

HANGE CHANGE

Australian Energy Market Commission

RULE DETERMINATION

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

Rule Proponent(s)

Ministerial Council on Energy

Commissioners

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22 December 2011

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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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Summary

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 in this Final Determination, including the rule as made, the Rule proposed by the MCE, without amendments. The Rule as made commences on 22 December 2011.

The Commission has concluded that the current EBSS framework for TNSPs does not ensure that the Australian Energy Regulator (AER) will 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 control 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 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 Rule as made makes the EBSS arrangements for non-network alternative expenditure for TNSPs consistent with those for DNSPs.

The Commission has not defined or categorised non-network alternative expenditures for the purposes of the EBSS. The Commission believes that the objective of the Rule as made 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 Rule as made are likely to be small. However, the Rule as made 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 Rule change is likely to provide in terms of improving efficient investment and pricing outcomes for TNSPs and consumers.

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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) 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 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 (DSP) in the National Electricity Market (NEM) (Stage 2 DSP Review).

1.2 Rationale for the 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. The Commission understands that 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

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 control 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, when designing and implementing an EBSS, to consider the possible effects of the scheme on a TNSP's incentives for the implementation of non-network alternatives (proposed Rule).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 control 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 control period in incurring efficient expenditure. The TNSP will look to reduce its actual expenditure from that forecast within a regulatory control 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 control period as the business would retain the benefit for the remainder of the regulatory control period.

In order to balance the expenditure incentive over the regulatory control 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.

² Ibid, pp. 3-4.

³ Ibid, Appendix A.

² Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

The purpose of the scheme is to ensure that TNSPs face continuous incentives to make efficiency savings on their operating costs throughout a regulatory control 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 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 control 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.

1.4.2 Stage 2 DSP Review recommendation

In November 2009, the Australian Energy Market Commission (AEMC) provided its Final Report on Stage 2 DSP Review to the MCE.⁶ 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.⁷ 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 control 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.

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

⁵ Ibid, p. 1.

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.

⁷ Ibid, p. vii.

⁸ Ibid, p. viii.

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.⁹

The Stage 2 DSP Review also noted that the 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. 10

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.¹¹ 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. 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:

⁹ Ibid, p. 24.

¹⁰ Ibid.

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-%20M CE%20Response%20-%20AEMC%20DSP%20Stage%202%20Report.pdf

www.aemc.gov.au.

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

- 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 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 final 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 Publication of draft Rule determination and draft Rule

On 29 September 2011 the Commission published a notice under section 99 of the NEL and a draft Rule determination in relation to the Rule Change Request (Draft Rule Determination). The Draft Rule Determination included a draft Rule (Draft Rule).

Submissions on the Draft Rule Determination closed on 10 November 2011. The Commission received six submissions on the Draft Rule Determination. They are available on the AEMC website. A summary of the issues raised in submissions, and the Commission's response to each issue, is contained in Appendix A.2.

¹³ www.aemc.gov.au

2 Final Rule Determination

2.1 Commission's determination

In accordance with section 102 of the NEL the Commission has made this final Rule determination in relation to the Rule proposed by the MCE. In accordance with section 103 of the NEL the Commission has determined to make the proposed.

The Commission's reasons for making this final Rule determination are set out in section 3.1.

The National Electricity Amendment (Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses) Rule 2010 No 10 (Rule as made) is published with this final Rule determination. The Rule as Made commences on publication. The Rule as made is the same as the proposed Rule. 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 14;
- submissions received during first and second round of consultation;
- the AER's September 2007 final decision on the EBSS for TNSPs;¹⁵
- the AER's final decisions on the EBSS as part of its TNSP revenue cap determinations for TransGrid's 2009-10 to 2013-14 regulatory control period¹⁶ and Transend's 2009-10 to 2013-14 regulatory control period¹⁷;
- the AEMC's Stage 2 DSP Review Final Report¹⁸; and

¹⁴ Under section 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a Rule.

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

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

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

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

⁶ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

the rule making test under Part 7 of the NEL, being the Commission's analysis as
to how the Rule as Made will, or is likely to, contribute to the achievement of the
National Electricity Objective (NEO), in addition to taking into account the
revenue and pricing principles as set out in section 7A of the NEL as required
under section 88B of the NEL.

2.3 Commission's power to make the Rule

The Commission is satisfied that the Rule as made falls within the subject matter about which the Commission may make Rules. The Rule as made falls within the matters set out in 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 Rule as made 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 Rule as made because the 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 the 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 of supply.¹⁹

The Commission is satisfied that the Rule as made will, or is likely to, contribute to the achievement of the NEO because it 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 Rule as made is compatible with the proper performance of Australian Energy Market Operator (AEMO)'s declared network functions. The Rule as made 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

In applying the Rule making test in section 88 of the NEL, the Commission has taken into account the revenue and pricing principles as required under section 88B of the NEL as the Rule Change Request.

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

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.

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

 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 Rule as made 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/propositions 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 control 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 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 control period makes it unlikely that a TNSP will take a risk by substituting more economically efficient demand management expenditure with capex.

The Rule as made requires the AER in designing and implementing the EBSS, to 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 Assessment of Rule

The Rule as made 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 Rule as made 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 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)).

The Rule as made is the same as the draft Rule published in September 2011.

3.3 Civil Penalties

The Rule as made 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 Rule as made be classified as civil penalty provisions.

4 Commission's assessment approach

This chapter describes the analytical framework that the Commission has applied to assess the Rule Change Request in accordance with the requirements set out in the NEL (and explained in Chapter 2).

In assessing any Rule Change Request against the NEL criteria the first step is to consider the counterfactual arrangements against which the Rule change is being compared. In the present case the counterfactual arrangements are to leave the EBSS arrangements in the Rules unchanged.

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 Rule as made 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 Rule as made 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. ²⁰ 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 control period, decided to use demand management expenditure as a means of efficiently deferring capex.²¹

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.²² 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.²³

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. 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.

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.

²¹ Ibid.

²² Ibid, p. 4.

²³ Ibid.

²⁴ Ibid.

²⁵ 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.²⁶

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.²⁷

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. ²⁸ 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. ²⁹

5.2 Stakeholder views

The AEMC has received stakeholder responses following both the Consultation paper and the draft Rule determination.

5.2.1 Response to the Consultation Paper

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.

²⁶ Ibid.

²⁷ See: AER, Electricity transmission network service providers Efficiency Benefit Sharing Scheme -Final Decision, June 2008, p. 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. 6.

²⁹ Ibid

¹⁴ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

The EBSS and incentives for non-network alternative expenditure

All stakeholders agreed with the Rule Proponent's view on the interaction between the EBSS 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 pursue non-network demand-side solutions as doing so could potentially mean over-spending their opex targets which attracts financial penalties under the EBSS.³⁰

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.³¹ 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."³²

The TEC rejected the position held by the MCE and the AEMC that the current Rules framework "does not materially bias against the use of DSP [demand-side participation]". 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.³⁴

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.³⁵

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

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

Total Environment Centre submission, p. 3.

³² Ibid

Total Environment Centre submission, p. 5.

³⁴ Ibid.

³⁵ Ibid.

different from the EBSS framework for TNSPs and the proposed Rule would ensure consistency across network businesses.³⁶

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." 37

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. 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. ³⁹

Similarly, the TEC listed a number of specific activities that that it considered as non-network alternatives. ⁴⁰ 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'. ⁴¹ 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. ⁴²

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.

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

Ausgrid submission, p. 1.

³⁸ Ibid, p. 2.

³⁹ Ibid

Total Environment Centre submission, p. 6.

⁴¹ Ibid.

⁴² Ibid.

¹⁶ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

5.2.2 Response to the draft Rule determination

The Commission received six responses to the draft Rule determination. Responses were received from AER, Grid Australia, Origin, TEC, Moreland Energy Foundation Ltd (MEFL) and EnerNOC.

5.2.3 The EBSS and incentives for non-network alternative expenditure

All stakeholders supported the Commission's finding in the draft Rule determination that the inclusion of non-network alternative expenditure in the EBSS would distort the incentives of the TNSP to undertake efficient non network alternative expenditure.

TEC reiterated its view that the Rule change will not noticeably increase the use of non-network alternatives to capex as it does not address the underlying biases or barriers to such alternatives that are systematic in the NEM framework.⁴³ MEFL was also of the view that the draft Rule would be unlikely to increase significantly the use of cost effective demand side alternatives.⁴⁴

Treatment of non-network alternative expenditure under current EBSS arrangements

Consistent with its submission to the consultation paper the TEC noted that the Rule change aims to increase consistency between determinations for different TNSPs and align the determination requirements for TNSPs with those for DNSPs.⁴⁵

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

Both the TEC and AER supported the proposal by the AEMC in the draft Rule determination not to define or list the types of non-network alternative expenditure. 4647 The AER notes the nature of projects that regulated businesses submit for approval under the AER's determinations in part reflect technological innovation. The AER will continue to examine, on a case by case basis, expenditures proposed by regulated businesses to be demand related. 48

⁴³ TEC submission, p 2

⁴⁴ MEFL submission

TEC submission p 2

TEC submission, p 3

⁴⁷ AER submission, p 2

⁴⁸ AER submission, p 2

Implementation costs and administrative regulatory burden

Similar to the response to the consultation paper the stakeholders did not express any views on the implementation costs and administrative regulatory burden arising from the Rule change request.

5.3 Commissions'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.

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.⁴⁹ 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.⁵⁰

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

⁴⁹ AER, TransGrid Transmission Determination 2009-10 to 2013-14, Final Decision, April 2009, pp. 101-102.

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

¹⁸ Efficiency Benefit Sharing Scheme and Demand Management Expenditure by Transmission Businesses

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 Rule as 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 control 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 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.

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.⁵¹ 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

Analysis of Issues

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

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 Rule as made 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.

5.3.4 Implementation costs and administrative regulatory burden

The Commission considers that the Rule as made 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 Rule as made 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 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 control period, decided to undertake non-network alternative expenditure as a means of efficiently deferring capex.

The Commission also acknowledges 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 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 Rule as made 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 Rule as made 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 Rule as made 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.

A Summary of issues raised in submissions

A.1 First round of consultation

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	Noted.

	sion considers that the issues e scope of matters that are
change proposal and stated that even though raised are beyond the	e scope of matters that are
alternative expenditure from the scheme in some TNSP determinations, this Rule change must be made. However, the TEC does not believe that the Rule change will result in any material increase in could be potentially a AEMC's Power of Ch depending on when t chapter 6 and 6A net package and the exte	ome of the issues it has raised addressed as part of the noice Review. In addition, the AEMC receives the AER's twork regulation Rule change ent of the issues raised by the regulatory framework issues ould be examined as part of

Stakeholder	Issue	AEMC response
	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.	

A.2 Second round of consultation

Stakeholder	Issue	AEMC response
Australian Energy Regulator	The nature of projects that regulated businesses submit for approval under the AER's determinations, reflect to some extent technological innovation. The AER will continue to examine on a case by case basis, expenditures proposed by regulated businesses to be demand management related, and therefore to be excluded from the EBSS.	Noted.
Australian Energy Regulator	The AER recognises that where demand management expenditure is operational in nature, applying an efficiency scheme such as the EBSS that rewards or penalises a TNSP, depending on performance against a regulatory allowance, can reduce incentives for pursuing demand management.	Noted.
EnerNOC	EnerNOC note the continued low use of non-network alternatives by NSPs generally is a clear indication that a prescribed process and/or an "equivalent value" approach is warranted.	The Commission considers that the issue 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

Stakeholder	Issue	AEMC response
		Power of Choice Review.
EnerNOC	EnerNOC note the low adoption of non-network alternatives as well as cultural and other barriers that these Network companies have to non-network alternatives is justification for affirmative action that promotes more demand side alternatives.	Noted
Moreland Energy Foundation	Moreland Energy Foundation Ltd emphasise that this change is unlikely to significantly increase the use of cost-effective demand-side alternatives to expensive supply-side capital expenditure.	The Commission considers that the issue 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.
Moreland Energy Foundation	Moreland Energy Foundation Ltd supports the draft Rule determination and draft Rule, which removes a barrier to demand-side participation in the National Energy Market at the transmission level.	Noted
Total Environment Centre	TEC remains of the view that this Rule change will not noticeably increase the use of non-network alternatives to capex as it does not address the underlying biases or barriers to such alternatives that are systematic in the NEM framework.	The Commission considers that the issue 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.
Total Environment Centre	TEC noted the inconsistency between the EBSS arrangements for DNSPs and TNSPs in relation to the treatment of non-network alternative expenditure and agreed with other stakeholders that the EBSS, absent the Rule change, can create an unintentional disincentive for TNSPs to pursue	Noted

Stakeholder	Issue	AEMC response
	non-network alternatives.	
Total Environment Centre	TEC agrees with the AEMC's decision not to explicitly define or list non-network alternative expenditures under the EBSS.	Noted
Total Environment Centre	TEC note the additional requirement upon the AER will, to a very small extent, increase the likelihood that TNSPs will undertake economically efficient demand-side projects under opex in principle and removes one of the barriers to DSP in the NEM	Noted
GridAustralia	Grid Australia supports the proposal to explicitly exclude non-network alternatives (such as network support agreements) from the EBSS for electricity transmission network businesses.	Noted
Origin	Origin supports the draft Rule that would make it an explicit requirement for the Australian Energy Regulator (when designing the EBSS) to consider the potential impact on TNSP incentives to undertake non-network alternative expenditure.	Noted

Abbreviations

AEMC Australian Energy Market Commission

AEMO Australian Energy Market Operator

AER Australian Energy Regulator

DNSP Distribution Network Service Provider

DSP Demand Side Participation

EBSS Efficiency Benefit Sharing Scheme

MCE Ministerial Council on Energy

MEFL Moreland Energy Foundation Ltd

NEL National Electricity Law

NEM National Electricity Market

NEO National Electricity Objective

NER National Electricity Rules

TEC Total Environment Centre

TNSP Transmission Network Service Provider

TUOS Transmission Use of System