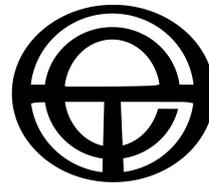


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Submission to the AEMC

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

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Introduction

The purpose of an Efficiency Benefit Sharing Scheme is to incentivise NSPs to spend less opex than that allowed in the current revenue reset. It allows them to retain and carry forward the difference 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. In principle, this approach encourages NSPs to operate at the level of opex that is most economically efficient, thereby reducing costs for consumers and satisfying the National Electricity Objective.

This rule change seeks to avoid penalising TNSPs who decided to use demand management expenditure as a means of efficiently deferring capex in the previous regulatory period. It requires the AER to, when designing and implementing the EBSS, consider the possible effects of the scheme on a TNSP's incentives for the implementation of non-network alternatives, potentially segregating out of opex EBSS allowances relating to non-network solutions. This additional requirement upon the AER increases 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.

TEC's Support for this Rule Change

Even though recent decisions by the AER on the EBSS may suggest that it may already exclude non-network alternative opex from the scheme in some TNSP determinations, TEC believes this rule change must be made. In principle, this rule change will increase consistency between determinations for different TNSPs, align the determination requirements for TNSPs with that of DNSPs, and increase the likelihood that demand management is segregated from opex under the EBSS, and increase the potential for economically efficient investment by TNSPs.

As TEC has previously advocated for the segregation of demand-side participation from opex under the EBSS, we are pleased that the MCE has initiated this rule change and commend the AEMC for highlighting it.

Barriers to DSP and Limitations of the EBSS

The fundamental problem with an EBSS is that any program that is included under opex (like demand management and energy efficiency) which can also be addressed by a program included under capex (like network augmentation) provides an incentive to invest in supply-side over demand-side solutions.

The basis for such an observation is that the opex allowance excludes any profit for an NSP, after the 5 year EBSS period, whereas a capex solution has embedded within it a profit element both from the sale of access to its network and the rate of return on capital used for a network solution. As the

EBSS rewards a NSP for reducing its opex below that allowed for in the revenue reset, a solution which reduces opex increases profit. As increased capex also rewards the NSP, there is no countervailing pressure on the NSP to find an opex solution for a network need.

This is partially recognised by the MCE in the details of the rule change request: “the MCE states that the interaction of the application of the EBSS to opex and the ability to carry forward actual capital expenditure (capex) to the asset base in future periods may distort the incentives between building additional network infrastructure and contracting for demand management as an efficient non-network alternative solution.”

This rule change request seeks to address this problem by requiring the AER to consider “the possible effects of the EBSS on incentives for the implementation of non-network alternatives.”

In addition, Clause 6A.6.5(b) states:

In developing and implementing an efficiency benefit sharing scheme, the AER must have regard to:

- (1) the need to provide Transmission Network Service Providers with a continuous incentive (that is equal in each year of any regulatory control period) to reduce operating expenditure;*
- (2) the desirability of both rewarding Transmission Network Service Providers for efficiency gains and penalising Transmission Network Service Providers for efficiency losses; and*
- (3) any incentives that Transmission Network Service Providers may have to inappropriately capitalise operating expenditure.*

This Clause and this rule change request to amend it both seek to address the capitalisation of operating expenditure and the consequent bias towards supply-side solutions in the NEM. However, in practice, the discretion that the AER has to consider the economic efficiency of NSP investments and the transfer of opex to capex is far more limited. With or without the implementation of this rule change request, there exist many flaws in the NER which provide incentive for NSPs to game the system and invest in less efficient network solutions over more efficient non-network solutions:

- The ex-ante approach to capex in the BB provides an active incentive for the NSP to find supply-side solutions: the higher the level of capex and the higher the rate of return determined, ceteris paribus, the higher the incentive for the NSP to invest in network solutions. The lack of an ex-post approach to capex provides no oversight to ensure that NSP has undertaken the most economically efficient project in order to supply electricity services to its customers. In addition, NSPs have the potential to overspend their allowed capex and carry this over into the next determination period.

- The level of scrutiny that network proposals face can be decreased by NSPs through the submission of increasingly lengthy and complex engineering reports, as the AER and state regulators such as IPART face very tight timeframes and resource barriers during determinations.
- The AER is unable to use their own ‘best-practice’ benchmarks for economic modelling during revenue determinations (except in Victoria). Instead, it must rely on the modelling provided by NSPs in their proposals, which, as described by Mr. Reeves, “are at the top of, or beyond, what could be considered a range that ‘reasonably reflects’ the required expenditure”.
- Based on past determinations, if the AER blocks unreasonable revenue proposals there is about a 60% likelihood that they will be approved if they are referred to the Competition Tribunal, effectively neutering any power held by the AER to block inflated proposals by monopoly network companies.
- The NER require formal demonstration for only a small component of an NSP’s capex business program because of the high triggers for the Transmission and Distribution Regulatory Impact Tests.
- The AER must include all capex incurred in the asset base for a NSP, even if these costs are unnecessary, imprudent or economically inefficient.
- Capex projects which are contingent at the time of a reset can be added to the allowed revenue post-reset, even if the ex ante capex allowance has not been used.

TEC agrees with AER Chairman, Andrew Reeves, that “as it stands, the current regime provides network businesses with incentives to submit revenue proposals that are at the top of, or beyond, what could be considered a range that ‘reasonably reflects’ the required expenditure”. Similarly, in its *Final Report on Changes in Regulated Electricity Retail Prices from 1 July 2011*, NSW IPART said it was “concerned that the cumulative effect of the economic regulation aspects of the NER skews the AER’s decisions towards higher prices and potentially inefficient outcomes.”

IPART said that in its view, the current regulatory framework:

- “may constrain the AER’s ability to apply what it considers to be the best estimate of the efficient operating and capital costs;
- “may provide strong incentives for network business to invest capital in the network because the prescriptive requirements of the NER may lead to excessive returns;

- “allows the businesses to earn a return on all capital invested regardless of its efficiency and prudence, by requiring the AER to roll all capital expenditure into the asset base without any ex post review; and
- “provides opportunities for the businesses to target particular issues through the appeal process.”

TEC asserts that this is not merely the view of IPART, but the reality of economic regulation of the NEM. We reject the position held by the MCE and the AEMC that the NER “does not materially bias against the use of DSP”. While the Rules do not *explicitly* bias against the use of DSP, there are multiple elements of the current Rules framework which *significantly* bias supply-side network solutions over demand-side non-network solutions.

TEC agrees with the MCE that this rule change is necessary and must be implemented if it is to begin to correct the bias towards supply-side projects in the NEM. However, it is unlikely that this rule change request, if implemented, will result in any material increase in demand-side participation. Particularly strong evidence for this is that the elements of this rule change already exist in the Rules for the Economic Regulation of Distribution Service, and demand-side participation in distribution networks remains extremely sub-optimal.

If this rule change request 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 of Demand Side Participation in the National Electricity Market. The problem this rule change attempts to address — the penalisation of TNSPs who implemented demand management in the previous regulatory period — is really a minor barrier to DSP in the NEM when considered against the number and strength of the barriers listed above.

This rule change request, therefore, is one step in the journey toward optimal demand-side and supply-side participation in the NEM, and we look forward to working with the AEMC on addressing the remaining issues as part of The Power of Choice — Stage 3 Review of Demand-side Participation in the NEM.

We address the questions asked in the consultation paper below.

Does the current EBSS as implemented by the AER create a material disincentive for TNSPs to undertake efficient non-network alternative expenditure?

The current EBSS as implemented by the AER may create a material disincentive for TNSPs to undertake efficient non-network alternative expenditure, as the AER has not consistently recognised the scheme’s

incentive effect across all TNSPs. The rule change request should address this inconsistency, in principle. However, the barriers outlined in this submission provide far greater material disincentive to undertake efficient non-network alternative expenditure and weaken the power of the EBSS and the AER to ensure economically efficient investment.

What types of demand management expenditure and other forms of DSP related expenditure undertaken by TNSPs can be characterised as non-network alternative expenditure?

Total Environment Centre interprets non-network alternative expenditure and elements of demand-side participation as ‘actions which change the demand on an electricity system’. 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.

Non-network alternative expenditure can therefore include, but should not be limited to:

- distributed generation, including standby generation and cogeneration;
- demand response;
- energy efficiency;
- power factor correction;
- integrated demand-side management projects;
- direct load control;
- fuel substitution;
- interruptible loads;
- load shifting;
- pricing initiatives, including time of use or demand-based tariffs; and
- ‘smart grid’ technologies.

Should the AER have flexibility and discretion in determining what types of expenditure can be classified as non-network alternative expenditure?

TEC agrees that it is difficult to develop an exhaustive list of non-network alternative expenditure — the cost elements that can properly be excluded from the scheme’s operation. Under the above definition, demand-side could encompass a wide spectrum of activities, from behaviour change resulting from the implementation of an environmental management system to load shedding. In addition, while the above list of demand-side projects can both satisfy the NEO and lead to environmental and social outcomes, not all of them may be appropriate or possible for TNSPs to implement.

The AER should have the flexibility and discretion to determine what types of expenditure can be classified as non-network alternative expenditure given that encompasses such a wide range of activities, and given they are regulating monopoly companies who have great incentive to game the

system, restructure their capitalisation policies, and substitute expenditure under opex in capex.

Rather than providing a comprehensive list of activities, the AEMC or AER could develop guidelines for what constitute non-network alternative expenditure activities in a similar way to how the New South Wales Energy Savings Scheme defines its Recognized Energy Savings Activities —through the satisfaction of proscribed criteria. This scheme also provides an avenue for market participants to identify and request to implement developing technologies and practices rather than relying on the efforts of the regulator.

At the same time, a list of common energy efficiency, demand management, distributed generation and smart grid technologies and practices could be developed to provide certainty for NSPs, along with mechanisms for the inclusion of less common and emerging technologies during determinations.

Finally, any uncertainty that arises through the lack of a comprehensive list or increased discretion given to the AER will be more than offset by the monopoly power held by the NSP and the slew of other incentives they have to generate revenue through capital investment.