

STANGE CHANGE

Australian Energy Market Commission

CONSULTATION PAPER

National Electricity Amendment (Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses) Rule 2011

Rule Proponent(s)

Ministerial Council on Energy

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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 4 November 2010, the Ministerial Council on Energy (MCE) (Proponent) submitted a Rule change request to the Australian Energy Market Commission (AEMC or Commission) in relation to implementation of the Rule change proposals arising from the AEMC's Final Report on the Stage 2 Review of Demand Side Participation (DSP) in the National Electricity Market (NEM).

The MCE's Rule change request seeks to initiate three separate Rule changes that include:

- amending the Efficiency Benefit Sharing Scheme (EBSS) framework applicable to transmission businesses (TNSPs) to require the Australian Energy Regulator (AER) to consider the scheme's effect on the businesses' incentive to undertake demand management or other DSP related (i.e. non-network alternatives) expenditure;
- expanding the Demand Management Incentive Scheme for distribution businesses to include incentives for innovation in connection of embedded generators; and
- clarifying the arrangements for avoided transmission use of system (TUOS)
 payments to generators so that an embedded generator that is already receiving
 network support payments does not also receive avoided TUOS payments.

As the subject matter of each Rule change proposed is not related or inter-dependent, the proposed Rule changes have been disaggregated into three separate projects to allow the AEMC to more efficiently assess each Rule on its merits within the Rule change process. This project (ERC0127) specifically deals with the MCE's Rule change proposal on amending the EBSS to require the AER to consider the scheme's effect on TNSPs' incentive to undertake non-network alternative expenditure.

The other proposed Rules are being consulted on separately under AEMC project reference codes "ERC0128 - Inclusion of Embedded Generation Research into Demand Management Incentive Scheme" and "ERC0129 - Network Support Payments and Avoided TUOS for Embedded Generators".

This Consultation Paper has been prepared by the staff of the AEMC to facilitate public consultation on the EBSS and demand management expenditure component of the Rule change proposal and does not necessarily 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 EBSS framework applicable to TNSPs and the changes proposed by the Proponent;
- identifies a number of questions and issues to facilitate the consultation on this Rule change request; and
- outlines the process for making submissions.

2 Background

This chapter provides the background to the Rule change request on the EBSS. It provides an overview of the current EBSS framework and a summary of the AEMC's Stage 2 Final Report on Review of Demand Side Participation in the NEM (Stage 2 DSP Review), which recommended the proposed Rule change to the MCE.

2.1 Overview of the EBSS framework

The current Chapter 6A economic regulatory framework of the National Electricity Rules (NER or Rules) seeks to decouple the revenue requirements of TNSPs from the actual costs they incur during the regulatory period. The standard building blocks approach applied to revenue regulation allows the TNSPs to retain profits resulting from cost savings (or losses resulting from over-spending) until the next time their revenue cap is set. However, 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.

Without a balanced incentive mechanism, TNSPs would face a diminishing incentive during a regulatory period in incurring efficient expenditure. The TNSP will look to reduce its actual expenditure from that forecast within a regulatory period as they are allowed to retain any savings until the next reset. However, this results in a greater incentive to reduce expenditure at the start of regulatory period as the business would retain the benefit for the remainder of the regulatory period.

In order to balance the expenditure incentive over the regulatory period, clause 6A.6.5 of the Rules requires the AER to develop an EBSS that provides for a fair sharing between TNSPs and transmission network users of the efficiency gains and losses from the TNSP's operating expenditure (opex) forecasts and actual costs. Under the EBSS framework, a TNSP can earn additional revenue or be penalised depending on whether its actual opex is less than or greater than its allowed opex forecast targets in each year of its regulatory control period.

The purpose of the scheme is to ensure that TNSPs face continuous incentives to make efficiency savings on its operating costs throughout a regulatory period by being rewarded for pursuing efficiency and penalised for any inefficiency. Similar provisions in the Rules also require the AER to apply an EBSS to distribution businesses' opex forecasts.

As required by the Rules, the AER established an EBSS for TNSPs in September 2007. Under the scheme designed by the AER, a TNSP can retain and carry forward the difference (negative or positive) between its actual and forecast opex in any year of a

AER, Electricity transmission network service providers Efficiency Benefit Sharing Scheme - Final Decision, September 2007.

regulatory period for five years following the year in which the efficiency gain or loss is incurred.²

The five year retention period for the scheme is linked to the regulatory control periods of TNSPs. In this way, the scheme encourages TNSPs to remain efficient throughout its regulatory control period rather than to concentrate efficiency gains in just the early part of its regulatory control period.³

Under the AER's scheme, the efficiency benefit or loss for a particular year is calculated as the difference between the actual and forecast opex amounts of the TNSP as they change from one year to the next.

2.2 Stage 2 DSP Review recommendations

In November 2009, the AEMC provided its Final Report on Stage 2 DSP Review to the MCE. The Stage 2 DSP Review was undertaken with an explicit focus on the current Rules to determine whether there were material barriers to the efficient and effective use of DSP in the NEM. The Stage 2 DSP Review's overall finding was that, in the context of the current technology, the Rules framework does not materially bias against the use of DSP. However, it identified a number of aspects of the current Rules that could be improved to enhance demand-side participation.

In considering whether the economic regulatory framework for network businesses provided sufficient incentives for DSP, the Stage 2 DSP Review found that the EBSS framework for TNSPs could potentially penalise a business who, in the previous regulatory period, decided to use demand-side solutions as a means of efficiently deferring capital expenditure (i.e. undertake a non-network alternative expenditure). This was because expenditure on demand-side related solutions are largely in the form of on-going opex, and the EBSS can therefore potentially create a disincentive for a TNSP to consider efficient non-network alternatives as it may lead to reduced financial rewards or even penalties if the expenditure results in outturn opex being more than the forecast .

The Stage 2 DSP Review recommended that the potential disincentive effect could be addressed by allowing for any demand management or DSP related opex to be excluded from the EBSS. It was recommended that the Rules on EBSS should be amended to require the AER when developing and implementing the scheme, to consider the incentive effects of the scheme on TNSPs implementation of non-network alternatives.

The Stage 2 DSP Review also noted that the proposed Rule change would make the EBSS arrangements for TNSPs consistent with those for distribution businesses, where a similar provision requiring the AER to consider the scheme's effect on non-network alternative has resulted in the AER explicitly excluding any non-network alternatives related opex from the EBSS.

² Ibid, p.1.

³ Ibid, p.2.

⁴ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

2.3 MCE response to the Stage 2 DSP Review

In June 2010, the MCE released its response to the Stage 2 DSP Review recommendations. The MCE generally supported the overall findings of the Review and agreed to initiate the recommended Rule change on the EBSS.

Accordingly, on 4 November 2010, the Commission received the MCE's Rule change request.

3 Details of the Rule Change Request

The Rule change request from the MCE proposes that clause 6A.6.5(b) be expanded to require the AER to, when designing and implementing an EBSS, consider the possible effects of the scheme on a TNSP's incentives for the implementation of non-network alternatives.

In its Rule change request the MCE provides its rationale for the Rule change. A number of key points raised in the Rule change request is summarised below:

- the MCE endorses the findings from the Stage 2 DSP Review with respect to incentives for different types of costs between and over regulatory periods;
- the MCE states that the interaction of the application of the EBSS to opex and the
 ability to carry forward actual capital expenditure (capex) to the asset base in
 future periods may distort the incentives between building additional network
 infrastructure and contracting for demand management as an efficient nonnetwork alternative solution;
- the MCE believes that the factors the AER must consider in designing the EBSS are currently different between transmission and distribution regulatory frameworks. The MCE notes that while the EBSS applies to opex for both transmission and distribution, the distribution regulatory framework allows, but does not require, the scheme to also be applied to capex. The MCE states that in practice, the AER has not applied an EBSS to capex in the distribution regulatory framework due to the difficulty in designing a scheme with appropriate incentives and the risk of introducing perverse incentives; and
- the MCE believes that unless the EBSS for TNSPs excludes opex incurred for pursuing non-network alternatives, the current method for re-setting revenue cap allowances will penalise a TNSP who in the previous regulatory period decided to use demand management expenditure as a means of efficiently deferring capex.

The MCE's Rule change request includes a proposed Rule, which is provided as Appendix A to this Consultation Paper.

4 Assessment Framework

The Commission's assessment of this Rule change request must consider whether the proposed Rule promotes the National Electricity Objective (NEO) as set out under section 7 of the National Electricity Law (NEL), which 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 seeks to ensure that incentives and obligations for supply-side and demand-side solutions are balanced and that TNSPs are encouraged to adopt the most efficient option. Improving demand management and other DSP related expenditure will provide an efficient balance between network investment and the value of flexible demand. The proponent believes that the proposed Rule will improve incentives for TNSPs to pursue non-network alternative solutions and increase efficient investment outcomes for consumers.

In assessing the proposed Rule against the NEO, the following issues have been identified for consideration:

- materiality of the problem the extent to which the current EBSS administered by the AER creates a disincentive for TNSPs to undertake non-network alternative expenditure; and
- regulatory discretion and certainty whether the AER should have flexibility and discretion in determining the types of non-network alternative expenditure it will exclude from the EBSS or should the proposed Rule be more prescriptive to give TNSPs more certainty.

The proposed Rule will be assessed against the relevant counterfactual arrangements, which in this case are the current EBSS provisions in the Rules, the AER's published Final Decision on the EBSS and its application of the EBSS under the revenue cap determinations of TNSPs.

5 Issues for Consultation

Taking into consideration the assessment framework and potential requirements to implement the proposed Rule change, we have identified a number of issues for consultation that appear to be relevant to this Rule change request.

These issues outlined below are provided for guidance. Stakeholders are encouraged to comment on these issues as well as any other aspect of the Rule change request or this paper including the proposed framework.

5.1 Materiality of the problem

In principle, where expenditure on demand management and other DSP related activities are operational in nature, the EBSS can create a disincentive problem for TNSPs in making efficient substitution of network infrastructure solutions. While this view and the subsequent recommendation for the Rule change was widely supported by stakeholders in the Stage 2 DSP Review, the AER already appears to recognise the scheme's incentive effect and already applies the scheme to ensure that TNSPs face neutral incentives to pursue network augmentation compared to non-network alternatives.

The AER's recent decisions on the EBSS as part of its TNSP revenue cap determinations suggests that, despite the Rules currently requiring the AER to consider incentives for expenditure on non-network alternatives to be considered under the scheme, it already excludes TNSPs non-network alternative opex from the scheme. For example, in TransGrid's 2009-10 to 2013-14 revenue cap final determination, the AER decided to exclude opex on non-network alternatives from the EBSS.⁴ Similarly, the AER has excluded opex on non-network alternatives from the EBSS applicable to Transend in the 2009-10 to 2013-14 revenue cap determination.⁵

However, the revenue cap determinations of other TNSPs such as Powerlink, SP AusNet, ElectraNet SA, do not refer to the exclusion of non-network alternatives expenditure from the EBSS. This means that currently there is some inconsistency between the AER's Final Decision on the EBSS framework for TNSPs established in September 2007 and its subsequent practical application of the EBSS. This is potentially due to the timing of these determinations which were made under the transitional provisions of the Rules and required the AER to establish schemes and other transmission guidelines prior to the first round of determinations in a short space of time.

Since then, the AER has established the EBSS framework for distribution businesses where it was required to expressly consider the non-network alternative incentive issue in more detail. It is likely that the AER has consequently refined its approach to the

⁴ AER, TransGrid Transmission Determination 2009-10 to 2013-14 - Final Decision, April 2009, pp. 101-

⁵ AER, Transend Transmission Determination 2009-10 to 2013-14 - Final Decision, April 2009, pp. 123-124

⁸ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

EBSS for TNSPs to ensure a consistent approach in the development and application of the scheme across all network businesses.

Notwithstanding the apparent inconsistency in what the Rules require the AER to consider in designing and implementing the EBSS, the existing EBSS Final Decision for TNSPs established by the AER and the AER's recent revenue cap decisions on EBSS, the materiality of the perceived problem to be addressed by the proposed Rule needs to be considered.

Even if the existing Rule does not materially affect a TNSP's incentive on non-network alternative expenditure, it may still be desirable to amend the Rule so that there is regulatory consistency and certainty within the Rules in how the EBSS should be designed and implemented across all network businesses.

Issue Materiality of the problem

- 1. Does the current EBSS as implemented by the AER create a material disincentive for TNSPs to undertake efficient non-network alternative expenditure?
- 2. Are there any TNSPs for whom non-network expenditure is not excluded from their EBSS?

5.2 Regulatory discretion

The existing Rules on the EBSS provide the AER with considerable discretion on how to design and implement the EBSS. The proposed Rule if made, would not expressly exclude demand management or other forms of DSP-related expenditure from the EBSS, but will add an additional attribute for the AER to have regard to in designing and implementing the EBSS. This will mean that the AER will retain the discretion to consider what forms of non-network alternative expenditure items it will accept for exclusion from the scheme.

While such discretion may create some level of uncertainty for TNSPs on the types of non-network expenditure that will be approved for exclusion, the AER has already observed that it is difficult to develop a comprehensive list of the cost elements that can properly be excluded from the scheme's operation.⁶ For this reason, the AER retains the flexibility under the scheme yet allows businesses to propose, for consideration by the AER, other cost categories to be excluded from the operation of the scheme so that they are not unfairly penalised.

There is also merit in allowing the AER to retain discretion in determining the types of cost categories it will accept or reject under the scheme given the potential for TNSPs to inappropriately respond to the incentive framework by restructuring their capitalisation policies and substituting expenditures between opex and capex.

AER, Electricity transmission network service providers Efficiency Benefit Sharing Scheme - Final Decision, September 2007, p.3.

It is noted that the proposed Rule is intended to align the EBSS requirement on exclusion of non-network alternatives with the EBSS provisions for distribution businesses where the AER has similar discretion in determining what constitutes non-network expenditure.

Issue Regulatory discretion and certainty

- 1. What types of demand management expenditure and other forms of DSP related expenditure undertaken by TNSPs can be characterised as non-network alternative expenditure?
- 2. Should the AER have flexibility and discretion in determining what types of expenditure can be classified as non-network alternative expenditure?

6 Lodging a Submission

The Commission has published a notice under section 95 of the NEL for this Rule change proposal inviting written submission. Submissions are to be lodged online or by mail by 21 July 2011 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 proposals.⁷ The Commission publishes all submissions on its website subject to a claim of confidentiality.

All enquiries on this project should be addressed to Zaeen Khan 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, using the "lodge a submission" function and selecting the project reference code ["ERC0127"]. 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: ERC0127.

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.

⁷ This guideline is available on the Commission's website.

Abbreviations

AEMC Australian Energy Market Commission

AER Australian Energy Regulator

Commission See AEMC

DSP Demand Side Participation

EBSS Efficiency Benefit Sharing Scheme

MCE Ministerial Council on Energy

NEL National Electricity Law

NEM National Electricity Market

NEO National Electricity Objective

NER or Rules National Electricity Rules

opex operating expenditure

Stage 2 DSP Review AEMC's Stage 2 Final Report on Review of Demand

Side Participation in the NEM

TNSP transmission business

TUOS transmission use of system

¹² Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

Α **Proposed Rule**

The Proponent's Rule change request contains a copy of a draft of the proposed Rules. These draft amendments include proposed Rule changes that are not related to the proposed Rule that is the subject of this Consultation Paper.

Since the MCE's Rule change request has been disaggregated, the amendments reproduced below only relate to the Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses component of the Rule change request. It is reproduced without amendments or corrections, except for minor formatting changes.

Amendment of National Electricity Rules – Chapter 6A

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

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

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

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

; and

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

AProposed Rule 13