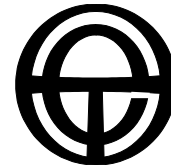


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SUBMISSION
to

Australian Energy Regulator
Regulatory investment test for transmission

Issues Paper

17 November 2009

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Regulatory investment test for transmission Issues Paper

1. Introduction

Although Total Environment Centre (TEC) appreciates the opportunity to comment on the Australian Energy Regulator's (AER) Issues Paper on the regulatory investment test for transmission (RIT-T), the failure of the Ministerial Council on Energy (MCE), the Australian Energy Market Commission (AEMC) and the AER to put in place a regulatory framework that prioritises demand management (DM) above inefficient infrastructure expansion remains a core problem in the National Electricity Market (NEM). The AER's current approach to the RIT-T is another symptom of this failure.

The provisions for the RIT-T still do not include demand side or non-network options as a necessity in any assessment of costs or benefits. Without the requirement to investigate DM solutions before other options, it is likely that augmentation options will continue to dominate from the beginning, putting DM solutions at a disadvantage.

The intention in the Rules for the RIT-T to "identify the option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the NEM" is a questionable approach, as it assumes that the interests of those who produce and transport electricity are aligned with and equal to the long-term interests of consumers. This is not necessarily the case, considering the extraordinary waste and misallocation of resources that occurs from the inefficient and unnecessary consumption of electricity in the NEM. In this context, the push for consumers to use electricity *inefficiently* is to the benefit of, and is often driven by, generators and networks at the expense of the interests of consumers, who bear the burden of inefficient investments and increased prices. The RIT-T should reflect the NEL Objective by ensuring that the long-term interests of consumers are the priority.

We have addressed or raised those issues that are of particular concern to us, rather than specifically answering the questions set out in the Issues Paper. Some matters raised are in reference to elements of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009 No. 15 as relevant to the AER's development of the RIT-T.

2. RIT-T issues

2.1 DM and Capex

There is currently lack of certainty regarding the ability of transmission networks to recover DM expenditure. This is exacerbated by the fact that much DM expenditure is opex in nature and is therefore excluded from TNSP asset bases resulting in the inability of networks to earn a return on this investment. Transmission networks must therefore be able to include a return of and return on DM expenditure, including opex.

2.2 Scope of the RIT-T

The Scope of the RIT-T does not make any reference to the consideration of non-network solutions (DM). This is unacceptable considering the vast under-utilisation of DM in the NEM. Non-network solutions need to be specifically added to the scope.

2.2 Classes of market costs and benefits

TEC believes there are additional classes of costs and market benefits besides those set out in the Electricity Rules which should be included in the RIT-T. In particular, non-network alternatives and carbon costs should be explicitly referred to. We recommend that the following additional classes of market benefits and costs be included in the RIT-T:

- consider the following market benefits that could be delivered by the credible option:
 - changes in any other demand side participation measures
 - changes in costs through avoidance of greenhouse gas emissions and any associated carbon costs
- quantify the following classes of costs for the credible option:
 - long-term carbon costs to consumers

2.3 Option value

TEC agrees that the proposed new class of market benefit for option value requires additional clarification in the RIT-T or the application guidelines.

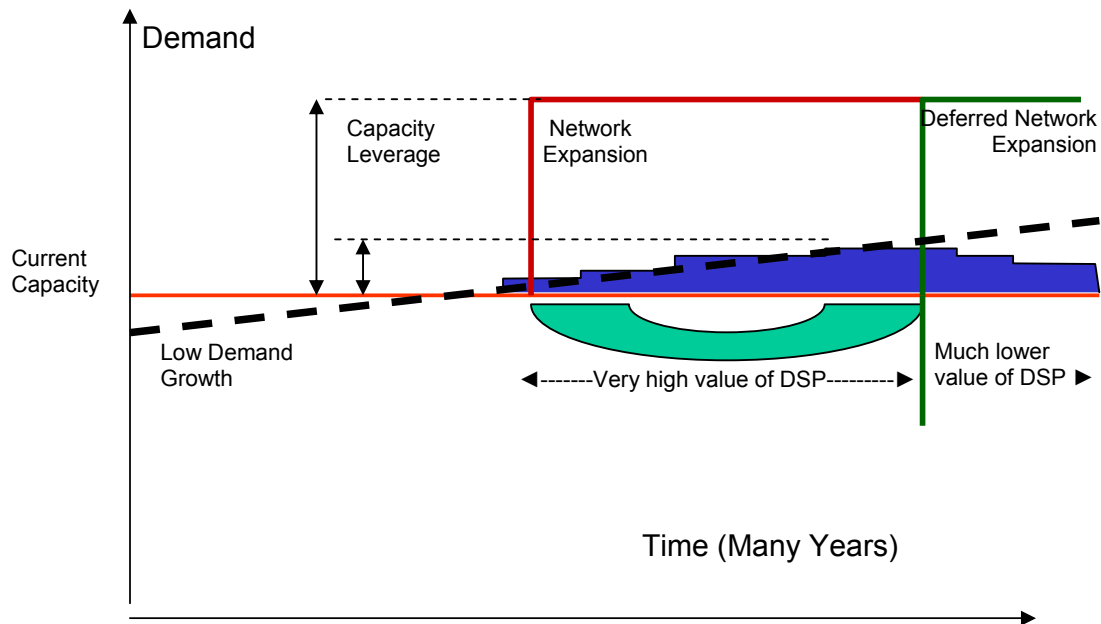
We strongly agree that where an irreversible investment is made (and thus DM options are not utilised), the loss of the option to defer very much constitutes a material opportunity cost, in terms of both financial and carbon costs. As the Allen Consulting Group (ACG) revealed in advice provided to the AEMC:¹

...it is shown that if deferring the project would raise the present value of that project's projected net market benefit, then the benefits received during the years that the project is deferred will exceed the costs – and so deferring the project will create a net economic gain.

¹ The Allen Consulting Group, *Climate change policies and the application of the regulatory investment test for transmission*, prepared for the AEMC Review of energy market frameworks in light of climate change policies, December 2008, p. 9.

McLennan Magasanik Associates have demonstrated how small scale demand side programs can defer a much more expensive network development where there are substantial economies of scale, illustrated in Figure 1 below.²

Figure 1 – Example of leverage from demand side participation



TEC supports the AER's view that a reasonable scenario approach is more appropriate for the RIT-T than a real options approach. Benefits and costs of network augmentation deferral should be incorporated into the RIT-T, as option value or otherwise, and this is discussed in section 2.2 above. As the AER states in the issues paper, "...a TNSP must consider a number of options under a range of reasonable scenarios of future supply and demand".³ TEC believes that this range of 'reasonable scenarios' must begin to include models significantly different to business as usual, such as those outlined in a recent UTS study which predicted potential energy shortfalls in New South Wales could be met through a mix of demand management measures such as energy efficiency, and distributed and renewable energy.⁴ The assumption of ever-expanding energy demand pervasive in the NEM, and the rise in greenhouse gas emissions that this increase implies, is incredibly foolhardy in light of the climate change crisis.

Finally, it is not appropriate that TNSPs are given the discretion under the Electricity Rules to only consider option value where the TNSP "reasonably considers that the additional option value is material", considering the ingrained bias of TNSPs against network deferral.

² McLennan Magasanik Associates, *Role of the NEM in responding to climate change policies*, prepared for Total Environment Centre, June 2009, p. 36.

³ AER, *Regulatory investment test for transmission – Issues Paper*, September 2009, p. 9.

⁴ Rutovitz, J and Dunstan C., *Meeting NSW Electricity Needs in a Carbon Constrained World: Lowering Costs and Emissions with Distributed Energy*, Prepared as part of Project 4 of the CSIRO Intelligent Grid Research Program by the Institute for Sustainable Futures, University of Technology Sydney, June 2009, p. vi.

2.4 Issues relating to the treatment of climate change policies

While the AER is finally attempting to assess potential intersections between the NEM, via the RIT-T, and climate change policies, the AER has taken the same flawed approach as the AEMC did in its *Review of energy market frameworks in light of climate change policies*. In another example of how out of touch NEM bodies are with current energy policy issues, the AER has focused on how the Carbon Pollution Reduction Scheme (CPRS) and expanded Renewable Energy Target (RET) will affect the operation of the NEM, specifically, how the CPRS and expanded RET will fit into the RIT-T assessment framework. The AER has thus missed an opportunity to design the RIT-T to align with broad energy policy (which has the urgent mandate to reduce greenhouse emissions) as well as meet the National Electricity Law (NEL) objective.

As the AER recognises, the objective of the proposed CPRS is to reduce carbon emissions. Similarly, an objective of the expanded RET is “to reduce emissions of greenhouse gases in the electricity sector.”⁵ DM, including energy efficiency, is the most cost-effective and rapid technique within the NEM for reducing greenhouse gas emissions from the typically fossil-fuel intensive generation of electricity. As such, TEC believes that regulatory mechanisms like the RIT-T must include strong incentives for TNSPs to undertake investigation and implementation of DM as the primary option to assess potential constraints.

ACG have stated that the most important aspect of the method for incorporating the effects of the expanded RET scheme into the assessment of transmission benefits is to “...take account of the ERET scheme when forecasting the future type, timing and location of generation capacity “without” and “with” the transmission augmentation,”⁶ or in the AER’s words, “...by a comparison between the state of the world with the option in place to a state of the world in which the option is not in place.”⁷

Prioritised DM options should be subjected to a similar assessment well before augmentation approaches are begun, and such analysis would likely show that the state of the world with the DM solution in place is optimal, above all other scenarios.

2.5 Exemptions from the RIT-T

2.5.1 RIT-T threshold should be \$1 million

TEC maintains that the threshold for the RIT-T should be \$1 million rather than \$5 million. The RIT-T will provide much needed oversight of a multitude of TNSP investment decisions. Combined, these small investments may comprise a significant imposition on consumers. To allow such investments to occur without the rigour of the RIT-T would be against the interests of consumers. In particular, we are concerned that many DM alternatives to smaller augmentation decisions may be overlooked.

⁵ Source:

[http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/909E016D7E5B42E3CA257633001C202A/\\$file/RenewableEnergyElectricityAct2000.pdf](http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/909E016D7E5B42E3CA257633001C202A/$file/RenewableEnergyElectricityAct2000.pdf)

⁶ The Allen Consulting Group, *Climate change policies and the application of the regulatory investment test for transmission*, prepared for the AEMC Review of energy market frameworks in light of climate change policies, December 2008, p. 8.

⁷ AER, *Regulatory test application guidelines*, November 2007, clause 4.1(b).

2.5.2 Urgent and unforeseen network issues

TEC is not convinced that TNSPs will not use the concept of “urgent and unforeseen” to avoid proper consideration of non-network alternatives. A cultural bias by networks against DM and distributed generation on the spurious grounds of ‘reliability’ can be expected to continue unless the RIT-T is more explicit about the assessment and use of these tools to meet demand.

2.5.3 Replacement and reconfiguration

Similarly, TEC is also not convinced that replacement and reconfiguration are appropriate from exemption – they could instead act as an impetus to review the overall efficiency of that section of the system. It could be found that redundancies are available if non-network solutions are seriously considered.

2.6 RIT-T application guidelines issues

2.6.1 Operation and application of RIT-T

The AER needs to make available draft application guidelines for the RIT-T and undertake stakeholder consultation on the design of these guidelines.

2.6.2 Process to be followed in applying the RIT-T

A 12 week consultation period for the Project specification consultation report is inappropriate, and instead we recommend a 26 week period at the absolute minimum. Transmission network investments are frequently several years in the planning, and so a 26 week consultation period is far from unreasonable.

There is no justification given for exempting TNSPs from publishing a draft report at the Project assessment stage when the estimated capital cost of the preferred option is less than \$35 million. This is an inappropriate clause that would exempt a considerable portion of investments from full and rigorous reporting requirements, which are often crucial for non-network proponents and other interested parties throughout the consultation process.

2.6.3 Dispute resolution process

It is critical that any electricity consumer is able to contest network investment decisions through the dispute resolution process. It is electricity consumers who are paying for these investments and they should therefore be able to contest these decisions.

We would encourage that the dispute resolution process be developed bearing in the mind that non-network proponents are likely to be less informed or able to dispute a network project. It is essential that the dispute resolution process be accessible for small proponents.