



Australian Energy Market Commission

**Final Rule Determination**

**National Electricity Amendment (Final Rule  
Determination - Parameter Values, Equity Beta  
and Gamma) Rule 2008**

Rule Proponent(s)  
Energy Users Association of Australia

13 November 2008



Signed: .....

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## **Citation**

AEMC 2008, *Final Rule Determination - Parameter Values, Equity Beta and Gamma*, Final Rule Determination, 13 November 2008, Sydney

## **About the AEMC**

The Council of Australian Governments, through its Ministerial Council on Energy, established the Australian Energy Market Commission (AEMC) in July 2005 to be the Rule maker for national energy markets. The AEMC is currently responsible for Rules and policy advice covering the National Electricity Market. It is a statutory authority. Our key responsibilities are to consider Rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on AEMC initiative.

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## Abbreviations

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
APIA	Australian Pipeline Industry Association
Commission	see AEMC
Consumer Advocacy Group	Consumer Action Law Centre, Consumer Utilities Advocacy Centre and Public Interest Advocacy Centre
Distribution Rule	<i>National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007</i>
DNSP	Distribution Network Service Provider
ENA	Energy Networks Association
ESC	Essential Services Commission (Victoria)
EUAA	Energy Users Association of Australia
MCE	Ministerial Council on Energy
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
Rules	National Electricity Rules
SCO	Standing Committee of Officials
TFP	Total Factor Productivity
TNSP	Transmission Network Service Provider
Transmission Revenue Rule	<i>National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18</i>
WACC	Weighted Average Cost of Capital

## Summary

On 21 April 2008, the Energy Users Association of Australia (EUAA) lodged a Rule change proposal to amend the values for the parameters of equity beta and gamma, which are used in determining the allowed revenue and prices for network service providers.

The EUAA considers that the current parameter values for equity beta and gamma are resulting in allowed returns well above those that should apply to regulated networks, considering the associated risks. The EUAA is seeking to amend Chapter 6A and transitional chapter 6 in Appendix 1 of Chapter 11 of the Rules by replacing the value of equity beta from 1.0 to 0.75 and the value of imputation credits gamma from 0.5 to 1.0.

The EUAA proposes that these amended values are applied to the determinations currently under consideration. These relate to determinations for provision of transmission services by TransGrid and Transend and for distribution services provided by the NSW and ACT distribution businesses. The AER must publish its final decisions by 30 April 2009 on these determinations.

At the first round consultation stage, the EUAA and the Customer Advocacy Group raised an alternative to the Rule change proposal. This alternative would require the AER to incorporate the outcome of its current rate of return parameters review into the current determinations (due to completed by 31 March 2009).

In accordance with section 102 of the National Electricity Law (NEL), the Commission has determined not to make the Rule change originally proposed by the EUAA nor the alternative change submitted during first round consultation. The Commission is satisfied that neither the proposed Rule or the alternative would promote the National Electricity Objective (NEO).

In reaching its decision the Commission has considered the issues raised by the proponent, the submissions received during first and second round consultation, the provisions of the NEL including the revenue and pricing principles, how the proposal could contribute to the National Electricity Objective, the MCE decision on transitional arrangements for the NSW and ACT distribution businesses and its own analysis.

This Rule determination sets out the reasons of the Commission in accordance with the NEL and sets out the Commission's assessment.

### **The Commission's reasoning**

The intent of this Rule change proposal is amend certain rate of return parameters being applied to the regulatory determinations currently being processed. The Commission is of the view that this Rule change request (nor the alternative) does not meet the Rule making test for the following reasons:

- There are compelling reasons against amending the parameters values after the determination process has commenced. It would increase the uncertainty and

regulatory risks face by the network service providers and would not promote efficient investment. The network businesses might seek to reflect the increased risk in a higher rate of return allowance.

- The network service providers have already submitted their proposals (and the AER is conducting its assessment) on the expectation that the existing values for gamma and equity beta apply. To amend the parameter values at this stage would not reflect good regulatory practice and undermine investor confidence in the regulatory framework.
- The parameters review, to be conducted every five years by the AER, is the most appropriate process to determine the best estimate for the revenue determination parameter values. The Rules specify parameter values to provide certainty and a stable investment climate for those determinations which commence before the completion of the first AER parameters review. The MCE concurred with this when setting the determination framework for distribution network service providers and the transitional arrangements for NSW and ACT distribution businesses.
- To accept the Rule change proposal would overturn the MCE policy decision to establish transitional Rules for the ACT and NSW distribution determinations so that these reviews could be conducted with as much certainty as possible under the new arrangements within the extremely tight timeframes.
- The Rule change request would also change the reference point for the AER parameters review. In assessing the appropriate parameter values, the AER must have regard to the need for persuasive evidence to justify any change to the current values where the parameter values cannot be determined with certainty. However the Commission considers the EUAA has not provided compelling evidence to accept its revised values and has not fully considered all the implications of amending the equity beta and gamma values on the other parameters. Therefore a full assessment of the appropriate values would be required for this aspect of the Rule change and the Commission considers that it would be neither appropriate nor efficient for the AEMC to conduct a concurrent review of the parameters.
- In addition, the transitional arrangements applying to the NSW and ACT distribution business curtails the AER's discretion to amended components of a distributor's building block proposal, if the proposal complies with the Rules.

For these reasons, the Commission has decided not to accept either the Rule Change proposal or the alternative raised in submissions.

# 1 Rule Change Proposal

## 1.1 Proposal

On 21 April 2008, the Energy Users Association of Australia (EUAA) submitted a proposal to amend the National Electricity Rules (Rules) prescribing values for the parameters of equity beta and gamma, used in determining the allowed revenue and prices for network service providers (Rule Proposal).

The EUAA considers that the existing parameter values for equity beta and gamma do not reflect the current best economic estimate. In particular, the EUAA is seeking to amend Chapter 6A and transitional chapter 6 in Appendix 1 to Chapter 11 (transitional Chapter 6) of the Rules by replacing the value of equity beta from 1.0 to 0.75 and the value of imputation credits gamma from 0.5 to 1.0.

The EUAA proposes that the amended parameter values be applied in the transmission and distribution revenue determination processes currently under consideration by the Australian Energy Regulator (AER). These relate to the provision of transmission services by EnergyAustralia, TransGrid and Transend and the provision of distribution services provided by the NSW and ACT distribution businesses.

A copy of the proposed Rule is contained in Appendix A.

## 1.2 Context to the Rule Change Proposal

### 1.2.1 Explanation on equity beta and gamma

The prices that network service providers are permitted to charge for the provision of regulated services are based upon their efficient costs calculated in accordance with the building blocks methodology set out in the Rules. The equity beta and gamma are two of the seven parameters used in reaching transmission and distribution revenue determinations.

The equity beta measures the non-diversifiable risk which investors face when investing in a specific business (i.e., operational risk and financial leverage risk). The equity beta is used in calculating the rate of return allowance for network businesses under the weighted cost of capital methodology (WACC). The higher the equity beta, the riskier the business is perceived to be and hence a higher allowed revenue is determined.<sup>1</sup>

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<sup>1</sup> The estimation of equity beta is a difficult exercise and a contentious issue in cost of capital estimations. The beta of a firm can be estimated in three ways: direct estimation using historical returns for the firm in question; indirect estimation using local comparators; and indirect estimation using foreign comparators. In practice, the direct estimation of a firm's beta is carried out by regressing the return on the firm's equity on an asset against the return on an index representing the market portfolio.

The gamma value measures the utilisation of imputation credits and is used in calculating the estimated amount of corporate income tax payable.<sup>2</sup> The gamma parameter is a reflection of both the degree to which investors utilise imputation credits that are attached to dividends and also the degree to which businesses attach imputation credits to their dividends. In simple terms, the lower the gamma value, the higher the allowed revenue needs to be set to allow investors to earn a return commensurate to the risks.

The estimation of the gamma can also influence the calculation of the market risk premium used in the rate of return calculations.

### 1.2.2 Transmission Determination Rules

The framework governing the revenue determinations of transmission network service providers (TNSPs) is contained in Chapter 6A of the Rules.

In November 2006 the Commission made the *National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18* (Transmission Revenue Rule). The Transmission Revenue Rule amendment inserted a new chapter, Chapter 6A, into the Rules governing the allowed revenue for TNSPs.

Chapter 6A codified prescribed values for certain parameters to be used for the purposes of making transmission revenue determinations. The equity beta was set at 1.0 and gamma was set at 0.5. The Rules also prescribe a value of 6.0% for the market risk premium and a value of 0.6 for the market value of debt as a proportion of the market value of equity and debt.

In setting these values for equity beta and gamma, the Commission relied on generally accepted views and widespread practice at the time on the quantum of these variables. It considered that inserting prescribed values for parameters in the Transmission Revenue Rule would provide a stable investment environment.

The Transmission Revenue Rule also provides for a periodic review of parameter values to be conducted by the AER, following which the AER may adopt revised values. The Commission decided that any changes in these variables should be considered and dealt through this review process.

Through the Transmission Revenue Rule, the Commission has implemented a framework which maintains short to medium regulatory certainty through fixing the parameter values and then allowing for five yearly periodic assessments of the appropriate parameter values. This is consistent with good regulatory practice and recognises the importance of promoting a stable investment climate. The Commission considered this to be more economic and appropriate than the

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<sup>2</sup> Imputation credits (also known as franking credits) are received by Australian residents who receive dividend income from an Australian-based company. The whole reasoning behind the imputation system is to avoid the double taxation on dividends. That is, dividends received by Australians have already had tax taken out of them at the company level and should not be taxed at an individual level again. For most Australian residents, the utilisation rate on imputation credits is 1. For non-Australian residents, the rate is zero or close to zero.

alternative of having the parameter values constantly being reviewed at each revenue determination.

Following a recent determination, the Rules now require the first rate of return parameters review for transmission to be completed by 31 March 2009. This was in order to align the date of this review with the similar review of parameter values for distribution.<sup>3</sup>

### **1.2.3 Distribution Determination Rules**

Chapter 6 of the Rules contains the framework for the economic regulation of distribution services, and the application of equity beta and gamma in determinations for distribution network service providers (DNSPs). A revised Chapter 6 was introduced as part of the broader reform to establish a national framework for the regulation of distribution - the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007* (Distribution Rule). The Distribution Rule came into effect on 1 January 2008.

The Distribution Rule adopted many of the principles of the Transmission Revenue Rule. However, unlike Chapter 6A, the revised Chapter 6 did not set prescribed values to be used for the parameters. Instead it provided for the AER to conduct a review of the parameters and for the first review to be conducted by 31 March 2009.

#### **1.2.3.1 Transitional Arrangements for NSW and ACT Distribution Determinations**

In a similar context, the Ministerial Council on Energy (MCE) Standing Committee of Officials (SCO) recognised the importance of putting in place transitional arrangements in order to provide certainty to network businesses, stakeholders and the AER about the arrangements that would apply for the upcoming NSW/ACT distribution business revenue determinations.<sup>4</sup> This included adopting the existing parameter values (set out in the Transmission Revenue Rule) as the MCE considered that the AER would not have sufficient time to carry out a thorough review before the upcoming revenue determinations for the NSW/ACT distribution businesses.

Therefore, provisions are set out in transitional chapter 6 of the Rules to govern the AER's distribution determinations in respect of the NSW and ACT DNSPs for the regulatory control period commencing on 1 July 2009. This includes equity beta and gamma values identical to those in the Chapter 6A.<sup>5</sup>

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<sup>3</sup> AEMC 2008, Rule Determination, *National Electricity Amendment (WACC, Alignment of Reviews) Rule*, 26 June 2008.

<sup>4</sup> MCE SCO, *Changes to the National Electricity Rules to establish a national framework for the economic regulation of electricity distribution - Explanatory Material*, April 2007, pages 42-44 and MCE SCO, *Response to Stakeholder Consultation on Exposure Draft of the National Electricity Rules for Distribution Revenue and Pricing*, p 85.

<sup>5</sup> The transitional arrangements for NSW and ACT commenced at the same time as the revised Chapter 6.

## 1.3 Interactions with other processes

### 1.3.1 AER Review of Parameter Values

As explained above, the parameter values to be applied for transmission and distribution revenue determinations are subject to a five yearly review to be conducted by the AER. The AER has now commenced this review, which must be completed by 31 March 2009.<sup>6</sup>

Under the Rules<sup>7</sup>, the AER may review the values of, and methodologies, used to calculate the following matters:

- the nominal risk free rate;
- the equity beta;
- the market risk premium;
- the maturity period and bond rates;
- credit rating level;
- the ratio of the market value of debt to the market value of equity and debt; and
- the assumed utilisation of imputation credits (gamma).

The Rules specify the framework under which the AER must conduct the reviews. The AER must have regard to:

- the need for the rate of return to be a forward looking rate that is commensurate with prevailing conditions in the market for funds and the risks involved in providing the prescribed transmission (or distribution) services;
- the need for the market value of debt to reflect the current cost of borrowings for comparable debt; and
- the need for parameter values to be based on a benchmark efficient network provider.

Where the parameter values cannot be determined with certainty, the AER must have regard to:

- the need to achieve an outcome that is consistent with the national electricity objective (NEO); and

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<sup>6</sup> The AER released an Issues Paper, "Review of the weighted average cost of capital (WACC) parameters for electricity transmission and distribution", on 6 August 2008. The AER intends to release a draft statement (transmission) and draft statement of regulatory intent (distribution) on the WACC parameters on 9 December 2008.

<sup>7</sup> See Clause 6.5.4 for distribution and Clauses 6A.6.2 (f) to (j) and Clauses 6A.6.4.(b) to (f) for transmission.

- the need for persuasive evidence before adopting a value that differs from the value that has previously been adopted for it.

As a consequence of the review, the AER may adopt revised values, methodologies or credit rating levels. For transmission determinations, the Rules only allow the AER to apply the revised values to a determination where the revenue proposal has been submitted to the AER after the completion of the review.<sup>8</sup> For distribution, no revenue determination will be commenced until after the completion of the AER review of parameters except for the NSW and ACT distribution revenue determinations. As noted above those determinations are treated separately in transitional Chapter 6 of the Rules.<sup>9</sup>

### **1.3.2 Transmission and Distribution Determinations under Consideration**

The EUAA proposes that the amended parameter values are applied in the revenue determinations currently under consideration by the AER.

Both Transgrid and Transend provided their revenue proposals on 31 May 2008, and the AER must publish its final decisions by 30 April 2009. These transmission determinations will apply from 1 July 2009 to 30 June 2014.

The NSW and ACT distribution businesses submitted their regulatory proposals on 2 June 2009.<sup>10</sup> Likewise, the AER must publish its final decisions on these determinations by 30 April 2009. The determinations will apply from 1 July 2009 to 30 June 2014.

## **1.4 Problems to be addressed by the Rule Change**

The EUAA considers that the current parameter values of equity beta and gamma do not reflect the best estimate of the true value of these parameters. The EUAA believes that the current values of equity beta and gamma (if applied) are likely to result in:

- over-recovery of revenue as compared with the relevant economic cost by a network service provider in respect of a revenue determination made prior to the conclusion of the parameter reviews by the AER. The over-recovery will occur for the entire regulatory control period in respect of which a revenue determination operates (typically five years); and
- prices for electricity in the National Electricity Market (NEM) being higher than the efficient level for the duration of regulatory control periods in respect of which such revenue determinations operate (due to inefficiently high prices for services provided by network service providers).

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<sup>8</sup> Clause 6A. 6.2 (h).

<sup>9</sup> Chapter 11, Division 2 Clause 11.15.

<sup>10</sup> The determination for EnergyAustralia will be a joint determination covering both transmission and distribution.

The EUAA purports that its Rule proposal to change these values will reduce the cost of electricity and the resulting economic distortions from inefficient prices and therefore achieves the NEO. The EUAA argues that applying an equity beta of 0.75 instead of the current 1 would save more than \$100m annually.

The EUAA considers that the current values are not efficient because:

- supporting studies argue that current values are not consistent with the benchmark efficient network service provider;<sup>11</sup>
- in the final determination for the Transmission Revenue Rule, the EUAA considers that the Commission did not attempt to estimate the true value for equity beta and gamma and took a conservative approach to these values;
- that in its ruling on Telstra, the Australian Competition Tribunal did not accept the argument that because of asymmetric risks, the estimation of WACC should be biased upwards;<sup>12</sup> and
- the Essential Services Commission, Victoria (ESC) has published further information on gamma, which supports a different value.<sup>13</sup>

## 1.5 Proponent's proposed solution

The EUAA considers that that the current parameters are delivering allowed returns well above those that should apply to regulated networks considering the risk that those networks face. To address the identified problem, the EUAA proposes that:

- the value of equity beta change from 1.0 to 0.75, and
- the value of imputation credits gamma change from 0.5 to 1.0.

The EUAA argues that there are strong economic efficiency and wealth distribution reasons for ensuring that the allowed returns for network businesses reflect contemporary assessments. They consider that the solution would:

- be straightforward to implement with minimal administrative costs; and
- maintain the flexibility in the Rules for the AER to conduct periodic reassessments of the values of certain parameters.

In its submission to the first round consultation, the EUAA raises an alternative solution. Instead of the prescribed parameter values being amended through a Rule change, the Commission could instead amend the Rules so that the AER is required

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<sup>11</sup> T Brailsford et al, *A Re-examination of the historical equity risk premium in Australia*, April 2007; M Lally, *The Relationship between Franking Credits and the Market Risk Premium: A comment*.

<sup>12</sup> Telstra Corporation Ltd (No 3) [2007] ACompT 3, M Lally, *Review of Parameters in the National Electricity Rules*, September 2007.

<sup>13</sup> Allen Consulting Group, *Empirical Evidence on Proxy Beta Values for Regulated Gas Distribution Activities – Report to the Essential Services Commission of Victoria*, June 2007.

to incorporate the outcome of its parameter review into the revenue determinations being considered.<sup>14</sup> The Customer Advocacy Group submission raised the same suggestion.<sup>15</sup>

The AER is due to complete its parameter review by the end of March 2009 and will release its final decisions for the current determinations in April 2009. These determinations will take effect from 1 July 2009.

The EUAA does not believe that applying amended values to the current determination processes would pose a problem for the following reasons:

- parameters used to establish the WACC for regulated businesses such as the equity beta and gamma, should be set using the most contemporary information available and should be based on parameters applying at the time of the making of the final determination;
- regulated businesses already face uncertainty about the bond rate, inflation rates and the risk-free rate to be used in revenue resets and are required to accommodate this uncertainty; and
- regulated businesses are required to make revenue applications on the basis that those applications represent a prudent and efficient level of operating and capital expenditure, independent of what the WACC is or might be.

The EUAA also notes that there is a risk that the current parameter values continue after the AER's parameters review. It notes that the Rules state that, where the values cannot be determined with certainty, there is a need for persuasive evidence before the AER could adopt an alternative value. The EUAA considers that the AER might be more inclined to adopt the current parameter values when it makes its decision on the parameters review.<sup>16</sup>

## 1.6 First Round Consultation

On 22 May 2008, the Commission published a notice under section 95 of the National Electricity Law (NEL) advising of its intention to commence the Rule change process and initial consultation on this Rule proposal.

The closing date for submissions on the Rule Change Proposal was 20 June 2008. The Commission received 11 submissions from the following parties:

- Energex

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<sup>14</sup> EUAA, *Submission to the consultation on the EUAA's Rule Change Application*, 23 June 2008, p.2.

<sup>15</sup> Consumer Action Law Centre, Consumer Utilities Advocacy Centre, and Public Interest Advocacy Centre joint submission to Rule Change proposal from EUAA on WACC parameter Values, Equity Beta and Gamma, 20 June 2008, p.2.

<sup>16</sup> EUAA, *Request for a Rule Change, Value of Equity Beta and Gamma prescribed in the National Electricity Rules*, 21 April 2008, p.18 point 85 – 87.

- Australian Pipeline Industry Association (APIA)
- Integral Energy
- SP AusNet
- EnergyAustralia
- ActewAGL
- Grid Australia
- Energy Networks Association (ENA)
- Joint submission from the Consumer Action Law Centre, Consumer Utilities Advocacy Centre and Public Interest Advocacy Centre (Consumer Advocacy Group)
- Joint submission from Powercor, ETSA Utilities and Citipower
- EUAA

Nine submissions came from infrastructure investors, owners or related bodies, all of which argued that the proposed rule should be rejected. These submissions consider that the Rule proposal should not be accepted due to its inconsistency with the current market governance arrangements, its effects on the scheduled AER rate of return parameters review and its negative impact on regulatory certainty. Both the ENA and APIA consider that the proposal could have reasonably be considered to be misconceived. Only the Consumer Advocacy Group submission supports the Rule proposal.

In addition, no public hearing has been held on this Rule change proposal.

## **1.7 Second Round Consultation on the Draft Rule Determination**

On 28 August 2008, the Commission published its draft Rule determination in accordance with section 99 of the NEL and second round consultation closed on 10 October 2008. The draft Rule determination was to not accept the EUAA Rule change proposal.

Submissions were received from ENA, Integral Energy, Grid Australia, Energex and EnergyAustralia, all of which were strongly supportive of the Commission's draft Rule determination. They agreed that amending the parameters values would significantly increase uncertainty and that the existing AER Parameter Review is the most appropriate process to determine the best estimates for revenue determination parameter values.

## **2 Rule Determination**

### **2.1 Commission's final determination**

In accordance with section 102 of the NEL, the Commission has determined not to make the Rule change originally proposed by the EUAA or the alternative change submitted during first round consultation. This Rule determination sets out the reasons of the Commission as to why it should not make the Rule proposed by the EUAA.

### **2.2 Commission's considerations**

In making its Rule determination not to make the Rule Change, the Commission has taken into account:

1. the Commission's powers under the NEL to make the Rule;
2. the proponent's Rule change proposal and proposed Rule;
3. the alternative proposal raised by both the proponent and customer advocacy group;
4. submissions received;
5. the revenue and pricing principles set out in the NEL; and
6. the Commission's analysis as to the ways in which the proposed Rule will or is likely to contribute to the promotion of the NEO, so that it would satisfy the statutory Rule making test.

The Commission considers that neither the EUAA proposal nor the alternative raised in its submission would contribute to the achievement of the NEO.

There are compelling reasons against amending the parameters values after the determination process has commenced. It would increase the uncertainty and regulatory risks face by the network service providers and would not promote efficient investment. The network businesses might seek to reflect the increased risk in a higher rate of return allowance.

The network service providers have already submitted their proposals (and the AER is conducting its assessment) on the expectation that the existing values for gamma and equity beta apply. To amend the parameter values at this stage would not reflect good regulatory practice and undermine investor confidence in the regulatory framework.

The parameters review, to be conducted every five years by the AER, is the most appropriate process to determine the best estimate for the revenue determination parameter values. The Rules specify parameter values to provide certainty and a stable investment climate for those determinations which commence before the

completion of the first AER parameters review. The MCE concurred with this when setting the determination framework for distribution network service providers and the transitional arrangements for NSW and ACT distribution businesses.

To accept the Rule change proposal would overturn the MCE policy decision to establish transitional Rules for the ACT and NSW distribution determinations so that these reviews could be conducted with as much certainty as possible under the new arrangements within the extremely tight timeframes.

The Rule change request would also change the reference point for the AER parameters review. In assessing the appropriate parameter values, the AER must have regard to the need for persuasive evidence to justify any change to the current values where the parameter values cannot be determined with certainty. However the Commission considers the EUAA has not provided compelling evidence to accept its revised values and has not fully considered all the implications of amending the equity beta and gamma values on the other parameters. Therefore a full assessment of the appropriate values would be required for this aspect of the Rule change and the Commission considers that it would be neither appropriate nor efficient for the AEMC to conduct a concurrent review of the parameters.

In addition, the transitional arrangements applying to the NSW and ACT distribution business curtails the AER's discretion to amended components of a distributor's building block proposal, if the proposal complies with the Rules.

Therefore the proposal, and the alternative raised in submissions, are not consistent with the revenue and pricing principles in the NEL and would not promote the NEO.

Chapter 3 of this Rule determination sets out the Commission's assessment of the proposal.

### **3 Commission's assessment against the NEL Criteria**

This Chapter sets out the Commission's assessment of the Rule proposal and the alternative proposal submitted during first round consultation, and its reasons for its final determination not to make the Rule change requested by the EUAA.

#### **3.1 Methodology**

The NEO is the basis of assessment under the Rule making test and is founded on the concepts of economic efficiency (including productive, allocative and dynamic dimensions of efficiency), good regulatory practice (which refers to the means by which regulatory arrangements are designed and operated) as well as reliability, safety and security priorities. In making its assessment on this Rule proposal, the Commission must also take into account the revenue and pricing principles set out in the NEL.

Assessing any Rule change request against the NEL criteria is based upon a comparison with the appropriate counterfactual. In this case, the relevant counterfactual is the continuation of the present arrangements where AER applies the existing parameter values for equity beta and gamma to the current revenue determinations and undertakes its parameter review to determine the appropriate values to apply for future determinations.

The issue raised by the Rule proposal is not specifically whether the current parameter values for the equity beta and gamma reflect the current best economic estimate. Instead the assessment is whether the NEO would be better achieved through amending the Rules to allow the AER to apply a revised value for these parameters when making the current revenue determinations, compared to the counterfactual. Those revised values would come via the Rule change process, as originally proposed by EUAA, or based on the outcome of the AER review of parameter values.

Therefore the effects of allowing the current values for equity beta and gamma to be revised need to be assessed in terms of efficiency, incentives facing the business, investment certainty and good regulatory practice.

#### **3.2 Commission's power to make the Rule**

The Commission is satisfied that the Rule as proposed falls within the subject matter for which the Commission may make Rules, as set out in section 34 of the NEL and schedule 1 to the NEL.

The proposed Rule is within the matters set out in s.34 and schedule 1, as it relates to:

- the activities of persons participating in the NEM or involved in the operation of the NEM (section 34 (1) (a) (iii) of the NEL); and
- the regulation governing transmission and distribution revenue and pricing (items 15-26 and 25-26H, Schedule 1).

The Rule proposal relates to the activities of DNSPs, TNSPs and market participants operating in the NEM. Specifically, the subject matter of the Rule proposal seeks to change the values of equity beta and utilisation of imputation credits (gamma) which, in the view of the EUAA, would correct the revenue of network service providers and improve the efficiency of electricity pricing.

### **3.3 Rule Making test and the National Electricity Objective**

The NEO is the basis of assessment under the Rule making test and is set out in section 7 of the NEL:

“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.”

The Rule making test states:

“(1) 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 national electricity objective.

(2) For the purposes of subsection (1), the AEMC may give such weight to any aspect of the national electricity objective as it considers appropriate in all circumstances having regard to any relevant MCE statement of policy principles”.

#### **3.3.1 NEL revenue and pricing principles**

As the matters raised by this Rule change proposal relate to the regulation framework governing transmission and distribution revenue and pricing, under section 88B, the Commission must also take into account the revenue and pricing principles, set out in section 7A of the NEL.

The revenue and pricing principles relate to providing a reasonable opportunity to recover efficient costs; effective incentives to promote efficiency, and to ensure that the prices should allow for a return commensurate with the regulatory and commercial risks involved in providing the service. Also, the revenue and pricing principles state that regard should be had to the economic costs and risks of the potential for over or under investment or for under or over utilisation of the network.

### **3.4 Proponent’s reasoning**

The EUAA is of the view that the Rule change would contribute to the NEO by:

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- providing parameter values that are closer to their true values for the AER to use in making revenue determinations; and
- ensuring that prices for electricity services are set at an efficient level, such that economic activity is not distorted by service providers earning revenues in excess of their economic costs.

If the price of services provided by network service providers is above the efficient level this may create various distortions in the economy such as:

- household consumers of electricity will face prices above the efficient level and are therefore likely to consume less electricity and/or consume less goods or services other than electricity, than they would if prices were at the efficient level;
- business consumers of electricity will face input costs above the efficient level, and are therefore likely to price their products at a level higher (if they can do so), face a loss of competitive position vis-à-vis international competitors and/or set output at a level lower, than they would if prices were at the efficient level;
- incentives for inefficient investment in generation plants to bypass transmission; and
- incentives for network service providers to undertake inefficient investment in network infrastructure.

### **3.5 Commission's assessment**

There are two possible effects of this Rule proposal that must be assessed:

- whether amended equity beta and gamma values should be used for the revenue determinations currently under consideration; and
- whether the current equity beta and gamma values should be changed in order to amend the reference point for the AER parameters review.

### **3.6 Amending the Equity Beta and Gamma values for the determination currently under consideration**

This section sets out the Commission's assessment of whether it is appropriate to amend parameter values after the revenue determination process has commenced. As explained in chapter 1, the equity beta and gamma are components of the post tax revenue model and are used to calculate the annual revenue requirement as specified in the Rules. The actual value of these parameters will directly influence the allowed revenue and prices set by the AER in its determinations. The businesses have already submitted their revenue proposals and regulatory proposals (collectively referred to in this draft Rule determination as 'proposals'). Further, the AER is currently undertaking consideration of these proposals based on the current parameter values.

### **3.6.1 Need to promote regulatory certainty**

The Commission considers that amending these parameter values after revenue determination has commenced would decrease regulatory certainty, and therefore, undermine investor confidence in the regulatory framework. It would be inappropriate regulatory practice to change the Rules after the process has started.

The network service providers have submitted their proposals on the expectation that the existing parameter values will be applied. Amending the Rules so that these values are changed would significantly alter the basis and assumptions of the current determination process.

Also allowing the values to be amended may set a precedent that the framework for making revenue determinations could be changed more generally after the process has started. Market participants could seek to amend parameters on an ad hoc basis through the general Rule change process on the basis of what they considered to be changed circumstances. This would significantly undermine the current regulatory revenue framework and would result in an increase in the regulatory risks faced by network service providers. The material increase in regulatory risk could be reflected in higher cost of capital allowances.

These points were recognised in the submissions to this Rule proposal. Participants consider that allowing retrospective amendments would create uncertainty and be contrary to reasonable regulatory practice. It would be inconsistent with the principle of the promoting efficient investment enshrined in the NEO.

### **3.6.2 MCE Decision on NSW and ACT transitional arrangements**

Another consideration raised by market participants against this Rule proposal is that it would be inconsistent with the MCE policy decision on the ACT and NSW distribution transitional arrangements. Participants commented that the MCE approved the transitional Rules for ACT and NSW to ensure that the forthcoming reviews could be conducted with as much certainty as possible under the new regime within tight timeframes. The MCE considered that there was insufficient time to conduct a comprehensive review of the issues.

Integral Energy stated that any change to these arrangements would be contrary to the MCE policy decision to provide certainty and ensure an appropriate rate of return for the 2009 to 2014 regulatory control period. The ENA considered that the transitional arrangements were extensively consulted on and it would not be appropriate for the AEMC to supplant the MCE decision. The ENA also argued that the transitional arrangements are a key component of the overall market governance agreed to by the MCE and advised that changing these arrangements would be an unprecedented extension of the function and scope of the Rule change process and would frustrate the MCE policy objective.

The Commission considers that permitting the equity beta and gamma values to be re-opened for these revenue determination processes, would raise the potential for other changes to be proposed which would alter the transitional Rules the AER must

apply for the NSW and ACT determinations despite the regulatory reviews already being commenced.

### **3.6.3 Limited Discretion for the AER in making NSW and ACT distribution determinations**

In the particular case of the revenue determination processes for the ACT and NSW distribution businesses, the AER's discretion is particularly limited. The construction of clause 6.12.3 (d) in transitional Chapter 6 gives the AER no discretion at all to amend the basis on which the calculations in the proposals are made, if the AER is satisfied that those amounts have been properly calculated using the post tax revenue model on the basis of amounts calculated, determined or forecast in accordance with Part C of transitional Chapter 6. Therefore, even if the parameter values were changed, the AER would have no discretion to apply them.

### **3.6.4 Application to existing processes**

Under Section 104 of the NEL a Rule change can commence operation no earlier than the day it is notified in the South Australian Government Gazette. Further, clause 33 of schedule 2 to the NEL states:

“ ...the repeal, amendment or expiry of a provision of this Law, the Regulations or the Rules does not.....affect the previous operation of the provision or anything suffered, done or begun under the provision”

On one interpretation of these provisions, a Rule change may not apply to existing processes. On this basis the AER would not be able to apply amended parameter values because the network service providers have already submitted their proposals and the revenue determination processes have commenced.

### **3.6.5 Current arrangements remain appropriate**

At the time of making the Transmission Revenue Rule the Commission considered that it was appropriate for the parameter values to be prescribed in the Rules and for those values to be applied to any determination which had commenced before the AER completed the first parameters review. The reasons given for this were providing certainty, a stable investment climate and a level playing field. The Commission considered that the five yearly AER parameters review was the best process to reassess the validity of the parameters values.

The timing of the first parameter review was to ensure that all TNSPs, either via transitional arrangements or Chapter 6A provisions, would be afforded the same treatment in the next revenue determination with regard to these parameters.<sup>17</sup>

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<sup>17</sup> The Commission took the view that all transmission NSPs should be afforded the same parameters for a single regulatory control period. That is, no TNSP should be disadvantaged or advantaged by the timing of the WACC review. Refer to AEMC 2006, *National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, Rule Determination, 16 November 2006, Sydney, p 85.

Accepting the Rule change proposed by the EUAA would result in inconsistent treatment for Transgrid and Transend.

The MCE also agreed that the AER parameters review process was the most appropriate approach for determining the parameter values in its decision on the Distribution Rule. In addition, all of the submissions agreed that the AER parameters review was the appropriate forum to review the current values.

The current arrangements, where the parameter values are specified in the Rules until amended under the five yearly AER review process, (and that any amended values can only apply to revenue determination processes which have yet to be commenced) promotes investment certainty and reflects good regulatory practice. The Commission considers that it is neither appropriate, nor would it be an efficient process, if the parameter values were constantly being reviewed in light of any changing circumstances.

### **3.7 Amending the reference value for the AER Parameters Review**

Through amending the current values, the Rule change proposal would also have the effect of changing the reference point for the AER's rate of return parameters review. In conducting the parameter review, where the parameter values cannot be determined with certainty, the AER must have regard to the need for persuasive evidence before adopting a value for that parameter than differs from the value that has previously been adopted for it.<sup>18</sup> The EUAA considers that if this Rule proposal was not made, there is a risk that the AER may be more inclined to adopt the current values in the decisions for its parameters review.

This section sets out the Commission's reasoning as to whether the current equity beta and gamma should be changed in order to amend the reference points for the AER's parameters review.

#### **3.7.1 Failure to allow for implications to other parameters**

The EUAA has proposed that only the values of equity beta and gamma are amended for the current revenue determination processes. As noted in chapter 1, the equity and gamma are only two of the seven parameters for the post-tax revenue model that are subject to the AER's review process. This raises the question of whether it is appropriate to evaluate only these two values, in isolation from the other parameters.

There is a clear link between the gamma parameter value and the market risk premium. The concepts and methodology used in estimating these two parameters need to be consistent. In its Rule proposal, the EUAA recognises this link but argues that increasing the value of gamma from 0.5 to 1 would have the effect of marginally increasing the market risk premium by between 0.12% to 0.28%. The EUAA

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<sup>18</sup> Clauses 6A.6..2 (j)(4)(ii), 6A.6.4 (e)(2) and clause 6.5.4 (e)(4) of the NER.

dismisses the need to also reconsider the value of the market risk premium on the grounds that the current value is estimated to the nearest 1%.<sup>19</sup>

A number of submissions argued against this. Grid Australia considers that the EUAA argument for not also considering the market risk premium as underlining the ad hoc and partial nature of its Rule change request and that the EUAA has offered no reason as to why the market risk premium should be estimated with apparently less precision than the equity beta.<sup>20</sup> The ENA comments that the Rule change proposal would prevent the AER from being able to examine the cross-linkages between the equity beta and gamma values and other parameters which fall outside the scope of the EUAA Rule change proposal.

The Commission also considers that it would be inappropriate to consider only two of the seven parameters in isolation. The relationship between the gamma value and the historical measurement of the market risk premium has been an issue in previous regulatory cost of capital determinations and will be examined as part of the AER parameters review. Therefore the Commission remains of the view that the all required parameters need to be reviewed together and that this should be undertaken by the AER, as the current arrangements envisage.

### **3.7.2 Insufficient evidence to support the proposed amended values**

The Commission recognises that the current values prescribed in the Rules for the equity beta and gamma may not reflect the best economic estimate and that some of the benefits raised by EUAA could be valid.

However it does not consider that the EUAA has provided compelling evidence to support its proposed amended values. Further the Commission does not accept the EUAA's argument that the current parameter values have been artificially skewed upwards. The Commission's decision on the current parameter values was based upon the current best practice of Australian regulators and what was generally accepted. There is no inflated bias in the current parameter values.

### **3.7.3 Inefficient duplication of processes**

To change the reference values for AER parameters review, the Commission considers a full assessment of the appropriate values for all the parameters specified in the Rules would be needed. As explained above, the EUAA has neither provided sufficient evidence nor fully considered all the implications to justify the proposed new values.

A number of submissions raise concerns about the AEMC conducting a concurrent review of the parameters at the same time the AER is undertaking its parameters review. EnergyAustralia considers that if the AEMC accepted the proposed change then it would presuppose and ultimately prejudice the AER's review. Likewise, the

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<sup>19</sup> EUAA, *Request for a Rule Change, Values of Equity Beta and Gamma*, 21 April 2008.

<sup>20</sup> Grid Australia, *Response to EUAA Rule Change Proposal, Equity beta and gamma values*, 20 June 08.

APIA states that the Rule proposal could have a negative impact on the procedural independence and fairness of the AER parameters review. The ENA is of the view that it would foster wasteful duplication.

Energex considers that any rule change process may not only conflict with the AER review but is unlikely to be completed in sufficient time to be applied ahead of the AER process. EnergyAustralia and Grid Australia consider that it would be more practical and logical for such issues to be considered under the AER parameters review, noting that this was the AEMC's intention when building in the review mechanism into the Rules.

The Commission agrees with these issues and considers that a concurrent comprehensive review of the parameter values conducted by the Commission would be a wasteful duplication of resources, would have implications for the conduct of the AER parameters review and would be unlikely to be completed in sufficient time.

## A EUAA Proposed Rule Amendments

EUAA proposes to amend the Rules as follows:

1. In **rule 6A.6.2(b)** replace:

'the equity beta, which is deemed to be 1.0'

with

'the equity beta, which is deemed to be 0.75'

2. In **rule 6.5.2(b) of Appendix 1** replace:

'(the equity beta) is deemed to be 1.0'

with

'(the equity beta) is deemed to be 0.75'.

3. In **rule 6A.6.4(a)** replace:

'the assumed utilisation of imputation credits, which is deemed to be 0.5'

with

'the assumed utilisation of imputation credits, which is deemed to be 1.0'

4. In **rule 6.5.3 of Appendix 1** to the Rules replace:

'(the assumed utilisation of imputation credits) is deemed to be 0.5'

with

'(the assumed utilisation of imputation credits) is deemed to be 1.0'