

Issues paper on the early signal pathway expectations

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

August 2024

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1 Introduction

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable, and affordable energy future for Australia as it transitions to net zero emissions. The regulatory framework governing gas transmission and distribution networks is the National Gas Law and Rules (NGL and NGR). Our work in this sector is guided by the National Gas Objective (NGO).

On 29 June 2024, we received an access arrangement proposal from Jemena Gas Networks (JGN) New South Wales (NSW) for the 5-year regulatory period of 1 July 2025 to 30 June 2030 (2025–30 period).¹ Our final decision on this proposal will set the revenue allowance that forms the major component of the revenue it proposes to recover from its customers.

The Better Resets Handbook (Handbook) encourages networks to develop high quality proposals through genuine engagement with consumers. To facilitate this objective, the early early signal pathway was introduced to provide an opportunity for a business to receive formal feedback on aspects of its proposal during its pre-lodgement engagement. Through the earlier review of information, we can provide signals at the issues paper stage on whether we will undertake a targeted review of a proposal.

A targeted review means that we have been able to narrow the scope of issues to be assessed, based on the expectations on key topic areas in the Handbook being met. Where a business has satisfied the expectations for a topic area set out in the Handbook, a targeted review would focus on a select set of issues, cost categories or programs of work for assessment. We consider that proposals that reflect consumer preferences, and which meet our expectations, are more likely to meet the requirements of the NGR and are more likely to be largely or wholly accepted at the draft decision stage. However, where we are required to undertake a more in-depth review, we would consider it is still possible to settle further issues at the draft determination stage or potentially fully accepting issues.

The Handbook sets out our expectations for how a business will engage with consumers and how those outcomes should be reflected in proposals. It also sets out our expectations for depreciation, capital, and operating expenditure (capex and opex), and tariff structure statements (electricity distribution only).

JGN is the fourth network business, and first gas distribution business selected to participate in the early signal pathway.² Under this process, we had regular pre-lodgement engagement and provided feedback against the expectations outlined in the Handbook.

We have undertaken an initial assessment of JGN's proposal and throughout this Issues paper discussed our assessment in relation to the expectations. We are seeking stakeholder feedback on JGN's proposal, and the issues highlighted in our paper.

¹ JGN, [2025–30 Access Arrangement](#), June 2024; JGN, [2025 Plan](#), June 2024.

² AER, [Better Resets Handbook – Towards consumer-centric network proposals](#), December 2021.

1.1 How can you get involved?

Engagement and stakeholder feedback is a valuable input to our decision on JGN's access arrangement. We have set out a number of questions throughout this paper and stakeholders can assist in our process by providing their views on these questions or any other aspects of JGN's proposal. When we receive stakeholder submissions that articulate consumer preferences, address issues in an access arrangement proposal, and provide evidence and analysis, our decision-making process is strengthened.

You can contribute to our assessment by:

- joining us at an online public forum on 2 September 2024 at 2pm (AEST). Registration details are available on our website and [through Eventbrite](#).³
- making a written submission on the proposal to JGN2025@aer.gov.au by 13 September 2024.⁴ Written submissions should be addressed to Arek Gulbenkoglu, General Manager. Alternatively, you can mail submissions to GPO Box 3131, Canberra ACT 2601. We prefer that all submissions be publicly available to facilitate an informed and transparent consultation process.

Table 1 Key dates for Jemena Gas Networks' access arrangement 2025–30

Milestone	Date
AER publishes Issues paper on access arrangement proposal	23 August 2024
AER holds public forum on Issues paper and JGN's access arrangement proposal	2 September 2024
Submissions close on JGN's access arrangement proposal and Issues paper	13 September 2024
AER publishes draft decision	November 2024
JGN submits revised proposal to the AER	January 2025
Submissions close on draft decision and JGN's revised proposal	February 2025
AER publishes final decision	April 2025
Final decision takes effect	1 July 2025

Note: Timelines are indicative and subject to change.

³ Register for Jemena Gas Networks' public forum [through Eventbrite](#).

⁴ See [Jemena Gas Networks' submission page](#) for full details on making a submission. For further information regarding the AER's use and disclosure of information provided to it, see the ACCC/ AER Information Policy.

2 Initial observations

JGN has prepared its access arrangement proposal at a time of significant uncertainty for the future of gas. This uncertainty has been at the forefront of JGN’s planning and communication with consumer groups. It states that the ‘energy system is undergoing a once-in-a-generation transformation, and it is operating in a period of uncertainty surrounding the future role of gas networks in the energy landscape’.⁵

The Australian Energy Market Operator’s (AEMO) latest Gas Statement of Opportunities (GSOO) forecasts that residential and small commercial consumption will gradually decline in the short term, with electrification to reduce natural gas usage more significantly in the medium to long term as the economy transitions to meet net zero emissions by 2050.⁶

JGN acknowledges that this uncertainty adds complexity to its planning process, but suggests it is important to act now to achieve a smoother pathway to net zero.⁷ JGN has also outlined how it has ensured that its access arrangement is consistent with the NGO.⁸

2.1 JGN’s access arrangement

JGN has developed a 2025–30 proposal that it considers continues to provide its customers with a safe and reliable service, together with a number of initiatives aimed at supporting a fair and equitable energy transition for customers over the long term.⁹ Key initiatives that JGN has proposed in its access arrangement include:

- Proposing a more targeted approach to its mains replacement program by using technology to better understand the condition of its assets.
- Investing in renewable gas connections from biomethane suppliers, enabling customers to access renewable gas sooner.
- Changes to new connections to require more customers to make an up-front contribution to connect to the network, reducing the growth in its asset base.
- Accelerated depreciation to speed up the recovery of assets.
- Maintaining its current approach to continue to charge for abolishments.
- Moving from a price cap tariff variation mechanism to a hybrid mechanism. This approach will share volume risks between JGN and customers.¹⁰

JGN’s proposal is the first step in a 10-month review process. Over the course of this process, from proposal to draft decision, and then to revised proposal and final decision, components of forecast revenue are likely to change. These changes may result from our decisions taking a different view on proposed revenue to JGN. In addition, a standard part of

⁵ JGN, [2025 Plan](#), June 2024, p. v.

⁶ AEMO, *Gas Statement of Opportunities*, March 2024.

⁷ JGN, *2025 Plan*, June 2024, p. v.

⁸ JGN, *2025 Plan*, June 2024, p. v.

⁹ JGN, *2025 Plan*, June 2024, p. v.

¹⁰ JGN, *2025 Plan*, June 2024, pp. v-vi.

our process is to update the forecast revenue for movements in market variables such as interest rates, bond rates and inflation. Movements in these market variables can have a material impact on the final revenue and, therefore, consumer bills.

2.2 Key drivers of proposed revenue

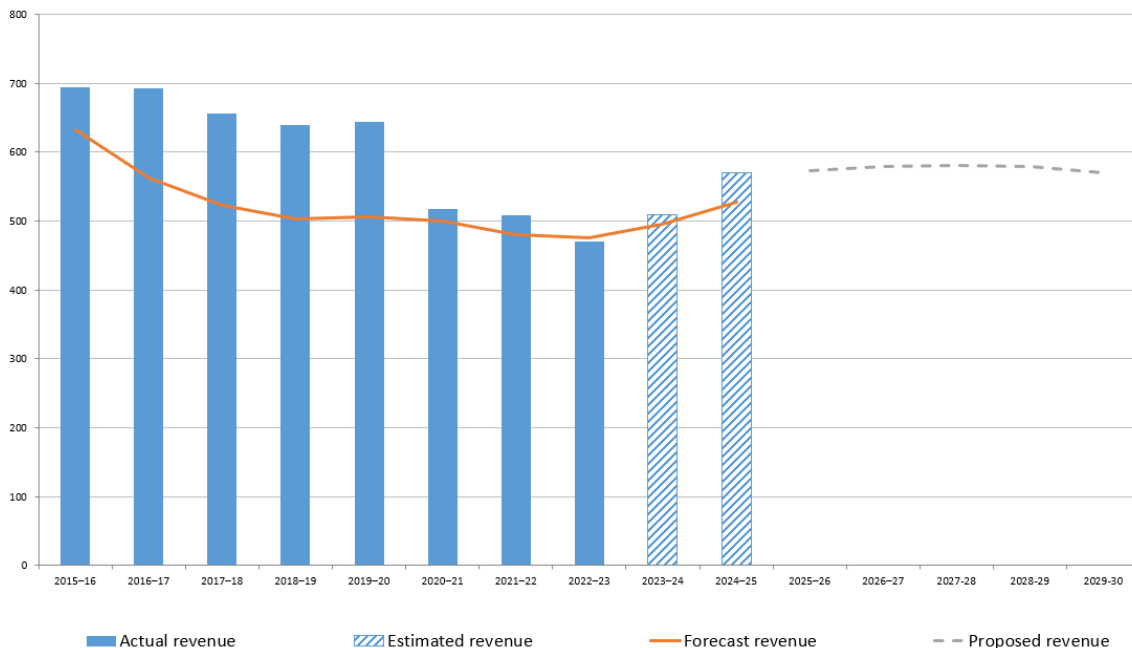
JGN has proposed a total revenue of \$3,132.7 million (\$nominal, smoothed) over the 2025–30 period. This is \$927.7 million (42.1%) higher than what we approved for the 2020–25 period.

This increase from the 2020–25 period, is driven by factors ‘outside’ the control of the network (approximately 22%). This includes higher actual inflation rates for the 2020–25 period and higher interest rates for the 2025–30 period. The proposed accelerated depreciation accounts for approximately 39% of the increase in revenue while all other components of the proposal account for the remaining 39% of the increase.

Revenue is driven by changes in real costs and inflation. To compare the revenue requirement from one period to the next on a like-for-like basis, we use ‘real’ values that have been adjusted for the impact of inflation by using a common year (2024–25).

In real terms, JGN’s proposed revenue is \$2,882.5 million (smoothed) over the 2025–30 period. This is a \$403.9 million (16.3%) increase compared to the current 2020–25 period (Figure 1).

Figure 1 Changes in regulated revenue over time (\$million, 2024–25)



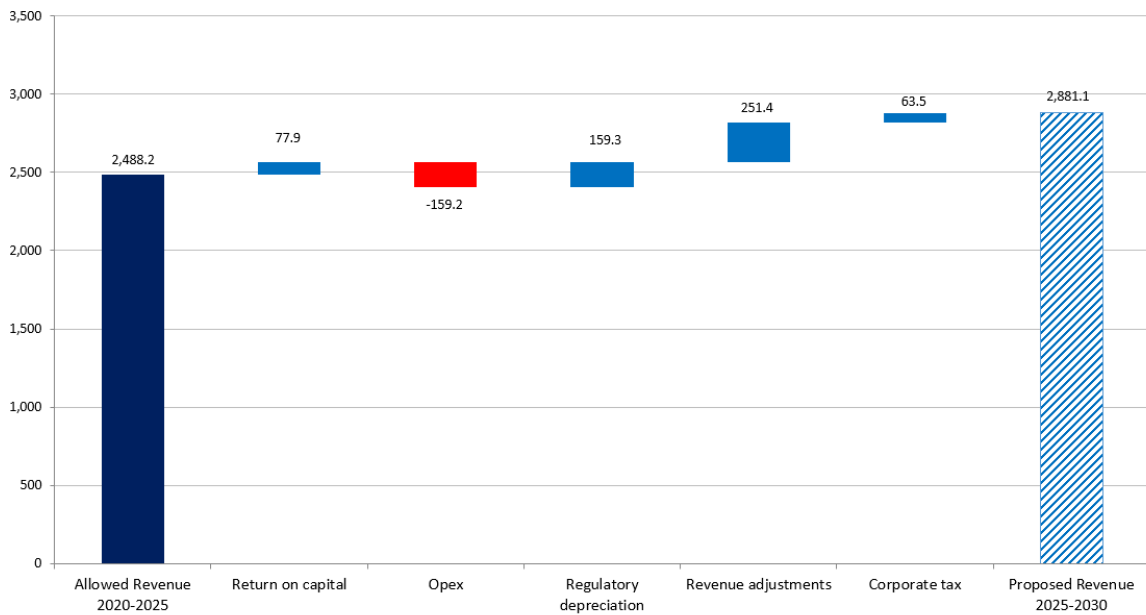
Source: AER analysis.

Figure 2 illustrates that one of the main drivers of the increase in revenue is JGN’s proposal to bring forward the recovery of its depreciation costs, by increasing the rate at which it can recover from consumers its past investment in network assets. This is referred to as accelerated depreciation.

Under the current regulatory framework, JGN’s use of accelerated depreciation is a mechanism that allows the network to manage the risk of future obsolescence, by recovering income sooner rather than later. This benefits the network by increasing the certainty of recovering its investment. A balanced approach to accelerated depreciation can also serve to benefit consumers by smoothing the price impact of a declining customer base across current and future network users.

Other drivers for this increase in revenue are a higher rate of return due to higher interest rates, a higher revenue adjustment mainly due to a large one-off negative remittal revenue adjustment which only applies in the 2020–25 period, and a higher corporate income tax.

Figure 2 Changes in building blocks between the 2020–25 period and 2025–30 period (\$million, 2024–25)



Source: AER analysis.

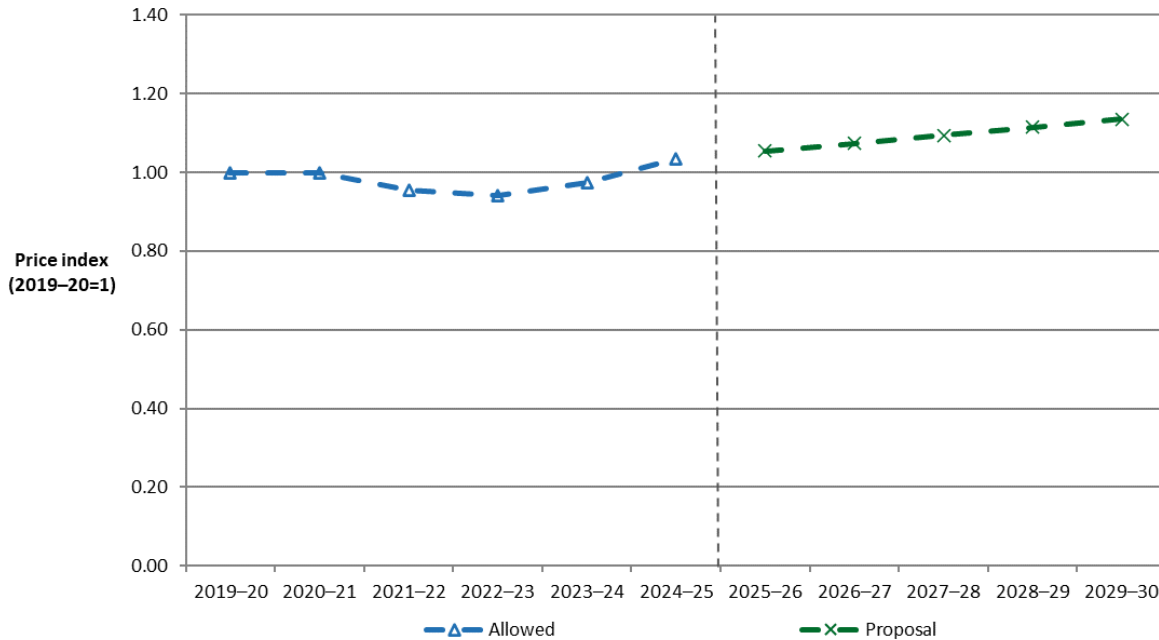
Note: Allowed revenue and proposed revenue in the chart are unsmoothed total revenue for the access arrangement period. The 2020–25 allowed revenues (including opex) are converted to real 2024–25 dollars using lagged CPI. The higher revenue adjustments are mainly due to the expiry of a one-off large negative revenue adjustment of \$204.3 million for the 2015–20 remittal decision included in the 2020–25 access arrangement decision.

The framework requires the AER to, in its role as a regulator, assess key drivers of the proposal to ensure consumers are spending no more than is necessary to meet the current and future needs of businesses.

The combined effect of a higher revenue requirement, as outlined above, and a gradual forecast decline in demand over the 2025–30 period results in higher prices. For illustrative purposes, the modelled impact of JGN’s proposal is an estimated real price increase of around 9.8% by the end of the 2025–30 period. This translates to an estimated real increase

of around 1.9% per annum.¹¹ Figure 3 shows indicative tariff paths for JGN’s reference services across the 2025–30 period in real terms. It compares JGN’s proposed tariff path with that approved previously for the 2020–25 period.

Figure 3 Indicative tariff path for JGN’s reference service from 2020–21 to 2029–30 (Index 2019–20=1, \$2024–25)



Source: AER analysis.

JGN’s distribution charges make up around 39.6% of its residential customers’ gas bill and 20.2% of its small business customers’ gas bill.¹² Over the 2025–30 period, JGN’s proposal would result in an average nominal annual increase of \$16 (2.1%) for residential customers, and an average annual increase of \$166 (1.1%) for small business customers, which typically use more gas.¹³

These estimated bill impacts are likely to change as we progress through the 10-month review process. Our decisions, along with external factors such as interest rates and inflation, will affect the final revenue. Coupled with our decision on demand, these will in turn affect the tariffs JGN is able to charge to consumers over the next access arrangement period.¹⁴

¹¹ In nominal terms, the estimated price increase is around 26.0% by the end of the 2025–30 period, and an increase of 4.7% per annum. These are simple estimates only, calculated based on an aggregate level rather than individual zone level tariffs.

¹² JGN, *2025–30 Access Arrangement Proposal attachment JGN - RIN - Att 15 - Workbook 5 - Bill Impacts - 20240628*, June 2024.

¹³ Calculated based on annual consumption of 15GJ and 500GJ for residential customers and small business customers respectively; JGN, *2025–30 Access Arrangement Proposal attachment JGN - RIN - Att 15 - Workbook 5 - Bill Impacts - 20240628*, June 2024.

¹⁴ JGN are proposing a hybrid form of control that shares some volume risk with customers where JGN bears volume risk up to a +/- 5% agreed threshold level, and JGN and customers will share the volume risk 50:50 beyond the threshold level.

3 Assessment of the early signal pathway expectations

We have undertaken an initial assessment of JGN's proposal and, throughout this Issues paper we indicate where we believe a targeted review is suitable in relation to the topic areas of consumer engagement, capex, opex, and depreciation.

We acknowledge JGN has prepared its access arrangement proposal at a time of significant uncertainty regarding the future of gas. JGN has demonstrated a very high standard of stakeholder engagement in developing its proposal. However, the proposal raises a number of complex issues as a result of the energy transition, which means there are aspects of its access arrangement we consider do not meet the expectations of the Handbook and, as a result, require us to undertake a more detailed review.

While JGN's proposal has not met elements of the expectations set out in the Handbook, this does not mean that, following an in-depth review, we would not consider settling further issues at the draft determination stage or potentially fully accepting issues. This should also not be taken as a reflection of the quality of JGN's proposal, but acknowledgement of the challenge of some of the issues faced.

The areas we have identified for detailed review include:

- JGN's approach to accelerated depreciation (section 3.2)
- Adjustments to opex base year costs, specifically for Software as a Service (SaaS) and ICT and the proposed rate of change (sections 3.4.3.2 and 3.4.3.3).
- A number of opex step changes, including the proposed leakage detection (Picarro) program, the pipeline integrity management program, and the customer vulnerability program (3.4.3.4); and a new category specific cost relating to safeguard mechanism costs (3.4.3.5).

JGN's proposal not met capex expectation 1 of the Handbook and, as a result, a more detailed review is required, comprising 67% of proposed capex forecast expenditure. We have observed increases in a number of expenditure categories, and our detailed review will focus on renewables connections, metering, replacement capital expenditure (repex) and "other capex" business cases (section 3.3).

3.1 Consumer engagement

High quality consumer engagement is critical to developing proposals that support delivery of services that meet the needs of consumers at a price that is affordable and efficient. The Handbook sets out principle-based expectations for considering consumer engagement, covering the nature of engagement; the breadth and depth of engagement; and clearly evidenced impact from this engagement.

Consumer engagement is an important facet of our assessment. However, we are still required to ensure we are satisfied that the proposed forecast reasonably reflects prudent and efficient costs and a realistic expectation of future demand and cost inputs. We are looking to see how consumer values and preferences are shaping engagement. When

assessing a proposal, we should be able to see how a business has linked customer preferences to the expenditure proposed. Where consumer views on an issue are diverse, a business needs to set out those views and how it has balanced the divergence of preferences.¹⁵

Overall, JGN has delivered a well-planned, comprehensive, and high-quality consumer engagement program, which delivered transparent and sincere engagement with its customers and stakeholders. JGN has shown a genuine commitment to the early signal pathway through its extensive engagement program.

3.1.1 Nature of the engagement

JGN has undertaken an extensive engagement program over a 20-month period, which it states ‘has tackled head-on, the key challenges associated with the energy transition towards net zero, and uncertainty surrounding the future role of our gas network.’¹⁶ Its engagement program comprised of three key elements:

- An Expert Panel consisting of industry and energy specialists, to develop four plausible long-term scenarios for the NSW energy system.
- An Advisory Board consisting of customer advocates and industry specialists to consider a full range of possible initiatives that it might adopt during the 2025–30 period. This included examining the four long-term scenarios developed by the Expert Panel, and advising which initiatives should be taken to customers.
- A Customer Forum consisting of residential customers. The 8 forums undertook a deliberative process to understand customer needs and expectations.¹⁷

The Customer Forum first met in November 2022 for the purpose of building participants’ capacity and knowledge, to ensure they could make informed recommendations that considered the balancing views of customers.¹⁸ This session also provided early input to the Advisory Panel on customer values and helped shape the design and scope of the main deliberative forums, which took place over 6 sessions (Forums 2–7).¹⁹ Forum 8 was used for participants to hear how JGN responded to its direction, as well as test issues raised by the Advisory Board.

3.1.2 Breadth and depth of engagement

JGN engaged BD Infrastructure as its consumer engagement partner for the deliberative Customer Forums.²⁰ JGN outlined that central to its engagement program was a commitment to consult with a wide array of customers to ensure it understood the diverse perspectives, needs and expectations on its services.²¹ The composition of the Customer Forum featured a

¹⁵ AER, *Better Resets Handbook – Towards consumer-centric network proposals*, December 2021, p. 16.

¹⁶ JGN, [2025 Plan](#), June 2024.

¹⁷ JGN, *2025 Plan*, June 2024, pp.7-8.

¹⁸ JGN, *2025 Plan*, June 2024, p.48.

¹⁹ JGN, *BD Infrastructure - Att 2.2 - Customer forum engagement report 20240611*, June 2024, p. 9.

²⁰ JGN, *BD Infrastructure - Att 2.2 - Customer forum engagement report 20240611*, June 2024.

²¹ JGN, *2025 Plan*, June 2024, p. 47.

broad representative sample of the JGN consumer base. In addition, JGN established a Youth Forum and a Culturally and Linguistically Diverse steering group.

JGN outline that the Customer Forum participants came to a consensus view, however, note this did not necessarily mean that 100% had agreed positions for each initiative considered.²² The Customer Forum made six recommendations which included considerations around renewable gas strategies, affordability, and vulnerability.²³

An example of an initiative discussed with the Customer Forum was the speed of the recovery of JGN's assets. Throughout the deliberative process, JGN tested three options for accelerating the recovery of its assets, which included amounts of \$300 million, \$500 million, and \$700 million.²⁴ Section 3.2.2.4 has a detailed discussion of the feedback provided by the Customer Forum on this initiative.

newDemocracy Foundation was engaged to evaluate JGN's overall Customer Forum process. newDemocracy Foundation concluded 'the deliberative engagement process was strong and demonstrated good practice, meeting the requirements of the Handbook.'²⁵ It did observe some points for future improvements in deliberative processes. For example, while deliberative processes enable deep forms of engagement, it isn't possible for everyone to deliberate at this level. It suggests one way of including people beyond a deliberative process is 'to complement it with "shallower" forms of community engagement that require less of participants' time but still allow them a contextually suitable way of influencing the process.'²⁶

We, and the Consumer Challenge Panel, sub-panel (CCP31) observed parts of the engagement, including face-to-face Customer Forums. As part of the early signal pathway, we have been able to provide point-in-time feedback. CCP31 provided an assessment of consumer expectations in the Handbook at two intervals of the pre-engagement process. JGN acknowledged that the advice provided by CCP31 helped it evolve its engagement process.²⁷

At the November 2023 check-in, CCP31 observed that JGN had progressed well against the Handbook expectations, observing its engagement had been sincere, and the JGN team was open to feedback. CCP31 provided guidance to assist JGN in further progressing against the Handbook expectations, which included:

- sincerely consider the competing views of stakeholders in its draft proposal, particularly in the context of the future for gas, where there was a clear split in preferences among community groups

²² JGN, *2025 Plan*, June 2024, p. 48.

²³ JGN, *2025 Plan*, June 2024, pp. 32-33. See Figure 3.1 for a full table of the Customer Forum's recommendations, reproduced exactly how it was written.

²⁴ JGN, *2025 Plan*, June 2024, p. 35.

²⁵ JGN, newDemocracy, [Att 2.8 Independent evaluation report](#), June 2024,

²⁶ JGN, newDemocracy, *Att 2.8 Independent evaluation report*, June 2024, p.6. See the report for further recommendations provided by newDemocracy.

²⁷ JGN, *2025 Plan*, June 2024, p. 11.

- providing consumers with more detail on the viability of the future gas options, particularly ‘bio-methane’, to enable its consumer groups to give informed responses to JGN’s questions.

At the second check-in, CCP31 observed that JGN faced significant challenges in how to consider the diversity of consumer input into their access arrangement proposal. CCP31 noted this in the context of how difficult it is to transfer future of gas concerns into practical elements of an access arrangement proposal.

Through the feedback provided by CCP31, JGN noted there were certain issues raised that it did not agree with, to which it provided further observations to demonstrate that its engagement program was robust, genuine, and transparent.²⁸ It also appointed Sagacity Research and Jackie Duke Insights (JD Insights) to conduct a survey and in-depth interviews of customer forum participants to test some of CCP31’s observations.²⁹ JGN outlines that the research conducted by Sagacity Research and JD Insights had confirmed that the ‘vast majority of customers trusted the process, felt valued and adequately educated to make informed recommendations’.³⁰ All 22 people surveyed stated they had sufficient knowledge to provide informed feedback.³¹

JGN considers that the outcome of Sagacity Research and JD Insights research provides information that Jemena has ‘demonstrated a robust, genuine and transparent engagement process that meets the expectations set out in the AER’s Better Resets Handbook.’³²

3.1.3 Clearly evidenced impact

JGN considers that its engagement approach has enabled it to understand the needs and expectations of its customer and stakeholders in order develop its 2025–30 access arrangement proposal. We note that JGN’s access arrangement has had regard to:

- identifying and understanding what is important to its customers and stakeholders and their feedback
- the IAP2 Spectrum best practice engagement
- guidance from the AER and CCP31.

It is important that when we are assessing a proposal, we should be able to see how a business has linked customer preferences to the expenditure proposed. Where consumer views on an issue are diverse, a business needs to set out those views and how it has balanced the divergence of preferences.

We consider that JGN has sought feedback on complex topics that elicited a broad range of views. This is evident in topic areas such as accelerated depreciation, capex and opex, which are discussed through the relevant sections. We would encourage JGN to be open to

²⁸ JGN, *Att 2.1 – Consumer Challenge Panel feedback and response – 20240628*, June 2024, p. iv.

²⁹ JGN, *2025 Plan*, June 2024, p. 31; JGN, Sagacity and JD Insights, [Att 3.3 - Sagacity and JDI report](#), June 2024.

³⁰ JGN, *Att 2.1 – Consumer Challenge Panel feedback and response – 20240628*, June 2024, p. iii.

³¹ JGN, Sagacity and JD Insights, *Att 3.3 - Sagacity and JDI report*, June 2024, p. 33.

³² JGN, *Att 2.1 – Consumer Challenge Panel feedback and response – 20240628*, June 2024, p. iii.

further engagement beyond pre-lodgement on complex issues that matter to consumers, given the continued transition and uncertainty of the future of gas.

Questions on consumer engagement

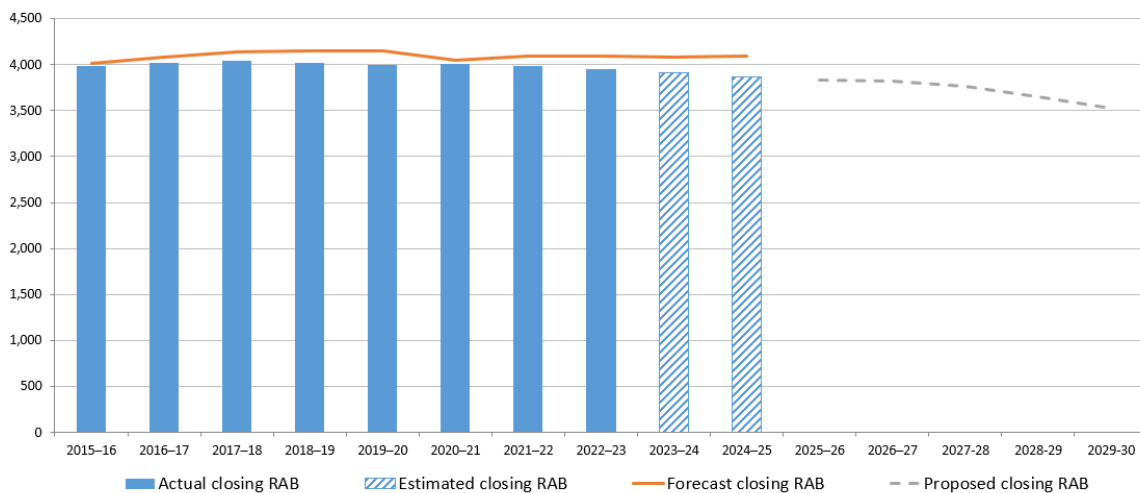
- 1) What do you think of the consumer engagement approach undertaken by JGN against the expectations set out in the Handbook in delivering a consumer-centric proposal?

3.2 Capital base and depreciation

The capital base is the value of assets used by a gas network to provide distribution network services. The value of the capital base substantially impacts the total revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher capital base would increase both the return on capital and depreciation components of the revenue determination.

In real terms (\$2024–25), JGN’s proposed capital base will be \$348.6 million (9.0%) lower by the end of the 2025–30 period compared the value at the start of the period.³³ This reduction is mainly driven by JGN’s proposed \$300 million of accelerated depreciation of its existing pipeline assets. Figure 4 shows the value of JGN’s capital base over time in real terms.

Figure 4 Closing capital base value over time (\$million, 2024–25)



Source: AER analysis.

3.2.1 Assessment against the Handbook expectations for depreciation

Regulatory depreciation is provided so investors recover their investment over the economic life of the asset (“return of capital”). A business under the early signal pathway that meets our

³³ JGN proposed a forecast capital base of \$4,041.1 million (\$nominal) by the end of the 2025–30 period, which is \$170.8 million (4.4%) higher than the capital base at the end of the 2020–25 period. This follows an increase of \$552.2 million (\$nominal) in the estimated capital base over the 2020–25 period; JGN, *2025–30 Access Arrangement Proposal attachment JGN - Att 7.6.2M - PTRM - Step 2 - 20240628 - Public*, June 2024.

expectations for depreciation is likely to receive a targeted review for that element. In determining whether we will undertake a targeted review of a network business' regulatory depreciation proposal, we would expect:³⁴

- that the business would use our post-tax revenue model (PTRM), roll forward model, and depreciation tracking module (where relevant) without amendments
- the asset classes would be unchanged from the last regulatory determination and the asset lives would also reflect those approved in previous decisions.

JGN used our standard regulatory models and proposed to continue applying the year-by-year tracking approach in determining its forecast straight-line depreciation of existing assets. It used our depreciation module for the year-by-year tracking calculation. It did not propose any changes to the standard asset lives for its existing asset classes. During the early signal pathway, JGN provided early versions of its regulatory models to us for review. This early engagement allowed us to collaboratively work with JGN to largely resolve many of the modelling issues before the lodgement of its proposal.

In real terms, JGN's proposed regulatory depreciation is \$159.3 million (31.9%) higher than for the 2020–25 period.³⁵ The higher regulatory depreciation is mainly driven by JGN's proposed \$300 million (\$2024–25) of accelerated depreciation relating to the uncertainty around the future usage of its gas network. This represents about 10.4% of its proposed total revenue.³⁶

JGN has consulted with its stakeholders at its forums on the topic of accelerated depreciation. Throughout the early signal pathway, JGN has proactively engaged with us on its modelling of the future use of its gas network prior to the lodgement of its proposal. However, we consider accelerated depreciation to be a key issue that requires continued engagement with both JGN and stakeholders throughout this review process. As such, we will undertake a detailed review of JGN's proposed accelerated depreciation. We are satisfied the other aspects of JGN's regulatory depreciation proposal meet the expectations as set out in the Handbook.³⁷

3.2.2 Accelerated depreciation – managing asset stranding risk

Accelerated depreciation remains the most accessible regulatory tool we currently have in managing asset stranding risk arising from demand uncertainty in the gas sector. While accelerated depreciation can be used in managing asset stranding risk, it must be carefully considered. The level of accelerated depreciation should reflect the specific circumstances of the regulated business, and more importantly, the scale of price adjustments should be reasonably made without creating price shocks. Long term price stability and

³⁴ The Handbook records these expectations for depreciation proposals along with those for capex, opex and tariff structure statements. Proposals that meet these expectations are more likely to be largely or wholly accepted at the draft decision stage, creating a more effective and efficient regulatory process for all stakeholders.

³⁵ Regulatory depreciation is the net total of the straight-line depreciation less the indexation of the RAB.

³⁶ Based on proposed total unsmoothed revenue in real (\$2024–25) terms.

³⁷ AER, *Better Reset Handbook towards Consumer Centric Network Proposals*, December 2021, p. 33.

intergenerational equity between current and future gas customers are also important issues when considering accelerated depreciation.

To demonstrate asset stranding risk and justify the appropriate level of accelerated depreciation, we expect a regulated business to:³⁸

- provide plausible future energy scenarios that cover a spectrum of outlooks from the most pessimistic to the most optimistic for its network, and to estimate the likelihood (probability) of each scenario. This includes demonstrating the magnitude of stranding risk and possible divestment and investment plans under each scenario.
- provide compelling evidence to identify factors that will influence the expected economic life of the network, such as applicable government policies, evidence of customer sentiment in switching away from gas, developments in competing technology, decline in long-term demand and the future potential for renewable gas.
- apply consistent assumptions across all the building blocks of the access arrangement proposal where possible. This includes demand forecasts, depreciation proposal and expenditure proposals.
- actively and meaningfully engage with its customers and identify the level of customer support for its proposed actions to manage stranding risk. This includes analysis of the impact of accelerated depreciation on prices and customer bills.

Overall, our preliminary view is that JGN's proposal for accelerated depreciation has taken into account the above expectations.³⁹ It has provided long-term scenario modelling which demonstrated the magnitude of its stranded assets and the price impacts under varying levels of accelerated depreciation. It examined jurisdictional government policies on the future role of gas and actively engaged in customer consultation on the topic of accelerated depreciation.

In the sections below, we discuss JGN's accelerated depreciation proposal and its stakeholder consultation to date, and compare JGN's proposal with our decisions for the Victorian gas distributors. We also discuss accelerated depreciation in the context of other issues such as long-term price stability, intergenerational equity, and JGN's forecast declining demand and investment in renewable gas in detail below.

3.2.2.1 JGN's proposal for accelerated depreciation

JGN's proposed accelerated depreciation forms part of its strategic response to minimise its asset stranding risk and extend the life of its gas network in the face of uncertain future gas demand. It stated that the proposed accelerated depreciation aims:

- to speed up the capital recovery of its assets to avoid the potential for any inequitable capital recovery of its assets

³⁸ AER, *Information paper on regulating gas pipelines under uncertainty*, 15 November 2021, pp. 45 and 50.

³⁹ JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 46.

- to ensure more stable prices in the future by reducing the amount of the asset base that will be recovered in future periods.⁴⁰

JGN's proposal provided a variety of material in response to our expectations for demonstrating a case for stranding risk.⁴¹ It considered various aspects of uncertainty surrounding the future role of its gas network reflecting Australia's current commitment to target net zero carbon emissions by 2050.⁴²

JGN provided a long-term future of gas model that examined the asset stranding risk under several scenarios⁴³ with varying degrees of electrification and uptake of renewable gas. It measured the asset stranding risk as the price relativity between gas and the cost for a customer to electrify. From this modelling, it has demonstrated that although accelerated depreciation increases customer bills in the short term, it lowers them over the long term, supporting long-term price stability, managing asset stranding risk and intergenerational equity issues.

3.2.2.2 Long-term price stability and intergenerational equity

Under a future scenario where electrification continues to reduce demand for natural gas to meet a net zero emissions target by 2050, a declining customer base coupled with a large residual capital base will create intergenerational equity issues. This is because customers who leave the network early would have paid a lower share of the capital base compared to future customers. This would increase the cost burden on future customers as there will be fewer customers remaining on the network (including those who are unable to afford to disconnect early) to pay for the residual value of the capital base.

JGN's long term modelling of its capital base shows that despite capex reductions over 2030–50 in response to declining demand, a one-off \$300 million of accelerated depreciation for the 2025–30 period will still result in a sizeable residual capital base potentially being stranded by 2050.⁴⁴ Figure 5 shows that about \$1.5 billion (or 46.3%) of JGN's capital base will still need to be recovered by 2050.

⁴⁰ JGN, *JGN 2025 Plan*, June 2024, p. vi.

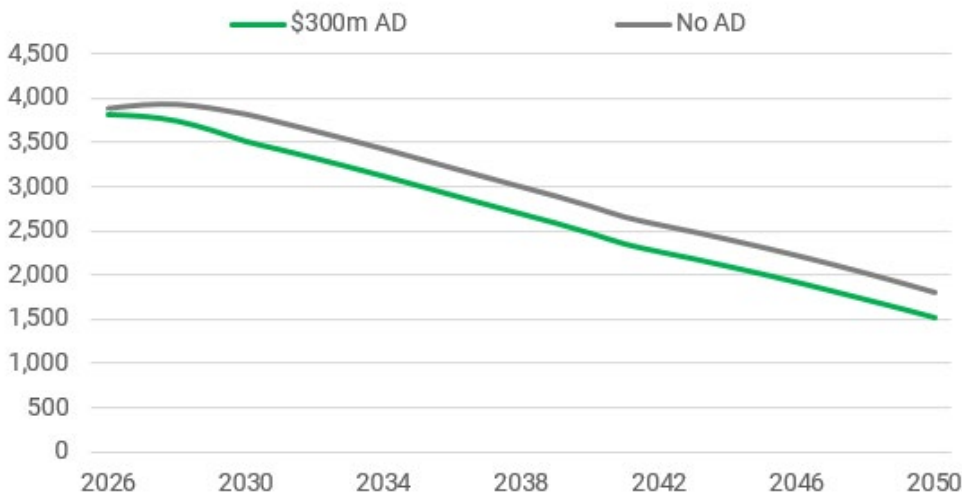
⁴¹ JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 46.

⁴² JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 7.

⁴³ JGN modelled 4 scenarios. Its classification of each scenario and associated likelihood of each scenario are: 'Electric Hare' (27%), 'Big Hydrogen' (10%), 'Electric Tortoise' (49%) and 'Market Hydrogen' (15%). See JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 13.

⁴⁴ JGN modelled 4 scenarios in its Future of gas model. Its classification of each scenario and associated likelihood of each scenario are: 'Electric Hare' (27%), 'Big Hydrogen' (10%), 'Electric Tortoise' (49%) and 'Market Hydrogen' (15%); JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 13; JGN, *Att 7.4 - Future of gas analysis*, June 2024, pp. 18 and 19.

Figure 5 Closing capital base (\$million, 2024–25)

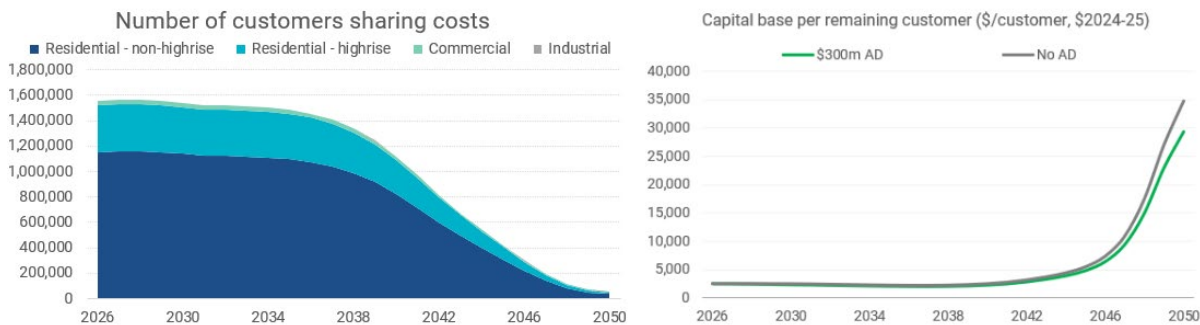


Source: JGN, *Att 7.8M – Future of gas model*, June 2024.

Note: AD = Accelerated depreciation. The chart reflects \$300 million accelerated depreciation for the 2025–30 period only and assumes no further accelerated depreciation in subsequent periods. This chart reflects the ‘Electric tortoise’ scenario in JGN’s *Future of gas model*. This scenario assumes residential customers slowly electrify and industrial users transition to biomethane, and hydrogen remains not commercially viable.

As shown in Figure 6, JGN’s long-term modelling shows that the cost burden will be disproportionately higher for future consumers remaining on the network as the customer base continues to decline.

Figure 6 Projected customer base and cost burden per customer



Source: JGN, *Att 7.8M – Future of gas model*, June 2024.

Note: AD = Accelerated depreciation. Charts reflect JGN’s ‘Electric tortoise’ scenario.

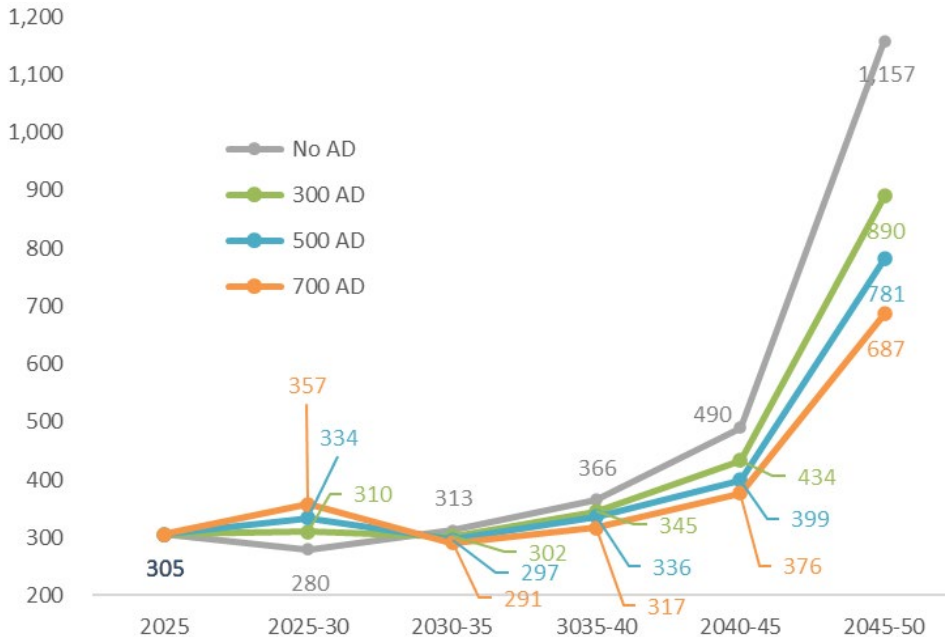
Accelerated depreciation may help improve intergenerational equity by allowing more recovery of the network’s capital base when there are more customers on the network to share the cost.⁴⁵ In turn, this will ease price increases in the long-term so that future customers will not be subjected to unreasonably high prices if demand does fall substantially.

In addition to managing the inequitable recovery of the capital base in the event of declining demand, accelerated depreciation will also help stabilise long-term prices, although this may be at the expense of short-term price increases. This is demonstrated in Figure 7, which shows that higher accelerated depreciation in the short-term will reduce the level of price

⁴⁵ AER, *Information paper on regulating gas pipelines under uncertainty*, November 2021, pp. 25 and 31.

increases in the long run. This is because higher accelerated depreciation in the short term will decrease the capital base that needs to be recovered in future periods, hence supporting long-term price stability, intergenerational equity and reducing asset stranding risk.

Figure 7 Average residential distribution network bill component (\$2024–25)



Source: JGN, *Att 7.8M – Future of gas model*, June 2024.

Note: AD = Accelerated depreciation. This chart reflects JGN's 'Electric tortoise' scenario. The figures reflect the 5-year average of the annual distribution network component of a typical residential annual bill with a consumption of 15GJ.

3.2.2.3 Forecast declining demand and capex for renewable gas

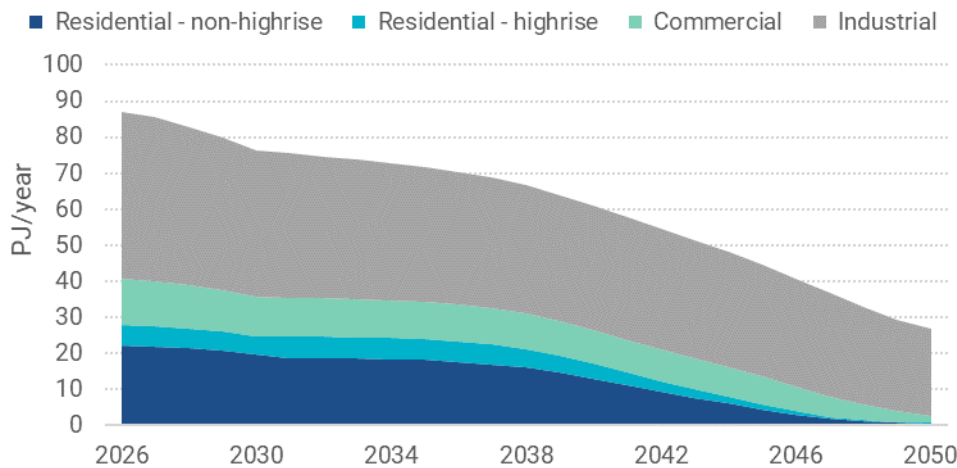
We consider that other key components of JGN's access arrangement proposal such as demand and expenditure forecasts will need to be consistent with its proposal for accelerated depreciation where possible.

JGN has forecast its volume market demand⁴⁶ to decline over the 2025–30 period driven by net reductions to its customer base and a declining average consumption of gas per customer. It noted that its volume market gas demand is expected to continue declining out to 2050 as shown in Figure 8. This trend aligns with AEMO's 2024 GSOO expectation for a gradual decline in demand forecasts in the short term, with electrification reducing natural gas usage more significantly in the medium to longer term as the economy transitions to meet net zero emissions by 2050.⁴⁷

⁴⁶ JGN's volume market consists of residential and small business customers who use less than 10TJ of gas per year.

⁴⁷ AEMO, *Gas Statement of Opportunities*, March 2024, p. 6.

Figure 8 Long-term gas throughput outlook (PJ/year)



Source: JGN, *Att 7.8M – Future of gas model*, June 2024.

Note: The combined green and blue areas reflect JGN’s volume market of residential and small business customers.

Reflecting the decline in demand, JGN has reduced its forecast connections capex by 39% for the 2025–30 period compared to the current 2020–25 period. It has also sought to reduce growth in its capital base by amending its connections policy and adopting a targeted approach to minimise mains replacement expenditure.⁴⁸

In addition, given the uncertainty around the use of hydrogen gas, JGN has not included any forecast expenditure associated with hydrogen projects for the 2025–30 period.⁴⁹ Instead, it has proposed to invest in renewable biomethane gas connections to help sustain demand on its network as it is more readily available compared to hydrogen.⁵⁰ Section 3.3 discusses JGN’s proposed forecast capex in detail.

JGN submitted that its proposal for accelerated depreciation is consistent with its proposed capex program to invest in biomethane gas connections. While the overall demand on its network in an electrified future scenario is still expected to decline, renewable gas will help extend the usage for its gas network and therefore lower the risk of asset stranding. Figure 9 shows that renewable gas is forecast to displace the declining demand for natural gas and help sustain overall demand on JGN’s network. Without renewable gas, JGN submitted that its asset stranding risk would be higher. Therefore, JGN would require a higher level of accelerated depreciation than its current proposal.⁵¹

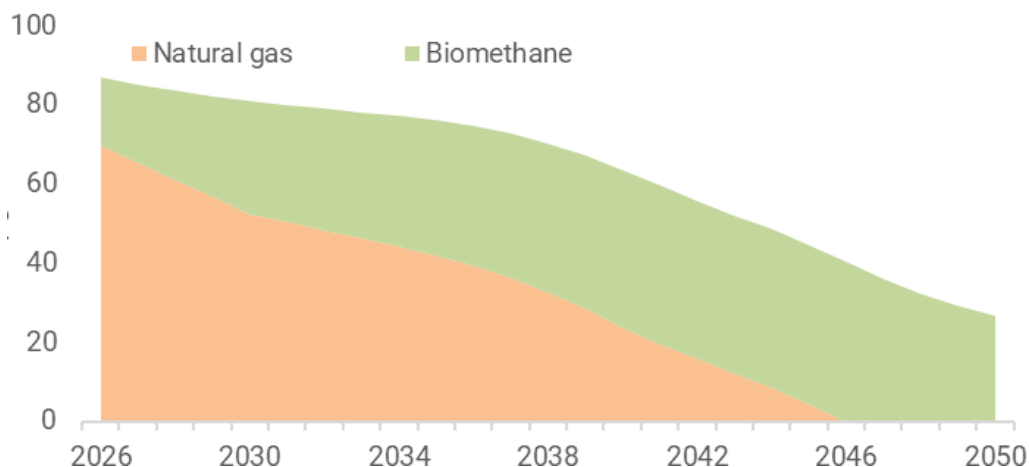
⁴⁸ JGN, *JGN 2025 Plan*, June 2024, pp. 51, 57, 64 and 116.

⁴⁹ JGN, *Att 2.1 - Consumer Challenge Panel feedback and response*, June 2024, p. 17.

⁵⁰ JGN, *JGN 2025 Plan*, June 2024, pp. 67 and 68.

⁵¹ JGN, *JGN 2025 Plan*, June 2024, pp. VI, 69.

Figure 9 Electrification scenario gas throughput outlook (PJ/year)



Source: JGN, *Att 7.8M – Future of gas model*, June 2024.

Note: Charts reflect JGN's 'Electric tortoise' scenario.

3.2.2.4 Customer consultation on accelerated depreciation

JGN has pointed to its customer preferences as part of its stakeholder engagement in obtaining support for the \$300 million in accelerated depreciation. We note that CCP31 has concerns regarding the validity of the consumer preferences derived for accelerated depreciation. This was partly due to the limited options presented to consumers and the difficulty of the subject matter.

JGN estimated that an optimised accelerated depreciation range of \$1.5–\$2.4 billion (\$2024–25) for the 2025–30 period is needed to mitigate its stranding risk and prolong the life of its network. To reduce the impact on customer bills, JGN put forward a lower range of accelerated depreciation options between \$300–\$700 million to test the level of customer support at its Customer Forums.⁵²

Reflecting feedback from its Customer Forum, JGN initially sought to propose an accelerated depreciation amount of \$400 million for the 2025–30 period.⁵³ At the first early signal pathway check-in for providing initial feedback to JGN, we noted that JGN's proposed \$400 million was significantly higher than that allowed in the Victorian 2023–28 gas distribution access arrangements, despite Victoria having firmer policy signals than NSW regarding a move away from gas. JGN subsequently revised its proposed accelerated depreciation amount to \$300 million in its draft proposal and has kept this amount unchanged in its proposal.

JGN cited that many of its stakeholders are comfortable and supportive of its \$300 million accelerated depreciation proposal based on the outcomes of its Customer Forum and Small Business Focus Groups.⁵⁴ However, CCP31 questioned JGN's interpretation of customer

⁵² JGN, *Att 7.4 - Future of gas analysis*, June 2024, p. 29; JGN, *JGN 2025 Plan*, June 2024, pp. 107–108.

⁵³ JGN, *Att 7.8M – Future of gas model*, June 2024; JGN, *Att 7.3 – Depreciation approach*, June 2024, p. 28.

⁵⁴ This is reflective of 84% of its customers voting to 'live with' or above under the 'Love – Like – Live with – Loathe – Lament' scale JGN, *JGN 2025 Plan*, June 2024, pp. 45 and 109.

support for its accelerated depreciation proposal at its Customer Forums. CCP31 raised concerns that the topic of accelerated depreciation had not been understood at an appropriate level for customers to make an appropriately informed and objective view. It considered JGN's measure for customer support would benefit from some form of independent verification to test if customers understood the initiatives they were voting to support. CCP therefore recommended JGN to revisit its engagement with its customers on this subject.⁵⁵

In response, JGN appointed Sagacity Research and JD Insights to conduct surveys and in-depth interviews of Customer Forum participants to test whether they understood the topics they deliberated on, including exploring customers' understanding of the role of accelerated depreciation. Overall, this review concluded that participants of the Customer Forum trusted the process, felt valued, and were adequately educated to make informed recommendations. This included verifying that most participants surveyed felt they had sufficient knowledge on the topic of accelerated depreciation to provide informed feedback. In addition, newDemocracy Foundation independently evaluated JGN's Customer Forum process and concluded that it met the requirements of the Handbook. As a result, JGN submitted that the topic of accelerated depreciation was well understood by its customers and that no further engagement is required on this topic.⁵⁶

3.2.2.5 Jurisdictional government policies on the future of gas

We consider that JGN's proposed accelerated depreciation should also be informed by NSW government policies on the future role of gas. Government policies and roadmaps play a crucial role in establishing the pace and future role of gas networks during the energy transition to net zero by 2050. However, there are differing outlooks and strength of jurisdictional policy signals driven by climate change-related commitments across Australian states and territories.

In our recent decisions for the gas distributors in the ACT and Victoria, we have allowed some level of accelerated depreciation for these businesses.⁵⁷ In 2021, we reduced Evoenergy's standard asset lives to all new pipeline assets which resulted in a small amount of accelerated depreciation approved for the 2021–26 period. In 2023, we approved an accelerated depreciation amount of \$53 million to \$175 million for the Victorian gas distributors for the 2023–28 period. In these decisions, the case for accelerated depreciation was supported by the ACT and Victorian governments' jurisdictional policies or legislation to

⁵⁵ Consumer Challenge Panel, *Jemena Gas Network CCP31 Conclusions Report (Early Signal Pathway)*, April 2024, pp. 38, 39 and 43.

⁵⁶ JGN, *Att 2.1 – Consumer Challenge Panel feedback and response*, June 2024, pp. iii, 15 and 16; JGN, *Sagacity and JD Insights - Att 3.3 - Sagacity and JDI report*, June 2024, pp. 4, 31 and 33.

⁵⁷ AER, *Final Decision – Evoenergy Access Arrangement 2021 to 2026, Attachment 4 Regulatory Depreciation*, April 2021, p. 6.

AER, *Final Decision – AusNet Gas Services Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7

AER, *Final Decision – Australian Gas Networks (Victoria & Albury) Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7.

AER, *Final Decision – Multinet Gas Services Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7.

transition away from the use of natural gas.⁵⁸ Conversely, the NSW government has not made similar policies to date. However, we note that strong policy signals such as bans on new gas connections have been proposed or implemented by some local councils within JGN's network area.⁵⁹

While each government's policy on new gas connections is unique to its respective jurisdiction and noting the NSW government's policies are still evolving, we have compared JGN's proposed accelerated depreciation amount with the amounts approved in our 2023 decisions for the Victorian gas distributors. This is because the size of JGN's capital base and its accelerated depreciation proposal are more comparable to the Victorian gas distributors than to Evoenergy.

As shown in Table 2 and Table 3, JGN's accelerated depreciation amount per customer and as a proportion of its opening capital base are both higher than those corresponding aggregated measures approved for the Victorian gas distributors. This is despite firmer policy signals in Victoria than NSW regarding a move away from gas. However, JGN's proposed accelerated depreciation of \$300 million (\$2024–25) is only marginally lower than the aggregate amount of \$333 million (\$2022–23) approved for the 3 Victorian gas distributors.

Table 2 JGN's proposed accelerated depreciation for the 2025–30 period

Network	AD amount (\$2024–25, million)	Customer numbers (2022–23)	Opening capital base (\$2024–25, million)	AD amount per customer (\$2024–25)	AD as a proportion of opening capital base
JGN (Proposal)	\$300m	1,513,170	\$3,870m	\$198	7.8%

Source: JGN, *Access Arrangement Proposal – PTRM*, June 2024; JGN, *2022-23 Annual RIN*, November 2023.
Note: AD = Accelerated depreciation.

Table 3 AER's final decisions on accelerated depreciation for the Victorian gas distribution 2023–28 access arrangements

Network	AD amount (\$2022–23, million)	Customer numbers (2021)	Opening capital base (\$2022–23, million)	AD amount per customer (\$2022–23)	AD as a proportion of opening capital base
Ausnet	\$105m	778,752	\$1,868m	\$135	5.6%
AGN	\$175m	739,621	\$1,953m	\$237	9.0%

⁵⁸ AER, *Final Decision – Evoenergy Access Arrangement 2021 to 2026, Attachment 4 Regulatory Depreciation*, April 2021, p. 6.

AER, *Final Decision – AusNet Gas Services Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7.

AER, *Final Decision – Australian Gas Networks (Victoria & Albury) Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7.

AER, *Final Decision – Multinet Gas Services Gas Distribution Access Arrangement 1 July 2023 to 30 June 2028, Attachment 4 Regulatory Depreciation*, June 2023, p. 7.

⁵⁹ Waverly Council, City of Sydney, Parramatta, Canterbury-Bankstown have all proposed or implemented bans on new gas connections. See JGN, *JGN 2025 Plan*, June 2024, p. 51.

Network	AD amount (\$2022–23, million)	Customer numbers (2021)	Opening capital base (\$2022–23, million)	AD amount per customer (\$2022–23)	AD as a proportion of opening capital base
Multinet	\$53m	719,436	\$1,416m	\$74	3.7%
Victoria gas networks (Aggregate)	\$333m	2,237,809	\$5,238m	\$149	6.4%

Source: AER analysis.

Note: AD = Accelerated depreciation.

3.2.2.6 Price impacts of accelerated depreciation for the 2025–30 period

While accelerated depreciation is a regulatory tool to reduce asset stranding risk in the context of declining demand for gas, it must be balanced with the short-term price impacts and affordability concerns.⁶⁰

JGN has proposed a moderate real price increase of 1.9% per annum over the 2025–30 period. However, its proposed forecast revenue reflects a placeholder weighted average cost of capital (WACC) of 5.21%⁶¹ and a placeholder expected inflation rate of 2.79% per annum.⁶² We note that throughout the access arrangement review process, WACC and inflation inputs are expected to be updated reflecting movements in economic and market conditions. This will in turn impact forecast revenue and prices for the 2025–30 period. Our decision on other components of the proposal (such as opex and capex) will also affect total revenue and, with demand, these will in turn affect the calculation of prices.

In our 2023 final decisions for the Victorian gas distributors, we applied a base constraint on the annual price increase in real terms and allowed some amount of accelerated depreciation for each of the distributors.⁶³ For a given price path constraint, our approach resulted in the amount of accelerated depreciation to be adjusted to accommodate movements in other key components (such as WACC, inflation, capex, opex and demand) that impact revenue and prices. Conversely, JGN’s proposed \$300 million accelerated depreciation is a fixed amount of its total revenue requirement and is not based on achieving a particular price path outcome for the 2025–30 period.⁶⁴

Table 4 shows that the real price increases would be materially higher at 3.8% per annum for the 2025–30 period after the expected inflation and WACC inputs are updated with the latest available market data. This translates to a higher average residential bill increase of \$24 per annum compared to \$16 per annum based on the proposal. It also shows that JGN’s proposed accelerated depreciation amount would need to be reduced to \$156 million from \$300 million to achieve the annual 1.9% real price increase.

⁶⁰ AER, *Information paper on regulating gas pipelines under uncertainty*, 15 November 2021, p. 28.

⁶¹ Average nominal vanilla WACC over 2025–30.

⁶² JGN, *Att 7.1 - Revenue and price path*, June 2024, pp. 2 and 3.

⁶³ Our final decision for the 2023–28 Victorian gas distribution determination was to target a ‘base’ real price path of 1.50% per annum excluding the impact of incentive schemes. Incentive schemes are excluded when calculating accelerated depreciation to preserve the schemes intended objectives.

⁶⁴ JGN, *Att 7.3 - Depreciation approach*, June 2024, p. 33.

Table 4 JGN’s accelerated depreciation price impact for the 2025–30 period

	AD amount (\$2024–25, million)	Average 2025–30 WACC (p.a) ^c	Expected inflation (p.a.)	Total revenue requirement (\$nominal, million unsmoothed)	Real price path (excluding incentive schemes)	Real price path ^b	Nominal residential annual bill impact (year on year) ^b
JGN proposal	\$300	5.21%	2.79%	\$3,129.6	1.50%	1.9%	\$16 p.a.
JGN proposal with updated market parameters	\$300	6.07%	2.85% ^a	\$3,308.3	3.36%	3.8%	\$24 p.a.
JGN proposal with updated market parameters, reduced AD	\$156	6.07%	2.85% ^a	\$3,139.1	1.50%	1.9%	\$16 p.a.

Source: AER analysis.

Note: AD = Accelerated depreciation.

- (a) Updated to reflect the RBA’s latest available August 2024 Statement on Monetary Policy.
- (b) Based on typical gas consumption of 15 GJ for a residential customer. Bill impact is compared to a nominal annual residential gas bill of \$771 as at 30 June 2025.
- (c) Average nominal vanilla WACC over 2025–30.

Questions on depreciation

- 2) What do you think of JGN’s proposal for accelerated depreciation and whether it appropriately aligns with its proposal on forecast demand and capex (discussed in section 3.2.2.3)? Specifically, do you consider that JGN’s proposed forecast declining demand and capex proposal for biomethane connections aligns with or contradicts its proposal for accelerated depreciation?
- 3) What do you think of JGN’s engagement with its stakeholders on the topic of accelerated depreciation (discussed in section 3.2.2.4)? What aspects of accelerated depreciation do you consider JGN engaged well with its stakeholders on; or would benefit from further discussion and clarification from JGN?
- 4) Is JGN’s proposed accelerated depreciation of \$300 million for the 2025–30 period reasonable in the context of the uncertainty of future demand for gas in NSW? Specifically, to what extent has JGN’s proposed accelerated depreciation appropriately balanced its asset stranding risk with other considerations, such as short-term price increases, long-term price stability and intergenerational equity?
- 5) What do you think of the real price path constraint approach we applied for the 2023–28 Victorian gas distribution decisions (discussed in section 3.2.2.6)? If you do not consider this to be a reasonable approach to determine the amount of accelerated depreciation, what alternative approach do you consider should be used to determine the amount of accelerated depreciation?

3.3 Capital expenditure

Capex refers to the capital costs and expenditure incurred in the provision of pipeline services.⁶⁵ This investment mostly relates to assets with long lives and these costs are recovered over several access arrangement periods. We must make our decision in a manner that will, or is likely to, deliver efficient outcomes that benefit consumers in the long term (as required under the NGO).⁶⁶

For the early signal pathway, the Handbook sets out 4 expectations for consideration in assessing a business' capex proposal, including:

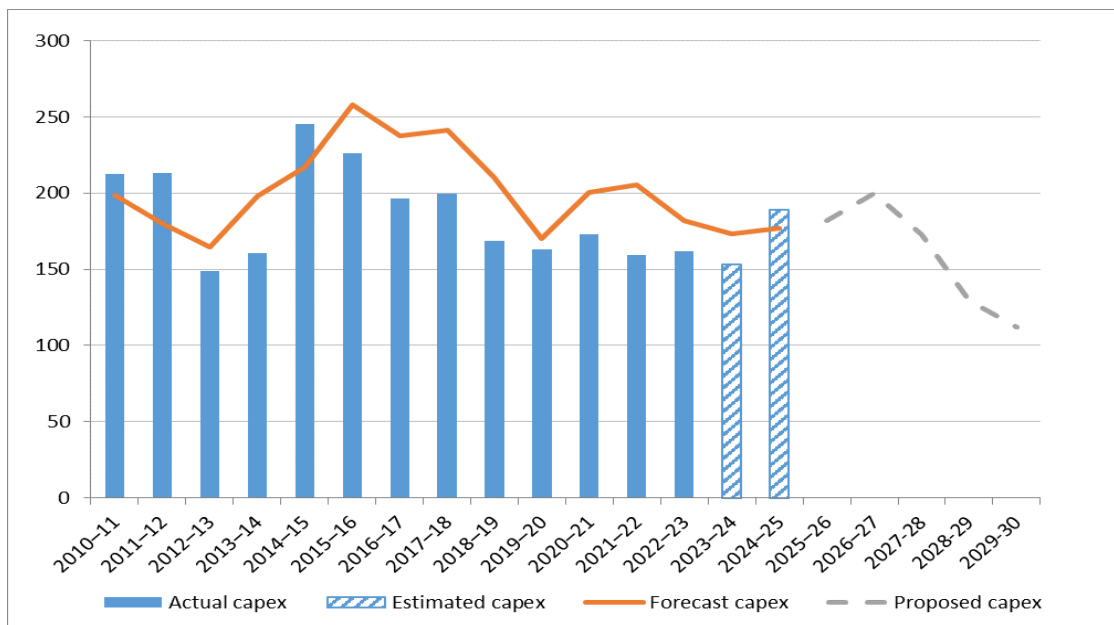
- top-down testing of the total capex forecast and consideration at the category level
- evidence of prudent and efficient decision making on key projects and programs
- evidence of alignment with asset and risk management standards
- genuine consumer engagement on capital expenditure proposals.⁶⁷

We are currently not satisfied that all of the expectations of the Handbook have been met and, as a result, more detailed review is required.

3.3.1 JGN's capex proposal

JGN proposed forecast net capex is \$792.8 million (\$2024–25) for the 2025–30 period. This is 5.6% lower than its actual/estimated expenditure for the 2020–25 period. Figure 10 shows JGN's proposed net capex forecast compared to historic levels.

Figure 10 Comparison of forecast and actual net capex (\$million, 2024–25, excluding overheads and capital contributions)



⁶⁵ NGR, r. 69.

⁶⁶ The NGO and the capex criteria have been updated to make reference to expenditure that contributes to meeting emissions reduction targets, see NGR, r. 79.2(c)(v).

⁶⁷ AER, *Better Resets Handbook – Towards consumer-centric network proposals*, December 2021, pp. 20-23.

Source: JGN, JGN - Att 5.2M - Capital expenditure forecast model - June 2024, June 2024; AER Analysis.

3.3.1.1 Key drivers of the proposal

Table 5 shows a breakdown of JGN's proposed capex by category. The key categories of JGN's proposed capex are renewable connections, mains replacement, mains augmentation, meter replacement, and other capex. Renewable connections are a new area of investment and they refer to the updated NGO and capex objectives.

Capex categories experiencing uplifts from actual and estimated expenditure in the 2020–25 period are: mains replacement (up 76.6%), mains augmentation (up 30.2%), meter replacement (up 49.2%), and other capex (up 1.9%). These, along with JGN's proposed expenditure on renewables connections, will form the focus of our capex review, and are summarised below.

Within the current period (2020–25), JGN expects to underspend our forecast for capex (net of overheads and capital contributions) by \$101.5 million or 10.8%.

Table 5 Net capex proposal by category (\$million, 2024–25)

Capex Category	Actual and estimated 2020–25 capex	Proposed 2025–30 capex	Change (%)	Proportion of net capex (%)
Connections	428.4	338.9	-20.9%	42.8%
Connections - Non-renewable	425.7	258.1	-39.4%	32.6%
Connections – Renewable ^a	2.7	80.8		10.2%
Mains replacement	35.4	62.5	76.6%	7.9%
Mains augmentation	11.6	15.1	30.2%	1.9%
Telemetry	1.9	0.9	-51.9%	0.1%
Meter replacement	106.3	158.6	49.2%	20.0%
ICT	87.8	45.0	-48.7%	5.7%
Other capex	168.5	171.7	1.9%	21.7%
Net Capex	839.9	792.8	-5.6%	100.0%
Capitalised Overheads	32.9	23.7	-27.9%	3.0%
Capcons	48.8	16.0	-67.3%	2.0%
Gross Capex	921.6	832.5	-9.7%	

Source: JGN, JGN - Att 5.2M - Capital expenditure forecast model - June 2024, June 2024; AER analysis.
Numbers may not sum due to rounding.

a Renewable connections expenditure in the 2020-25 period is entirely an extension of renewable connection projects proposed for the 2025–30 period.

Connections

JGN proposes non-renewable connections expenditure of \$338.9 million (not including \$16.0 million in forecast capital contributions from customers), which is 42.8% of total net

capex. This is a reduction of 21% from its actual and estimated expenditure from the 2020–25 period. JGN states it is under a regulatory obligation to connect new customers to the network, so continued spending on connections is unavoidable. However, it submits that the reduction in connections expenditure owes to broader gas demand trends. These include electrification, decarbonisation, changing consumer sentiment, and proposed changes to connections policy requiring more customers to contribute to their connections.⁶⁸

Within its connections expenditure, JGN has proposed renewable connections expenditure of \$80.8 million. JGN has proposed eight projects which will supply its network with biomethane and renewable gas blends.⁶⁹ Capex to connect renewable gas is a new area of expenditure and will raise important considerations under the updated NGO and capex objectives. For this reason, we will undertake a review of this segment of the connections capex proposal.

Meter replacement

JGN proposes \$158.6 million in meter replacement expenditure, which represents 20% of net capex. This is an overall increase of 49.2% from its actual and estimated expenditure from the 2020–25 period. JGN states that the increase in spending is in part due to it previously deferring meter replacement by using meters beyond their design life. Consequently, there will be many aging meters that JGN claims will not measure gas consumption accurately, and must be replaced in the coming period.

JGN also proposes replacing 8,000 mechanical meters with digital meters. JGN says digital replacements will allow for remote meter reading and will be limited to meters that are prohibitively difficult to access. JGN argues this will allow customers and retailers to read gas usage more easily.⁷⁰

Mains replacement and mains augmentation

JGN proposes \$62.5 million in mains replacement and \$15.1 million in mains augmentation, which represents 7.9% and 1.9% of total net capex respectively. This is an overall increase of 76.6% and 30.2% in comparison to its actual and estimated expenditure for the 2020–25 period respectively. The proposal states that the increase in spending aims to maintain safety and reliability across the network. JGN submits that it is trying to balance the uncertain future role of its network with its obligation to keep its network safe and reliable. JGN states it is updating its asset management approach so that its mains replacement program is more targeted, distinguishing between mains that need to be replaced and those whose service can be extended.⁷¹

3.3.2 Assessment against the Handbook capex expectations

We have assessed JGN against the capex expectations set out in the Handbook.⁷² Our assessment is outlined below.

⁶⁸ JGN, *JGN 2025 Plan - June 2024*, June 2024.

⁶⁹ JGN, *JGN 2025 Plan - June 2024*, June 2024.

⁷⁰ JGN, *JGN 2025 Plan - June 2024*, June 2024, pp. 73–74.

⁷¹ JGN, *JGN 2025 Plan - June 2024*, June 2024, pp. 71–75.

⁷² AER, *Better Resets Handbook*, December 2021.

3.3.2.1 Top-down testing of the total capital expenditure forecast and at the category level

We consider that JGN has not satisfied Handbook capex expectation 1. Although JGN is proposing a 5.6% decrease in forecast net capex from the 2020–25, that decrease is related mainly to decreased connections expenditure. Due to the fall in forecast demand, there is a large decrease in connections (down \$89.5 million or 20.9%). When we exclude the connections category, there is a \$42.4 million (or 10.3%) increase in capex. This is due to all capex categories other than telemetry and ICT experiencing uplifts.

We will undertake a review of larger capex categories, including renewable connections, metering, repex, augex and “other capex”. As such, we will be reviewing \$533.8 million (67%) of \$792.8 million net capex forecast. We consider telemetry and non-renewable connections categories do not require further review.

3.3.2.2 Evidence of prudent and efficient decision making on key projects and programs

At this stage, it is unclear if the expectation has been met. As part of our pre-lodgement engagement, JGN provided information and business cases in support of its key projects. However, this information did not provide sufficient evidence to allow us to form a view on in relation to this expectation. In particular, we required more information on the technical drivers of the proposed expenditure, such as leak data, pressure trends, and forecast method of future opex for options. We also required more information on deferral options in the context of gas network uncertainty. JGN has sought to address this as part of its proposal, and we will take this further information into account in our review of JGN’s capex proposal.

Our assessment noted an uplift in total expenditure on ICT. JGN forecasts a step down in ICT capex but has reclassified much of its ICT as opex. We will assess the overall ICT expenditure profile (capex and opex), including the detailed risk assessments, and cost benefit justifications for each program.

3.3.2.3 Evidence of alignment with risk management standards

Alignment with industry standards on good asset and risk management demonstrates prudent and efficient decision making. Our high-level review of JGN’s asset management plan and associated documentation indicates that these are consistent with well-established Australian industry standards. We will review whether these asset management practices apply to historical capex categories and have been applied to new and emerging capex categories.

3.3.2.4 Genuine consumer engagement on capital expenditure proposals

It is unclear if the expectation has been met. JGN engaged with consumers on a number of capex areas such as: repex, meter replacement, “other” capex and ICT. However, it is not clear to what extent all stakeholders were equipped and able to engage with the relevant technical material.

In considering this expectation, we also note CCP31’s observation that it would like to see JGN provide more detail about some of its suggested future gas options, particularly biogas (i.e. renewable connections).

We note that JGN tried to inform its customer forum members on renewable connections as a general concept, presenting them with external experts on the topic.⁷³ However, we are concerned that JGN tested support for renewable gas as a concept, rather than for the specific renewable gas projects in its proposal. In its eighth and most recent customer forum, JGN's respondents noted they had not received much information on these specific projects.⁷⁴

Overall, we observe that JGN's consultation received positive feedback from stakeholders, especially in areas outside of renewable gas capex. As part of our assessment, we will have regard to whether stakeholders received sufficient information, and review evidence as to how the proposed forecast capex is consistent with or considers consumer preferences and outcomes identified in the course of consumer engagement.

3.3.2.5 Overall assessment against the capex expectations

As detailed above, we propose to undertake a review of JGN's renewable connections, repex, augex, ICT and other capex. We propose undertaking a high-level review for all other capex.

Questions on forecast capex

- 6) What do you think about the proposed scope of our review?
- 7) What do you think of JGN's incorporation of consumer feedback on its draft plan into its access arrangement proposal?
- 8) What do you think of the prudence and efficiency of JGNs' capex forecast for the 2025–30 access arrangement period?

3.4 Operating expenditure

Opex refers to the operating, maintenance, and other non-capital expenses incurred to deliver pipeline services.⁷⁵ It includes labour costs and other non-capital costs that a prudent service provider is likely to require during the 2025–30 access arrangement period for the efficient operation of its network.

For the early signal pathway, the Handbook sets out the expectations for consideration in assessing a business' opex proposal. Following a review of JGN's opex proposal, we have identified several areas we consider require further assessment through a detailed review. We discuss our initial assessment throughout this section and invite stakeholder feedback.

3.4.1 JGN's opex proposal

JGN proposed opex is \$1,155.2 million (\$2024–25) for the 2025–30 access arrangement period. This represents expenditure related only to its transportation reference service.

⁷³ JGN, *BD Infrastructure - Att 2.2 - Customer forum engagement report - 20240611*, 11 June 2024, pp. 24-26.

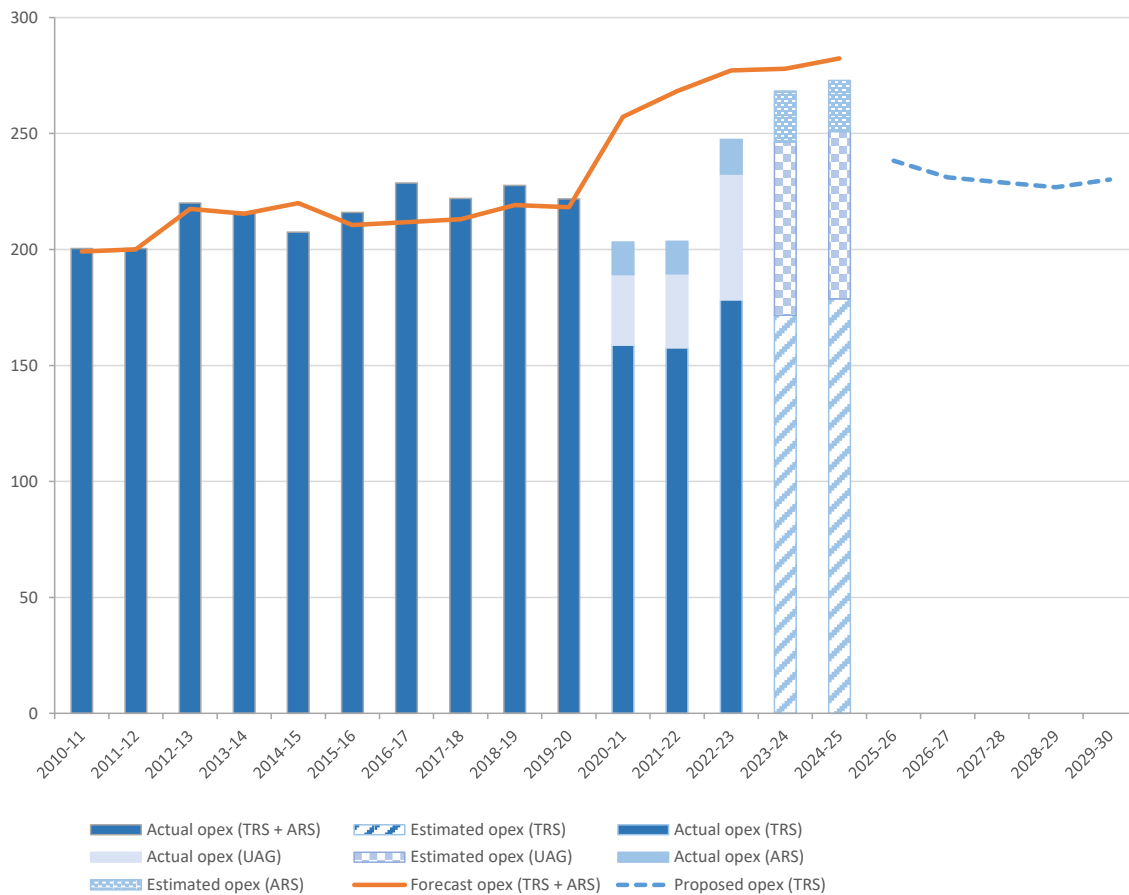
⁷⁴ JGN, *JBD Infrastructure - Att 2.2 - Customer forum engagement report - 20240611*, 11 June 2024, pp. 22-23.

⁷⁵ NGR, r. 91(1).

In our 2020–25 access arrangement determination for JGN, we approved a single reference service, including transportation services, metering services and ancillary services. However, we required JGN to unbundle the disconnection/reconnection ancillary reference service from 2021–22.⁷⁶ As such, JGN has proposed to split its current reference service into the Transportation Reference Service (Transportation RS) and Ancillary Reference Service (Ancillary RS).

Focussing on JGN’s Transportation RS opex only, JGN’s total opex forecast of \$1,155.2 million, including debt raising costs, for the 2025–30 access arrangement period is \$46.7 million (4.2%) higher than JGN’s actual/estimated opex for the 2020–25 period.

Figure 11 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 – 20240628*, June 2024; JGN, *Access arrangement, PTRM (multiple periods: 2010–15, 2015–20, 2020–25)*; AER analysis.

Note: Includes debt raising costs and movements in provisions.

3.4.2 Key drivers of the opex proposal

JGN stated that the proposed increase in opex is driven by step changes.⁷⁷

⁷⁶ 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.

⁷⁷ JGN, *2025–30 Access arrangement proposal - Attachment 6.1 Operating expenditure*, June 2024, p.1.

JGN used a base-step-trend approach to forecast opex for the 2025–30 access arrangement period. This is consistent with our approach to assessing opex, as outlined in our Expenditure Forecast Assessment Guideline.⁷⁸ JGN used an estimate of opex in 2023–24 as the base to forecast (\$268.3 million (\$2024–25) or \$1,341.7 million over five years). It chose 2023–24 as the proposed base year, stating that a network’s most recent actual expenditure best reflects the efficient expenditure required to achieve the operating objectives.⁷⁹ JGN then:

- applied adjustments of -\$458.5 million to the base year opex over 5 years to:
 - remove \$396.0 million (or \$79.2 million per annum) for unaccounted for gas (UAFG) costs, which it forecast separately as a category specific forecast.
 - remove \$109.5 million (or \$21.9 million per annum) for costs relating to ancillary reference services to reflect the separation of Ancillary RS from 1 July 2025.⁸⁰
 - add \$12.5 million (or \$2.5 million per annum) for Software as a Service (SaaS) implementation costs which were previously capitalised, consistent with the International Financial Reporting Interpretations Committee (IFRIC) reporting standards.⁸¹
 - add \$12 million (or \$2.4 million per annum) for project costs associated with establishing and implementing new ICT cloud-based service capacity.
- added an estimate of the difference between the base year opex and the opex it will incur in the final year of the current access arrangement period, increasing opex by \$22.6 million over five years (or \$4.5 million per annum).
- applied its overall rate of change forecast to its adjusted base opex, increasing opex by \$14.5 million over five years. This included:
 - input price growth increasing opex by \$18.5 million
 - output growth increasing opex by \$18.8 million
 - 0.86% productivity growth, reducing opex by \$22.8 million.
- added five step changes totalling \$70.3 million over five years:
 - \$2.7 million for support to customers experiencing vulnerability
 - \$15.0 million for ICT services
 - \$3.6 million for climate change reporting
 - \$20.8 million for gas leak detection (Picarro)
 - \$28.1 million for the pipeline integrity management program or “pigs and digs”.
- added \$177.5 million for four category specific forecasts over five years, including:
 - \$145.8 million for UAFG

⁷⁸ JGN, *2025–30 Access arrangement proposal - Attachment 6.1 Operating expenditure*, June 2024, p.1.

⁷⁹ The proposed base year will be the most recent year with audited actual data by the time of our final decision, as the estimated opex for 2023–24 will be updated in the revised proposal in January 2025 to reflect the full year actual audited costs; JGN, *2025–30 Access arrangement proposal - Attachment 6.1 Operating expenditure*, June 2024, p.1.

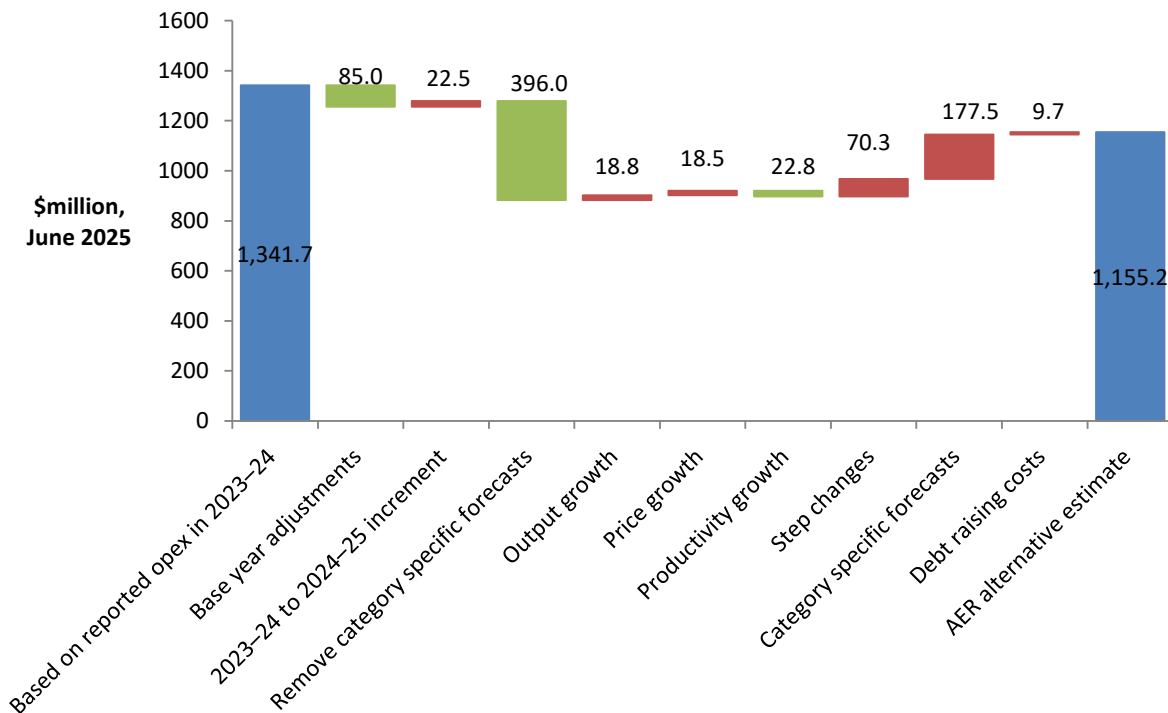
⁸⁰ This is consistent with our 2020-25 final determination. For more details, please see: AER, [Final decision – Jemena Gas Networks \(NSW\) Ltd Access Arrangement 2020–25 – Overview](#), June 2020, pp. 19-21.

⁸¹ JGN, *2025–30 Access arrangement proposal - Attachment 6.1 Operating expenditure*, June 2024, p.1.

- \$21.3 million for government levies and licence fees
- \$10.4 million for compliance with the safeguard mechanism.
- added \$9.7 million for debt raising costs over five years.

Figure 12 shows how each of these components contributes to JGN’s total opex forecast for the 2025–30 access arrangement period.

Figure 12 Breakdown of opex forecast (\$million, 2024–25)



Source: AER analysis

3.4.3 Assessment against the Handbook opex expectations

3.4.3.1 Opex forecasting approach

As stated in the Handbook, our first expectation for a business’s opex proposal relates to its opex forecasting approach. We expect that opex is forecast using the 'base-trend-step' approach set out in the Expenditure Forecast Assessment Guideline, and the inputs and assumptions used to forecast opex are consistent with those used to calculate opex efficiency carryover mechanism (ECM) amounts.

JGN applied our standard base-trend-step forecasting approach. JGN’s opex forecast is also consistent with the opex forecast used to calculate its ECM amounts.

3.4.3.2 Base opex

We expect that forecast opex uses a base year for which audited actual opex is available and that a network business can demonstrate it is not materially inefficient. The Handbook also states that a network should consult with the AER prior to its proposal, where it seeks to make further adjustments to base opex.

JGN used 2023–24 as the base year, the fourth year of the current access arrangement period. While JGN's audited actual opex for this year is not available, it will be by the time we make our final access arrangement determination. JGN has provided analysis to demonstrate its base opex is not materially inefficient. For the final decision, we will update the base year opex estimate used in the draft decision.

JGN also proposed a \$24.5 million (\$2024–25) upward adjustment to base year costs (2.1% of total forecast opex) related to the change in accounting standards associated with SaaS products, and project costs associated with establishing and implementing new ICT cloud-based service capacity. While we have engaged with JGN on the SaaS issue as part of the early signal pathway, the proposed upward adjustment expenditure represents an increase of \$13.4 million (\$2024–25) over the 2025–30 period compared to JGN's draft plan.

Given the materiality and complexity of these adjustments, we intend to undertake a detailed review of the SaaS and ICT adjustments to base year costs.

JGN also applied other adjustments to base opex that are straightforward and mechanical in nature (UAFG, movements in provisions, ancillary reference service and final year increment). We will only review these to ensure the adjustments have been applied correctly.

3.4.3.3 Rate of change

We expect forecast opex to incorporate a trend that adopts our standard approach to output, price and productivity growth. JGN did not provide sufficient information to enable engagement on the rate of change in its draft plan. We intend to apply a detailed review of JGN's proposed rate of change, specifically to ensure that JGN's benchmarking analysis is consistently applied to its proposed opex forecast approach and that JGN's proposal aligns with our standard approach to forecast the rate of change (e.g., output growth forecast net of productivity growth forecast).

3.4.3.4 Step changes

Our expectation in the Handbook is that step changes be limited to a few well justified ones, or none at all, and be explored with consumers. JGN proposed five step changes totalling \$70.3 million, representing 6% of total forecast opex.

While JGN provided information on the nature of the proposed expenditure and consumer engagement, the number of identified step changes (5) and their materiality does not align with the expectation. We intend to undertake a detailed review of the leakage detection (Picarro) program, and the pipeline integrity management program, which together represent 4.5% of total forecast opex, reviewing evidence such as the basis of underlying cost estimates, cost benefit analysis and the scope and depth of consumer support. We will also review the support for vulnerable customers step change, to assess the types of programs proposed and the extent to which this step change reflects consumer preferences.

We propose to prioritise these step changes for detailed review due to their materiality, interactions with capex, the need to assess prudence and efficiency of expenditure which may exceed regulatory obligations or be captured in trend estimates, and the need to assess expenditure not included in the draft plan, or explored with consumers.

We have considered and accepted similar step changes to some of those identified by JGN in other recent determinations (e. g., ICT projects and related changes in accounting

treatment, emissions reporting). While we will review these step changes, we do not intend to focus on these as part of our detailed review.

3.4.3.5 Category specific forecasts

We expect category specific forecasts to be limited to cost categories that have been included in our previous decisions. Further, if a network business considers new cost categories are warranted, this should be discussed with consumers and the AER.

JGN proposed 4 category specific forecasts totalling \$187.2 million over 5 years, representing 16.2% of total forecast opex. These category specific forecasts are for UAFG, government levies and licence fees, safeguard mechanism costs, and debt raising costs.

We intend to undertake a review of the safeguard mechanism costs (\$10.4 million) because it is a new category specific forecast. For the remaining category specific forecasts (debt raising costs, UAFG, and government levies and licence fees), JGN has either adopted our standard approach or applied the approach we approved at the 2020–25 determination.

3.4.3.6 Genuine consumer engagement

JGN stated that its consumers mainly value affordability, and it has responded by maintaining opex per customer constant over the 2025–30 access arrangement period. JGN also responded by proposing a new step change of \$2.7 million to enhance support for customers experiencing vulnerability.⁸²

JGN engaged with customers over various customer forums on how to approach its mains replacement program, in the context of the energy transition, and uncertainty surrounding the future role of gas networks. It stated that the customer feedback resulted in it including an opex step change for leak detection services (Picarro) to enable JGN to take a more proactive approach to asset management and reduce network emissions.⁸³

In contrast, JGN did not engage with stakeholders regarding the proposed step change for pipeline integrity management, stating that throughout its engagement with customers, they consistently expressed their desire for JGN to prioritise safety. Given the critical safety implications of preventative measures (pipeline integrity management), JGN considered there to be potential risks if the program is not carried out.⁸⁴

While consultation appears to have had some positive feedback from stakeholders, we will have regard to whether stakeholders received sufficient information, and review evidence as to how the proposed forecast opex is consistent with or considers consumer preferences and outcomes identified in the course of consumer engagement.

3.4.3.7 Overall assessment against the opex expectations

As explained above, we propose to undertake a review of JGN's approach to SaaS/ICT base adjustments, its rate of change, step changes (in particular the Picarro program, the pipeline

⁸² JGN, *2025–30 Access arrangement proposal - Attachment 6.1 Operating expenditure*, June 2024, p.3.

⁸³ JGN, *2025–30 Access arrangement proposal - Att 6.2 - Opex step change justification - 20240628 – Public*, June 2024, pp. 17-18.

⁸⁴ JGN, *2025–30 Access arrangement proposal - JGN 2025 Plan*, June 2024, p. 95.

integrity management program, and support for vulnerable customers) and the category specific forecast related to safeguard mechanism costs.

We propose undertaking a high-level review for all other opex matters that are not subject to a detailed review. This will largely involve confirming modelling approaches and updating inputs.

Questions on forecast opex

- 9) What do you think about the proposed scope of our review?
- 10) What do you think about JGN's incorporation of consumer feedback on its draft plan into its access arrangement proposal?
- 11) What do you think of the prudence and efficiency of JGNs' opex forecast for the 2025–30 access arrangement period, including the proposed step changes and base adjustments?

3.5 Other issues for consideration

A number of components such as incentive schemes and reference services and tariffs are not part of the early signal pathway consideration. However, we have taken this opportunity to make some initial observations for stakeholder feedback on these elements.

3.5.1 Capital expenditure sharing scheme (CESS)

The CESS incentivises efficient capex throughout the period, by providing incentives to improve efficiency by rewarding networks when expenditure is lower than forecast and penalising them when expenditure is higher than forecast. Gas businesses also have the contingent payment factor, which adjusts rewards according to measured service quality. This ensures that expenditure reductions do not come at the cost of deteriorating service quality. JGN proposes a reward for performance in the 2020–25 period of \$30.3 million.⁸⁵

3.5.1.1 Updated CESS guideline

Following a review in 2023, the CESS mechanism was updated, most relevantly the sharing factor. The updated scheme reduces the rewards when a network business outperforms against its approved forecast by more than 10% but maintains the same penalties for underperformance. This asymmetry will reduce the costs of the CESS to consumers while maintaining strong incentives for efficiency.⁸⁶ We note we have discretion in the form of CESS we apply, but that it would be our preference to apply the updated CESS in the 2025–30. We note that JGN's proposed access arrangement does not include the updated sharing factor.⁸⁷

⁸⁵ JGN, *Att 7.12M - CESS model*, June 2024.

⁸⁶ AER, [Final decision - Review of incentive schemes for networks](#), April 2023.

⁸⁷ JGN, *2025–30 - Access Arrangement*, June 2024, pp. 25-31.

3.5.1.2 Renewable connections

JGN proposes to exclude new connections capex from its CESS in the 2025–30 period, which is in line with our final decision for the 2020–25 period.⁸⁸ JGN further proposes to exclude renewable gas connections from the CESS. JGN proposes that the number of renewable gas suppliers seeking connections to its network are beyond its control.⁸⁹ Whether renewable gas connections should be treated the same as regular customer connections requires consideration.

Questions on the CESS

- 12) What do you think about the proposed approach to the sharing factor for JGN's CESS in the 2025–30 period?
- 13) What do you think about the proposed approach to renewable gas connections being excluded from the CESS in the 2025–30 period?
- 14) Do you have any other views on the proposed application of JGN's incentive mechanisms?

3.5.2 Reference services and reference tariffs

Determining a service to be a reference service, as compared to it being a non-reference service, makes a significant difference to how the service is regulated. Reference services are subject to AER price regulation via reference tariffs. That is, we set maximum prices which gas networks may charge network users for reference services. Gas networks may choose to charge network users less than the reference tariffs we determine but they may not charge more. Services we determine to be non-reference services are not subject to price regulation. This means gas networks set their own charges for non-reference services.

3.5.2.1 Reference services

JGN proposed to split its current single reference service into two separate reference services:

- transportation reference service
- ancillary reference service.

JGN also proposed minor changes to its interconnection service. We approved these amendments in our final decision on JGN's reference service proposal, released in November 2023.⁹⁰ JGNs' proposed reference services are set out in Table 6.

⁸⁸ AER, *Final decision - JGN access arrangement 2020-25 - Attachment 13 - Capital expenditure sharing scheme*, June 2020. For our full reasoning, see: AER, *JGN 2020–25 - Draft decision - Attachment 13 - Capital expenditure sharing scheme*, November 2019.

⁸⁹ JGN, *2025 Plan*, June 2024, pp. 110-111.

⁹⁰ AER, *Final decision – Jemena Gas Networks (NSW) Ltd – Gas distribution determination 2025–30 – reference services*, November 2023.

Table 6 JGN’s proposed reference services

Transportation reference service	Ancillary reference service
Receipt of gas	Special meter reads
Transportation of gas	Disconnections (volume customers)
Delivery to customer premises	Reconnections (volume customers)
Standard meter installation and meter reading services	Disconnections and reconnections (demand customers)
	Abolishments
	Hourly charge – non standard requirements
	Expedited reconnections

Source: AER analysis

JGN’s proposed reference services largely retain its existing suite of reference services. We note that splitting the single reference service into separate transportation and ancillary reference services is necessary to apply different tariff variation mechanisms to those separated service categories.

At this stage we consider these reference services remain appropriate for JGN’s 2025–30 access arrangement period.

JGN proposed that two additional services are not reference services, so not be subject to price regulation:

- interconnection
- negotiated services.

The interconnection service relates to linking JGN’s distribution network to other gas networks. This service is rarely, if ever used.

The ‘negotiated services’ service is a catch-all for bespoke service requests unsuited to the ancillary reference service ‘hourly charge’. Again, we expect this service to rarely be used.

3.5.2.1.1 Tariff variation mechanism for gas transportation

Our 2023 review of gas distribution network reference tariff variation mechanism and declining block tariffs (the review) concluded that we would assess these issues on a case-by-case basis in the context of individual access arrangement proposals.⁹¹

For the 2025–30 access arrangement period, JGN proposed a new hybrid tariff variation mechanism incorporating elements of both price cap and revenue cap regulation – a cap and collar approach. JGN currently provides gas transportation services under a price cap tariff variation mechanism.

⁹¹ AER, *Final decision – Review of gas distribution network reference tariff variation mechanism and declining block tariffs*, October 2023.

The cap and collar element of JGN's hybrid mechanism comprises a +/- 5% threshold and a volume risk sharing ratio of 50:50 with customers. This means that for a regulatory year in which actual gas volumes are within 5% above or below forecast volumes, price cap regulation applies as usual. If actual volumes for a regulatory year are more than 5% higher or lower than forecast, JGN and customers will split the costs/benefits. That is, any revenue over or under recovery driven by volumes being more than 5% higher or lower than forecast, will be split equally between JGN and customers (via higher or lower reference tariffs in future years). The outcome from JGN's consultation process suggested that stakeholders strongly supported the proposed hybrid approach and 50:50 cost sharing ratio⁹² noting that under a hybrid approach, prices would be less volatile than under a revenue cap.

Our preliminary view is that JGN's hybrid tariff variation mechanism reflects, at least in part, the changed context for provision of gas transportation services. The NGO now incorporates emissions reduction objectives. Price cap regulation incentivises network service providers, such as JGN, to grow the volume of gas carried by their networks. The main alternative approach, revenue cap regulation, does not provide the same incentive.⁹³

We note JGN's proposed hybrid tariff variation mechanism retains the incentive for JGN to grow volumes, up to 5% above forecast volumes. Beyond the 5% threshold, the incentive to grow volumes is halved. While the incentive property is weakened, it is not removed.

We also note that the emphasis on accurate forecasting of gas volumes is largely retained under JGN's proposal. Some stakeholders have questioned the accuracy of volume forecasts used to determine gas network tariffs in the past. Under the alternative approach, revenue cap regulation, there would no longer be such an emphasis on accurate volume forecasting.

3.5.2.1.2 Tariff structure for gas transportation

JGN proposed to retain its declining block structure for all customers. For volume customers (residential and small business customers) JGN proposed to simplify the declining block tariff structure by reducing the number of blocks from six to four and by removing the distinction between 'country' and 'coastal' location.

JGN indicated in its report that streamlining the declining block structure was mostly supported by its stakeholders if it was gradual and had minimal bill impacts. In general, the consensus of stakeholders was to support the reduction of gas usage by flattening the block structure.⁹⁴ Stakeholders were also positive about JGN's proposal to combine the 'country' and 'coastal' location classifications.⁹⁵

⁹² JGN, *Attachment 3.1, BD Infrastructure, Tariff Forum outcomes report - Jemena Gas Networks 2025–30 Regulatory Reset*, June 2024, p. 5.

⁹³ More detailed discussions of price cap and revenue cap regulation are set out in our *Final decision – Review of gas distribution network reference tariff variation mechanism and declining block tariffs* and in our *Issues paper – Review of gas distribution network reference tariff variation mechanism and declining block tariffs*, released May 2023. Both papers are available at our website www.aer.gov.au.

⁹⁴ JGN, *Attachment 3.1, BD Infrastructure, Tariff Forum outcomes report - Jemena Gas Networks 2025–30 Regulatory Reset*, June 2024, pp. 53-54.

⁹⁵ JGN, *Attachment 3.1, BD Infrastructure, Tariff Forum outcomes report - Jemena Gas Networks 2025–30 Regulatory Reset*, June 2024, p. 62.

This positive feedback also extended to JGN’s proposal to distinguish between smaller and larger volume customers (as distinct from JGN’s ‘demand’ customers) by establishing a new 200GJ threshold. This is so a more appropriate fixed charge may be applied to larger volume customers to better reflect the nature of costs JGN incurs in providing the transportation service to those customers. JGN proposed to increase the fixed charge proportion of the typical large customer bill from 4% to 20% to bring it into line with that of a typical residential customer.

We note that declining block tariffs are also contentious in light of the emissions reduction objectives now incorporated within the NGO.

3.5.2.2 Ancillary reference service tariffs

JGN’s proposed ancillary reference service tariffs are set out in Table 7.

Table 7 JGN’s proposed ancillary reference service tariffs

Ancillary reference service	Charge (\$2025–26)
Special meter reads	\$17
Disconnections (volume customers)	\$84
Reconnections (volume customers)	\$118
Disconnections and reconnections (demand customers)	Individually priced
Abolishments	\$1,472 (<25m ³ /hr)
Hourly charge – non-standard requires	\$206.00 per hour
Expedited reconnections	\$196.00 per meter

Source: AER analysis

JGN proposed a new tariff variation mechanism for its ancillary reference service tariffs. The proposed mechanism incorporates use of x-factors to annually escalate these tariffs. The x-factors reflect JGNs’ expected annual change in labour costs.

3.5.2.3 Abolishment tariff

Our final decisions on access arrangement proposals submitted by Victorian gas distributors for the 2023–28 period incorporated a partially socialised abolishment tariff. This had the effect of reducing ancillary reference tariffs for abolishment in Victoria from ~\$950 to \$220. The balance of abolishment service costs is being recovered from all Victorian customers via gas transportation tariffs.

Our decisions in the Victorian context to reduce the abolishment tariff was premised on a safety concern. Namely, that relatively high abolishment tariffs disincentivised customers from requesting the abolishment service. This would leave unused gas connections in situ for indefinite periods.

We have observed consistent support from other government departments and stakeholders in socialising the cost to address the safety of the network. This includes the NSW public safety and technical regulator, the Pipeline and Gas Networks team (PGN) that sits within the NSW Department of Climate Change, Energy the Environment and Water. PGN recently

expressed support to minimise abolishment costs and incentivise customer take up of abolishment.

JGN proposed to retain a cost reflective abolishment tariff, in part due to stakeholder feedback that a user-pays approach is more appropriate.

Questions on reference services and tariffs

15) Do you have any views on the proposed reference services? Including consideration on JGN's proposed approaches to the hybrid tariff variation mechanism, declining block tariff structure, and to abolishment tariffs.

4 Summary of questions

Expectations on the early signal pathway
<p>Consumer engagement</p> <p>1) What do you think of the consumer engagement approach undertaken by JGN against the expectations set out in the Handbook in delivering a consumer-centric proposal? Please give examples.</p>
<p>Capital base and depreciation</p> <p>2) What do you think of JGN's proposal for accelerated depreciation and whether it appropriately aligns with its proposal on forecast demand and capex (discussed in section 3.2.2.3)? Specifically, do you consider that JGN's proposed forecast declining demand and capex proposal for biomethane connections aligns with or contradicts its proposal for accelerated depreciation?</p> <p>3) What do you think of JGN's engagement with its stakeholders on the topic of accelerated depreciation (discussed in section 3.2.2.4)? What aspects of accelerated depreciation do you consider JGN engaged well with its stakeholders on; or would benefit from further discussion and clarification from JGN?</p> <p>4) Is JGN's proposed accelerated depreciation of \$300 million for the 2025–30 period reasonable in the context of the uncertainty of future demand for gas in NSW, why or why not? Specifically, to what extent has JGN's proposed accelerated depreciation appropriately balanced its asset standing risk with other considerations, such as short-term price increases, long-term price stability and intergenerational equity?</p> <p>5) What do you think of the real price path constraint approach we applied for the 2023–28 Victorian gas distribution decisions (discussed in section 3.2.2.6)? If you do not consider this to be a reasonable approach to determine the amount of accelerated depreciation, what alternative approach do you consider should be used to determine the amount of accelerated depreciation?</p>
<p>Capital expenditure</p> <p>6) What do you think about the proposed scope of our review?</p> <p>7) What do you think of JGN's incorporation of consumer feedback on its draft plan into its access arrangement proposal?</p> <p>8) What do you think of the prudence and efficiency of JGNs' capex forecast for the 2025–30 access arrangement period?</p>
<p>Operating expenditure</p> <p>9) What do you think about the proposed scope of targeted review?</p> <p>10) What do you think about JGN's incorporation of consumer feedback on its draft plan into its access arrangement proposal?</p> <p>11) What do you think of the prudence and efficiency of JGNs' opex forecast for the 2025–30 access arrangement period, including the proposed step changes and base adjustments?</p>
<p>Other areas for consideration</p> <p>12) What do you think about the proposed approach to the sharing factor for JGN's CESS in the 2025–30 period?</p> <p>13) What do you think about the proposed approach to renewable gas connections being excluded from the CESS in the 2025–30 period?</p> <p>14) Do you have any other views on the proposed application of JGN's incentive mechanisms?</p> <p>15) Do you have any views on the proposed reference services? Including consideration on JGN's proposed approaches to the hybrid tariff variation mechanism, declining block tariff structure, and to abolishment tariffs.</p>

Glossary

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Ancillary RS	Ancillary Reference Service
augex	augmentation capital expenditure
CAB	Consumer Advisory Board
capex	capital expenditure
CESS	capital expenditure sharing scheme
CCP31	Consumer Challenge Panel, sub-panel 31
ECM	efficiency carryover mechanism
GSOO	Gas Statement of Opportunities
Handbook	The Better Resets Handbook
ICT	Information and communication technologies
JGN	Jemena Gas Networks
NGL	National Gas Laws
NEM	National Electricity Market
NSW	New South Wales
NGO	National Gas Objectives
NGR	National Gas Rules
opex	operating expenditure
RAB	regulated asset base
repex	replacement expenditure
SaaS	Software as a Service
Transportation RS	Transportation Reference Service
UAFG	unaccounted for gas
WACC	weighted average cost of capital