

STANDING COMMITTEE OF OFFICIALS Telephone: (02) 6213 7789 Facsimile: (02) 6213 6689

Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

John

Dear Mr Pierce

I refer to the letter received on 13 July 2010 from the Hon Martin Ferguson AM MP, Chair of the Ministerial Council on Energy (MCE) detailing the MCE's response to the recommendations of the Australian Energy Market Commission (AEMC) in its Stage 2 Final Report on its *Review of Demand Side Participation in the National Electricity Market*.

In the letter the MCE noted its intention to ask the AEMC to initiate Rule change processes for several of the recommendations in the Report. The purpose of this letter is to formally request that the AEMC undertake this task.

The attached document provides additional information in support of this request.

Should you have any further enquiries, please contact Ms Kristen Palmer, Manager, MCE Secretariat, on (02) 6213 6107.

Yours sincerely

Drew Clarke

Chair, MCE Standing Committee of Officials

4 November 2010

Enc.

MCE

Rule Change Request

Implementation of the Rule change proposal arising from the Australian Energy Market Commission Review of Demand-Side Participation in the National Electricity Market

October 2010

Background

In October 2007, the Australian Energy Market Commission (AEMC) initiated a review of whether the demand-side of the National Electricity Market (NEM) can participate effectively and efficiently in the market. Stage 2 of the Review specifically tested whether the current Rules created impediments to DSP and identified ways of reducing or removing any identified impediments.

The AEMC published its Stage 2 Final Report for the Review of Demand-Side Participation (DSP) in the NEM on 7 December 2009 (DSP 2 Final Report). The DSP 2 Final Report recommended that a number of improvements could be made to the Rules to further enhance participation of demand-side in the NEM. The proposed amendments to the existing Rules included:

- changing the existing Efficiency Benefits Sharing Scheme (EBSS) to exclude operating expenditure for DSP undertaken by transmission businesses;
- expanding the existing Demand Management Incentive Scheme (DMIS) to include connection of embedded generators; and
- clarifying the existing Rules so that an embedded generator that is already receiving network support payments from a transmission business does not also receive avoided TUOS.

On 13 July 2010, the MCE published its response to the DSP 2 Final Report, which supported the above amendments and requested that the AEMC progress the amendments as a rule change request in accordance with the Rule making procedure under National Electricity Law (NEL). The MCE recognises that the procedure for making of a rule requires the AEMC to undertake public consultation and the AEMC may decide to make a more preferable rule if it is satisfied that the more preferable rule will or is likely to better contribute to the National Electricity Objective (NEO).

The following information is provided in support of this Rule change request.

Contents of Rule change request

1. Proponent of the Rule change

The Ministerial Council on Energy MCE Secretariat GPO Box 9839 Canberra ACT 2601

2. Description of the proposed Rule changes

The Rule change proposal seeks to address three issues related to encouraging more efficient use of demand-side in the NEM. The issues for this Rule change request specifically relate to the: treatment of different types of costs between and over regulatory periods; incentives for innovation - connecting embedded generators; and clarifying the arrangements for avoided TUOS for embedded generators.

The Rule change proposal effectively seeks to introduce of the following new arrangements:

- 1. Excluding operating expenditure for DSP by transmission business from the EBSS requiring the Australian Energy Regulator (AER) to, when designing and implementing an EBSS, to consider the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- 2. Expanding the existing DMIS requiring the AER to expand the existing DMIS to include innovation to deliver more cost-effective connection of embedded generators.
- Avoided TUOS clarifying the Rules so that an embedded generator that is already receiving network support payments from a transmission business does not also receive avoided TUOS.

A copy of the draft changes to Rules to give effect Rule change proposal is contained in the DSP 2 Final Report as <u>Appendix A</u> and attached to this Rule change request. The MCE notes that the AEMC will conduct further consultation on the proposed Rule changes in accordance with the standard Rule change procedure.

3. Nature and scope of the issues proposed to be addressed.

The AEMC DSP 2 Final Report examined the existing Rules to identify how, if at all, the Rules materially disadvantage use of efficient DSP. Whilst the AEMC's overall findings was that, in the context of the current technology, pricing and demand conditions, the Rules do not impede the use of DSP, it was noted that a number of workstreams, such as those relating to connection processes and distribution planning requirements, are still underway. The AEMC also recommended that a number of aspects of the current Rules should be improved to further enhance efficient DSP in the NEM. These specific areas and issues to be addressed are discussed below.

Treatment of different types of costs between and over regulatory periods

As part of the Stage 2 DSP Final Report, it was highlighted that there is a need to better align the way different costs types are treated between and over regulatory periods so as to avoid potential biases in choice of expenditure used by networks. Specifically, the interaction of the application of the EBSS to operating expenditure and the ability to carry forward actual capital expenditure to the asset base in future periods may distort the incentives between building network infrastructure and contracting for DSP. That is, the current method for re-setting network prices or revenue allowances for transmission businesses appears to penalise a business who in the previous regulatory period decided to use expenditure on DSP as a means of efficiently deferring capital expenditure.

Under the current framework, the standard building block approach to revenue regulation allows network owners to retain profits resulting from cost savings (or losses resulting from overruns) until the next time the cap is set. Where the retention of benefits is limited to the next revenue reset, the incentive to minimise costs gets weaker as the date of the next re-set approaches. To ensure a consistent incentive over the regulatory period an EBSS is applied. The EBSS delivers a constant retention period irrespective of when a cost saving (or over-run) is incurred.

Currently, the factors the AER must consider in designing the EBSS are different between transmission and distribution. While the EBSS applies to operating expenditure for both

transmission and distribution, the distribution framework allows, but does not require, the scheme to also be applied to capital expenditure. In practice the AER's current distribution EBSS does not apply to capital expenditure, for reasons that are set out in the AER's final decision on the distribution EBSS.¹

As noted by the AER in its final decision on the distribution EBSS, where the EBSS is not applied to capex the incentive later in the regulatory control period to reduce capex is less than the incentive to reduce opex. Consequently, where expenditure for non-network alternatives is operational in nature, DNSPs may have a greater incentive later in the regulatory control period to augment networks rather than implement non-network alternatives.

Therefore, if only applied to operating expenditure and no counteracting factors are in place, an EBSS appears to penalise efficient substitution of network infrastructure (capital expenditure) with DSP (operating expenditure). This is, as a result, likely to create a barrier to efficient DSP. One counteracting factor, as applied by the AER in the distribution EBSS, is to exclude opex for non-network alternatives from the EBSS, so ensuring neutral incentives to augment networks compared to those to implement non-network alternatives.

To ensure these issues are considered in the EBSS for transmission, it is proposed that the factors that must be considered be expanded to include the implications for non-network alternatives. For example, this would allow transmission networks' operating expenditure on DSP to be excluded from the EBSS.

Incentives for innovation - connecting embedded generators

In the Stage 2 DSP Final Report, the AEMC acknowledged that innovation in electricity networks is likely to become increasingly important particularly as a result of climate change policies, which may drive the connection of new lower carbon technologies to the network and an increased focus on the ways that energy use can be managed.

As a result, the prospect of more customers using embedded generation as a substitute for electricity sourced from the main network is also likely to increase. For example, as incentives are provided by government (such as feed-in tariffs and rebates) customers are likely to seek to install more embedded generation. In addition, as the costs of high carbon-emitting generation increases, the economics of some of the cleaner embedded generation options, such as co-generation plants, may improve.

In the Stage 2 DSP Final Report, the AEMC found that, absent additional incentives, the existing framework may not encourage distribution businesses to deliver cost-efficient connections for embedded generators. This is because distributors currently have a strong incentives to focus on network reliability and safety but weak incentives to manage the costs associated with embedded generator connections. This occurs as a result of the discretion distribution businesses are afforded with respect to minimum technical standards and that the cost of implementing those standards are met by connecting generators.

Therefore, as a mechanism to address the lack of incentive of distribution businesses to minimise the costs of connections, it is proposed that the existing DMIS be expanded to also include innovation in connecting embedded generators.

 $^{^1}$ AER final decision on distribution efficiency benefit sharing scheme, available at <code>http://www.aer.gov.au/content/index.phtml/itemId/720374</code>

It is noted that the existing DMIS already appropriately permits the consideration of embedded generation where it represents an efficient non-network alternative. The proposed Rule change, however, relates to innovation in the connection of embedded generators generally. Innovation, including more cost effective connection practices and operational strategies for embedded generators, is important if efficient DSP outcomes are to be achieved over the long term.

For the avoidance of doubt, the intention of expanding the DMIS as proposed is to support and encourage innovation in connections, not for *all* embedded generation connections to be supported under the DMIS.

Arrangements for avoided TUOS

The Stage 2 DSP Review examined the appropriateness of embedded generators receiving avoided TUOS payments. Generally, it was considered that the current arrangements for avoided TUOS are appropriate and proportionate from the perspective of small embedded generators.

However, it was considered that the Rules need to be clarified so that where a generator provides network support and receives a corresponding network support payment under contract to a transmission business, additional avoided TUOS payments should not be made. To provide a payment in this circumstance would represent a double-payment to embedded generators. Hence locational and operational incentives would be over-signalled and the long term costs to consumers of electricity would be higher.

It is therefore recommended that the Rules be clarified so that an avoided TUOS payment is not made when transmission benefits are reflected in a network support payment.

4. How the proposed Rule will or is likely to contribute to the achievement of the National Electricity Objective

The Rule making test contained in section 88 of the NEL requires that the AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the National Electricity Objective (NEO). The NEO, as set out in section 7 of the NEL, is 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."

The proposed Rule changes seek to ensure that incentives and obligations for supply-side and demand-side solutions are balanced, that network businesses are encouraged to adopt the most efficient option, and that providers of non-network solutions are provided with efficient recompense for network support services.

Enhancing efficient DSP is likely to contribute to the achievement of the NEO by promoting a more efficient balance between investment in networks providing electricity services on the one hand, and the efficient use of those services on the other hand.

The proposed Rule changes also seek to facilitate improvement in connection processes for embedded generators, thus counteracting the current imbalance due to distribution businesses' control over technical requirements for connections. Over the long term, this will serve the interests of consumers by providing a better balance between the quality, safety, reliability and

security of distribution networks, and the price of accessing the relevant electricity service (namely connection of embedded generators to distribution networks).

All three rule changes are therefore likely to contribute to greater efficiency in the operation of, and investment in, electricity networks. As a result, this is likely to promote the long term interests of consumers of electricity with respect to price, reliability and security of electricity supply.

5. Expected benefits and costs of the proposed change and the potential impacts of the change on those likely to be affected

Benefits

The proposed Rule changes seek to promote more efficient use of DSP in the NEM and to minimise costs of connection through balancing existing incentives and providing more opportunities for innovation. This is likely to benefit both market participants and consumers as the changes will lead to greater efficiency with respect to the use of, investment in networks, and promote the long term interests of consumers of electricity with respect to the price of supplying electricity.

Costs

The proposed new arrangements are not expected to impose significant implementation costs as the changes represent an incremental change to existing arrangements and are not likely to require substantial change to existing processes and practices. The MCE considers that the proposed changes are proportionate and efficient to address the issues identified, particularly to ensure that efficient DSP outcomes are achieved over the long term.

Impacts on parties likely to be affected

The proposed Rule changes require the AER to make amendments to existing mechanisms already established under the Rules. It is considered those changes are not expected to have a significant administrative burden on the AER because the amendments will not significantly change existing processes. It is recognised that there may be some additional administrative burden on the AER to review proposals from network businesses who seek to take up incentives provided by the new arrangements.

The proposed Rule changes are also likely to impact on network businesses and embedded generators. As noted above, the impact of the proposed changes are not expected to be significant as the new arrangements represent an incremental change to existing obligations and processes.

Amendment of the National Electricity Rules

The National Electricity Rules are amended as set out in Schedule 1.

Schedule 1 Amendment of National Electricity Rules – Chapter 5, 6, 6A and 10

[1] References to "demand management incentive scheme"

In clauses 6.3.2(a)(3), 6.4.3(a)(5), 6.4.3(b)(5), 6.6.3(b), 6.6.3(b)(4), 6.8.1(b)(4), 6.12.1(9) and S6.1.3(5), omit all references to "demand management incentive scheme" and substitute "demand management and embedded generation connection incentive scheme".

[2] Clause 5.5 Access arrangements relating to Distribution Networks

Omit clause 5.5(h) and substitute:

Except where a Connection Applicant receives a network support payment, a Distribution Network Service Provider must pass through to a Connection Applicant the amount calculated in accordance with paragraph (i) for the locational component of prescribed TUOS services that would have been payable by the Distribution Network Service Provider to a Transmission Network Service Provider had the Connection Applicant not been connected to its distribution network ('avoided charges for the locational component of prescribed TUOS services').

[3] Clause 6.6.3 Demand management incentive scheme

In the heading of clause 6.6.3, omit "Demand management incentive scheme" and substitute "Demand management and embedded generation connection incentive scheme".

[4] Clause 6.6.3 Demand management incentive scheme

Omit clause 6.6.3(a) and substitute:

The AER may, in accordance with the distribution consultation procedures, develop and publish an incentive scheme or schemes (demand management and embedded generation connection incentive scheme) to provide incentives for Distribution Network Service Providers to implement efficient non-network alternatives, to manage the expected demand for standard control services in some other way, or to connect efficiently embedded generators.

[5] Clause 6.6.3 Demand management incentive scheme

In clause 6.6.3(b)(4), omit "and" where lastly occurring.

[6] Clause 6.6.3 Demand management incentive scheme

In clause 6.6.3(b)(5), omit "." and substitute:

; and

(6) the effect of the classification of distribution services, as determined in accordance with clause 6.2.1, on a Distribution Network Service Provider's incentive to adopt or implement efficient embedded generator connections.

[7] Clause 6A.6.5 Efficiency benefit sharing scheme

In clause 6A.6.5(b)(2), omit "and" where lastly occurring.

[8] Clause 6A.6.5 Efficiency benefit sharing scheme

In clause 6A.6.5(b)(3), omit "." and substitute:

<u>; and</u>

(4) the possible effects of the scheme on incentives for the implementation of non-network alternatives.

[9] Chapter 10 Deleted Definitions

In Chapter 10, omit the following definition:

demand management incentive scheme

An incentive scheme for certain *Distribution Network Service Providers* developed and *published* by the *AER* under clause 6.6.3.

[10] Chapter 10 New Definitions

In Chapter 10, insert the following new definition in alphabetical order:

demand management and embedded generation connection incentive scheme

An incentive scheme for certain *Distribution Network Service Providers* developed and *published* by the *AER* under clause 6.6.3.