14 December 2017

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Via online submission

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Mr Pierce

Rule change proposal—Cross period revenue smoothing – National Gas Rules

Jemena Gas Networks (NSW) Ltd (**JGN**) is the owner and operator of the NSW Gas Network. Our customers face significant year-on-year network price volatility as a result of the process for finalising our current access arrangement period (2015-20) allowed revenues.

This network price volatility does not need to occur. It is driven by the need to make revenue adjustments in the final two years of our current access arrangement period. The revenue adjustments will be required to give effect to the Australian Energy Regulator's remade JGN decision (for 2015-20) following the conclusion of legal proceedings.

We consider it is in customers' long term interests to make a new rule within the National Gas Rules that would enable the AER the discretion to smooth our revenue between our 2015-20 and 2020-25 access arrangement periods. By doing so, we consider this would eliminate the network price volatility for our customers.

Please find **attached**:

- JGN rule change proposal, with the details of the issue, justification and proposed draft rule

- Information sheet.

If you have any questions or would like to discuss any aspect of this proposal, please contact Usman Saadat on (02) 9867 7483 or at usman.saadat@jemena.com.au.

Yours sincerely

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Jemena Gas Networks (NSW) Ltd

Rule change proposal - National Gas Rules

Cross period price smoothing for Jemena Gas Networks

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OVERVIEW

Jemena Gas Networks (NSW) Ltd (**JGN**) is the owner and operator of the NSW Gas Network.[1] Pursuant to section 295 of the National Gas Law (**NGL**), we are seeking a rule change to the National Gas Rules (**NGR**) to facilitate smoothing of revenue recovery and network prices[2] across our current 5 year access arrangement period (2015-20) and the immediately subsequent access arrangement period (2020-25).

With no current mechanism in the NGR for cross-period smoothing, JGN's customers are likely to face a sharp reduction in network prices towards the end of the current access arrangement period, followed by a sharp increase in network prices at the commencement of the new period. We consider that permitting cross-period revenue smoothing may be appropriate in such instances where there would otherwise be significant price volatility.

In the case of JGN, the expected network price volatility has arisen due to:

- the need for the Australian Energy Regulator (**AER**) to remake its final decision for the current access arrangement period following legal proceedings
- uncertainty (for both JGN and the AER) on the likely outcomes of those legal proceedings when setting network prices for regulatory years 2016-17 and 2017-18 that has resulted in network prices being maintained at a level above those originally proposed by JGN and approved by the AER.
- the limited number of years remaining in the current access arrangement period to give effect to the outcomes of legal proceedings.

To address this issue, JGN proposes inclusion of a mechanism in the NGR that allows our revenue recovery to be smoothed over two 5 year access arrangement periods, rather than only one. The rule change is required as there is currently no mechanism under the NGR to enable this to occur – the AER's powers extend to setting revenue for one access arrangement period only.

JGN's proposed rule is designed to create a mechanism by which the AER has the power to minimise price volatility for gas consumers using JGN's gas network. It would enable the AER to make an "adjustment determination", which provides for smoothing of revenue recovery across two access arrangement periods. It does this by allowing the AER to make an adjustment to JGN's revenue allowance for the current 2015-20 period, with an equal and offsetting adjustment to be made in the subsequent period.

JGN's proposed rule would operate as a one-off power designed to deal specifically with the immediate issue of network price volatility between JGN's current and subsequent access arrangement periods only.

By reducing volatility in prices for gas consumers on the JGN gas network, the proposed rule will contribute to the achievement of the National Gas Objective (**NGO**). The AEMC has previously noted that significant price volatility in a short period of time has the potential to distort consumers' budgetary decisions on energy spending, as well as investment decisions on energy usage, with these distortions potentially leading to long term inefficient outcomes for consumers.[3] The proposed rule seeks to avoid such inefficient outcomes, by allowing the AER to make a determination which smooths revenue recovery (and the path of network prices) between JGN's access arrangement periods.

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[1] The Network consists of the NSW Distribution System, the Wilton-Newcastle trunk pipeline, the Wilton-Wollongong trunk pipeline and the Central West Distribution System.

[2] We use the term "Network prices" to refer to JGN's schedule of reference tariffs and charges. These are the tariffs JGN is allowed to charge for the reference services we offer and are varied via our reference tariff variation mechanism.

[3] AEMC, Participant derogation - NSW DNSPs revenue smoothing, draft rule determination, 26 Apr 17, p. ii.

1. INTRODUCTION

1.1 JGN IS PROPOSING A RULE CHANGE TO THE NATIONAL GAS RULES

Jemena Gas Networks (NSW) Ltd (**JGN**) is the owner and operator of the NSW Gas Network.

JGN's customers are likely to face a sharp reduction in network prices towards the end of the current access arrangement period (2015-20), followed by a sharp increase in network prices at the commencement of the new period (2020-25).

JGN considers the national gas objective (**NGO**) could be better achieved by minimising this price volatility. As previously noted by the AEMC[4], significant price volatility in a short period of time has the potential to distort consumers' budgetary decisions on energy spending, as well as investment decisions on energy usage, with these distortions potentially leading to long term inefficient outcomes for consumers.

Pursuant to section 295 of the National Gas Law (**NGL**), we are therefore seeking a rule change to the National Gas Rules (**NGR**) to facilitate smoothing of JGN's revenue recovery and network prices across our current 5 year access arrangement period (2015-20) and the immediately subsequent access arrangement period (2020-25). The NGR does not permit this at present.

1.2 CURRENT ARRANGEMENTS AND RELEVANT BACKGROUND

As a monopoly service provider, JGN's revenue is regulated by the Australian Energy Regulator (**AER**) through revisions to our access arrangement.[5] JGN's current access arrangement period is from 1 July 2015 to 30 June 2020. JGN obtains its revenue via the network prices we are allowed to charge.[6]

The formula for how our network prices are set and varied, is often referred to as the "form of control". JGN currently has a tariff basket (or weighted average price cap) form of control.

This means the network prices the AER determines (including the means of varying the network prices from year to year) are the binding constraint across the 2015–20 access arrangement period, rather than the total revenue requirement. Where actual demand across the 2015–20 period varies from the demand forecast in the access arrangement, JGN's actual revenue will vary from the AER's revenue allowance. In general, if actual demand is below forecast demand, JGN's actual revenue will be below forecast revenue, and vice versa

The tariff basket form of control provides us with particular incentives to respond to market developments, retain efficient price signals and maintain our incentive to grow the gas market and thereby support lower average network prices over time. The tariff basket price control is the predominant form of price control for gas networks in Australia.

This rule change proposal is consistent with the tariff basket form of price control as the incentive properties remain unchanged.

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4 AEMC, Participant derogation - NSW DNSPs revenue smoothing, draft rule determination, 26 Apr 17, p. ii.

5 Section 132 of the NGL.

6 Network businesses like JGN do not bill end customers directly for the provision of network services. Network charges are billed to retailers who then recover these charges through their retail tariffs, which are the retail prices paid by end customers.

1.3 RULE MAKING REQUIREMENTS

JGN understands that the AEMC may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NGO[7] as set out in section 23 of the National Gas Law (**NGL**):

> *'The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.'*

JGN also understands that any proposal for the making of such a rule must address the specific matters set out in clause 13 of the National Gas (South Australia) Regulations (**Regulations**), including setting out the expected benefits and costs of this proposed rule change and the potential impacts it may have on other parties.

1.4 STRUCTURE OF THIS RULE CHANGE PROPOSAL

In keeping with the requirements set out in the NGL and clause 13 of the Regulations, the remainder of this rule change proposal is structured as follows:

- Section 2 outlines the 'Statement of Issue"—the nature and scope of the issue that this rule change proposal is designed to address
- Section 3 outlines how our proposed rule will address the issue
- Section 4 explains how this proposed rule change will, or is likely to, contribute to the achievement of the NGO and sets out the expected benefits and costs of this proposed rule change and the potential impacts it may have on other parties
- Attachment A provides the proposed rule drafting.

[7] Section 291 of the NGL.

2. STATEMENT OF ISSUE

The issue that the proposed rule seeks to address is the significant expected price volatility for JGN's customers across access arrangement periods. Significant price volatility in a short period of time has the potential to distort consumers' budgetary decisions on energy spending, as well as investment decisions on energy usage. Such distortions to usage and investment can potentially lead to inefficient outcomes for consumers in the long term.

Recent experience has highlighted the potential for price volatility to occur, particularly where access arrangement decisions are made later than originally planned, and/or where decisions need to be remade. There is currently no mechanism under the NGR to address price volatility by allowing the smoothing of total revenue from one access arrangement period into another.

In JGN's case, the expected price volatility is due to the significant delay in the AER remaking its access arrangement decision for the 2015-20 period, and in the meantime network prices have been maintained (through interim arrangements) at levels that are above the network price path that JGN proposed and the AER approved. This section outlines why this delay has arisen, and explains the potential for this to result in significant price volatility between JGN's current and forthcoming access arrangement periods. This is the specific issue that JGN's rule change proposal seeks to address.

2.1 DECISION PROCESS FOR JGN'S 2015-20 NETWORK PRICES

2.1.1 THE ORIGINAL AER DECISION FOR THE 2015-2020 ACCESS ARRANGEMENT PERIOD

On 3 June 2015, the AER published a final decision on revisions to the access arrangement for JGN's NSW gas distribution network for the five-year access arrangement period due to commence on 1 July 2015. The AER's decision was to refuse to approve JGN's proposed revisions under rule 62 of the NGR, and to instead approve its own revisions to the access arrangement under rule 64.

In its final decision, the AER approved a downward path for network prices over the 2015-2020 period, designed to offset expected wholesale gas price increases and reduce retail price volatility for customers.[8] **Table 1** shows the real price reductions and equivalent nominal price changes approved by the AER in its final decision. The effect of that smoothed revenue path is to leave JGN below, but within 10%, of its annual cost of service (unsmoothed revenue) at the end of the current period on 30 June 2020.

Table 1: AER final decision ($million, nominal)

	RY16	RY17	RY18	RY19	RY20
Unsmoothed revenue	402.0	428.5	456.5	485.2	476.3
Smoothed revenue	497.4	450.3	429.6	419.6	432.2
X factor[9]	20.43%	12.00%	7.00%	4.90%	0.00%
Real price change	-20.43%	-12.00%	-7.00%	-4.90%	0.00%
Nominal price change	-18.40%	-9.76%	-4.63%	-2.47%	2.55%

(1) Source AER final decision. Inflation assumed at 2.55%.

(2) The mathematical formula for a nominal price change under the CPI–X form of control is [(1+CPI)*(1+ X factor)] – 1.

8 AER final decision, *Overview | Final decision: Jemena Gas Networks 2015–20*, p. 22.

9 A positive x-factor is equivalent to a real price decrease.

(3) RY refers to a 'regulatory year', which is a one-year period ending on 30 June. For example, RY16 refers to the first year of JGN's 2015-20 access arrangement period, commencing on 1 July 2015 and ending on 30 June 2016.

Although total revenue was equalised with the total cost of service across the 2015-2020 access arrangement period as a whole, the smoothing of revenue recovery across the period resulted in some disparities between *annual* revenue and the *annual* cost of service. As the price path approved by the AER was downward sloping, annual revenue was projected to be above the annual cost of service in early years of the 2015-2020 access arrangement period, but below the annual cost of service in later years. Under this smoothed price path, some difference between annual revenue and the annual cost of service was tolerated. However, one of the objectives in designing the price path was to bring annual revenue close to (within 10% of) the annual cost of service by the last year of the access arrangement period.

Recognising the importance of price stability for customers, in its 2015-2020 access arrangement proposal, JGN had also committed to considering price path options for the subsequent access arrangement period that help to keep prices stable over time.[10]

2.1.2 TRIBUNAL DETERMINATION TO SET ASIDE THE ORIGINAL AER DECISION, AND AER APPEAL

In March 2016, the Australian Competition Tribunal (**Tribunal**) made a determination to set aside the AER's decision on revisions to the JGN access arrangement for the 2015-2020 period.[11] The Tribunal ordered the AER to remake its decision in accordance with certain directions, including directions to reconsider its approach to the return on debt, the value of imputation credits (gamma) and market expansion capital expenditure.

The AER then sought judicial review of the Tribunal's determination in the Federal Court. The AER's application for judicial review was heard in October 2016 and a decision was published in May 2017.[12] The Federal Court upheld one of the AER's grounds for review (relating to gamma), but otherwise affirmed the Tribunal's determination. Consequently, the Tribunal's order that the AER remake its decision still stands, albeit with some modification to the terms of the directions given to the AER. The AER is still required to reconsider its approach to the return on debt and market expansion capital expenditure and to remake its decision for JGN (per the original directions of the Tribunal), but will not be required to reconsider gamma.

2.1.3 PROCESS FOR REMAKING THE AER'S DECISION FOR JGN'S 2015-2020 PERIOD

Given the time spent resolving Tribunal and Court proceedings, the AER has only recently recommenced a process for remaking its decision for JGN in relation to market expansion capital expenditure and the return on debt (this process was first commenced following the Tribunal decision, but was put on hold while that decision was under judicial review before the Court).

JGN estimates that the AER's remade decision (including for the cost of debt) will be published around the middle of 2018 at the earliest. Although there is no formal process for remaking of an access arrangement decision following an appeal, JGN anticipates that some time will be required for stakeholder consultation, public submissions and reconsideration by the AER before the remade decision is finalised.

2.1.4 INTERIM NETWORK PRICING MEASURES

Since the Tribunal set aside the AER's decision on revisions to the JGN access arrangement, there has been no formal mechanism in place to implement annual changes to network prices.[13] As a consequence, to ameliorate

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[10] JGN, *2015-20 Access Arrangement, Response to the AER's draft decision & revised proposal*, p.110.

[11] *Application by Jemena Gas Networks (NSW) Ltd* [2016] ACompT 5.

[12] *Australian Energy Regulator v Australian Competition Tribunal (No 3)* [2017] FCAFC 80.

[13] This would normally be done using the network price variation mechanism contained in the access arrangement (as revised by the AER's decision), with network prices being varied in each year in accordance with a formula contained in the access arrangement.

uncertainty around applicable network prices and the process for annual changes to those prices (until the AER remakes its decision), JGN has entered annual enforceable undertakings which specify the network prices which apply in the relevant regulatory year, and other terms and conditions of access.[14]

So far, two enforceable undertakings have been offered by JGN and accepted by the AER. Overall, the effect of these enforceable undertakings is that JGN's network prices in the regulatory year commencing on 1 July 2016 (**RY17**) and the regulatory year commencing on 1 July 2017 (**RY18**) have been set higher than would have been the case had the AER's May 2015 final decision for JGN not been set aside:

- In April 2016, following AER and JGN engagement, the AER accepted an enforceable undertaking from JGN (**2016 EU**) addressing network prices and other terms and conditions of access for RY17. The 2016 EU provided that JGN's network prices would remain unchanged in RY17 from those applicable in RY16 (i.e. network prices would not be reduced by 12% in real terms in RY17, as had been contemplated under the price path originally approved by the AER in its May 2015 final decision).
- In May 2017, the AER accepted a further enforceable undertaking from JGN (**2017 EU**) addressing network prices and other terms and conditions of access for RY18. The 2017 EU provided that network prices would be reduced by 7% in real terms in RY18, from those applicable in RY16. Thus, the 2017 EU provided for a change in network prices in RY18 that was consistent with what was contemplated for the RY18 price change approved by the AER in its May 2015 final decision.

The annual network price variations for RY17 and RY18 were undertaken during periods of significant uncertainty about the timing for a remade AER decision. The variations sought through the 2016 EU and 2017 EU to balance various factors including:

- the lack of precedent for giving effect to a price variation without required access arrangement network price variation provisions
- the potential for revenue and price volatility, and
- uncertainty of merits review outcomes.

The 2017 EU was also negotiated with the AER in the context that further steps would need to be taken to manage future JGN price volatility through cross period smoothing options.

2.2 SIGNIFICANT EXPECTED PRICE VOLATILITY

At this stage there remains some uncertainty around the revenue and total price outcomes for the 2015-20 access arrangement period that may result from the AER's remade decision for JGN. However these outcomes are likely to lie somewhere between:

- the original AER final decision outcome (shown in **Table 1** above); and
- the original AER final decision outcome, modified to adopt JGN's positions on the return on debt and market expansion capital expenditure (per JGN's revised proposal).

JGN has modelled the likely path of network prices under these two scenarios. This modelling shows that in either of these scenarios (and any scenario in between), there would be significant price volatility over the next three regulatory years (RY19 to RY21) without a rule change.

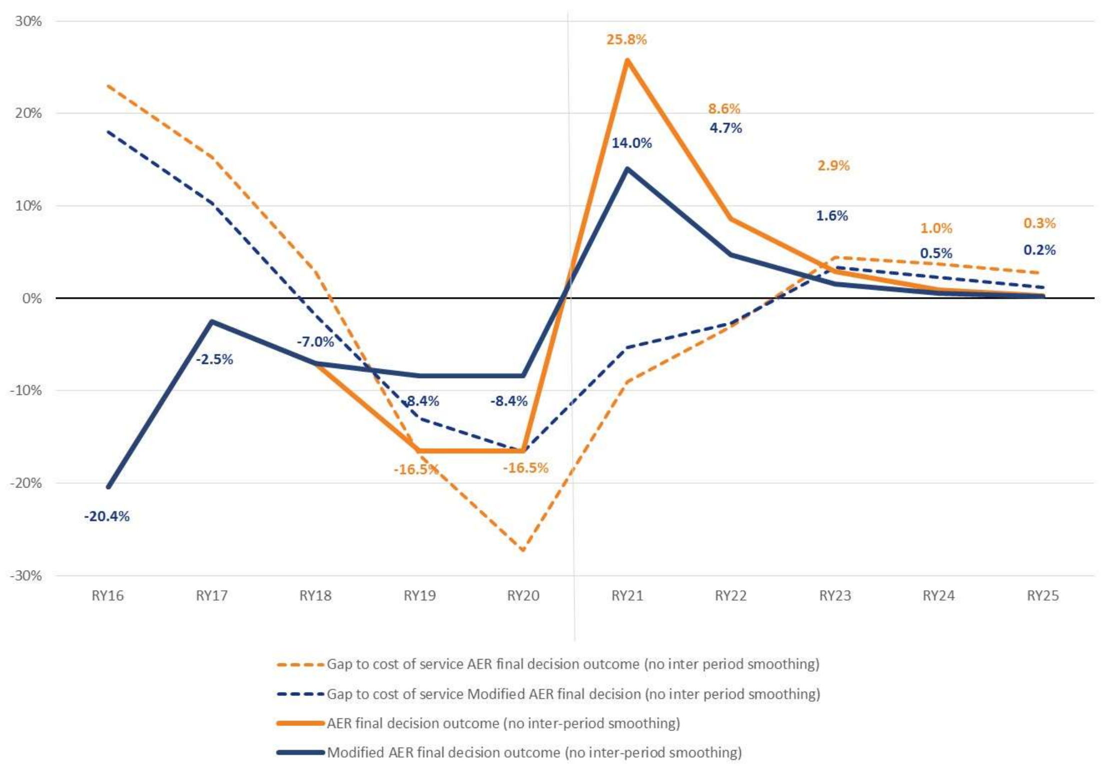
[14] The approach of using enforceable undertakings has also been used between the AER and NSW and ACT electricity distributors.

Under both scenarios (and any scenario in between), significant network price reductions will be necessary in RY19 and RY20 to give effect to the remade AER decision, followed by a significant price increase at the commencement of the new period (RY21). JGN forecasts that:

- there would need to be significant real network prices reductions (of between 8.4% and 16.5%) in RY19 and RY20, pushing prices well below cost-reflective levels by RY20;
- there would then need to be a significant correction in the next access arrangement period (i.e. significant real network price increases), to return prices back to sustainable "cost-reflective" levels.

Figure 2–1 shows the forecast path for JGN's network price under the two scenarios referred to above. This chart shows the forecast path for network prices assuming the AER maintains its current practice of applying large adjustments to network prices at the commencement of an access arrangement period, followed by gradually smaller changes in subsequent years. JGN understands that this practice is directed at minimising, as far as reasonably possible, variance between expected revenue for the last regulatory year of the access arrangement period and the annual revenue requirement for that last regulatory year.[15] If the AER continues this practice in setting JGN's network prices for the next access arrangement period, JGN estimates that the required adjustment to network prices in RY21 would be a real increase of between 14.0% and 25.8%. This large adjustment in the first year of the period would be followed by progressively smaller (but still significant) real increases in network prices in subsequent years.

Figure 2–1: Forecast real changes in network prices and gap to cost of service, RY16 – RY25



It is possible that the AER could adopt a different practice in setting network prices for the next access arrangement period – for example, the required adjustment to network prices could be spread equally across the

15 This is a requirement for X factors under the National Electricity Rules (**NER**, cl 6.5.9(b)(2)). Though not an explicit requirement under the NGR, the AER typically adopts a practice under the NGR that aligns with this objective.

five years of the period. However, this would still not address the volatility issue between RY19 and RY21, as shown in **Figure 2–2**. It would also introduce further misalignment between the annual cost of service and forecast revenue toward the end of the 2020-2025 period, as JGN's network prices would "overshoot" the cost of service by a considerable margin.[16] In the scenario where the original AER final decision outcome for the 2015-2020 period is allowed to stand (meaning that larger reductions in network prices would be required in RY19 and RY20), network prices would need to be increased by more than 10% in real terms in each year of the 2020-2025 period, and by the last year of the period network prices would be approximately 21% above the cost of service. This is shown below.

Figure 2–2: Forecast real changes network prices and gap to cost of service, RY16 – RY25 – with smoothing of network price adjustments in the 2020-2025 period

Modelling for Figure 2–1 and Figure 2–2 is based on conservative assumptions regarding operating and capital expenditure that will be required in the 2020-2025 period, and the cost of capital. JGN has assumed an average of the RY16 to RY20 AER final decision allowances for RY21 to RY25 gross capital contributions, capital contributions and asset disposals (in real terms). Operating expenditure for the 2020-2025 period is assumed to be equal to the RY20 allowance, as set out in the AER's (original) decision for the 2015-2020 period. The cost of capital for the remainder of the current period and throughout the 2020-2025 period is assumed to be the same as for RY18 – a conservative assumption given that the RY18 allowed cost of capital is low by historical standards.

Significant price volatility would be undesirable for all stakeholders, and would not advance the achievement of the NGO. Significant price volatility in a short period of time has the potential to distort consumers' budgetary

[16] An equally spread set of price increases (equivalent X factors for each year) would do this because JGN would be starting from a position of revenue below cost of service. To enable year on year price increases, the initial years (RY21-RY22) will under-recover revenue. Therefore to maintain NPV neutrality for the whole period, the final years (RY24 and RY25) must over-recover revenue, thus leaving JGN's revenue and therefore prices above cost of service, leading to the potential distortion of customer usage and investment decisions.

decisions on energy spending, as well as investment decisions on energy usage, with these distortions potentially leading to long term inefficient outcomes for consumers.

In the absence of cross-period smoothing, there would also be a significant divergence for JGN between the revenue that is derived from network prices and the estimated cost of service in the last two years of the current period. As shown above, forecast revenue is expected to be between 16% and 27% below the cost of service by RY20, depending on the content of the AER's remade decision. Such a wide divergence between annual costs and revenue from revenue from reference services is likely to lead to inefficient use of, and investment in, natural gas services.

A key objective in setting network prices is to align, to the extent practicable, the price paid by customers with the efficient cost of service. Aligning network prices with the cost of service will drive efficient service usage, which is in the long-term interests of consumers. Conversely, where network prices are set significantly above (or below) the cost of service, this can lead to inefficiently low (or high) usage. The desirability of aligning the annual cost of service with forecast revenue is explicitly recognised in the National Electricity Rules[17], and the AER's practice in establishing network price paths under the NGR also recognises this. As explained above, the network price path originally approved by the AER for the 2015-2020 period was designed to align annual revenue with the annual cost of service (within 10%) by the last year of the period.

In the case where network price adjustments are spread equally across the 2020-2025 period, the divergence between service costs and network prices would persist throughout the 2020-2025 period, with network prices overshooting the cost of service by between 12% and 21% by the end of the period.

JGN's detailed modelling of the cost of service and revenues in each scenario is set out in Attachment B.

2.3 NEED FOR CROSS-PERIOD SMOOTHING TO MINIMISE VOLATILITY

The expected price volatility for JGN's customers can be mitigated by allowing for cross-period revenue and network price smoothing between the 2015-2020 and 2020-2025 periods. If cross-period smoothing were to be allowed, there could be a more gradual downward trajectory for network prices heading into the 2020-25 period.

JGN has modelled the likely path of network prices under an assumption that cross-period smoothing is allowed. As above, this modelling contemplates two scenarios – one in which the AER's remade decision for JGN is identical to its original decision, and an alternative scenario in which the AER's remade decision adopts JGN's positions on the return on debt and market expansion capital expenditure (per JGN's revised proposal).

Figure 2–3 shows the forecast path for network prices under the two scenarios referred to above. This shows that, with cross-period smoothing, there is the potential for network prices to be much less volatile. With smoothing, there could be a steady and gradual reduction in network prices over the next three regulatory years (annual reductions of between 2.2% and 5.4% in real terms), rather than a sharp decrease followed by a sharp increase in network prices.

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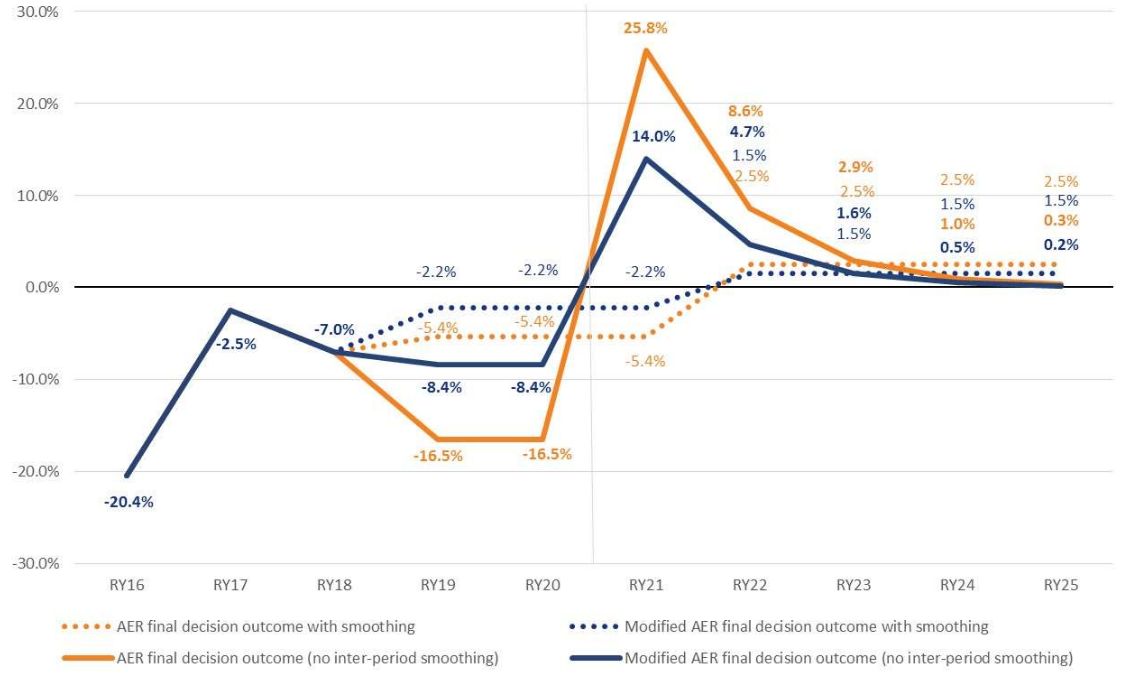
[17] NER, cl 6.5.9(b)(2).

Figure 2–3: Forecast real changes in network prices, RY16 – RY25 – with and without cross-period smoothing



In this case, cross-period smoothing would involve bringing forward some revenue recovery from the 2020-2025 period into the 2015-2020 period, in order to:

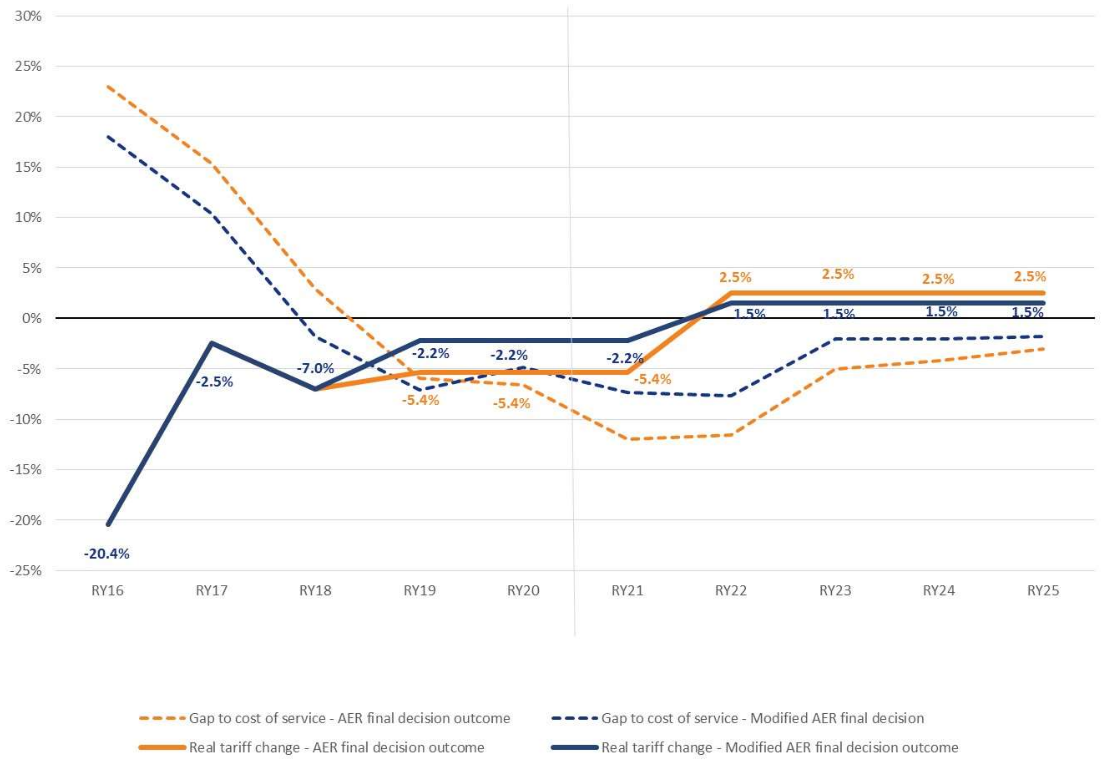
- reduce the need for large reductions in network prices in RY19 and RY20; and
- correspondingly, reduce the need for a sharp increase in network prices in RY21.

As discussed in Section 3, JGN's proposed rule would ensure that this shifting of revenue recovery between periods is NPV neutral, such that JGN is no better or worse off (in revenue terms) as a result of cross-period smoothing.

Smoothing would avoid the undesirable outcomes identified above. In particular, this would mitigate the risk of distortion to usage and investment decisions that can be caused by significant price volatility.

Cross-period smoothing would also reduce the gap between forecast revenue from network prices and the annual cost of service. As shown in Figure 2–4, forecast revenue can be brought much closer to the estimated cost of service in RY19 and RY20, if cross-period smoothing is allowed.

Figure 2–4: Forecast real changes in network prices and gap to cost of service – with cross-period smoothing



2.4 CROSS-PERIOD REVENUE SMOOTHING CANNOT OCCUR UNDER THE CURRENT NGR

Under the NGR at present there is no scope to shift revenue recovery between access arrangement periods in order to reduce price volatility. Part 9 of the NGR (which deals with revenue and network price regulation for covered pipelines) is premised on recovery of a service provider's revenue requirement for an access arrangement period within that period only – revenue recovery cannot be deferred to later access arrangement periods, nor can recovery be brought forward to earlier periods.

The key network price control mechanism under the NGR is the network price variation mechanism[18], which forms part of the access arrangement that is approved by the AER. Network price variations are not to occur within an access arrangement period, except in accordance with the reference tariff variation mechanism.[19]

Design and operation of the network price variation mechanism is constrained by rule 92(2) of the NGR. This rule provides that forecast revenue from reference services in an access arrangement period ***must*** be equal to the portion of total revenue (building block costs, calculated under rule 76) that is allocated to reference services ***for that period***.

JGN's understanding is that there is no mechanism by which a service provider may recover more than the amount of total revenue (building block costs) that is allocated to reference services for the relevant access arrangement

[18] For avoidance of doubt, the network price variation mechanism is referred to as the "reference tariff variation mechanism" in the NGR and JGN's access arrangement. We use the reference tariff variation mechanism terminology in JGN's draft rule at Attachment A.

[19] NGR, r 97(5).

period (except where a cost pass through event occurs during the period). Under the NGR at present, revenue recovery cannot be deferred or brought forward from outside the relevant access arrangement period.

3. HOW THE PROPOSED RULE ADDRESSES THE ISSUE

3.1 DESCRIPTION OF THE PROPOSED RULE

JGN proposes a rule that would give the AER a power to make a determination providing for smoothing of JGN's revenue recovery across two access arrangement periods. Recognising the unique circumstance that our customers are currently in, the proposed rule would give the AER a one-off time-limited power to make such a determination, with this power triggered by the AER remaking its access arrangement decision for JGN for the 2015-2020 period.

A key element of JGN's proposal is a power for the AER to make an 'adjustment determination' at the same time as (or shortly after) it remakes its access arrangement decision for JGN for the 2015-2020 period. The AER would not be *required* to make an adjustment determination, but *may* make such a determination if it considers that to do so would be likely to reduce price volatility and contribute to the achievement of the NGO. The AER may only make such a determination:

- no earlier than when the AER remakes its access arrangement decision for the 2015-2020 period; and
- no later than 1 March 2019

If an adjustment determination is not made by 1 March 2019, then the power effectively expires.

If an adjustment determination is made, this will provide for an adjustment to 'total revenue' that may be recovered by JGN in the 2015-2020 period, with an offsetting adjustment to be made in the calculation of total revenue for the subsequent access arrangement period. The two adjustments must offset each other in an NPV sense, so that the adjustment is NPV-neutral.

An adjustment determination must include:

- the adjustment amount, which may be either a positive or negative amount;
- a recalculation of JGN's total revenue for the 2015-2020 period, including the adjustment amount; and
- a revised network price variation mechanism (factoring in the revised 'total revenue') to be applied in any remaining annual network price variations occurring for JGN in the 2015-2020 period.

The adjustment amount must be determined so as to minimise, so far as is reasonably possible, variations in JGN's network prices across the two access arrangement periods that are the subject of the determination.

Where an adjustment determination is made, this will have the effect of varying JGN's access arrangement insofar as it deals with the network price variation mechanism. However, if the AER chooses not to make an adjustment determination, the access arrangement will remain as per the AER's remade decision.

It should be noted that the rule itself, as proposed by JGN, would not have the effect of varying the access arrangement or the applicable network prices under that access arrangement. Rather, the access arrangement is only varied by the AER making the adjustment determination which, as noted above, is at the AER's discretion. All the proposed rule does is give the AER a power to make a determination that would have such an effect.

The proposed rule also includes a requirement that any adjustment for the 2015-20 access arrangement period be reversed in the calculation of total revenue for the next access arrangement period. That is, total revenue for the next period must include an adjustment equal to the negative of the adjustment amount. The reversal of the adjustment will therefore be factored into the network price path for the next period.

Further explanation is provided in the annotations to the drafting of the proposed rule (see **Attachment A**).

3.2 HOW THE PROPOSED RULE ADDRESSES THE ISSUE

The expected price volatility, and therefore the risk of distortion to customers' energy usage and investment decisions, can be mitigated by allowing for cross-period revenue smoothing between the 2015-2020 and 2020-2025 periods. If the AER is allowed the discretion to smooth revenue recovery across the two periods, there could be a more gradual downward trajectory for network prices heading into the next period that also minimises the gap between JGN's allowed revenues and its cost of service. JGN forecasts that, with smoothing, there could be:

- a steady and gradual reduction in network prices over the next three regulatory years (annual reductions of between 2.2% and 5.4% in real terms), rather than a sharp decrease followed by a sharp increase in network prices ; and
- a maximum 12% gap between revenue and cost of service in any one year, as opposed to up to 27% without smoothing, ensuring that JGN's network prices better reflect our costs, year on year.

The proposed rule provides for cross-period revenue smoothing where the AER considers that this would be likely to reduce price volatility, ensure prices better reflect costs and best contributes to the achievement of the NGO. Thus, the proposed rule provides a regulatory mechanism by which the issue of potential price volatility can be addressed.

3.3 ISSUE CANNOT BE ADDRESSED WITHOUT RULE CHANGE

As discussed above (section 2.4), the NGR is currently drafted on the basis that "total revenue" for an access arrangement period (i.e. the building block costs for that period, as calculated under rule 76) will be recovered during that period. In particular, rule 92(2) requires a network price variation mechanism to be designed so that forecast revenue from reference services over an access arrangement period is equalised with the portion of "total revenue" allocated to reference services for that period. JGN understands that there is currently no scope under the NGR to recover part of "total revenue" (building block costs) for an access arrangement period outside of that period – and hence no scope to smooth recovery of total revenue for one period across multiple periods.

JGN recognises that there are potentially other approaches that defer or bring forward capital cost recovery and hence change "total revenue" over the period. Specifically, it may be possible to make adjustments to the depreciation schedule with the effect of increasing "total revenue" for the current period (thus bringing forward cost recovery), through a variation to the access arrangement. However, this option is unlikely to be cost effective or efficient, and would be unnecessarily complex. Adjustments to the depreciation schedule are likely to be contentious and conceptually complex, potentially requiring expert input. Further, any increase in total revenue for the current period that is effected by an adjustment to the depreciation schedule would not necessarily be reversed in the next access arrangement period – rather, the reversal of this adjustment would likely occur over several periods, depending on which asset classes are the subject of the adjustment, and the remaining asset lives for those asset classes.

We also recognise that, in some cases, price volatility may be reduced by altering the network prices path *within* an access arrangement period. However in this case, simply altering JGN's network price paths within the 2015-20 access arrangement period will not avoid the undesirable consequences outlined previously. As shown in Figure 2–2 above, even with equalisation of price adjustments over the 2020-2025 period, there would need to be a large adjustment at the commencement of the new period and substantial increases in each year of that period.

3.4 A JGN SPECIFIC RULE IS PREFERABLE TO A BROADER RULE CHANGE

JGN notes that, under the NGL, a rule may be of general or limited application.[20] In the case of the current proposal, this may be a narrow rule only allowing for smoothing of revenue and network prices across JGN's current and subsequent access arrangement periods (as currently proposed), or it could potentially be broadened to give the AER a more general power to make cross-period adjustments.

A rule made by the AEMC under the NGL may also be of similar effect to a jurisdictional derogation under the National Electricity Law – i.e. a rule made under the NGL may:[21]

- exempt, in a specified case or class of case, a person or a body performing or exercising a function or power, or confer a right, or on whom an obligation is imposed, under the NGR, or a class of such a person or body, from complying with a provision, or a part of a provision, of the NGR; or
- provide for the modification or variation of a provision of the NGR (with or without substitution of a provision of the NGR or a part of a provision of the NGR) as it applies to a person or a body performing or exercising a function or power, or conferred a right, or on whom an obligation is imposed, under the NGR, or a class of such a person or body.

JGN has proposed a rule of limited application – that is, a rule which only allows for cross-period smoothing in one particular circumstance only – because it is seeking to address what we consider to be a one-off issue. So far as JGN is aware, this price volatility issue only arises in respect of JGN, and only in relation to the current access arrangement period.

Seeking to make a broader rule change should be unnecessary given that no other service providers face the same issue. A broader rule change would introduce unnecessary complexity, since the particular circumstances and issues faced by each service provider would need to be considered. Furthermore, based on the consultations carried out in advance of submission of this rule change proposal, JGN understands that a broader rule change would not be supported by all service providers.

20 NGL, s 74(3)(a).

21 NGL, s 74(3)(l), (m).

4. CONTRIBUTION TO THE ACHIEVEMENT OF THE NGO

The proposed rule advances the long-term interests of consumers with respect to the price of natural gas, by creating a mechanism by which the AER can minimise price volatility over the remainder of JGN's current access arrangement period and into the next access arrangement period.

Significant price volatility in a short period of time creates a divergence between JGN's network prices and cost of service. This has the potential to distort consumers' budgetary decisions on energy spending, as well as investment decisions on energy usage, with these distortions potentially leading to long term inefficient outcomes for consumers. The proposed rule reduces the extent to which network prices need to be below the efficient cost of supply in the later years of JGN's current period, thus promoting efficient use of natural gas services.

JGN has also received customer feedback that price volatility is generally considered to be undesirable.

Finally, the proposed rule reduces the risk of longer term impact from JGN's annual revenues being highly volatile and significantly below the annual cost of service in some years, including impacts on JGN's credit metrics, and therefore required rates of return.

4.1 BENEFITS AND COSTS

The key benefits of the proposed rule are those relating to the advancement of the NGO, as set out above.

Administrative costs are likely to be negligible, given that the rule only provides a one-off power, to be exercised at the AER's discretion, to make an administratively simple determination.

No broader impacts are anticipated, beyond these benefits and minor administrative costs.

4.2 JGN'S ENGAGEMENT WITH STAKEHOLDERS IN DEVELOPING THE PROPOSAL

JGN has sought feedback from customer groups, other service providers and the AER on the issue of potential price volatility. JGN has also consulted the AER in relation to its rule change proposal to address this issue.

At the April 2017 meeting of JGN's Customer Council, customer advocates indicated support for the notion that we should seek to minimise price volatility and price shocks. Customer advocates also expressed support for cross-period smoothing to minimise the risk of price shocks. They also indicated that customers like certainty and predictability, and that price stability and investment certainty is particularly important for small businesses.

JGN understands that the AER broadly supports a rule change to provide for cross-period revenue smoothing. The AER acknowledges that smoothing may be necessary and desirable in some cases to avoid price volatility which might adversely affect the long-term interests of consumers.

Finally, JGN understands that other service providers would broadly support a rule change of this type that is specifically directed at the issue that has arisen for JGN and its customers, and not a rule change with a broader scope.

Attachment A
Proposed Rule

A1. PROPOSED RULE (ANNOTATED)

[###] Cross-period smoothing

Adjustment determination

(1) The AER may make an *adjustment determination* to provide for smoothing of reference tariffs across the *2015 access arrangement period* and the *subsequent access arrangement period*, if the AER is satisfied that making the *adjustment determination*:

(a) would be reasonably likely to reduce volatility in reference tariffs for *Jemena's* customers across the *2015 access arrangement period* and the *subsequent access arrangement period*; and

(b) will or is likely to contribute to the achievement of the national gas objective.

(2) The AER may only make an *adjustment determination*:

(a) no earlier than the date of the *remade 2015 access arrangement decision*; and

(b) no later than 1 March 2019.

(3) An *adjustment determination* must include:

(a) the *adjustment amount*;

(b) a revised calculation of the portion of total revenue that is allocated to reference services for the *2015 access arrangement period*, with the *adjustment amount* added;

(c) a revised *reference tariff variation mechanism* for the *2015 access arrangement period*, reflecting the revised calculation of the portion of total revenue allocated to reference services for that period, including the *adjustment amount;* and

(d) any consequential amendments to the *remade 2015 access arrangement decision* as the AER considers necessary, which must be limited to those amendments necessary for, or directly consequential on, revision of the *reference tariff variation mechanism* for the *2015 access arrangement period*.

(4) The *adjustment determination* must be designed to minimise, so far as reasonably possible, volatility in reference tariffs for *Jemena's* customers across the *2015 access arrangement period* and the *subsequent access arrangement period*, having regard to:

(a) the effect of an *adjustment determination* on the *reference tariff variation mechanism* for the *2015 access arrangement period* under sub-rule 5;

(b) the effect of an *adjustment determination* on the design of the *reference tariff variation mechanism* for the *subsequent access arrangement period* under sub-rule 7; and

(c) the current best estimate of total revenue and demand for reference services for each regulatory year of the *subsequent access arrangement period*.

Notes

The proposed rule gives the AER a power to make an adjustment determination only in respect of JGN, and only for a limited time after it remakes its decision on revisions to the JGN access arrangement for the 2015-2020 period.

The adjustment determination must include the "adjustment amount" (a dollar amount), as well as a revised calculation of total revenue and revised reference tariff variation mechanism for the 2015-2020 period, factoring in the adjustment amount.

The adjustment amount must be designed so as to minimise volatility in reference tariffs across the 2015-2020 access arrangement period and the subsequent period. This determination of the adjustment amount will need to have regard to the fact that the adjustment affects total revenue (and hence reference tariffs) in both periods in an offsetting manner.

Revision of the 2015 access arrangement decision

(5) If the AER makes an *adjustment determination*, the effect of the *adjustment determination* is to vary the *remade 2015 access arrangement decision* in the following respects:

(a) total revenue for each year of the *2015 access arrangement period* is as set out in the *adjustment determination*;

(b) the reference tariff variation mechanism for the *2015 access arrangement period* is as set out in the *adjustment determination;* and

(c) the *remade 2015 access arrangement decision* incorporates any consequential amendments as are set out in the *adjustment determination* pursuant to sub-rule (3)(d).

(6) The variation of the *remade 2015 access arrangement decision* takes effect on the day the *adjustment determination* is made.

Notes

The effect of an adjustment determination is to revise the AER's remade access arrangement determination for the 2015-2020 period, insofar as it deals with reference tariff variations.

As currently drafted, the proposed rule provides specifically for revisions to a specific decision – the AER's remade decision in respect of JGN for the 2015-2020 period.

Application of the adjustment amount in the subsequent access arrangement period

(7) If the AER makes an *adjustment determination*, the design of the *reference tariff variation mechanism* for the *subsequent access arrangement period* must be adjusted in the following way:

(a) if the *adjustment determination* provides for a positive *adjustment amount*, the net present value of the *adjustment amount* must be deducted from the portion of total revenue allocated to reference services, for the purposes of designing the *reference tariff variation mechanism*; and

(b) if the *adjustment determination* provides for a negative *adjustment amount*, the net present value of the *adjustment amount* must be added to the portion of total revenue allocated to reference services, for the purposes of designing the *reference tariff variation mechanism*.

Notes

Sub-rule 8 sets out the requirement for the adjustment to be reversed in the subsequent period, through an NPV-neutral adjustment to total revenue. This is done through a modification of the design of the reference tariff variation mechanism (normally governed by NGR rule 92(2)) for the next access arrangement period.

Definitions

(8) In this rule:

2015 access arrangement decision means the decision of the AER, published on 3 June 2015, to approve revisions to the access arrangement for the NSW gas distribution network owned by Jemena for the *2015 access arrangement period*.

2015 access arrangement period means the *access arrangement period* for the NSW gas distribution network owned by Jemena commencing on 1 July 2015.

adjustment amount means an amount to be added to the portion of total revenue that is allocated to reference services for the *2015 access arrangement period*, determined in accordance with sub-rule 5. This may be either a positive or negative amount.

adjustment determination means a determination made by the AER under sub-rule 1.

Jemena means Jemena Gas Networks (NSW) Limited (ABN 87 003 004 322).

remade 2015 access arrangement decision means the decision of the AER to approve revisions to the access arrangement for the NSW gas distribution network owned by Jemena for the *2015 access arrangement period*, as remade by the AER following the *Tribunal determination*.

subsequent access arrangement period means the *access arrangement period* for the NSW gas distribution network owned by Jemena immediately following the *2015 access arrangement period*.

Tribunal determination means the determination of the Australian Competition Tribunal dated 3 March 2016 to set aside the *2015 access arrangement decision* and remit the matter back to the AER for reconsideration, as varied as a consequence of judicial review of that determination.

Attachment B
JGN modelling of revenues and cost of service under alternative network price scenarios

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B1. SCENARIOS

Table B1–1: JGN modelling of revenues and cost of service under alternative network price scenarios

	RY16	RY17	RY18	RY19	RY20	RY21	RY22	RY23	RY24	RY25
Scenario 1: AER final decision outcome, no cross-period smoothing, target return to cost of service by RY25										
Estimated cost of service	398.8	428.9	458.7	487.6	478.7	498.0	525.6	519.4	546.5	573.3
Real price adjustment	-20.4%	-2.5%	-7.0%	-16.5%	-16.5%	25.8%	8.6%	2.9%	1.0%	0.3%
Forecast revenue	494.2	496.8	474.0	406.3	349.4	455.0	511.5	544.6	569.2	591.2
Gap to cost of service	24%	16%	3%	-17%	-27%	-9%	-3%	5%	4%	3%
Scenario 2: AER final decision outcome, no cross-period smoothing, equalisation of network price adjustments in 2020-2025 period										
Estimated cost of service	398.8	428.9	458.7	487.6	478.7	498.0	525.6	519.4	546.5	573.3
Real price adjustment	-20.4%	-2.5%	-7.0%	-16.5%	-16.5%	10.9%	10.9%	10.9%	10.9%	10.9%
Forecast revenue	494.2	496.8	474.0	406.3	349.4	401.1	460.4	528.5	606.7	696.4
Gap to cost of service	24%	16%	3%	-17%	-27%	-19%	-12%	2%	11%	21%
Scenario 3: AER final decision outcome, cross-period smoothing allowed										
Estimated cost of service	398.8	428.9	458.7	487.6	478.7	498.0	525.6	519.4	546.5	573.3
Real price adjustment	-20.4%	-2.5%	-7.0%	-5.4%	-5.4%	-5.4%	2.5%	2.5%	2.5%	2.5%
Forecast revenue	494.2	496.8	474.0	460.6	449.0	439.9	466.8	495.4	525.7	557.8
Gap to cost of service	24%	16%	3%	-6%	-6%	-12%	-11%	-5%	-4%	-3%
Scenario 4: Adjusted final decision outcome (return on debt per JGN revised proposal), no cross-period smoothing, target return to cost of service by RY25										
Estimated cost of service	415.5	448.3	480.7	510.3	502.0	522.0	550.4	544.9	572.9	600.6
Real price adjustment	-20.4%	-2.5%	-7.0%	-8.4%	-8.4%	14.0%	4.7%	1.6%	0.5%	0.2%

	RY16	RY17	RY18	RY19	RY20	RY21	RY22	RY23	RY24	RY25
Forecast revenue	494.2	496.8	474.0	445.6	420.2	496.1	537.6	565.2	588.1	609.9
Gap to cost of service	19%	11%	-1%	-13%	-16%	-5%	-2%	4%	3%	2%
Scenario 5: Adjusted final decision outcome, no cross-period smoothing, equalisation of network price adjustments in 2020-25 period										
Estimated cost of service	415.5	448.3	480.7	510.3	502.0	522.0	550.4	544.9	572.9	600.6
Real price adjustment	-20.4%	-2.5%	-7.0%	-8.4%	-8.4%	6.1%	6.1%	6.1%	6.1%	6.1%
Forecast revenue	494.2	496.8	474.0	445.6	420.2	461.7	507.3	557.4	612.4	672.9
Gap to cost of service	18%	11%	-1%	-13%	-16%	-12%	-8%	2%	7%	12%
Scenario 6: Adjusted final decision outcome, cross-period smoothing allowed										
Estimated cost of service	415.5	448.3	480.7	510.3	502.0	522.0	550.4	544.9	572.9	600.6
Real price adjustment	-20.4%	-2.5%	-7.0%	-2.2%	-2.2%	-2.2%	1.5%	1.5%	1.5%	1.5%
Forecast revenue	494.2	496.8	474.0	476.0	479.5	485.5	510.2	536.1	563.3	591.9
Gap to cost of service	19%	11%	-1%	-7%	-4%	-7%	-7%	-2%	-2%	-1%

14 December 2017

OVERVIEW

Jemena Gas Networks (NSW) Ltd (**JGN**) is the owner and operator of the NSW gas distribution network. We have requested a change to the National Gas Rules (**NGR**) to facilitate smoothing of revenue recovery and network prices across our current 5 year access arrangement period (2015-2020) and the immediately subsequent access arrangement period (2020-2025).

The purpose of the proposed rule is to create a mechanism to reduce significant expected network price volatility over these two periods for customers. The proposed rule will not impact customers of other gas networks, nor would it alter our total revenue allowances across both 5 year periods combined. Rather, it simply allows for "smoothing" of revenue recovery, and therefore smoothing of the path of network prices ("cross period smoothing"). This cannot be done within one 5 year period alone under the current NGR.

THE ISSUE THAT THE PROPOSED RULE SEEKS TO ADDRESS

The proposed rule is designed to address expected network price volatility facing gas customers in NSW, primarily between 2019-20 and 2020-21.

Unless a rule change occurs, our customers are likely to face a sharp reduction in network prices towards the end of the current access arrangement period, followed by a sharp increase in reference tariffs at the commencement of the new period. The expected network price volatility has arisen due to:

- the need for the Australian Energy Regulator (**AER**) to remake its final decision for the current access arrangement period following legal proceedings
- uncertainty (for both JGN and the AER) on the likely outcomes of those legal proceedings when setting network prices for regulatory years 2016-17 and 2017-18 that has resulted in network prices being maintained at a level above those originally proposed by JGN and approved by the AER.
- the limited number of years remaining in the current access arrangement period to give effect to the outcomes of legal proceedings.

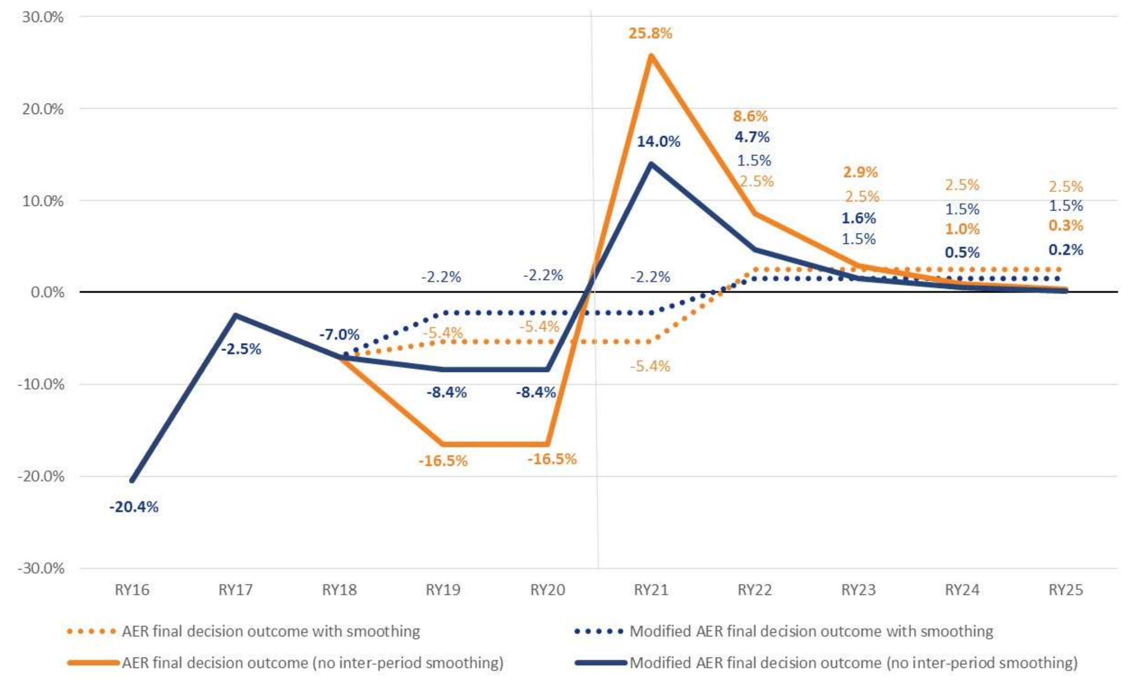
Based on current projections of the cost to operate and maintain the NSW gas distribution network, we estimate that, without the cross-period smoothing, our network prices would need to decrease between 8.4% and 16.5% in 2019-20 and then an increase again in 2020-21 by between 14.0% and 25.8%. The large adjustment in the first year of the next period would need to be followed by progressively smaller (but still significant) price increases in subsequent years. This is shown in Figure 1.

We understand that price volatility is often undesirable for customers. Besides individual customer preferences, significant price volatility in a short period of time can result in inefficient economic outcomes. Price volatility that does not represent JGN's underlying costs has the potential to distort individual consumers' budgetary decisions on energy spending, as well as investment decisions on energy usage. Such distortions to usage and investment can potentially lead to inefficient outcomes for consumers in the long term.

Given that we are now more than half way through the current 5 year access arrangement period, it is not possible to address this issue by smoothing within this period alone. Allowing cross period smoothing across the two access arrangement periods ensures that our customers are not subject to the network price volatility from 2019 they would face without this rule change.

However, there is currently no mechanism under the NGR to smooth revenue recovery (and therefore provide a less volatile path for reference tariffs) between two access arrangement periods.

Figure 1: Forecast real changes in network prices, RY16 – RY25 – with and without cross-period smoothing



HOW THE PROPOSED RULE ADDRESSES THE ISSUE

JGN's proposed rule is designed to provide a regulatory mechanism to minimise expected network price volatility for gas consumers using the JGN network. It would permit the AER to make a determination, which adjusts JGN 'total revenue' in the current 5 year access arrangement period, and provides for a corresponding (but reverse) adjustment in the following access arrangement period. The two adjustments must offset each other in net present value terms, meaning we (and customers) would be financially no better or worse off financially.

Under our proposed rule, this adjustment may only occur where the AER considers that this would be likely to reduce price volatility, and contribute to the achievement of the national gas objective (**NGO**). The AER would not be *required* to make an adjustment determination – it is a discretionary matter. Our proposal is that this would be a one-off power designed to deal with the immediate issue of reference tariff volatility between our current and subsequent access arrangement periods.

With cross period smoothing, we estimate that our prices would need to decrease between 2.2% and 5.4% in 2019-20, with these reductions continuing into 2020-21. That is, the expected price volatility would be removed entirely as shown in Figure 1.

It is important to note that network businesses like JGN do not bill end customers directly for the provision of network services. Network charges are billed to retailers who then recover these charges through their retail tariffs, which are the retail prices paid by end customers.

STAKEHOLDER ENGAGEMENT

In preparing this rule change request, we held positive discussions with, and took into account the feedback from, the AER, the Australian Energy Market Commission, customer groups and other service providers.