

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Lodged online: www.aemc.gov.au

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Rule Change Proposal – Transmission Demand Management Incentive Scheme - ERC0266

The Australian Energy Council welcomes the opportunity to make a submission to the AEMC consultation on the Energy Networks Australia (ENA) submitted rule change proposing the Australian Energy Regulator (AER) develop a Demand Management Incentive Scheme (DMIS) and a Demand Management Innovation Allowance (DMIA) to apply to transmission.

The Australian Energy Council (AEC) is the industry body representing 23 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over 10 million homes and businesses.

The case for change

The DMIS contains three elements:¹

- A cost uplift on expected costs of efficient Demand Management (DM) projects;
- A net benefit constraint, to ensure the incentive payment for any project cannot be higher than that project's expected net benefit; and
- An overall incentive constraint, which limits the total incentive in any year to one per cent of the distributor's allowed revenue for that year.

The AEC considers that DM represents a viable alternative to traditional capital intensive network investment – both transmission and distribution. Supported by the significant and ongoing growth in renewables and advances in communication technologies – coupled with increased storage capability, Demand Management may be more efficient than either of firm back up generation in support of intermittent renewables, or the expansion of the existing transmission network.

However, the problems with the competitiveness of DM (which have been a consistent contributor to the lack of its take up since the commencement of the National Electricity Market), the potential for inappropriate market incentives to be created and its overall impact on the complexity of system operations must be considered in the context of this proposed rule change. Whilst the AEC encourages the use of DM alternatives, which can unequivocally deliver lower

¹ AER, Demand management incentive scheme, Electricity distribution network service providers, December 2017.

prices for consumers, the question of capex over opex bias in the investment decisions of transmission networks is not actually answered by DMIS arrangements. For these reasons we do not support the use of cost uplift for such projects.

The AEC notes that back in 2015, in their response to AEMC's consultation paper on a Demand Management Incentive Scheme for Distribution that the ENA foreshadowed the potential for DM solutions to fail to address the network constraints for which they are purchased. This had the potential to increase the threshold for the approval of DM solutions relative to network alternatives.² DM is inherently a challenging technology to develop, which is the main reason it has been exploited to only a limited extent in the NEM, and we should avoid assuming that it would be efficient to exploit it to a much higher level. If the DMIS arrangement does this, then it would be inefficient.³

The AEC notes further that the ENA also argues that the penalty of either Service Target Performance Incentive type schemes, or reputational risk, is sufficient incentive to deliver the funded services⁴. The AEC contends that what the ENA describes are actually not sufficient incentives to protect against failure, and that reputational risk to a non-market entity under a regulated revenue cap is not financially material. End users are not readily able switch to a different transmission service provider as a response to the poor performance of DM.

The magnitude of any proposed DM incentive arrangement should correspond to the value that DM will deliver to end customers, which in turn will reflect the opportunity cost to the customer of the business not undertaking a DM investment.⁵ It is important that the economic benefits reflected in the DM incentive cannot otherwise be captured by either the subordinate network distribution business or the DM provider themselves.⁶

Are non-network options for transmission readily available?

Non Network Options for TNSPs are readily available now.

Transgrid, according to its own account⁷, procured 350 MW of DM (both load curtailment and embedded generation) during the summer of 2007/08 in the Sydney-Newcastle-Wollongong area.

² DEMAND MANAGEMENT INCENTIVE SCHEME Response to AEMC Consultation Paper – ERC0177 19 March 2015, p.2 <https://www.aemc.gov.au/sites/default/files/content/3caae9c2-8f9a-4a78-b45c-3bc841aa9b95/RuleChange-Submission-ERC0177-Energy-Networks-Association-150319.PDF>

³ The Western Australian experience documented in the Final Report: Reforms to the Reserve Capacity Mechanism, Department of Finance | Public Utilities Office is a useful corollary. See https://www.treasury.wa.gov.au/uploadedFiles/Site-content/Public_Utility_Office/Industry_reform/Reforms-to-the-Reserve-Capacity-Mechanism-Final-Report.pdf

⁴ DEMAND MANAGEMENT INCENTIVE SCHEME Response to AEMC Consultation Paper – ERC0177 19 March 2015, p.2 <https://www.aemc.gov.au/sites/default/files/content/3caae9c2-8f9a-4a78-b45c-3bc841aa9b95/RuleChange-Submission-ERC0177-Energy-Networks-Association-150319.PDF>

⁵ [Oakley Greenwood, Advice to the AER on the DMIS Incentive, 23 June 2017](https://www.aer.gov.au/system/files/Oakley%20Greenwood%20-%20Advice%20on%20the%20DMIS%20-%2023%20June%202017.pdf)
<https://www.aer.gov.au/system/files/Oakley%20Greenwood%20-%20Advice%20on%20the%20DMIS%20-%2023%20June%202017.pdf>

⁶ Ibid

⁷ Non-network solutions as an alternative to traditional network investment,: <https://www.transgrid.com.au/news-views/blog/Lists/Posts/Post.aspx?ID=159>

The implementation of this DM program enabled TransGrid to defer construction of the Western 500 kV Project for one year. Transgrid claimed that this delivered NSW consumers a cost saving of \$14m.

Four years later, TransGrid partnered with EnerNOC, to deliver a DM project involving more than 80 sites across metropolitan Sydney. By its own account⁸, this collaboration saw a possible reduction of peak demand for the summer of 2012/13 by a total of 48 MW in power use when peaks were forecast.

What is apparent from the Transgrid experience is that non-network options are both readily available and implementable in the current rules framework. In this procurement of demand management it is our assumption that Transgrid made prudent and logical decisions that provided them with the highest utility (ie, maximised their profit) but also were achieved without requiring additional levies from customers.

The Transgrid experience, undertaken in the absence of any incentive scheme, does not support the view that the only way to unlock the potential benefits of increased network DM is through the application of the DMIS and DMIA for transmission networks.

Transmission networks are already required to consider non-network options. If they are failing to do so, the AEC contends that the proposed rule change is not a prudent way to address this bias. We are concerned that once the AER is legally required to implement a DMIA & DMIS for transmission under the proposed rule, then as with the DMIS and DMIA for distribution, the AER are locked in to giving inefficiently generous incentives to ensure their success.

Providing financial incentives for TNSPs to undertake demand side investments under schemes such as the DMIA and DMIS means that future action will occur only when they are inefficiently generous. This is not the best approach to address the cultural and commercial biases to invest in capex. This capex bias would be better addressed by fittingly lower capital allowances, and a totex regime.

What, if anything, prevents the RIT-T from delivering a non-network solution where it is the most efficient solution?

The AEC has previously called for amendments to Chapter 6 to create a prohibition on including costs in the RAB in excess of those revealed through the RiT-D processes (6.2.1.e).⁹ In the absence of such an approach, the RIT-T may not deliver a non-network solution even when it is the most efficient, as there is no financial penalty for not doing so.

The AEC retain the view that the arrangements that will best promote the achievement of the NEO should encourage productive, allocative and dynamic efficiency in both the market for regulated transmission network services, as well as the market for DM services. The regulatory framework should not inadvertently lead to less efficient businesses, (as might arise with inefficiently generous incentives such as the DMIS uplift or DMIA) being able to obtain market share over more efficient

⁸ Ibid

⁹ Rule Change Proposal: Amendments to Chapters 5, 6, 6A and 7 of the National Electricity Rules

businesses. Therefore TNSPs should not be able to use their monopoly position or their ability to obtain benefits from DM services that cannot be obtained by other parties, to reduce competition for the provision these services. Such a reduction could also reduce efficiency in the market in potentially both the short and long terms.

If the cost past through mechanism is retained as proposed by ENA, how would a DMIS for TNSPs need to be structured to provide efficient incentives for DM?

The AEC have maintained that the DMIS does necessitate an uplift value greater than zero. The AEC have also urged adoption of a procurement only model for these schemes, exposing competitive providers to the technical information and price signals that indicate where and when transmission network support services are most valuable. This could be done now.

In the end, if the DMIS in transmission is similar to that for distribution, then transmission networks can be paid, say, up to \$1.50 for every \$1 they spend on a demand side project under the RIT-T (subject to some other constraints). Whilst this may be well intended to mitigate the cultural bias toward capex, for the demand side projects that maximise net benefits to consumers under the RIT-T, the scheme may deliver some highly profitable projects to TNSPs. At the same time, it might also allow TNSPs to further profit through managing their demand side projects 'internally', by nominally outsourcing them to their own ring fenced affiliate, through paying them an opex charge for management.¹⁰ To our understanding, transmission businesses do not have the same self-reporting obligations to a ring fencing guideline as distribution businesses do, and are not subject to specific obligations in this regard. This anomaly should be corrected prior to any consideration of a DMIS expansion to transmission.

In addition, it is important that the DM incentive under the Scheme does not duplicate (and therefore claim financially) any value of DM that is already able to be captured by a market participant.¹¹

To what extent should consumers bear the risk of short-term cost increases if TNSPs face higher incentives/rewards for increased DM expenditure through a DMIS?

The AEC contends that the risk of cost increases with the proposed approach is both systemic and long term. Consistent with the National Energy Objective (NEO), the long term interests of customers will be best served by arrangements that facilitate the provision of DM and Demand Response of the right size, location and operational characteristics that maximise economic welfare. In this context the need to accommodate and allocate the values of the transmission network peak, and the energy (generation) peak, mean that the transmission network is not

¹⁰ The AER Annual Compliance Report on the Electricity Distribution Ring-Fencing Guideline found that distributors were often not compliant with their Ring-fencing obligations. Particularly the AER noted that Evoenergy failed to implement key aspects of the Guideline and did not have non-discrimination procedures for dealing with its "Commercial Business Unit", while SA Power Networks and Ausgrid appeared to have adopted insufficient controls in relation to some obligations. See <https://www.aer.gov.au/system/files/Annual%20Report%20Final.pdf>

¹¹ Oakley Greenwood, Advice to the AER on the DMIS Incentive, 23 June 2017
<https://www.aer.gov.au/system/files/Oakley%20Greenwood%20-%20Advice%20on%20the%20DMIS%20-%2023%20June%202017.pdf>

necessarily the best party to make the investment decision. Dynamic price signals covering all parts of the value chain need to be seen so as markets can respond accordingly.

The Western Australian experience should also be considered. Reforms to the Capacity Reserve Mechanism in the WEM saw the exit of around 310MW of demand side response in 2017/18¹², following review by the Public Utilities Office into the nature of the capacity excess. This excess was a \$134 million cost to electricity consumers, and will take some time to unwind. This occurred because demand side management resources were able to enter the WA market under more favourable terms of use than electricity generation resources. The Report concludes that all capacity resources should face availability and measurement requirements that are broadly equivalent¹³.

The AEC has historically objected to comparable DNSP incentives as we do not consider the Ring-fencing and Compliance frameworks under which distribution network businesses operate have proven to be sufficiently robust and enforceable to mitigate the risk of inefficient market outcomes in the short term. We have historically been concerned that the application of the DMIS will significantly hinder the development of competitive demand side markets in the future. That concern remains.

Will a DMIS and DMIA for transmission complement or overlap with the existing incentive mechanisms?

The direction of the Power of Choice (PoC) review conclusion was that exploitation of customer-based activities are best performed by competitive processes and arranged by market participants. The current proposal puts this at risk, as one of the biggest threats to this model is that the monopolist transmission network business can crowd out competitive service. In this regard the existing DMIS effectively runs counter to the PoC direction; it uses monopolist money to encourage a monopolist activity to crowd out a competitive activity. Our view is that the entire DMIS concept should now be reconsidered in light of the PoC direction. It should certainly not be extended into transmission at this time.

The following potential conflicts appear to arise from introducing a TNSP DMIS/DMIA scheme:

- The vast majority of customers are connected to distribution networks, not to transmission networks. To the extent any network seeks to contract services from customers, we should be using the network closest to the customer to be the interface.
- A transmission network can already seek from, or distribution networks can put forward to them, non-network options to solve transmission congestion. These are options that distribution network businesses can recruit from their customers, highlighting that transmission networks could already benefit from the existing DMIS. Indeed economic benefits should already be accruing in the transmission system from the application of the

¹²Final Report: Reforms to the Reserve Capacity Mechanism, Department of Finance | Public Utilities Office. See https://www.treasury.wa.gov.au/uploadedFiles/Site-content/Public_Utility_Office/Industry_reform/Reforms-to-the-Reserve-Capacity-Mechanism-Final-Report.pdf

¹³ Ibid. Page 4

DMIS in the distribution system. There is nothing that prevents the distribution networks from using their DMIS to investigate how they can support transmission networks.

- There is already customer confusion created by having two organisations in distribution networks and retailers engaging with customers. This proposal creates a third engagement.

Any questions about our submission should be addressed to David Markham by email to david.markham@energycouncil.com.au or by telephone on (03) 9205 3107.

Yours sincerely,

David Markham
Corporate Affairs
Australian Energy Council