from time to time (plus any other operating expenditure approved by the AER), subject to the exclusions set out in clause 12.1(h).</i>
Revision 6.6	Make all necessary amendments to reflect our final decision on the proposed opex forecast for the 2025–30 access arrangement period, as set out in section 6.1.

⁴⁴ AER, *Draft decision – JGN (NSW) access arrangement 2025 to 2030, Attachment 8 – Efficiency carryover mechanism*, November 2024, p. 6.

Glossary

Term	Definition
AER	Australian Energy Regulator
Ancillary RS	Ancillary Reference Service
capex	capital expenditure
ECM	efficiency carryover mechanism
ESV	Energy Safe Victoria
Handbook	The Better Resets Handbook
ICT	Information and communication technologies
JGN	Jemena Gas Networks
NGL	National Gas Law
NSW	New South Wales
NGO	National Gas Objective
NGR	National Gas Rules
opex	operating expenditure
SaaS	Software as a Service
Transportation RS	Transportation Reference Service
UAFG	unaccounted for gas