

Ref: JD/RC

Date: 20 January 2012

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Dear Mr Hoang

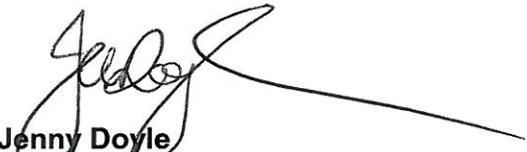
**SUBMISSION ON THE OPTIMISATION OF REGULATORY ASSET BASE AND USE OF FULLY DEPRECIATED ASSETS CONSULTATION PAPER**

Ergon Energy Corporation Limited (Ergon Energy) welcomes the opportunity to provide a submission to the Australian Energy Market Commission on its *Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets Consultation Paper*.

Ergon Energy does not support the Major Energy Users' proposal to introduce periodic optimisation of the Regulatory Asset Base. While Ergon Energy agrees that optimisation may eliminate redundant assets, over-design of assets and excess capacity in the network, the increase in administrative burden outweighs the benefits of the proposed Rule.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact me on (07) 4092 9813.

Yours sincerely

  
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Encl: Ergon Energy's submission.

# **Ergon Energy Corporation Limited**

**Optimisation of Regulatory Asset Base  
and Use of Fully Depreciated Assets**

**Consultation Paper**

**Australian Energy Market Commission**

**20 January 2012**





# **Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets Consultation Paper Australian Energy Market Commission 20 January 2012**

This submission, which is available for publication, is made by:

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## 1. INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy), in its capacity as a Distribution Network Service Provider (DNSP) in Queensland, welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) on its *Optimisation of Regulatory Asset Base and Use of Fully Depreciated Assets Consultation Paper* (Consultation Paper).

Ergon Energy does not support the Major Energy Users' (MEU) proposal to introduce periodic optimisation of the Regulatory Asset Base (RAB). While Ergon Energy agrees that optimisation may eliminate redundant assets, over-design of assets and excess capacity in the network, the increase in administrative burden outweighs the benefits of the proposed Rule. Past asset valuations by the Queensland Competition Authority (QCA) have resulted in minimal optimisation of Ergon Energy's RAB. Further, Ergon Energy believes that the proposed Rule change will create new disincentives to invest by increasing uncertainty and inefficiencies.

Ergon Energy is a member of the Energy Networks Association (ENA), the peak national body for Australia's energy networks. The ENA has prepared a submission addressing each of the questions posed by the AEMC and other issues relating to the MEU's proposal. Ergon Energy is supportive of the arguments contained in their submission. In addition to the issues raised by the ENA, Ergon Energy provides further comments on a number of areas of concern.

Ergon Energy has structured this submission into the following sections:

- Section 2 details general concerns relating to the MEU's proposed Rule change; and
- Section 3 outlines our detailed responses, in tabular form, to the consultation questions posed by the AEMC.

Ergon Energy is available to discuss this submission or provide further detail regarding the issues raised, should the AEMC require.



## 2. SPECIFIC COMMENTS

This section details Ergon Energy's general concerns relating to the MEU's proposed Rule change.

### 2.1 Optimisation Principles

Ergon Energy does not support periodic optimisation being undertaken by the Australian Energy Regulator (AER) due to the administrative burden this places on NSPs. However, if the proposed Rule change is adopted, Ergon Energy considers a set of optimisation principles should be developed and agreed upon with stakeholders. The optimisation principles developed by Sinclair Knight Merz (SKM) in undertaking asset valuations of Queensland distributors may provide a reasonable starting point.<sup>1</sup>

Specifically, Ergon Energy believes the following issues should be taken into consideration when developing optimisation principles:

- Any optimisation process should take account of future demand forecasts in the planning period, together with strategic development plans for the area. Under an 'economies of scale and scope' argument, there will be economic benefits from DNSPs installing assets that meet current capacity as well as forecast growth in customer demand over the next decade or so. While this approach causes a short-term excess in capacity, it minimises the long-term cost of providing services and is therefore in the best interests of customers.
- The inherent nature of forecasting means that any forecast growth in customer demand is likely to contain errors. Ergon Energy acknowledges that changes arising from the *Review of National Framework for Electricity Distribution Network Planning and Expansion* should minimise the extent of this problem. However, more significant forecast errors may occur due to unforeseeable changes in government policy or economic conditions. In these situations neither the DNSP nor their customers are likely to have control over the creation of excess capacity.
- In principle, assets which are not currently being used, and which are not envisaged to be used in the future, should be optimised out of the asset base. An exception to this is asset stranding. Queensland DNSPs have an obligation under section 40A(2) of the *Electricity Act 1994* to connect all customers to the network. As such, DNSPs cannot refuse to connect because they believe the customer (or future customers) will not require the connection for the life of the asset. As asset stranding is beyond the control of the DNSP, this risk should be born collectively by all customers.
- Assets should be able to be optimised back into the RAB at a later date if they start to be efficiently used (i.e. negative optimisation).
- Optimisation should take account of regulatory and legislative requirements relating to quality, reliability, planning criteria and security of supply. Such factors should be treated as constraints within which optimisation is to occur and should not be optimised down or out by one factor alone. Ergon Energy currently has assets which were optimised down or out at the last valuation according to planning criteria, yet were required and used to maintain current levels of service quality. For example, the 66kV line from Calen to Pinnacle (a line previously optimised out of the RAB), has been used to maintain a more reliable supply in the region than there would otherwise be.

### 2.2 Fully Depreciated Assets

Ergon Energy disagrees with the MEU's contention that viable assets are replaced once their depreciated value reaches zero and notes that the MEU does not offer any substantiated evidence that businesses face inappropriate incentives to do so. In Ergon Energy's case, asset replacement occurs due to system constraints (e.g. reliability) or economic considerations (e.g. excessive maintenance costs or limited availability of spare parts). Significant asset replacement occurs via an investment process which requires

<sup>1</sup> Refer to SKM's paper, *Valuation of Electricity Distribution Assets: Optimisation Issues*, contained in SKM (2004), *Queensland Competition Authority Valuation of Queensland Distributors: Ergon Energy Regulatory Asset Valuation (Reference Date – 31 December 2003)*, Final Report, 18 November 2004.



the production and review of a business case prior to the decision being made. This is consistent with a firm in a competitive environment.

It should also be acknowledged that firms operating in competitive environments have opportunities that are not available to regulated NSPs. As noted by the ENA, they can:

- Revalue assets throughout their lives;
- Earn significantly higher returns which exceed the original cost of financing successful investments;
- Withdraw capital from the delivery of services where cost of financing is not met; and
- Front-load depreciation to reduce the level of commercial risk from some investments.

On the other hand, NSPs typically undertake real straight line depreciation on assets, with limited opportunity to redeploy capital to adjust to market conditions.

Ergon Energy suggests that inappropriate investments, such as over-sized assets and replacement of viable assets for revenue improvement reasons, could be effectively handled by auditing NSPs' policies rather than through post investment optimisation.



### 3. TABLE OF DETAILED COMMENTS

Question(s)	Ergon Energy Response
<i>Impact on investment in services for the benefit of customers</i>	
<p>1. What would the impact on investment be with the rule change requests? Would this have a positive or negative impact?</p>	<p>Ergon Energy believes the proposed Rule change would have a negative impact on investment through uncertainty and inefficiency.</p> <p><i>Optimisation</i></p> <p>All things being equal, investment risk would be increased as the regulated return on the full investment is no longer guaranteed. This would lead to an increase in the cost of capital as a higher return would be demanded to offset this risk. Inefficient investment would be promoted as DNSPs would be encouraged to build only for current demand, rather than building for the future (i.e. allowing excess capacity for growth). This means that instead of building an efficient asset with a long life, repeated and more costly short-term ‘fixes’ would prevail. This is because they provide a more certain return on investment even though they are less efficient and more expensive in the long run.</p> <p><i>Replacement</i></p> <p>As discussed in Section 2.2 above, Ergon Energy replaces ageing assets on a needs basis, either due to system constraints or economic considerations. The proposed Rule change would encourage maintaining inefficient assets, resulting in additional maintenance costs and negative impacts on customers through reduced reliability.</p>
<p>2. Is it appropriate for the AER to determine and assess the age and condition of a regulated network business’s asset?</p>	<p>Ergon Energy does not believe it is appropriate for the AER to determine and assess the age and condition of our assets. As highlighted in the Consultation Paper, this topic was previously considered and rejected by the AEMC during the 2006 Rule determination process on the <i>Economic Regulation of Transmission Services</i>. The AEMC stated that:</p> <p><i>“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.”<sup>2</sup></i></p>

<sup>2</sup> AEMC (2006), *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, p98.



	<p>Ergon Energy supports the AEMC's earlier position. Further, the AER does not have the expertise, resources or the required depth of knowledge to independently determine and assess the age and condition of a particular asset.</p>
<p><i>Regulatory process</i></p>	
<p>3. Does the increase in administrative burden outweigh the benefits of the proposed rule?</p>	<p>As noted above, Ergon Energy agrees that optimisation may be beneficial in that it may eliminate redundant assets, over-design of assets and excess capacity in the network. However, we believe that the increase in administrative burden outweighs the benefits of the proposed Rule.</p> <p>The QCA previously conducted full asset valuations in 1996–97, 2000–01 and 2004–05. These valuations required the application of the Optimised Depreciated Replacement Cost (ODRC), using a 'brownfields' (i.e. assumes construction occurs around all existing infrastructure and development) and building blocks approach. The asset valuations resulted in minimal optimisation for Ergon Energy. In 1996, the valuation resulted in a 2.2 per cent reduction and a 0.4 per cent reduction in 1999.<sup>3</sup> In its 2004 Final Report,<sup>4</sup> SKM states:</p> <p style="text-align: center;"><i>“Application of the optimisation process has resulted in an increase in the value of the optimisation from \$11M in 1999 to \$13M in 2003. The heavy utilisation of the distribution system, which has been identified in recent studies, presents few assets that may be optimised out of the network.”</i></p> <p>SKM found that the distribution network, to a large extent, is operated as a series of radial feeders. As such, this configuration offers limited scope for optimisation. Further, the low level of optimisation is consistent with high levels of utilisation recorded for the Ergon Energy network.<sup>5</sup></p> <p>Ergon Energy notes and agrees with the AEMC's earlier view that the periodic optimisation approach:</p> <ul style="list-style-type: none"> <li>• Is information intensive;</li> <li>• Is likely to remain highly subjective;</li> </ul>

<sup>3</sup> SKM (2000), *Asset Valuation Review*, Final Report, 9 November 2000, p10.

<sup>4</sup> SKM (2004), *Queensland Competition Authority Valuation of Queensland Distributors: Ergon Energy Regulatory Asset Valuation (Reference Date – 31 December 2003)*, Final Report, 18 November 2004, p2.

<sup>5</sup> *Ibid* 4, p36.



	<ul style="list-style-type: none"> <li>• Provides the regulator (the AER) with significant discretionary powers; and</li> <li>• Creates a high degree of uncertainty for investment.<sup>6</sup></li> </ul> <p>Additionally, asset valuation and optimisation is time consuming and requires substantial resources, including skilled staff. For example, identifying and determining a more appropriate value for over-sized assets will require skilled AER staff to develop and directly control the process.</p> <p>Ergon Energy is particularly concerned with the administrative burden of extracting high quality data and asset values, and manually determining the optimisation value. Significant work will need to be undertaken to develop extraction routines from our core systems to generate building blocks which can be used in the optimisation process and to reconcile data across our systems.</p>
<i>Adequacy of the capital redundancy gas provision</i>	
<p>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?</p>	<p>Nil comment.</p>
<i>Alternative options to the proposed rule</i>	
<p>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?</p>	<p>Ergon Energy considers that the focus should be on current Asset Management regimes. Asset replacement decisions are generally operational decisions based on Asset Management policies relating to maintenance, planning and performance requirements. Assets are generally left in service as long as they have a useful life (and often beyond that). The financial complement of the Asset Management decision is based on replacement cost versus cost of ownership.</p> <p>To effectively monitor replacement of assets, the AER should therefore satisfy itself that asset replacement decisions are based on sound asset management principles. They should not be overly focused on prescriptive financial criteria that generally do not drive decision-making. Ergon Energy believes this approach is more suited to DNSPs, where assets are numerous and managed as an asset class rather than as individual assets.</p>
<p>6. The proposal rule places a requirement that would disincentivise expenditure for replacement of a fully or partially depreciated asset from being included in the RAB.</p>	<p>Please refer to our comments under Section 2.2 above.</p>

<sup>6</sup> AEMC (2006), *Draft Rule Determination – Economic Regulation of Transmission Services*, 26 July 2006, p75.



<p>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?</p>	
<p>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?</p>	<p>Ergon Energy does not believe optimising the RAB is an appropriate capex incentive mechanism. As discussed above, past asset valuations have resulted in minimal optimisation of Ergon Energy’s RAB.</p> <p>As suggested in our submission to the <i>Economic Regulation of Network Service Providers Consultation Paper</i>,<sup>7</sup> Ergon Energy believes a more appropriate avenue to introduce a capex incentive mechanism could be through the Efficiency Benefit Sharing Scheme (EBSS). Clause 6.5.8(b) of the Rules currently provides the AER with the power to introduce a capex incentive scheme via the EBSS.</p>
<p><i>Savings and transitional requirements</i></p>	
<p>8. When should any proposed rule commence?</p>	<p>If the proposed Rule change is adopted, it should not commence until the regulatory control period subsequent to the next regulatory control period (i.e. 2020–25 for Queensland DNSPs).</p>

<sup>7</sup> EECL (2011), *Submission: Economic Regulation of Network Service Providers*, 8 December 2011, p13.