



Australian Energy Market Commission

## CONSULTATION PAPER

National Electricity Amendment (Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets) Rule 2011

National Gas Amendment (Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets) Rule 2011

**Rule Proponent**

Major Energy Users

1 December 2011

RULE  
CHANGE

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## **About the AEMC**

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. The AEMC has two principal functions. We make and amend the national electricity and gas rules, and we conduct independent reviews of the energy markets for the MCE.

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# 1 Introduction

On 3 November 2011, the Australian Energy Market Commission (AEMC or Commission) received electricity and gas rule change requests from Major Energy Users (MEU or proponent) in relation to the optimisation of the Regulatory Asset Base (RAB) and the continued utilisation of fully or partially depreciated assets that are still in operation and useful. The proponent considers that its rule change requests would address gaps in the Australian Energy Regulator (AER) rule change requests on economic regulation of network service providers.

Under the National Electricity Rules (NER) and the National Gas Rules (NGR), the RAB (or capital base) is required to be rolled forward from one regulatory control period to the next, without being subject to optimisation<sup>1</sup> at regulatory resets. The proponent is concerned that there is therefore an incentive for network businesses to over invest, with consumers being required to pay for this over-investment. The proposed rule aims to address this by introducing optimisation for these assets.

The proponent is also concerned that there is no disincentive for network businesses to replace fully or partially depreciated assets, irrespective of whether they are still in operation and useful. The proponent proposes for new provisions in the rules to be included that aim to disincentivise the replacement of assets which are still in operation and useful.

This consultation paper has been prepared by the staff of the AEMC to facilitate public consultation on the rule change requests and does not represent the views of the AEMC or any individual Commissioner of the AEMC.

This paper:

- sets out a summary of, and a background to, the rule change requests;
- identifies a number of questions and issues to facilitate the consultation on the rule change requests; and
- outlines the process for making submissions.

## Submissions

Submissions are to be received by 20 January 2012. Additional details on lodging a submission are outlined in Chapter 6 of this paper.

## Timetable

The draft rule determination (and draft rule if applicable) is required to be published by 29 March 2012.

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<sup>1</sup> Optimisation in the context of these rule change requests refers to the reduction of the RAB according to the degree of utilisation of assets.

## 2 Background

This chapter provides an overview of the current processes provided under the rules with respect to rolling forward RAB (or capital base), including treatment of redundant assets.

### Current rules processes

#### *Electricity*

Under the NER, the RAB is rolled forward from one regulatory control period to the next.<sup>2</sup> Although there is some form of prudential test for the first year of the first regulatory control period, there is no optimisation of the RAB for subsequent regulatory resets.<sup>3</sup> There is also no requirement for an *ex post* asset utilisation review (nor an *ex post* prudency review) by the AER, nor a requirement for the RAB to be adjusted according to the degree of utilisation of an asset.<sup>4</sup>

On the other hand, there are provisions for dealing with redundant assets. If a Transmission Network Service Provider's (TNSP's) asset is no longer contributing to the provision of prescribed transmission services then the AER may determine for the value of this asset to be removed from the RAB.<sup>5</sup> For Distribution Network Service Providers (DNSPs), the previous value of a DNSP's RAB must be reduced by the value of an asset previously used to provide standard control services (but which is no longer being used because of a change in its service classification).<sup>6</sup> The NER also allows for DNSPs and TNSPs to reduce the RAB by the depreciated values and disposal values of assets.<sup>7</sup> However, there is also no requirement for an *ex post* capital redundancy review by the AER, and no direct provision disincentivising the replacement of fully or partially depreciated assets that may still be in operation and useful.

#### *Gas*

Similarly in gas, the RAB (or capital base) is rolled forward from one regulatory control period to the next.<sup>8</sup> The AER may conduct an assessment capex based on a prudency test.<sup>9</sup> However, there is no optimisation of the RAB.

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<sup>2</sup> Clauses S6.2.1(c)(1), (d)(2)-(3), and S6A.2.1(c)(1), (d)(2)-(d)(3) of the NER.

<sup>3</sup> Optimisation in the context of these rule change requests refers to the reduction of the RAB according to the degree of utilisation of assets. See also clauses S6.2.1(d)(2)-(3) and S6A.2.1(d)(2)-(3) of the NER.

<sup>4</sup> An *ex post* prudency review effectively requires the regulator to put itself in the position of a network business at the time that they were undertaking a particular project to determine if the project was undertaken efficiently.

<sup>5</sup> Clause S6A.2.3(a)(2) of the NER.

<sup>6</sup> Clause S6.2.1(e)(7) of the NER.

<sup>7</sup> Clauses S6.2.1(e)(5)-(6) and S6A.2.1(f)(5)-(6) of the NER.

<sup>8</sup> Rule 77 of the NGR.

There is a capital redundancy provision which provides that a full access arrangement may include (and the AER may require it to include) a mechanism to ensure that such redundant assets are removed from the RAB.<sup>10</sup> However, this is a discretionary provision that the AER can decide whether to include such a mechanism, so there is no automatic provision that requires service providers to remove these assets from the RAB. There is also no direct requirement to disincentivise fully or partially depreciated assets from being replaced, even though it may still be in operation and useful.

### **Previous AEMC rule determination**

The Commission previously made a rule determination on economic regulation of transmission services.<sup>11</sup> Amongst other things, the Commission made a determination on issues associated with the RAB, depreciation of asset values that would be adjusted to roll-forward RAB, and capex incentives. With respect to the reason why optimisation of the RAB and *ex post* prudency review were excluded, the Commission stated that:<sup>12</sup>

“A key mechanism for managing the investment risk for TNSPs was to ‘lock-in’ and roll forward the RAB from one regulatory period to the next. This aimed to give greater security to investors in the transmission system that their investments would be treated in an appropriate way over time. More specifically, the RAB would not be subject to optimisation at regulatory resets to reflect the economic value of the assets to users, which would otherwise present a significant risk to investors.”

### **Current AEMC rule determination on economic regulation of network service providers**

On 20 October 2011, the Commission commenced consultation on rule change requests received from the AER in relation to the economic regulation of electricity network businesses under the NER and determining the rate of return for gas network businesses under the NGR. Shortly before the commencement of consultation on the AER rule change requests, the Commission received rule change requests from an Energy Users' Rule Change Committee (EURCC),<sup>13</sup> relating to the calculation of return on debt for electricity network businesses under Chapters 6 and 6A of the NER. Given the similarity in subject matter on the issues raised in the rule change requests, the Commission decided to consolidate the rule change requests with respect to electricity on 3 November 2011, with submissions due to close on 8 December 2011. The AER rule change request *Price and Revenue Regulation of Gas Distribution and Transmission Services* (GRC0011) relates to access matters; however, that deals with cost of capital matters exclusively, which are not relevant here.

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<sup>9</sup> Rules 77(2) and 79 of the NGR.

<sup>10</sup> Rule 85(1) of the NGR.

<sup>11</sup> AEMC, *Economic Regulation of Transmission Services*, rule determination, 2006.

<sup>12</sup> *Ibid*, p. 98.

<sup>13</sup> The members of the EURCC include Amcor, Australian Paper, Rio Tinto, Simplot, Wesfarmers, Westfield and Woolworths.

As this stage, the MEU rule change requests have not been consolidated with the AER/EURCCC rule change request under section 93 of the NEL and section 300 of the NGL. Therefore, the timetable will proceed with the MEU rule making process independent of the AER/EURCC rule making process. If the Commission decides in the future that there is merit in aligning the timetable for the MEU rule change requests with the AER/EURCC rule change request, the Commission will notify stakeholders and amend the timetable accordingly.



### 3 Details of the rule change requests

The rule change requests from the proponent propose to require the AER to:

- review the valuation of all assets during the assessment of the RAB with the objective that the value of assets used in the RAB reflects the minimum value necessary to ensure the provision of the services required. This means that only necessary assets, sized for service, would be included in the RAB. The RAB would only allow a return on assets that are actually used and not on assets that are under-utilised or not used; and
- disincentivise the replacement of an asset that has not passed its useful life and can be used productively for further service. In other words, disincentives are placed on over-investment by DNSPs and TNSPs by discouraging replacement of fully or partially depreciated assets that are still in operation and useful beyond the depreciated life.

In its rule change requests, the proponent provides its rationale for the rule change requests. A number of key points raised in the rule change requests are summarised as follows:

- the proposed rule would address gaps in the AER rule change requests with respect to optimisation of the RAB and the continued utilisation of fully or partially depreciated assets that are still in operation and useful;
- it is inefficient for the costs of assets which are not being used to be passed onto consumers;
- it is inefficient for network businesses to over-invest in their network; and
- it is inefficient for assets which are still functional to be replaced.

The proponent's rule change requests include a proposed rule.

## 4 Assessment framework

The Commission's assessment of the rule change requests must consider whether the proposed rule promotes the national electricity objective (NEO) as set out under section 7 of the National Electricity Law (NEL) and the national gas objective (NGO) as set out under section 23 of the National Gas Law (NGL). The NEO is set out under section 7 of the National Electricity Law (NEL) as follows:

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to-

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.”

Similarly, the NGO under section 23 of the NGL states that:

“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.”

The Commission's assessment of the rule change requests will also include other considerations such as taking into account the revenue and pricing principles and any relevant Ministerial Council on Energy (MCE) Statements of Policy Principles.<sup>14</sup>

In assessing the proposed rule against the NEO and NGO, the factors we will take into consideration include:

- recovery of efficient costs – whether the proposed rule would allow businesses to be able to fully recover an efficient level of costs to deliver secure and reliable supplies to customers;
- efficient utilisation – whether the proposed rule would ensure actual costs to be rolled into the RAB reflect actual utilisation of an asset, and provide the appropriate signals for efficient utilisation;
- investment incentives – whether the proposed rule would have an impact on incentives to invest in services that would benefit customers: firstly, by the reduction of the RAB through the disincentive of replacing fully or partially depreciated assets; and secondly, by the reduction of the RAB where costs of assets would be based on the degree of their utilisation. It will also be relevant to consider whether this increased investment risk could justify a higher cost of capital; and

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<sup>14</sup> The revenue and pricing principles are set out under section 7A of the NEL and section 24 of the NGL, and there is no relevant Statement of Policy Principles.

- regulatory process - whether the proposed rule would create complexity or uncertainty in the regulatory process: firstly, by requiring the AER to assess whether assets are redundant with network businesses being required to demonstrate that the asset is either at the end of its functional life; and secondly, by requiring the AER to assess whether the assets are under-utilised with network businesses being required to show how much an asset has been utilised. We will assess the extent to which any uncertainty could have an impact on customers through reduced investment in services (as a result of increased cost of capital).

The proposed rule will be assessed against the relevant counterfactual arrangements which, in this case, will be the current provisions under the rules.

## 5 Issues for consultation

Taking into consideration the assessment framework, we have identified a number of issues for consultation that appear to be relevant to the rule change requests.

The issues and assessment outlined below are provided for guidance. Stakeholders are encouraged to comment on these issues as well as any other aspect of the rule change requests or this paper including the proposed framework.

### 5.1 Impact on investment in services for the benefit of consumers

The revenue and pricing principles under the NEL and NGL set out specific obligations that must be taken into account.<sup>15</sup> Regard must be had to the economic costs and risks of the potential for under and over investment by a regulated business in a distribution system, transmission system or pipeline.

The Commission previously stated in its 2006 rule determination on the economic regulation of transmission services that the RAB would not be subject to optimisation at regulatory resets to reflect the economic value of the assets to users, which would otherwise present a significant risk to investors.<sup>16</sup> The proposed rule would need to ensure that it does not disincentivise efficient, adequate and timely investment of services in new and replacement network capacity that would be of benefit to consumers. On the other hand, consumers should not be required to pay more than necessary for investment in these services.

However, it is anticipated that the proposed rule would reduce the RAB by:

(1) requiring some form of optimisation, based on the degree of asset utilisation; and  
(2) disincentivising the replacement of fully or partially depreciated assets that are still in operation and useful. With respect to the first point, this may encourage investment reflecting utilisation of the network, and therefore efficient investment into services for the benefit of consumers, as opposed to over-investment. On the other hand, it could also lead to under-investment in the network and create other issues such as reliability and security, which would not be promoting efficient outcomes for the benefit of consumers. The under-investment in services suggests that there would be an increased investment risk and therefore a need for a higher cost of capital for investments in services that would benefit customers. On the second point, this may result in efficient investment for the replacement of assets.

The MEU notes this issue when it suggests that it may be more efficient to build an oversized asset if there is a strong expectation that in the next few years the spare capacity will be utilised or a duplicate investment might be required in a short time after the initial investment is made for providing services to customers. The MEU proposed that this could be overcome by providing the AER with the ability to

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<sup>15</sup> Section 7A of the NEL and section 24 of the NGL.

<sup>16</sup> It is noted that the revenue and pricing principles did not come into effect until after this rule determination in 2008.

approve an oversized investment when there is a reasonable expectation that the additional capacity will be required within a reasonable time of the first investment.

**Question 1**      **What would the impact on investment be with the rule change requests? Would this have a positive or negative impact?**

**Question 2**      **Is it appropriate for the AER to determine and assess the age and condition of a regulated network business's asset?**

## **5.2**      **Regulatory process**

For every regulatory reset, the proposed rule would require the AER to request information from businesses on how much assets have been utilised. Businesses would be required to determine how much they have been utilised and then provide this information to the AER. The AER would then need to be able to assess this information and determine the amount that would reflect this level of utilisation.

Similarly, the AER would also need information on whether any fully or partially depreciated asset (which was still in operation and useful) has been replaced. Businesses would need to identify which assets were replaced and justify to the AER why it replaced any fully or partially depreciated assets. The AER would then determine whether the replacement of fully or partially depreciated assets were justifiable.

The proposed rule could place significant administrative burden on the AER and businesses. On the other hand, the benefits to consumers of the proposed rule could outweigh these administrative costs.

**Question 3**      **Does the increase in administrative burden outweigh the benefits of the proposed rule?**

## **5.3**      **Adequacy of the capital redundancy gas provision**

Rule 85(1) of the NGR provides that a full access arrangement may include (and the AER may require it to include) a mechanism to ensure that assets that cease to contribute in any way to the delivery of pipeline services (redundant assets) are

removed from the capital base. This provision may address an aspect of the proposed rule.

**Question 4** Does rule 85(1) of the NGR (capital redundancy) adequately address the proposed rule's objective to remove under-utilised assets from the RAB? Should rule 85(1) of the NGR be duplicated in the NER?

#### 5.4 Alternative options to the proposed rule

The revenue and pricing principles also include the economic costs and risks of the potential for under and over utilisation of a distribution system, transmission system or pipeline. The purpose of the proposed rule is to require that costs included in the RAB reflect actual costs for actual utilisation of the system or pipeline. It also seeks to disincentivise fully or partially depreciated assets from being replaced if they are still in operation and useful.

Optimisation of the RAB could be regarded as an alternative capex incentive to the “40/60 sharing factor” approach proposed by the AER in its rule change request on economic regulation of network service providers.<sup>17</sup> However, an important distinction to the MEU rule change request is that the AER rule change request focuses only on applying capex incentives on new investments in services for the consumer’s benefit, as opposed to both existing and new investments. In particular, the MEU rule change request deals with two aspects of existing (as well as new) investments: (1) replacement of fully or partially depreciated assets; and (2) utilisation of existing assets.

Related to this distinction is the asset life under consideration. In practice, investments would operate for more than a single regulatory control period, with some assets having a 40-year asset life or more. Therefore, the MEU rule change request would be applicable to addressing inefficient investment in any existing assets, whereas the AER rule change request would not apply to such assets.

**Question 5** The proposed rule requires the amount (to be determined by the AER) to reflect the difference between the actual depreciated value of assets provided and the depreciated replacement value of assets (to be deemed by the AER) required for provision of services. Does this provide the appropriate signals for efficient utilisation of assets? If not, is there a better alternative approach?

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<sup>17</sup> See AER rule change request, September 2011, p. 40.

**Question 6**      **The proposed rule places a requirement that would disincentivise expenditure for replacement of a fully or partially depreciated asset from being included in the RAB. Does this ensure that fully or partially depreciated assets that are still in use and useful are not replaced? If not, is there a better alternative?**

**Question 7**      **Should optimisation of the RAB be considered as an alternative to the “40/60 sharing factor” approach when the AEMC is considering the best capex incentive mechanism in response to the AER’s rule change request?**

## **5.5 Savings and transitional requirements**

The rules, if made, would be completed by 21 June 2012. This may have an impact on some revenue determination processes. Another consideration is the timing of the consolidated AER/EURCC rule change requests.

An additional consideration is the impact on RAB. In particular, the rule could apply to the revenue determination in the regulatory control period subsequent to the next regulatory control period.

**Question 8**      **When should any proposed rule commence?**

## **6 Lodging a submission**

The Commission has published notices under section 95 of the NEL and section 303 of the NGL for these rule change requests inviting written submissions. Submissions are to be lodged online or by mail by 20 January 2012 in accordance with the following requirements.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions on rule change requests.<sup>18</sup> The Commission publishes all submissions on its website subject to a claim of confidentiality.

All enquiries on this project should be addressed to Charles Hoang on (02) 8296 7800.

### **6.1 Lodging a submission electronically**

Electronic submissions must be lodged online via the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), using the "lodge a submission" function and selecting the project reference code "ERC0136" or "GRC0013". In the body of the submission it should clearly indicate whether it is being made in respect of project ERC0136 (electricity), project GRC0013 (gas) or both. The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Upon receipt of the electronic submission, the Commission will issue a confirmation email. If this confirmation email is not received within 3 business days, it is the submitter's responsibility to ensure the submission has been delivered successfully.

### **6.2 Lodging a submission by mail**

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The submission should be sent by mail to:

Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

Or by Fax to (02) 8296 7899.

The envelope must be clearly marked with the project reference code: ERC0136, GRC0013 or both.

Except in circumstances where the submission has been received electronically, upon receipt of the hardcopy submission the Commission will issue a confirmation letter.

If this confirmation letter is not received within 3 business days, it is the submitter's responsibility to ensure successful delivery of the submission has occurred.

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<sup>18</sup> This guideline is available on the Commission's website.



## Abbreviations

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Commission	See AEMC
DNSP	Distribution Network Service Provider
EURCC	Energy Users' Rule Change Committee
MCE	Ministerial Council on Energy
MEU	Major Energy Users
NEL	National Electricity Law
NEO	national electricity objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
RAB	Regulatory Asset Base
TNSP	Transmission Network Service Provider