

**AEMC Draft Determinations for
ERC0134**

**‘Economic Regulation of
Network Service Providers’ and
‘Price and Revenue Regulation
of Gas Services’**

Submission from

Jemena Limited

to the

Australian Energy Market Commission

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Table of contents

1	Executive summary.....	3
2	Introduction.....	6
2.1	Context of this consultation.....	6
2.2	Jemena’s network businesses	6
2.3	Structure of Jemena’s submission	7
3	Positive elements of the Commission’s draft determinations	9
4	Capex and opex allowances.....	10
4.1	Jemena’s concern related to opex and capex allowances	10
4.2	Draft rule inconsistent with Commission conclusions	11
4.3	How the increased discretion for the AER is detrimental to the NEO..	12
4.4	Proposed solution	14
5	Capex incentives	15
5.1	Ex post capex overspend reviews	15
5.1.1	<i>Jemena’s concern.....</i>	<i>15</i>
5.1.2	<i>Draft rule inconsistent with Commissions conclusions.....</i>	<i>16</i>
5.1.3	<i>The combined effect of the proposed capex incentives rules would be detrimental to the NEO and inconsistent with the RPP.....</i>	<i>17</i>
5.1.4	<i>Proposed solution</i>	<i>19</i>
5.2	Capex sharing schemes	20
5.2.1	<i>Jemena’s concern.....</i>	<i>20</i>
5.2.2	<i>International comparison</i>	<i>21</i>
5.2.3	<i>Proposed solution</i>	<i>22</i>
6	Rate of return.....	23
6.1	Rate of return framework	24
6.1.1	<i>The overall structure of the framework is a good start</i>	<i>24</i>
6.1.2	<i>Key improvements will help ensure that the framework is more effective for stakeholders</i>	<i>24</i>
6.1.3	<i>The final determination should include detailed and clear guidance on how to interpret the rules</i>	<i>25</i>



6.2	Return on debt	26
6.2.1	<i>The return on debt framework needs some work to prevent opportunism, avoid conflicting principles, and improve clarity</i>	26
6.2.2	<i>Improvements to the framework should help overcome these concerns</i>	27

1 Executive summary

Jemena welcomes the opportunity to respond to the Commission's draft determination on the economic regulation of network service providers rule change. The rule change affects the investment in, and return on, high valued assets. Any change should be exercised with caution and founded on sound analysis.

Jemena supports a number of the Commission's draft positions including the direction of the rate of return framework, enabling the consideration of different models to the capital asset pricing model, and enhancements to the regulatory determination process. Jemena considers that, with some improvements, these elements present an appropriate evolution to the framework.

While enabling this evolution, the Commission needs to ensure that the investment environment remains strong and confidence in the regulatory regime does not deteriorate. Certain elements of the draft rule do not necessarily support this and would create a less transparent and less predictable framework, which would be detrimental to the National Electricity Objective. In particular:

- the Commission's own factual findings do not support large scale changes to the capital expenditure rules
- implementing an ex post review of capital expenditure with retrospective effect may be inconsistent with the National Electricity Law, and indeed, good regulatory practice
- the Commission has concluded that the potential benefits of the rule change outweigh the implementation costs without quantifying either the benefits or the costs even at the most rudimentary level.

The transparency and stability of the regime depends as much, if not more, on the Commission in its rule-making capacity, as it does on the Australian Energy Regulator in its capacity as rule enforcer. If the Commission is to implement rule changes, while simultaneously concluding there isn't a strong case for making the changes, nor quantifying the costs and benefits, it would have a destabilising effect on the framework. This, in turn, would lead to higher funding costs for the industry, as investors price in what they see as higher regulatory and sovereign risk. The result will be less or later investment at the margin.

Jemena endorses the Energy Networks Association submission which provides a comprehensive, balanced insight and constructive suggestions for a way forward. In this submission, we concentrate and expand on four key areas:

1. *Capex incentives*

Jemena opposes the introduction of ex post capital expenditure reviews. Such reviews would be inconsistent with the Commission's observation that there is no incentive for network service providers to overspend and are therefore unnecessary. Moreover the possibility that efficient capital expenditure will be disallowed in ex post review creates a significant additional risk.

The National Electricity Objective would be best served by a combination of appropriate ex ante review and continuous, symmetrical incentive mechanisms.

2. *Expenditure allowances*

The Commission's position on forecast expenditure allowances is not supported by its analysis. Despite statements that the regulator is not 'at large' to set expenditure forecasts, the draft rule would replace the network service provider's proposal with a standard expenditure forecasting methodology set by the regulator as the starting point. The regulator itself would not be bound to any methodology.

This presents a regulatory risk for businesses that is likely to translate into higher rate of return requirements in the long run and therefore be detrimental to the National Electricity Objective. The objective would be best served by ensuring a credible link to a network service provider's proposal, not binding the network service provider to a regulator determined methodology, and enabling the regulator to make expenditure adjustments. This ability currently exists but can be enhanced.


3. *Combination of capex incentives and expenditure allowances changes*

The Commission proposes to make significant changes to the way in which expenditure allowances are set and to incentive arrangements. There will be strong incentives for network service providers to never overspend their allowances, even when the allowance is inadequate and it would be efficient to overspend.

Any underspending will eventually be followed by catch up expenditure in later years and an inefficient burden on consumers at that time. This loss of dynamic efficiency will be contrary to achieving the National Electricity Objective.

4. *Rate of return*

Jemena supports the overall structure of the rate of return framework outlined in the draft determination but considers there are opportunities for improvement. This includes refining the allowed rate of return objective so that it is consistent with the



language in the NEL, adding detail in the rate of return guidelines, and extending the consultation on the guidelines.

Jemena also considers that the return on debt framework should be improved to prevent opportunistic behaviour, avoid conflict and improve clarity.

Transitional arrangements

Separate to this submission, Jemena also intends to respond to the Commission's staff consultation on the transitional arrangements. Jemena's initial view is that it would be better to simplify the approach for setting revenues in the interim year that is created by delaying the next full determinations. This would reduce the administrative burden on both the Australian Energy Regulator and network service providers.

Additionally, implementing ex post reviews for expenditure undertaken prior to the implementation of the rule change amounts to a retrospective change. As mentioned above, Jemena questions whether this is consistent with the National Electricity Law and good regulatory practice.

2 Introduction

2.1 Context of this consultation

On 29 September 2011, the Australian Energy Regulator (**AER**) submitted two rule change requests¹ (**AER rule change proposal**) to the Australian Energy Market Commission (**Commission**) in relation to the economic regulation of:

- electricity transmission and distribution network services providers (**NSPs**)
- covered pipeline service providers for gas transmission and distribution pipelines.

On 17 October 2011, the Commission received a rule change request from the Energy Users Rule Change Committee (**EURCC**) (representing a group of large energy users) relating to the calculation of return on debt for electricity network businesses under chapters 6 and 6A of the National Electricity Rules (**NER**).

Given that AER and EURCC raise related issues, the Commission decided the two rule change requests should be dealt with as a consolidated request.

The Commission issued its draft determinations on 24 August 2012 (**Commission's draft determination**) in which it set out its initial views and draft rules.

2.2 Jemena's network businesses


Jemena owns two network businesses. The Commission's draft determination to make changes to chapter 6 of the NER and to part 9 of the National Gas Rules (**NGR**) would have a material effect on both of those businesses.

This submission sets out Jemena's response to those proposed changes focusing on those areas in which we consider that the Commission's position could be revised to ensure the changes better facilitate the National Electricity Objective (**NEO**) and National Gas Objective (**NGO**).

Jemena Electricity Networks (Vic) Limited

Jemena Electricity Networks (Vic) Limited (**JEN**) is a distribution network service provider (**DNSP**) that serves 320,000 consumers in north western Melbourne.

¹ These were the National Electricity Amendment (Economic regulation of network service providers) Rule 2011, and National Gas Amendment (Price and revenue regulation of gas services) Rule 2011.



The AER regulates JEN's revenues and prices under chapter 6 of the NER. On 29 October 2010, the AER released its final revenue determination² for JEN's current regulatory control period—1 January 2011 to 30 December 2015. JEN sought merits review of aspects of the AER's determination and the Australian Competition Tribunal (**Tribunal**) handed down its determination in respect of this review on 5 April 2012³.

Jemena Gas Networks (NSW) Limited

Jemena Gas Networks (NSW) Limited (**JGN**) is a covered pipeline service provider within the meaning of the NGR, and serves over 1,100,000 consumers in Sydney, Newcastle, Central Coast and Wollongong and over 20 regional centres across NSW.

The AER regulates JGN's access arrangement, which incorporates JGN's revenue, pricing and services, under parts 8, 9 and 10 of the NGR. On 11 June 2010, the AER released its final access arrangement determination⁴ for JGN's current regulatory period—1 July 2010 to 30 June 2015. JGN sought merits review of aspects of the AER's determination and the Tribunal handed down its determination in respect of this review on 30 June 2011⁵.

2.3 Structure of Jemena's submission

Jemena's submission responds to the Commission's draft determinations. It focuses on key areas which Jemena would like to draw to the Commission's attention.

Jemena has chosen not to expand on matters which are adequately covered by the Energy Networks Association in its submission dated 4 October 2012 (**ENA submission**). Jemena supports the ENA submission and refers the Commission to


² AER, *Final, Jemena Electricity Networks (Victoria) Ltd, Distribution determination 2011–2015*, October 2010

<http://www.aer.gov.au/content/item.phtml?itemId=740828&nodeId=f90d8ff7117d5b3d659e219b68f9a880&fn=Victorian%20distribution%20determination%20final%20decision%202011-2015%20-%20JEN%20final%20determination.pdf>.

³ Application by United Energy Distribution Pty Limited [2012] ACompT 1 (6 January 2012) and Application by United Energy Distribution Pty Limited (No 2) [2012] ACompT 8 (5 April 2012).

⁴ AER, *Final decision—Public Jemena Gas Networks Access arrangement proposal for the NSW gas networks, 1 July 2010 – 30 June 2015*, June 2010
<http://www.aer.gov.au/content/item.phtml?itemId=737314&nodeId=1ad7842f5a6f6ca1c7ca1818abf1bc95&fn=Final%20decision%20-%20public.pdf>.

⁵ Application by Jemena Gas Networks (NSW) Ltd (No 3) [2011] ACompT 6 (25 February 2011), Application by Jemena Gas Networks (NSW) Ltd (No 5) [2011] ACompT 10 (9 June 2011) and Australian Competition Tribunal, File No 5 of 2010, Determination, 30 June 2011.



the ENA submission for comment on those areas not discussed in the remaining sections of this submission.

The remainder of this submission focuses on:

- **Section 3** – Positive elements of the Commission’s draft determinations
- **Section 4** – Capex and opex allowances
- **Section 5** – Capex incentives
- **Section 6** – Rate of return in electricity and gas (including the rate of return framework and return on debt).

This submission is complementary to and should be read in conjunction with Jemena’s previous submission on 16 April 2012 in response to the Commission’s directions paper.⁶

⁶ Jemena, Rule change requests relating to economic regulation of network service providers – submission to AEMC Direction Paper ERC0134, 16 April 2012.

3 Positive elements of the Commission's draft determinations

Jemena supports a number of areas of the draft rule, which should contribute to the NEO and revenue and pricing principles (**RPPs**). In particular, Jemena welcomes:

- the use of a single overarching rate of return objective supported by secondary principles and guidance
- setting a rate of return that is commensurate with benchmark efficient financing costs of a service provider
- considering all relevant estimation methods, financial models, market data and other evidence and ensuring parameter consistency when setting that return⁷
- ensuring that regulators estimate the allowed rate of return with rigour and transparency⁸ and consistently with the NEO, the NGO, and the RPP
- setting the rate of return on a determination by determination basis with guidance from periodically set rate of return guidelines
- enabling more time in the regulatory determination process; in particular in those areas which allow for greater consultation and for focus on consumer engagement
- the framework introduced to enable the AER to pilot small scale incentive schemes.

Jemena refers the Commission to the ENA submission for comment on, and discussion of, potential enhancements to the areas noted above.

⁷ This would bring electricity in line with what occurs in gas.

⁸ This is explicitly noted by the AEMC and the ACT. For instance, see AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services*, Draft Determinations, 23 August 2012, p. 58.

4 Capex and opex allowances

Key points:


- The Commission's position on forecast expenditure allowances is not supported by its analysis.
- The draft rule effectively puts the AER 'at large' to set expenditure forecasts.
 - The standard expenditure forecasting methodology effectively removes the NSP's proposal as the starting point for the regulatory determination process.
 - The exclusions in 6.12.3(f) allow the AER wide discretion to vary from the NSP's proposal.
- If the Commission is to implement rule changes, while simultaneously concluding there isn't a strong case for making the changes, it would have a destabilising effect on the framework.
- The draft rule presents a regulatory risk to NSPs that would translate into higher rate of return requirements and be detrimental to the NEO.
- The NEO would be best served by ensuring a credible link to a network service provider's proposal, not binding the network service provider to a regulator determined methodology, and enabling the regulator to make expenditure adjustments. This ability currently exists but can be enhanced.

4.1 Jemena's concern related to opex and capex allowances

The practical application of the Commission's draft rule does not align with the Commission's own conclusions.

The draft rule provides the AER with significantly increased discretion to set expenditure allowances. The draft rule moves away from the propose/respond model in respect of expenditure forecasts to a process where the AER dictates the construction of the initial proposal. In addition, the draft rule would permit the AER to depart from a forecast which has been prepared in accordance with a standard methodology that it has specified.

This additional discretion increases regulatory risk for NSPs, as does the lack of Commission reasoning to justify some of the key changes relating to capex. As



investors price in what they see as higher regulatory and sovereign risk, this would have a detrimental impact on investment, increase the required rate of return and be inconsistent with achieving dynamic efficiency. These impacts mean the draft rule in relation to expenditure allowances would not contribute to the NEO.

4.2 Draft rule inconsistent with Commission conclusions

The Commission finds no evidence that the current rules have resulted in inefficient expenditure allowances:

...it is not possible to conclude that the NER have constrained the AER's ability to consider and substitute NSP's expenditure forecasts and have caused inefficient increases in expenditure allowances.⁹

... the analysis presented in submissions by stakeholders provides important context about rising network charges but does not confirm that expenditure allowances to date have been inefficient, or that there are in fact problems with the NER in this area.¹⁰

The Commission then confirms the important role of the NSP in determining expenditure allowances:

The NSP's proposal is necessarily the procedural starting point for the AER to determine capex or opex allowance. The NSP has the most experience in how the network should be run, as well as holding all the data on past performance of its networks, and is therefore in the best position to make judgements about what expenditure will be required in future. Indeed, the NSP's proposal will in most cases be the most significant input into the AER's decision.¹¹

The Commission then appears to confirm that the AER should not be given unfettered discretion:

The Commission remains of the view that the AER is not 'at large' in being able to reject the NSP's proposal and replace it with its own.¹²

And finally, the Commission concludes that only clarifications are required to the rules:


while the Chapter 6A approach to capex and opex allowances remains generally consistent with good regulatory practice, it could be enhanced in some ways, and

⁹ AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services*, Draft Determinations, 23 August 2012, p. 101

¹⁰ *Ibid*, p. 97.

¹¹ *Ibid*, p. 102.

¹² *Ibid*, p. 103.



some changes for clarification reasons should be made so that Chapters 6 and 6A of the NER better reflect this approach..¹³

Despite these findings, the Commission's draft position is to provide the AER significantly greater discretion to be able to set expenditure allowances. The practical outcome of the draft rule would be for the AER to be 'at large' to determine expenditure forecasts. The draft rule change would:

- effectively remove the NSP's proposal as the starting point of the regulatory determination process; to be replaced by the AER's standard expenditure forecasting methodology
- place greater weight on benchmarking, which involves many subjective judgements
- reduce the reliance placed on the NSP's knowledge and expertise in forecasting its requirements by enabling the AER to depart from the NSP's proposal (via the exclusions in 6.12.3(f)).
- provide the AER such discretion as to leave very limited opportunity for a NSP to be able to challenge an AER determination¹⁴.

If the Commission chooses to implement the draft rule, these consequences would create significant uncertainty for NSPs. The Commission does not appear to have recognised this in its analysis and assessment against the NEO.


4.3 How the increased discretion for the AER is detrimental to the NEO

Jemena does not consider that the Commission has demonstrated with rigour that the draft rule, which provides the AER with significantly increased discretion when setting capex and opex allowances, will contribute to the NEO. In Jemena's view, the draft rule for capex and opex allowances would not contribute to the NEO.

A regulator, which is more 'at large' to determine expenditure forecasts, creates an incremental regulatory risk. Not only will allowances be less predictable but, if the AER has greater discretion, it will be more difficult to establish error at merits review. That risk is magnified by current uncertainty about the future of the merits

¹³ Ibid, p. 101.

¹⁴ The Standing Council on Energy and Resources (**SCER**) is currently conducting a review of the merits review regime which has created considerable uncertainty about the future form and availability of merits review. Some changes appear inevitable. Those changes may well affect whether and how decisions made under the Commission's draft rule can be tested in merits review. If that occurs, then it will add to risk and uncertainty.



review. Investors facing a higher risk will require a greater return commensurate with that risk, or look to other assets as potential investments.

Jemena is concerned that the changes to rules governing the way in which capex allowances are set, coupled with a climate in which there is strong political and public pressure to contain network prices, will embolden the AER to set capex allowances that are below what they would have been if the NER had remained unchanged, and below levels that would be accepted as prudent and efficient in other circumstances.


As the asset owner, the NSP is best placed to develop a forecasting approach for its own network. The forecasting approaches may differ, with good reason, from business to business. Introducing an AER-designed standard expenditure forecasting methodology would encourage the AER to micromanage expenditure forecasts. A standard expenditure forecasting methodology:

- is inconsistent with the conclusion that the NSP has the most experience in how the network should be run and is in the best position to make judgements about what projects will be required in the future
- relies on a 'one size fits all' approach
- cannot be consistent with current sign-off requirements for regulatory proposals where the NSP must declare that it has provided its own best forecast
- will duplicate work where a NSP still needs to provide its own best forecast and the AER must evaluate both forecasts.

Without a link to an NSP's proposal based on a forecasting methodology most appropriate to the NSP, there is a significant risk the AER gets it wrong. This risk is greater than under the propose/respond current arrangements, where, as the Commission has noted itself, there has been no evidence of inefficient expenditure allowances resulting.

In section 5.1.3 below, we discuss our concern relating to capex incentives and the risk of periods of underspend, followed by periods of 'catch up'. This risk would be magnified in a framework where the AER is at large to set the forecast in the first place.

The framework is therefore reliant on an unrealistic expectation that the regulator's ex-ante forecasts will be accurate when it should be tailored toward discovery of efficient expenditure levels through incentives. If the AER sets an allowance that is



below an efficient level, the risk of periods of underspending increases significantly. Periods of underspending and catch up transfer the burden between current and future consumers (dynamic efficiency) and are therefore inconsistent with the NEO.

4.4 Proposed solution

The current rules for expenditure allowances minimise the risk of detrimental risks to investment and price occurring by:

- ensuring a credible link to the NSP's proposal
- providing the AER with the ability to adjust expenditure allowances
- not binding the NSP to an AER-determined methodology.

Jemena supports the ENA suggestion that NSPs should be required to advise the AER of the expenditure forecasting methodology they are proposing to adopt as part of the framework and approach paper process. This should create an enhanced shared understanding between the AER and NSPs and be consistent with the policy goals which the Commission wishes to achieve.

5 Capex incentives

Key points:

- Jemena opposes the introduction of ex post capex reviews which are inconsistent with the Commission's observation that there is no incentive for NSPs to overspend.
- Jemena supports ex post reviews of capitalised related party margins in cases where such margins were disallowed by the AER during the previous determination. The test for such reviews, however, should focus on the prudence and efficiency of paying the margin, not simply whether the arrangement in question was "arm's length"
- If the Commission persists with implementing ex post capex reviews of any form then, as a matter of good regulatory practice, the Commission should ensure the reviews are not applied retrospectively.
- Taken as a whole, the Commission's draft rule will not promote the NEO. It is likely to lead to:
 - allowances being pared back in a way that has not been seen to date
 - NSPs avoiding expenditure in excess of their allowances, even where that expenditure is prudent and efficient
 - consequent underinvestment and loss of dynamic efficiency.
- When combined with the Commission's position on expenditure allowances, there would be a strong incentive for NSPs to spend no more than their allowances leading to periods of underspending with subsequent catch-up spending. This would be inefficient and detrimental to the NEO.
- The NEO is best served by a combination of appropriate ex ante review and continuous, symmetrical incentive mechanisms.

5.1 Ex post capex overspend reviews

5.1.1 *Jemena's concern*

Implementing an ex post capex review is inconsistent with the Commission's own conclusions. Where these are to be implemented in combination with the expenditure allowances provisions discussed in chapter 4 above, this could result in inefficient capex expenditure not consistent with the NEO.

5.1.2 *Draft rule inconsistent with Commissions conclusions*

Jemena notes the Commission's unqualified conclusion in the directions paper that:

The Commission is of the view that the capex incentives in the NER do not create an incentive for a NSP to spend more than its allowance in its regulatory determination.¹⁵

The Commission confirms that position in its draft determination:

The Commission does not consider that capex incentives in the NER provide an incentive for NSPs to spend more than their allowance.¹⁶

It also acknowledges that:

... nothing in the work that Parsons Brinckerhoff has undertaken indicates that the current regulatory framework provides NSPs with an incentive to overspend their allowances.¹⁷

adding that:

However, Parsons Brinckerhoff has also noted that insufficient regulatory oversight would strengthen the potential for capex overspends through a lack of consequences.

If that proposition is accepted, then there may be a case for examining oversight arrangements and making changes but only to the extent necessary to deliver the appropriate level of assurance that actual capex is prudent and efficient.


The Commission accepts that, in the absence of a capex Efficiency Benefit Sharing Scheme (**EBSS**), current rules produce an incentive to defer capex within the regulatory period, and that the incentive is amplified for short-lived assets when actual depreciation is used in the Regulatory Asset Base (**RAB**) roll-forward calculation. Jemena outlined the contrasting impact of forecast and actual depreciation in our previous submission.¹⁸ The Commission's draft rule correctly seeks to address these issues. However, the draft rule would introduce additional

¹⁵ AEMC, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Directions Paper*, March 2012, p. 40.

¹⁶ AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services, Draft Determinations*, 23 August 2012, p. 117.

¹⁷ *Ibid*, pp 122-123.

¹⁸ Jemena, *Rule Change Requests Relating to Economic Regulation of Network Service Providers Directions Paper ERC0134*, Submission from Jemena Limited to the AEMC, 16 April 2012, pp. 22-24.



penalties and risks. When taken together, they go beyond what is necessary to deliver an appropriate level of assurance, especially given the absence of evidence that there is an incentive to overspend.

The Commission's draft rules, if made final, would:


- change the assessment criteria for capex, including placing greater reliance on benchmarking
- remove uncertainty about the AER's discretion in setting capex allowances
- enable the AER to require that components of a distribution business's forecast capex be classified as contingent projects thereby reducing capex allowances
- maintain the option, at the AER's discretion (albeit guided by draft rule S6.2.2B), to require the use of actual depreciation instead of forecast depreciation in the RAB roll-forward calculation
- provide for the introduction of capex incentive schemes which, while they may address the acknowledged distortions inherent in current arrangements¹⁹, may also operate asymmetrically
- provide for ex post review in circumstances where actual expenditure exceeds the allowance, but with no provision for disallowed capex to be included in the RAB when/if it is later found to be efficient.

5.1.3 The combined effect of the proposed capex incentives rules would be detrimental to the NEO and inconsistent with the RPP

The discretion provided in the draft rule would mean the AER can set the expenditure allowances and also provide mechanisms which create additional penalties for overspends. The current frameworks include penalties for capex overspends via the use of actual depreciation and the loss of the return on capital. The capex incentives element of the draft rule would introduce the potential for further penalties.

The combined effect of the Commission's draft rule is that:

¹⁹ It is well accepted that current arrangements provide a strong incentive to defer capex within a regulatory period, and that the incentive is stronger for short-lived assets if actual depreciation is used in the RAB roll-forward calculation.

- 
- capex allowances are likely to be lower than they would have been under current rules
 - NSPs are likely to minimise expenditure in excess of allowances even if, on a fair assessment, that expenditure would be prudent and efficient: the penalties for and risks associated with over-expenditure are simply likely to be too great. The risk that capex will be disallowed altogether under an ex post review regime will be a significant factor when businesses make expenditure decisions.

But necessary capex cannot be deferred indefinitely: at some stage there will have to be a catch-up. There is evidence that the recent high levels of distribution capex have been required, at least in part, to make up for past underinvestment that has resulted from unrealistically low capex allowances being set for prior periods. There is a risk that the draft rule will lead to another period of underinvestment which will inevitably have to be followed by another round of catch-up spending. Jemena has provided evidence of previous underinvestment followed by periods of catch-up in Appendix 2.


The draft rule is likely to result in inefficient deferral of capex which cannot be consistent with the NEO. Moreover, the RPP will not be satisfied to the extent that NSPs do spend prudent and efficient capex in excess of allowances, and that capex is disallowed either through the operation of an incentive mechanism or by an inappropriate decision in an ex post review.

At the same time, ex post capex reviews will add significant costs for both businesses and the AER and will divert resources and attention from other important matters. These new costs will not produce any benefits since, according to the Commission's own assessment, there is no existing incentive for businesses to overspend their allowances.²⁰

The impact of ongoing underspends is to move the price burden from current consumers to future consumers when periods of expenditure catch-up are required to meet reliability and safety standards. Such inefficient redistribution of the price burden is not dynamically efficient and does not contribute to the NEO. However, the draft rule enhances the risk of this occurring.

Jemena considers that the only exception relating to ex-post capex reviews is the issue of related party margins. Jemena accepts that, where an AER determination for a given regulatory period disallows some or all of an NSP's proposed related

²⁰ AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services*, Draft Determinations, 23 August 2012, p. 117.



party margin amounts, and the NSP then chooses to nevertheless incur those amounts, it would be reasonable for the AER to assess the actual related party margins paid ex post, before deciding whether to roll them into the RAB. The assessment, however, should focus on whether the payments were prudent and efficient, and not on whether the relevant arrangements were “arm’s length”.

The ex post review mechanism, if introduced, must not operate retrospectively

We have described above how we consider NSPs will respond to the combined effect of the proposed suite of rules by spending no more than their allowances, irrespective of whether additional expenditure is, in the NSP’s view, necessary and prudent. The risk of disallowance under ex post review will be a significant contributing factor. We would expect that change of behaviour to occur from the effective date of the rules.

Given the Commission’s position that the draft rule will lead to additional efficiencies and will contribute to the NEO, Jemena understands the Commission’s desire to implement the rule change at the earliest opportunity.

However, if the suite of rules is to include ex post review, then fairness and equity demand that it should not apply to expenditure that occurs prior to the effective date of the rules. If expenditure before that date was subject to ex post review, it would amount to the rule operating retrospectively. Not only would that be poor in principle, we consider it would also be contrary to section 33 of schedule 2 of the National Electricity Law (NEL) which states that:

33—Saving of operation of repealed Law, Regulation or Rule provisions

(1) The repeal, amendment or expiry of a provision of this Law, the Regulations or the Rules does not—

...

(b) affect the previous operation of the provision or anything suffered, done or begun under the provision; or

(c) affect a right, privilege or liability acquired, accrued or incurred under the provision; or

...”

5.1.4 *Proposed solution*

Jemena suggests the Commission considers the following:

- The ex post capex review provisions should be withdrawn. If that is not done, then at the very least, there must be provision for any disallowed capex to be held in an account and uplifted at an appropriate rate, to be included in the RAB when/if it later becomes efficient (see NGR, s.84)
- If ex post capex review is maintained, this should not apply retrospectively to be consistent with the NEL and to maintain investor confidence
- Forecast depreciation should be the default option for the RAB roll-forward calculation given the severity of penalties created by actual depreciation, especially for short-lived assets.

5.2 Capex sharing schemes

5.2.1 *Jemena's concern*

The draft rule enables the AER to implement capex sharing schemes of its own design subject to certain principles. Jemena is broadly supportive of the Commission's view that a capex sharing scheme should require the AER to have regard to a number of principles and be consistent with a capital expenditure incentive objective (should one be deemed to be required).

However, Jemena considers that the capital expenditure sharing scheme principles should require symmetrical and continuous incentives. Jemena supports the previous ENA position that a symmetric and continuous incentive scheme would appropriately share benefits and costs associated with changes in expenditure between NSPs and customers.

Capital expenditure decisions with regard to long lived assets require an incentive scheme with continuous incentives in order to reflect the long term commitment of the capital investment. Jemena is concerned that investments in capital with long asset lives may be made under the presumption that spending the money now, may incur a financial penalty in the short term, but will result in gains for the business and consumers in the long term.

An incentive scheme that does not oblige the regulator to carry incentives continuously into the future to align with the long term return on the investment may not allow a NSP a 'reasonable opportunity to recover at least its efficient costs' and therefore be inconsistent with the RPPs and the NEO. If the reward is not commensurate with the level of financial risk arising from the penalty, this may lead the NSP to defer efficient investment decisions – decisions that, if taken, would have led to a long term net benefit for consumers.

5.2.2 *International comparison*

The United Kingdom has well developed capex sharing mechanisms. The common characteristics of these capex sharing schemes include broad symmetry and expenditure caps and floors.²¹ Jemena considers that it would be useful if the Commission's guidance reflected these design features.

Energy regulators in the United Kingdom have in recent years focussed their attention on how to encourage NSPs to 'truth tell' with regard to capex – that is, propose forecasts that are the most accurate reflection of the efficient level of capital expenditure required to operate the network. For example, the Office of Gas and Electricity Markets (**Ofgem**) plan to introduce an incentive scheme in 2013 targeting renewable generation in the electricity transmission sector. The incentive will be directed at minimising the average forecasting error over the course of a month. Ofgem's proposal is that the NSP will have a symmetrical monthly incentive calculated on a sliding scale from a reward of £250K for a zero error to a maximum penalty of £250K when the error is twice the forecast target error.

Jemena notes that where asymmetric incentives are used in the United Kingdom, these have generally been applied with higher reward/lower penalty. For example, the Water Services Regulation Authority (**Ofwat**) in the United Kingdom adopted asymmetric incentives in its 2009 price review under menu regulation. The scheme treated overspending and underspending symmetrically but with a slightly asymmetric incentive slope at the break even point (the point where outturn expenditure equals the forecast) – such that the rate of change for outperformance was greater than the rate of change for underperformance.

It is therefore disconcerting that the Commission's draft determination provides an example where the penalty exceeds the reward.²² Jemena considers that an asymmetric scheme of this design would be unlikely to be consistent with the NEO as it is more likely to lead to NSPs opting against efficient investment decisions to avoid incurring a strong penalty.

²¹ Ofgem, System operator incentive schemes from 2013 initial proposals: Overview, 27 July 2012.

²² AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services*, Draft Determinations, 23 August 2012, p. 133.

5.2.3 *Proposed solution*

Any capex incentive scheme should operate symmetrically, or if asymmetry is permitted then there should be provision for compensating allowances elsewhere.²³

The ENA submission outlines the benefits of a symmetrical and continuous scheme. Jemena supports the ENA position.

Jemena urges the Commission to reconsider implementing the principles for an ex-ante capital expenditure incentive scheme that were developed in the Joint Expert Report on Capital and Operating Expenditure – submitted as an attachment to the ENA submission to the Commission’s Directions Paper.

²³ There are established precedents for such compensation. For example, NSPs are compensated for an asymmetric requirement to make guaranteed service level payments by a revenue allowance based on an assumed benchmark level of payments.

6 Rate of return

Key points:

- Jemena supports the overall structure of the rate of return framework outlined in the draft determination. However, there are improvements that would make this framework more effective for stakeholders, including:
 - refining the allowed rate of return objective so that it is consistent with the language in the NEL
 - requiring more detail in the rate of return guidelines
 - extending the consultation period for these guidelines.
- Like in the AEMC's draft determination, the final determination should include detailed and clear guidance on how to interpret the rate of return rules.
- The return on debt framework needs some work to prevent opportunism, avoid conflict and improve clarity. This is achievable by:
 - requiring the rate of return guidelines to specify benchmark gearing, credit rating and maturity for new debt issues and data source and methods for deriving the benchmark. Thus separating out the question of how the benchmark cost of debt is derived from the separate question of whether it is applied as a spot rate, trailing average or other method
 - recognising that it takes time for service providers to change debt borrowing and risk management practices and that these practices will vary across businesses – and so adopting a default position of no change to the current approach
 - replacing return on debt estimation principles that are likely to conflict and / or provide imprecise guidance.
- These views are consistent with those in the ENA submission – which Jemena endorses.

6.1 Rate of return framework

6.1.1 *The overall structure of the framework is a good start*

Jemena supports the overall structure of the new rate of return framework proposed in the draft determination. Specifically, Jemena supports:

- using a single overarching objective together with a number of secondary objectives and guidance
- setting a rate of return that is commensurate with the benchmark efficient financing costs of a service provider
- considering all relevant estimation methods, financial models, market data and other evidence and ensuring parameter consistency when setting that return
- ensuring that regulators estimate the allowed rate of return with rigour and transparency²⁴ and consistently with the NEO, the NGO, and the RPP
- setting this return on a determination by determination basis with guidance from periodically set rate of return guidelines.

This framework should provide sufficient flexibility to deal with changing market circumstances and promote efficient financing practices. However, there is scope to improve the current draft rules so that stakeholders are better engaged and have more certainty over outcomes – a concern that is particularly important to investors in the current investment climate.

6.1.2 *Key improvements will help ensure that the framework is more effective for stakeholders*

Jemena is concerned with how the allowed rate of return objective and supporting principles are written and how the proposed rate of return guideline is developed and used. Jemena endorses the ENA submission on these concerns and proposed improvements to the draft rules.

As a brief overview, to overcome these concerns the rules should (amongst other things):

²⁴ This is explicitly noted by the AEMC and the ACT. For instance, see AEMC, *Consolidated Rule Request – Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas services*, Draft Determinations, 23 August 2012, p. 58.

- replace the words “correspond to” in the allowed rate of return objective with “be commensurate with” – this is consistent with the language in the NEL
- ensure that the rate of return guidelines include sufficient detail on how the relevant methodologies and data will be assessed at each determination, include estimates of the costs of debt and equity, and are only departed from if there are stated reasons and evidence to do so
- extend both the time between when guidelines are set from three to four years and the time for consultation from 30 to 60 business days after the invitation for submissions to improve the effectiveness of stakeholder engagement – especially given that the new rules will require consideration of more issues than in previous rate of return consultations
- refrain from amending clauses 6.12.3(f) and 6A.14.3(b) as these already operate as the AEMC intends.

These improvements should let stakeholders engage more effectively by requiring fewer resources and more informative guidelines. A key objective should be to avoid perpetual review of these guidelines, which may in itself disadvantage consumers.

The improvements should also help ensure that allowed rates of return are consistent with the RPPs.

6.1.3 *The final determination should include detailed and clear guidance on how to interpret the rules*

Jemena appreciates the Commission’s guidance on how to interpret the rules in the draft determination. We consider it important that similar guidance is also included in the final determination and that this guidance is detailed and clear – as this will prove valuable to stakeholders when applying the rules at future regulatory determinations.

Naturally, this guidance could cover a range of areas. But, as a minimum, we ask that the final determination include guidance on:

- what is meant by the benchmark efficient financing costs
- how to ensure that parameters are estimated consistently, including, for example, how to recognise the empirical fact that two parameters are significantly negatively correlated

- what framework to use when considering various estimation methods, financial models, market data and other evidence and how to weight and test these methods and evidence
- how to use historic data when setting a forward looking rate of return estimate that is commensurate with prevailing conditions in the market for funds.

6.2 Return on debt

6.2.1 *The return on debt framework needs some work to prevent opportunism, avoid conflicting principles, and improve clarity*

Jemena supports a framework that is flexible enough to use either trailing or prevailing methods to estimate the return on debt – provided this framework recognises that:

- it takes time for service providers to change borrowing and risk management practices in response to a change in methods
- efficient financing practices may vary between businesses.

However, the draft rules do not recognise this. By letting the estimation method switch from a prevailing to a trailing method (and vice versa) without safeguards, the draft rules create the risk of opportunism either by service providers or the regulator.

Also, the draft rules require the regulator to consider several factors when setting the return on debt. But there is no guidance on what to do if there is a conflict between these factors.

Finally, the draft rules do not clearly recognise that there is a difference between:

- setting the gearing ratio, credit rating and maturity for debt issued by a benchmark efficient entity with a similar degree of risk as that which applies to the service provider, and
- combining market data and a reasonable method to estimate the return on debt for that benchmark entity.

6.2.2 *Improvements to the framework should help overcome these concerns*

Jemena endorses the ENA submission on the return on debt, including improvements to the draft rules. These improvements include:

- requiring the rate of return guidelines to identify the benchmark gearing, credit rating and new issue maturity for debt costs and how to use market evidence when estimating the return on debt
- recognising that changing borrowing and risk management practices takes time and that different arrangements may be efficient for different firms by requiring:
 - service providers to propose a return on debt method that is consistent with the allowed rate of return objective and the return on debt methodology principles
 - the regulator to accept this method, if satisfied that it meets the objective and principles, or otherwise use the method that applied in the immediately preceding regulatory period
- removing guiding principles that are likely to conflict with each other or are otherwise covered by the NEO or NGO
- ensuring that network service providers have a reasonable opportunity to recover benchmark debt costs in the long term.

Appendix 1 – Glossary

ACT (or Tribunal)	Australian Competition Tribunal
AER	Australian Energy Regulator
capex	capital expenditure
DNSP	distribution network service provider
EBSS	efficiency benefit sharing scheme
DRP	debt risk premium
ENA	Energy Networks Association
EURCC	Energy Users Rule Change Committee
JEN	Jemena Electricity Networks (Vic) Ltd
JGN	Jemena Gas Networks (NSW) Limited
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NSP	network service provider
opex	operating expenditure
RAB	regulatory asset base
RPP	revenue and pricing principles
SCER	Standing Council on Energy and Resources
Tribunal (or ACT)	Australian Competition Tribunal

Appendix 2 – Underinvestment followed by catch-up expenditure

Jemena has investigated examples of historic underinvestment. These have required periods of catch up expenditure in order to maintain reliability standards.

General examples

In his recent Chairman's Report, the Chairman of AGL Energy, Jeremy Maycock, attributes part of recent increases in electricity network capex to the phenomenon of periods of underinvestment followed by periods of catchup:

Capital expenditure on electricity networks is now several times higher than it was in the 1990s. This partly reflects the underinvestment over many years by State governments in energy transmission and distribution infrastructure.²⁵

The Reserve Bank of Australia has also published an analysis which attributes rising utility prices in part to a need to 'catch up' for below average price increases and under-investment during the 1990s.

While the specific factors [behind increasing utility prices] vary across each of the utilities and from state to state, there are a number of common themes. Some of these relate to 'catch up' for the below-average price increases and under-investment during much of the 1990s – in real terms, utilities prices fell by 7 per cent between 1990 and 2000 – while others relate to changes in the structure of the market, input costs and funding costs.²⁶

Energy Australia example

These general statements above are supported (by way of example) by the documentation relating to EnergyAustralia's (now AusGrid's) price review for the current regulatory control period: 2009-14.

In its proposal document EnergyAustralia stated that:

A large proportion of the initial price increase for customers in the 2009-14 period is a legacy of regulatory decisions in the 2004-09 regulatory period as shown in Figure 1.1.

Determinations of EnergyAustralia's network revenue have historically been characterised by:

- over-emphasis on "X" cost control factors. The incentives have been strongly directed to ensure that the prices for network services are efficient, with little regard to service outcomes;

²⁵ AGL Energy Limited, 2012 Annual Report, September 2012, p. 7.

²⁶ Reserve Bank of Australia, Bulletin, December Quarter 2010, p. 11.

- over-emphasis on high capital utilisation without recognition of the run-away risk when utilisation approaches theoretical maximum levels; and
- a regulatory allowance for asset replacement programs below what EnergyAustralia proposed. The Independent Pricing and Regulatory Tribunal of NSW (IPART) and the Australian Competition and Consumer Commission (ACCC) both reduced EnergyAustralia's proposed asset replacement programs for 2004-09. In determinations to date, regulators have failed to understand the need for sustainable renewal programs. Replacing aged network elements which are highly loaded takes many years and is required to avoid long and frequent interruptions to customers.

EnergyAustralia has not responded to the "CPI-X" incentives regime by reducing operating or capital expenditure to unsustainable levels. Rather, it has maintained expenditure at the minimum level required to maintain the network and maintain service standards. Operating expenditure in 2004-09 is forecast to be 15.7 percent above regulatory allowance. Capital expenditure is forecast to be 23.6 percent above the regulatory allowance.

In 2005, the NSW Government recognised the shortcomings in the "regulatory bargain", that had effectively emerged from past Determinations, and introduced licence conditions that encompass mandatory investment criteria and minimum service quality standards. These are known as the DRP licence conditions. This proposal outlines the expenditure necessary to deliver these asset security and service reliability licence conditions.²⁷

The AER's adviser, Wilson Cook & Co, reviewed EnergyAustralia's proposal and concluded that:

In respect of capex, the increase in the scope of work is driven by four principal factors: growth in demand, the need to comply with the NSW licence conditions for supply security and reliability, the need to address deferred 11 kV work and the need to increase the rate of replacement of aged network assets, many of which are now at the end of or beyond their prudent engineering lives and are presenting in many cases an unacceptable safety and supply risk. We have concluded that [EnergyAustralia's] capex programme proposed is reasonable in both scope and cost.²⁸


Furthermore, Wilson Cook & Co noted that there were issues common to the 3 NSW DNSPs under review:

Some of these common issues include but are not limited to:

- considerable increases in costs over the current period, especially in relation to materials;

²⁷ EnergyAustralia, *Regulatory Proposal*, June 2008, pp. 3-4.

²⁸ Wilson Cook & Co, *Review of Proposed Expenditure of ACT & NSW Electricity DNSPs: Volume 2 – EnergyAustralia*, November 2008, p. 1.

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- different responses from the DNSPs to these increases, some curtailing work to keep within their regulatory allowance, creating a backlog to be addressed in the next period, some overspending their allowance and some doing both; and
 - the need to replace ageing assets at a faster rate, in respect of which the expenditure in the next period is only the first phase of what will be a major and extended period of capital investment in Sydney CBD and elsewhere.²⁹

The report also explains the drivers of the DNSPs' capex forecasts, including that:

...some DNSPs referred to constraints arising from previous determinations and identified a consequential backlog in the maintenance and replacement of their assets.³⁰

In its draft determination, the AER stated that:

The AER has reviewed the information provided in support of the replacement capex proposals for Country Energy and EnergyAustralia, and, on the basis of the advice of Wilson Cook & Co, is satisfied that the proposed expenditures reasonably reflect the efficient costs a prudent operator would require, consistent with the capex criteria.³¹

Wilson Cook & Co and the AER accepted EnergyAustralia's submission that unrealistically low capex allowances in prior regulatory periods had led to under-investment and a back-log in maintenance and other capital programs. Consequently, part of the allowance sought (and granted) for 2011-14 period was required as a 'catch-up' to replace ageing infrastructure.

²⁹ Wilson Cook & Co, ACT & NSW DNSPs Expenditure Review – Main Report, October 2008, p. 28.

³⁰ Wilson Cook & Co, ACT & NSW DNSPs Expenditure Review – Main Report, October 2008, p. 11.

³¹ AER, NSW Draft Distribution Determination 2009-10 to 2013-14, 21 November 2008. pp. 140-141.