RULE CHANGE

Australian Energy Market Commission

# DRAFT RULE DETERMINATION

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

**Rule Proponent**

Ministerial Council on Energy

**Commissioners**

Pierce
Henderson
Spalding

29 September 2011

**JOHN PIERCE**
Chairman
For and on behalf of the Australian Energy Market Commission

**Inquiries**

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

**E**: aemc@aemc.gov.au
**T**: (02) 8296 7800
**F**: (02) 8296 7899

Reference: ERC0127

**Citation**

AEMC 2011, Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses, Draft Rule Determination, 29 September 2011, Sydney

**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.

# Summary of draft Rule determination

On 4 November 2010, the Ministerial Council on Energy (MCE) made a request to the Australian Energy Market Commission (Commission) to make a Rule regarding the exclusion of non-network alternative expenditure from the operating expenditure that is subject to the Efficiency Benefit Sharing Scheme (EBSS) applicable to Transmission Network Service Providers (TNSPs).

The Commission has determined to make the Rule proposed by the MCE, without amendments.

The Commission has concluded that the current EBSS framework for TNSPs does not ensure that the Australian Energy Regulator (AER) will consistently consider the incentives for non-network alternative expenditures when it applies the EBSS to revenue determinations. As a result, the current EBSS requirements could potentially penalise a TNSP who, in the previous regulatory period, decided to undertake non-network alternative expenditure as a means of efficiently deferring capital expenditure. This may lead to TNSPs pursuing network solutions and incurring capital expenditure instead of investing in efficient non-network solutions.

The draft Rule would amend the EBSS provisions under clause 6A.6.5(b) to require the AER, in designing and implementing the EBSS, to consider the possible effects of the scheme on a TNSP's incentive for the implementation of non-network alternatives. The draft Rule makes the EBSS arrangements for non-network alternative expenditure for TNSPs consistent with those for distribution businesses.

The Commission has also determined not to define or categorise non-network alternative expenditures for the purposes of the EBSS. The Commission believes that the objective of the proposed Rule is more likely to be achieved by allowing the AER discretion in deciding the types of non-network alternative operating expenditure it will exclude from the EBSS on a case by case basis.

The Commission recognises that the benefits for the promotion and uptake of non-network alternative investment brought about by the draft Rule are likely to be small. However, the draft Rule strengthens the scope and certainty for TNSPs to consider demand management and other forms of non-network alternative expenditure that may represent an efficient substitute to network solutions.

The Commission considers the costs of implementing the change to be negligible in comparison to the benefits the draft Rule change is likely to provide in terms of improving efficient investment and pricing outcomes for TNSPs and consumers.

The Commission invites written submissions on this draft Rule determination, including the Draft Rule, by 10 November 2011.

# Contents

# 1 Ministerial Council on Energy's Rule change request

## 1.1 The Rule change request

On 4 November 2010, the Ministerial Council on Energy (MCE) (Rule Proponent) made a request to the Australian Energy Market Commission (Commission) to make a Rule regarding the exclusion of non-network alternative expenditure from the operating expenditure that is subject to the Efficiency Benefit Sharing Scheme (EBSS) applicable to Transmission Network Service Providers (TNSP) (Rule change request).

The objective of the proposed Rule was to improve the incentives for TNSPs to pursue efficient demand-side solutions as a substitute to network solutions and was to be achieved by requiring the Australian Energy Regulator (AER), in designing and implementing the EBSS under clause 6A.6.5(b), to consider the possible effects of the scheme on a TNSP's incentive for the implementation of non-network alternatives.[1]

The Rule change request was submitted by the MCE in response to the Rule change recommendation made by the Commission in its Stage 2 Final Report on Review of Demand Side Participation in the NEM (Stage 2 DSP Review).

## 1.2 Rationale for Rule change request

In the Rule change request, the Rule Proponent stated that:

- the interaction of the application of the EBSS to a TNSP's operating expenditure (opex) and its ability to carry forward its actual capital expenditure (capex) to the regulatory asset base in future periods may distort the incentives between building additional network infrastructure and contracting for demand management as an efficient non-network alternative solution;

- the factors the AER must consider in designing the EBSS are currently different between transmission and distribution regulatory frameworks. 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. 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

- unless the EBSS for TNSPs excludes opex incurred for pursuing non-network alternatives, the current method for re-setting revenue cap allowances will

1 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*, 4 November 2010.

penalise a TNSP who in the previous regulatory period decided to use demand management expenditure as a means of efficiently deferring capex.[2]

## 1.3 Solution proposed in the Rule change request

The Rule Proponent proposed to resolve the issues discussed above by making a Rule under clause 6A.6.5(b) 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.[3]

The proposed Rule would effectively align the opex EBSS framework across TNSPs and Distribution Network Service providers (DNSPs) in the treatment of non-network alternative expenditures.

## 1.4 Relevant background

### 1.4.1 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 NER 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 their operating costs throughout a regulatory period by being

2 Ibid, pp. 3-4.

3 Ibid, Appendix A.

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 NER, the AER established an EBSS for TNSPs in September 2007.[4] 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 regulatory period for five years following the year in which the efficiency gain or loss is incurred.[5]

The five year retention period for the scheme is linked to the regulatory control periods of TNSPs. In this way, the scheme encourages a TNSP to remain efficient throughout its regulatory control period rather than to concentrate efficiency gains in just the early part of its regulatory control period.[6]

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.

### 1.4.2 Stage 2 DSP Review recommendation

In November 2009, the AEMC provided its Final Report on Stage 2 DSP Review to the MCE.[7] 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.[8] 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).[9] 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

---

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

5 Ibid, p. 1.

6 Ibid, p. 2.

7 AEMC, *Review of Demand-Side Participation in the National Electricity Market*, Final Report, 27 November 2009, Sydney. The report is available at www.aemc.gov.au.

8 Ibid, p. vii.

9 Ibid, p. viii.

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.[10]

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.[11]

### 1.4.3 MCE response to Stage 2 DSP Review recommendation

In June 2010, the MCE released its response to the Stage 2 DSP Review recommendations.[12] 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 MCE submitted the Rule change request.

## 1.5 Commencement of Rule making process

On 23 June 2011, the Commission published a notice under section 95 of the National Electricity Law (NEL) advising of its intention to commence the Rule making process and the first round of consultation in respect of this Rule change request. A consultation paper prepared by AEMC staff identifying specific issues or questions for consultation was also published with the Rule change request. Submissions closed on 21 July 2011.

The Commission received four submissions on the Rule change request as part of the first round of consultation. They are available on the AEMC website.[13] A summary of the issues raised in submissions and the Commission's response to each issue is contained in Appendix A.

The MCE's Rule change request also included two other proposed Rules that were recommended in the Stage 2 DSP Review, as follows:

---

10 Ibid, p. 24.

11 Ibid.

12 Demand-Side Participation in the National Electricity Market, *MCE Response to the Australian Energy Market Commission's Stage 2 Final Report*, June 2010, available at: http://www.ret.gov.au/Documents/mce/_documents/2010%20bulletins/No.%20181%20-%20MCE%20Response%20-%20AEMC%20DSP%20Stage%202%20Report.pdf

13 www.aemc.gov.au.

- 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.[14]

As the subject matter of each Rule change proposed is not inter-dependent, the proposed Rule changes were disaggregated into three separate projects to allow the Commission to more efficiently assess each proposed Rule on its merits within the Rule change process. This draft Rule determination specifically deals with the MCE's Rule change request 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".

## 1.6 Consultation on draft Rule determination

In accordance with the notice published under section 99 of the NEL, the Commission invites submissions on this draft Rule determination, including a draft Rule, by 10 November 2011.

In accordance with section 101(1a) of the NEL, any person or body may request that the Commission hold a hearing in relation to the draft Rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 6 October 2011.

Submissions and requests for a hearing should quote project number "ERC0127" and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

14 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*, 4 November 2010, p. 3.

# 2 Draft Rule Determination

## 2.1 Commission's draft determination

In accordance with section 99 of the NEL the Commission has made this draft Rule determination in relation to the Rule proposed by the Proponent.

The Commission has determined it should make the Rule proposed by the Rule Proponent. The Commission's reasons for making this draft Rule determination are set out in section 3.1.

A draft of the proposed Rule that the Commission proposes to be made (draft Rule) is attached to and published with this draft Rule determination. The draft Rule is the same as the proposed Rule submitted by the Rule Proponent. Its key features are described in section 3.2.

## 2.2 Commission's considerations

In assessing the Rule change request the Commission considered:

- the Commission's powers under the NEL to make the Rule;
- the Rule change request;
- the fact that there is no relevant MCE Statement of Policy Principles;[15]
- submissions received during first round consultation;
- the AER's September 2007 final decision on the EBSS for TNSPs;[16]
- the AER's recent final decisions on the EBSS as part of its TNSP revenue cap determinations for TransGrid's 2009-10 to 2013-14 regulatory control period[17]and Transend's 2009-10 to 2013-14 regulatory control period[18];
- the AEMC's Stage 2 DSP Review Final Report[19]; and

---

15 Under section 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a Rule.

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

17 AER, *TransGrid Transmission Determination 2009-10 to 2013-14 - Final Decision*, April 2009, pp. 101-102.

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

19 AEMC, *Review of Demand-Side Participation in the National Electricity Market*, Final Report, 27 November 2009, Sydney.

- the Commission's analysis as to the ways in which the proposed Rule will or is likely to, contribute to the National Electricity Objective (NEO).

## 2.3 Commission's power to make the Rule

The Commission is satisfied that the draft Rule falls within the subject matter about which the Commission may make Rules. The draft Rule falls within section 34 of the NEL as it relates to the regulation of the activities of persons (including Registered Participants) participating in the national electricity market or involved in the operation of the national electricity system.

Further, the draft Rule falls within the matters set out in schedule 1 to the NEL as it relates to:

> "15 The regulation of revenues earned or that may be earned by owners, controllers or operators of transmission systems from the provision by them of services that are the subject of a transmission determination;
>
> …
>
> 17 Principles to be applied, and procedures to be followed, by the AER in exercising or performing an AER economic regulatory function or power relating to the making of a transmission determination;
>
> …
>
> 20 The economic framework, mechanisms or methodologies to be applied or determined by the AER for the purposes of items 15 and 16 including (without limitation) the economic framework, mechanisms or methodologies to be applied or determined by the AER for the derivation of the revenue (whether maximum allowable revenue or otherwise) or prices to be applied by the AER in making a transmission determination; and
>
> …
>
> 23 Incentives for regulated transmission system operators to make efficient operating and investment decisions including, where applicable, service performance incentive schemes."

These items are relevant to the draft Rule because the draft Rule relates to the regulation of revenues that can be earned by the TNSPs under the economic framework and the mechanisms or methodologies to be applied or determined by the AER in exercising or performing its economic regulatory function relating to the making of a transmission determination. The EBSS forms part of the transmission determination.

## 2.4 Rule making test

Under section 88(1) of the NEL the Commission may only make a Rule if it is satisfied that the Rule will, or is likely to, contribute to the achievement of the NEO. This is the decision making framework that the Commission must apply.

The NEO is set out in section 7 of the NEL as follows:

> "The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system."

For this Rule change request, the Commission considers that the relevant aspect of the NEO is efficient investment in, and efficient operation of, electricity services with respect to price, quality, safety, reliability and security of supply.[20]

The Commission is satisfied that the draft Rule will, or is likely to, contribute to the achievement of the NEO because the draft Rule has the potential to affect a TNSP's investment decisions in promoting more efficient use of demand management and other non-network alternative solutions by balancing existing investment efficiency incentives for TNSPs with more opportunities for innovation.

Under section 91(8) of the NEL, the Commission may only make a Rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed Rule is compatible with the proper performance of Australian Energy Market Operator's (AEMO) declared network functions. The Draft Rule is compatible with AEMO's declared network functions because it has no impact on the NER relating to AEMO's declared network functions.

## 2.5 Other requirements under the NEL

Under section 88B of the NEL, the AEMC must take into account the revenue and pricing principles in making a Rule for, or with respect to, any matter or thing specified in items 15 to 24 and 25 to 26J in Schedule 1 of the NEL. The Commission has taken into account the revenue and pricing principles in making this Rule determination as the draft Rule relates to items 15, 17, 20 and 23 of Schedule 1 of the NEL.

---

20 Under section 88(2), for the purposes of section 88(1) the AEMC may give such weight to any aspect of the NEO as it considers appropriate in all the circumstances, having regard to any relevant MCE Statement of Policy Principles.

Some relevant aspects of the revenue and pricing principles relate to:

- providing a reasonable opportunity to service providers to recover efficient costs and ensuring that prices should allow for a return commensurate with the regulatory and commercial risks in providing the service; and
- having regard to the economic costs and risks of the potential for under and over utilisation of a transmission system with which a regulated network service provider provides direct control network services.

The Commission considers that the draft Rule is consistent with the revenue and pricing principles as it promotes recovery of efficient costs by TNSPs in relation to their non-network alternative expenditure under the EBSS. In turn, this is likely to encourage more efficient use of the transmission network without impacting a TNSP's ability to recover its efficient costs.

# 3 Commission's reasons

The Commission has analysed the Rule change request and assessed the issues arising out of this Rule change request. For the reasons set out below, the Commission has determined that a Rule should be made. Its analysis of the proposed Rule is also set out below.

## 3.1 Assessment of issues

Clause 6A.6.5 of the NER 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 opex forecasts and actual costs. The purpose of the scheme is to ensure that a TNSP faces continuous incentives to make efficiency savings on its opex throughout a regulatory period by being rewarded for pursuing efficiency and penalised for any inefficiency.

As identified by the Rule Proponent, where expenditure on demand management and other demand-side related activities is operational in nature, the EBSS can potentially create a disincentive problem for TNSPs in making efficient substitution between network infrastructure solutions and demand management solutions. This is because expenditure on demand management and other forms of demand-side participation 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 Commission believes that the current EBSS framework for TNSPs does not ensure that the AER will consistently consider the incentives for non-network alternative expenditures when it applies the EBSS to TNSPs revenue determinations. The current lack of certainty and consistency in how a TNSP's non-network alternative expenditure may impact on its EBSS reward/penalties for the next regulatory period makes it unlikely that a TNSP will take a risk by substituting more economically efficient demand management expenditure with capex.

The draft Rule makes it an explicit requirement for the AER in designing and implementing the EBSS, to consistently consider the scheme's efficiency reward/penalty effects on incentives for TNSP to undertake non-network alternative expenditure. This should provide TNSPs more confidence to pursue demand management options and find an efficient balance between the need for additional network investment and the value of flexible demand.

## 3.2 Draft Rule

The draft Rule amends the EBSS provisions under clause 6A.6.5(b) to require the AER, in designing and implementing the EBSS, to consider the possible effects of the scheme on a TNSP's incentive for the implementation of non-network alternatives.

The draft Rule does not define or categorise non-network alternative expenditures for the purposes of the EBSS. This will provide the TNSPs and the AER discretion in deciding the types of non-network alternative opex that should be excluded from the EBSS on a case by case basis. This draft Rule provision is also consistent with the non-network alternative expenditure EBSS arrangements for DNSPs in Chapter 6 of the NER (clause 6.5.8(c)(5)).

## 3.3 Civil Penalties

The draft Rule does not amend any Rules that are currently classified as civil penalty provisions under the *National Electricity (South Australia) Law or Regulations*. The Commission does not propose to recommend to the MCE that any of the amendments in the Draft Rule be classified as civil penalty provisions.

# 4 Commission's assessment approach

This chapter describes the Commission's approach to assessing the Rule change request in accordance with the requirements set out in the NEL (and explained in Chapter 2).

In assessing this Rule change request, the Commission has considered the following issues:

- the effect of an EBSS on a TNSP's incentive to undertake non-network alternative expenditure;
- treatment of non-network alternative expenditure under current EBSS arrangements;
- types of non-network alternative expenditures that would benefit from being excluded from the EBSS; and
- potential implementation costs and administrative regulatory burden.

In assessing whether the draft Rule is consistent with the NEO, the Commission has assessed the extent to which the incentives for a TNSP to undertake efficient investments are likely to be stronger under the draft Rule than under current arrangements, and whether the benefits of those strengthened incentives are likely to outweigh any implementation and administrative costs.

The Commission's analysis of these issues is provided in Chapter 5.

# 5 Analysis of issues

## 5.1 Rule Proponent's view

### 5.1.1 The EBSS and incentives for non-network alternative expenditure

The Rule Proponent stated that the interaction of the application of the EBSS to opex and the ability to carry forward actual capex to the asset base in future periods may distort a TNSP's incentives between building additional network infrastructure and contracting for demand management as an efficient non-network alternative solution.[21] This view is based on the AEMC's findings from the Stage 2 DSP Review.

The Rule proponent is of the view 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.[22]

### 5.1.2 Treatment of non-network alternative expenditure under current EBSS arrangements

The Rule proponent stated that, currently, the factors the AER must consider in designing the EBSS are different between transmission and distribution frameworks.[23] It stated that the distribution framework allows, but does not require the scheme to also be applied to capex and that the AER to date has not applied the EBSS to distribution capex due to the difficulty in designing a scheme with appropriate incentives and the risk of introducing perverse incentives.[24]

The Rule proponent further stated that where EBSS is only applied to opex and no counteracting factors are in place, an EBSS would penalise efficient substitution of capex with non-network alternative expenditure in the form of opex.[25] According to the Rule Proponent, one counteracting factor, as applied by the AER in the distribution EBSS, is to exclude opex for non-network alternatives from the EBSS to ensure neutral incentives between network augmentation and non-network alternatives.[26]

---

21 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*, 4 November 2010, p. 3.

22 Ibid.

23 Ibid, p. 4.

24 Ibid.

25 Ibid.

26 Ibid.

To ensure these issues are considered as part of EBSS for TNSPs, the Rule Proponent proposed that the factors that must be considered for the EBSS be expanded to include the implications for non-network alternative expenditure.[27]

### 5.1.3 Types of non-network alternative expenditure likely to benefit from being excluded from the EBSS

The Rule change request does not discuss the types of non-network alternative expenditure are likely to benefit from its proposed Rule. In addition, the proposed Rule did not explicitly exclude non-network alternative expenditure, nor did it specify the types of opex that could be eligible for exclusion from the scheme. The proposed Rule was in effect drafted to mirror the EBSS arrangements for DNSPs, where a similar provision requiring the AER to consider the scheme's effect on non-network alternative has resulted in the AER explicitly excluding various types of demand-side non-network alternatives opex from the EBSS.[28]

### 5.1.4 Implementation costs and administrative regulatory burden

The Rule Proponent stated that its proposed Rule is not likely to impose any significant implementation costs as it is only an incremental change to the existing arrangements and not likely to require substantial changes to existing processes and practices.[29] However, it recognised that there may be some administrative burden on the AER to review proposals from the TNSPs who seek to take up the incentives provided by the new arrangements.[30]

## 5.2 Stakeholder views

The Commission received four submissions, which were from Grid Australia, Ausgrid, Origin Energy, and Total Environment Centre (TEC). Their views in relation to the issues considered by the Commission are summarised below.

### 5.2.1 The EBSS and incentives for non-network alternative expenditure

All stakeholders agreed with the Rule Proponent's view on the interaction between the EBBS and TNSPs incentives to pursue non-network alternative expenditure. There was general agreement expressed by Ausgrid, Grid Australia, Origin Energy and the TEC that the EBSS in its current form can create an unintentional disincentive for TNSPs to

27 Ibid.

28 See: AER, *Electricity transmission network service providers Efficiency Benefit Sharing Scheme - Final Decision,* June 2008, p. 14.

29 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*, 4 November 2010, p. 6.

30 Ibid.

pursue non-network demand-side solutions as doing so could potentially mean over-spending their opex targets which attracts financial penalties under the EBSS.[31]

While supporting the Rule change, the TEC did not believe that the Rule change will result in any material increase in demand-side participation or reduce what it views as a strong bias towards supply-side projects in the NEM.[32] It was of the view that with or without the implementation of the proposed Rule change, there were many flaws in the current economic regulation framework of the NER that provide incentives for network businesses to "game the system and invest in less efficient network solutions over more efficient non-network solutions."[33]

The TEC rejected the position held by the MCE and the AEMC[34] that the current Rules framework "does not materially bias against the use of DSP [demand-side participation]".[35] The TEC believes that while the Rules do not explicitly bias against the use of demand side participation, there are multiple elements of the current Rules framework which significantly bias supply-side network solutions over demand-side non-network solutions.

The TEC further stated that if the proposed Rule is implemented, it should not be regarded as a comprehensive redress of the bias against demand-side participation in favour of network solutions, either by itself or in conjunction with the other Rule change requests initiated by the MCE as a result of the AEMC's Stage 2 DSP Review.[36]

The TEC believes that this Rule change is only addressing a minor barrier to demand side participation in the NEM when considered against the number and strength of the barriers. However, the TEC acknowledges that some of the remaining issues can be addressed as part of the AEMC's Power of Choice Review.[37]

### 5.2.2 Treatment of non-network alternative expenditure under current EBSS arrangements

Submissions from the TEC and Ausgrid notes that the EBSS arrangements for DNSPs with respect to the treatment of non-network alternative expenditure are currently

31 Grid Australia submission, p.1; Ausgrid submission, p. 1, Origin Energy submission, p. 1; and Total Environment Centre submission, pp. 2-3.

32 Total Environment Centre submission, p. 3.

33 Ibid.

34 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 demand-side participation 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 demand-side participation. However, the review identified a number of aspects of the current Rules that could be improved to enhance demand-side participation, and this Rule change was one such recommendation to the MCE.

35 Total Environment Centre submission, p. 5.

36 Ibid.

37 Ibid.

different from the EBSS framework for TNSPs and the proposed Rule would ensure consistency across network businesses.[38]

Ausgrid also suggested that the current design and operation of the EBSS should be reviewed to address asymmetric risks for networks, particularly at the revenue reset. Ausgrid stated that this is because, in Ausgrid's view, the AER "will likely reduce operating expenditure forecasts and place businesses in a position where they continue to be penalised by overspending an allowance set by the AER that may not reflect efficient costs."[39]

### 5.2.3 Types of non-network alternative expenditure likely to benefit from being excluded from the EBSS

Ausgrid stated that the intent of the exclusion of non-network alternatives from the EBSS is to ensure that there is no disincentive for the economic substitution of opex for capex.[40] Ausgrid considered that as such, any opex that relates to the identification, development and implementation of alternatives to conventional network investments should be captured. Ausgrid stated that expenditure that should be captured as non-network alternative expenditure should include payments to providers of network support (including embedded generators), the cost of developing the necessary information, knowledge and capability to develop and deliver demand management type alternatives, internal costs related to the development and management of demand management initiatives, and the cost of trialling innovative alternatives to conventional network investment.[41]

Similarly, the TEC listed a number of specific activities that that it considered as non-network alternatives.[42] However, the TEC stated that it interprets non-network alternative expenditure and elements of demand-side participation as 'actions which change the demand on an electricity system'.[43] The TEC was of the view that if evidence can be provided that a particular initiative lowers demand on a network, is cheaper than or equal to the cost of investing in network solutions, and provides satisfactory reliability and security of supply, then it should be excluded from opex under the EBSS.[44]

### 5.2.4 Implementation costs and administrative regulatory burden

Stakeholders did not express any views on the Rule Proponent's view of the implementation costs and administrative regulatory burden arising from the Rule change request.

---

38 Ausgrid submission, p.1 and Total Environment Centre submission, p. 2.

39 Ausgrid submission, p. 1.

40 Ibid, p. 2.

41 Ibid.

42 Total Environment Centre submission, p. 6.

43 Ibid.

44 Ibid.

## 5.3 Commission's analysis

### 5.3.1 The EBSS and incentives for non-network alternative expenditure

In principle, where expenditure on demand management and other demand-side related activities is operational in nature, the EBSS can potentially create a disincentive problem for TNSPs in making efficient substitution of network infrastructure solutions. This is because expenditure on demand-side related solutions are largely in the form of on-going opex. 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.

In response to the economic regulation issues raised by the TEC, the Commission considers that those issues are beyond the scope of matters that are being addressed by this particular Rule change request. As noted by the TEC, some of the issues relating to the economic regulatory framework for DNSPs could be potentially addressed as part of the AEMC's Power of Choice Review. In addition, the Commission also notes that the AER is currently developing a Rule change package addressing a number of the economic regulatory framework issues in chapters 6 and 6A of the Rules. Depending on the extent of issues potentially raised by the AER in its forthcoming network regulation Rule change request, the economic regulatory framework issues raised by the TEC could be examined as part of that Rule change process.[45]

### 5.3.2 Treatment of non-network alternative expenditure under current EBSS arrangements

The Commission took into consideration the AER's determinations on the applicability of the EBSS as part of its TNSP revenue cap determinations. The AER's recent decisions on the EBSS suggest that, despite the Rules not requiring it 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.[46] Similarly, the AER has

---

45 On 5 August 2011, the AER released its "*Strategic Priorities and Work Program 2011-12*" in which it states that following its review of network regulation arrangements under chapters 6 and 6A, it has identified changes to the Rules to better protect consumers from paying more than they should for the safe and reliable supply of electricity. The AER has stated that its Rule change proposal will focus on: (i) how the regulator can ensure that the allowances for the businesses are no more than necessary, reflecting an unbiased estimate of efficient costs; (ii) ways to ensure that network businesses are not rewarded for unnecessary and excessive overspends; and (iii) reforming the process for deciding the network businesses' allowable returns to ensure that returns are consistent with current commercial practices and financing costs. The AER has stated that it will be proposing Rule changes to the AEMC in the third quarter of 2011: AER, *Strategic Priorities and Work Program 2011-12*, pp. 4-5.

46 AER, *TransGrid Transmission Determination 2009-10 to 2013-14*, Final Decision, April 2009, pp. 101-102.

excluded opex on non-network alternatives from the EBSS applicable to Transend in the 2009-10 to 2013-14 revenue cap determination.[47]

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.

The Commission is of the view that while it appears that the current disincentive for TNSPs to pursue non-network alternative expenditure under the EBSS may not be material, this is primarily because the AER has already moved to exclude non-network alternative expenditure from the scheme in some recent TNSP revenue determinations to ensure that TNSPs face neutral incentives to pursue network solutions compared to non-network alternatives.

However, the Commission considers that while the draft Rule, if made, may not have any practical effect on some TNSPs, it will nonetheless increase consistency between determinations for different TNSPs, align the determination requirements for TNSPs with that of DNSPs, and increase the likelihood that demand management expenditure is segregated from opex under the EBSS.

In addition, the current lack of certainty and consistency on how a TNSP’s non-network alternative expenditure may impact on its EBSS reward/penalties for the next regulatory period makes it unlikely that a TNSP will take a risk by substituting more economically efficient demand management expenditure with capex. By making it explicit in the Rules to require the AER to consistently consider the EBSS reward/penalty effects on incentives to undertake non-network alternative expenditure should provide TNSPs more confidence to pursue demand management options as a means of efficiently deferring capex.

In response to Ausgrid’s comment that the current design and operation of the EBSS should be reviewed to address asymmetric risks for network businesses, the Commission notes that the EBSS Rules only provide a framework for the AER to apply in designing and implementing an EBSS. The operational design features and application of the EBSS at the time of revenue resets is a matter for the AER in accordance with its revenue determinations. However, the Commission acknowledges Ausgrid’s support for this Rule change and its comment that it will address its specific issues with on the operation of the EBSS and its revenue reset implications for Ausgrid with the AER during consultation on its next revenue reset.

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

### 5.3.3 Types of non-network alternative expenditure likely to benefit from being excluded from the EBSS

While this issue was not canvassed in the Rule change request, comments were sought from stakeholders in the consultation paper on the types of expenditure that can be characterised as non-network expenditure and whether the AER should have flexibility and discretion in determining the types of opex that can be classified as non-network alternative expenditure.

The existing Rule on the design and implementation on EBSS provides the AER with considerable discretion. The Commission recognises that the Rule proposed by the Rule Proponent does not expressly require the AER to exclude any opex that can be characterised as non-network alternative expenditure from the EBSS.

The Commission notes that the AER has already observed the difficulty in developing a comprehensive list of the cost elements that can properly be excluded from the scheme's operation.[48] In its submission, the TEC has also observed the difficulty in developing an exhaustive list of non-network alternative expenditure. Demand management activities itself covers a wide spectrum of activities as a subset of non-network alternatives as evidenced from the types of costs suggested by Ausgrid and TEC.

The Commission considers that the EBSS should provide the AER with flexibility and discretion to allow businesses to propose, for consideration by the AER, cost categories to be excluded from the operation of the EBSS so that they are not unfairly penalised. It would not be appropriate to mandate what types of expenditure can be classified as non-network alternative expenditure given that it encompasses such a wide range of activities. Emerging smart grid technologies are also likely to create the need for a flexible definition of non-network alternative expenditure to allow the TNSPs to propose types of costs that may as yet be unknown.

Furthermore, the Commission considers that as prudent regulatory practice, the AER should be given some flexibility in scrutinising the non-network alternative cost categories proposed by the businesses under the EBSS given the potential for TNSPs to inappropriately respond to the incentive framework by restructuring their capitalisation policies and substituting expenditures between opex and capex. Regulatory oversight will be important to ensure that there are no perverse outcomes from a scheme that is intended to improve expenditure efficiencies.

The Commission also notes that the proposed Rule is intended to align the EBSS requirement on exclusion of non-network alternatives for TNSPs with the EBSS provisions for DNSPs where the AER has similar discretion in determining what constitutes non-network alternative expenditure.

---

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

### 5.3.4 Implementation costs and administrative regulatory burden

The Commission considers that the draft Rule is not likely to impose any significant costs on TNSPs or increase any administrative burden on the regulator as it is only an incremental change to the existing EBSS arrangements. The draft Rule is also not likely to require substantial changes to the AER's existing regulatory processes and practices as it merely codifies the AER's existing practise in relation to the issue and aligns the arrangement with the EBSS framework for DNSPs.

## 5.4 Conclusion

Having considered responses to the Rule Proponent's view as well as its own findings from the Stage 2 DSP review, the Commission has concluded that the current EBSS framework for TNSPs does not ensure that the AER will consistently consider the incentives for non-network alternative expenditures when it applies the EBSS to revenue determinations. As a result, the current EBSS requirements could potentially penalise a TNSP who, in the previous regulatory period, decided to undertake non-network alternative expenditure as a means of efficiently deferring capex.

The Commission also acknowledges that that the AER has already moved to recognise the impact that the EBSS can have on TNSPs' incentives for non-network alternative expenditure. While the AER's more recent decisions on the EBSS effectively neutralises the materiality of the problem identified by the Rule Proponent, the Commission considers that a draft Rule should nonetheless be made to clarify the issue. This will ensure that the Rules are transparent on future decisions as to the EBSS' impact on incentives to pursue economically efficient demand-side solutions.

The Commission has decided not to define or categorise non-network alternative expenditures for the purposes of the EBSS. The objective of the draft Rule is more likely to be achieved by allowing the AER discretion in deciding the types of non-network alternative opex it will exclude from the EBSS on a case by case basis. This draft Rule provision is also consistent with the non-network alternative expenditure EBSS arrangements for DNSPs.

The Commission recognises that the benefits for the promotion and uptake of non-network alternative investment brought about by the draft Rule are likely to be small. However, it does strengthen the scope and certainty for TNSPs to consider demand management and other forms of non-network alternative expenditure that may represent an efficient substitute to network solutions. Given the negligible costs of implementing the change, the Commission believes the benefits are likely to lead to some improvements in terms of efficient investment and pricing outcomes for TNSPs and consumers.

## Abbreviations

| | |
|---|---|
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| capex | capital expenditure |
| DNSP | Distribution Network Service Providers |
| EBSS | Efficiency Benefit Sharing Scheme |
| MCE | Ministerial Council on Energy |
| NEL | National Electricity Law |
| NEO | National Electricity Objective |
| NER | National Electricity Rules |
| opex | Operating Expenditure |
| Stage 2 DSP Review | Stage 2 Final Report on Review of Demand Side Participation in the NEM |
| TEC | Total Environment Centre |
| TNSP | Transmission Network Service Providers |
| TUOS | Transmission Use of System |

# A Summary of issues raised in submissions

| Stakeholder | Issue | AEMC Response |
|---|---|---|
| Ausgrid | The current design and operation of the EBSS should be reviewed to address asymmetric risks for networks, particularly at the regulatory reset. Ausgrid stated that this is because the AER "will likely reduce operating expenditure forecasts and place businesses in a position where they continue to be penalised by overspending an allowance set by the AER that may not reflect efficient costs." | Noted. The EBSS Rules provide the AER with discretion on the design and implementation of the scheme. This Rule change is adding an additional attribute for the AER to take into consideration in the design and implementation of the EBSS on the specific issue of non-network alternative expenditure. Issues on the operation of the EBSS more generally and how the AER determines the opex forecasts at revenue resets is beyond the scope of the issue this Rule change is addressing. However, the Commission acknowledges Ausgrid's support for the Rule change and its comment that it will address its specific issue with the operation of the EBSS and regulatory reset implications for Ausgrid with the AER during consultation on its next revenue reset. |
| Grid Australia | Stated that TNSPs should be provided with the same reasonable opportunity to retain efficiency savings regardless of whether the expenditure involves network or demand side (non-network) solutions. | Noted. |
| Origin Energy | Origin Energy states that the removal of any barriers to undertake non-network alternatives should be pursued expeditiously to help remove the disincentive under the EBSS. | Noted. |
| Total Environment Centre | The TEC expressed strong support for the Rule change proposal and stated that even though recent decisions by the AER on the EBSS may suggest that it may already exclude non-network alternative expenditure from the scheme in some TNSP determinations, this Rule change must be | Noted. The Commission considers that the issues raised are beyond the scope of matters that are being addressed by this particular Rule change. As noted by the TEC, some of the issues it has raised could be potentially addressed as part of the AEMC's Power of Choice Review. In addition, depending on when the AEMC receives the AER's chapter 6 and 6A network regulation Rule change package and the extent of the issues raised by the AER, the economic regulatory framework issues raised by |

| Stakeholder | Issue | AEMC Response |
|---|---|---|
| | made.<br><br>However, the TEC does not believe that the Rule change will result in any material increase in demand-side participation or reduce what it views as a strong bias towards supply-side projects in the NEM. It is of the view that with or without the implementation of the proposed Rule change, there are many flaws in the current economic regulation Rules framework that provide incentives for network businesses to "game the system and invest in less efficient network solutions over more efficient non-network solutions."<br><br>The TEC further states that if the proposed Rule is implemented, it should not be regarded as a comprehensive redress of the bias against demand-side participation in favour of network solutions, either by itself or in conjunction with the other Rule change requests initiated by the MCE as a result of the AEMC's Final Report on the Stage 2 Review.<br><br>The TEC believes that this Rule change is addressing a really a minor barrier to demand side participation in the NEM when considered against the number and strength of the barriers. However, the TEC acknowledges that some of the remaining issues can be addressed as part of the AEMC's Power of Choice Review. | the TEC could be examined as part of that Rule change process. |