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13 February 2008

Dr John Tamblyn
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Australian Energy Market Commission
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Dear John

Re: Transmission Reliability Standards Review

Thank you for the opportunity to respond to the Australian Energy Market Commission ("AEMC") in relation to the Reliability Panel's ("RP") Issues Paper of December 2007 on Transmission Reliability Standards Review (Issues Paper). This letter sets out VENCorp's response to some of the questions raised by the RP in the Issues Paper.

Background

In January 2007, at COAG's direction, the Energy Reform Implementation Group (ERIG) released its Final Report on energy reform ("Final Report"). That report concluded that a standardised approach to reliability was warranted due to a lack of clarity in the current standards set out in the National Electricity Rules (NER); the responsibility for interpreting and applying existing jurisdictional standards rested with the TNSPs themselves thereby creating a conflict of interest; and inconsistently applied planning criteria created inefficiency and investor uncertainty. The RP now seeks to investigate the efficacy of a common reliability standard across all NEM jurisdictions.

In general, VENCorp supports the adoption of a common reliability standard across all jurisdictions. However, there are some issues that need to be closely and carefully considered in the consultations and dialogue that will take place on this issue.

Transparency

The Issues Paper raises for discussion, the central notion that commonality of reliability standards across the jurisdictions (potentially modified for CBD and rural areas) would yield

better investment outcomes by reducing uncertainty caused by inconsistent standards. VENCorp believes that, unlike the present, it is just as important to ensure that if a common standard is set, that the standard be widely available and has a clear and unambiguous guidelines to enable it to be consistently and easily applied throughout each jurisdiction.

Additionally, the standard should be contained in one instrument, such as the NER, unlike the condition currently, where it seems that depending on the jurisdiction may be contained in legislation, regulations or individual licences. This has the effect of making compliance difficult and expensive, particularly for prospective investors and those participants that have interests in more than one jurisdiction. VENCorp believes that ERIG was of a similar view. A conclusion in its Final Report was:

> "improving coordination and driving the development of an efficient national power system through:
>
> ...
>
> - enhancing the information provided to stakeholders and ensuring process transparency."[1]

This should also encourage non-network alternatives to be considered more effectively. In its Rule Change Submission to the AEMC, the Total Environment Centre noted that recent estimates of potential demand management is in the vicinity of 3,000MW and estimates that "due to broad-scale energy efficiency measures, as outlined in the National Framework for Energy Efficiency, and programs specifically targeting the commercial sector, may provide potential of 4000-5000MW"[2]. Having a consistent national reliability standard could more effectively harness their potential.

In summary, while having a common standard is important, it is equally, if not more important, to have transparency of reliability standards and their method of application in a planning environment, in each jurisdiction.

Finally, VENCorp agrees with ERIG's comment that there seems to be an inherent conflict of interest in giving TNSPs the responsibility for interpreting and applying existing jurisdictional standards[3] provided that it is limited to those TNSPs that own assets in the jurisdictions they have planning responsibility for.

Efficiency

ERIG notes that reliable energy delivery is crucial. VENCorp agrees with ERIG's view, however, VENCorp has a few observations in relation to how this is dealt with in the Issues Paper.

The first point is that tying reliability to an "n-x" standard may lead to uneconomic investment results because to take that standard to its logical extreme would involve the duplication (and triplication and higher) of every component of the transmission system. It is more apt to be described as a "redundancy standard" rather than a reliability standard. Even if different

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[1] Energy Reform Implementation Group, A report to the Council of Australian Governments by the Energy Reform Implementation Group, p. 178.

[2] Total Environment Centre, Rule Change Package – Demand management and transmission networks, 6 November, p.8

[3] Reliability Panel, Issues Paper, p. 2

redundancy standards are adopted for say rural and CBD areas, it is unlikely that on their own it will achieve efficient outcomes.

The second point is that no matter what reliability standard is chosen, as implied by ERIG, if the standard is set too high or too low, it will result in allocative inefficiency because it encourages over-building or under-building. Since transmission costs are smeared among customers in a jurisdiction, there is no direct customer valuation of reliability based on price. Hence, this is why an arbitrary reliability standard is usually imposed on participants. Ultimately, it will result in allocative inefficiency if a cost-benefit analysis of transmission investments is not made.

In Victoria, VENCorp has used the market benefits limb of the Regulatory Test in order to avoid inefficient investment. Augmentations are assessed by measuring the benefits of each transmission investment against the cost of network or non-network options. The option with the greatest net benefit (in terms of NPV) is the most efficient option to proceed with.

The reliability limb of the Regulatory Test was inserted into the NER due to a concern that the market benefits alone may not allow for the necessary investment to maintain expected reliability. However, if the reliability limb of the test is applied in conjunction with a reliability standard that is in all other respects a redundancy standard, the result is likely to be a high level of over-building that is not entirely valued by customers. Therefore, in VENCorp's view, the commonly applying reliability standard(s) should not be set too high and they should also be subject to a rigorous cost-benefit analysis.

An example may serve to identify the costs and inefficiencies of a standard that is not subject to the scrutiny of a cost-benefits test. In response to load growth, a TNSP plans a project that will cost $50 million in 2008 dollars. There is no doubt that the project will be required, the only uncertainty revolves around its timing. Assume two competing planning standards: a planning standard where demand is met with no redundant elements ("no redundancy" planning standard); and a planning standard where the level of redundancy is legislated by various regulatory instruments ("legislated" planning standard)[4].

The "no redundancy" planning standard would push the build date out to the point where system demand is such that without augmentation, load shedding would occur at peak demand. Assume that the "no redundancy" standard would dictate a build date in 2016. This would produce costs to the market caused by constraints and unserved demand. Under a "legislated" planning standard, load shedding is sought to be avoided altogether at the first instance possible. Assume that this is projected in 2010. Accordingly, the build year relative to the "no redundancy" scenario is accelerated by 6 years. There is no doubt that the "legislated" scenario could achieve a better level of reliability than the "no redundancy" scenario but it comes at a cost. With the application of a cost-benefit analysis to the timing of the project, the timing of the project could be refined to a point where the costs to the market are minimised and the benefits are maximised. In other words the timing of the project is optimised.

Figure 1 shows the benefits of applying a cost-benefit analysis to the project in diagrammatic form. It shows that by causing the project's deferral to a time where it provides a greater benefit to the market it also produces a cost saving compared to the "legislated" planning standard. The graph assumes that the costs of the project (Costs) remain constant over time

[4] Note that current divergent standards that could be referred to as "legislated" planning standards are set out in Table 3.1 of the Issues Paper.

and that its benefits (Benefits) increase over time as load grows. The point at which the "legislated" planning standard suggests a build response is the point at which constraints are evident on the system. The point at which a cost-benefit analysis would suggest construction to commence is when the Benefits curve intersects with the Costs curve (in this example 3 years after the "legislated" scenario would occur).

This is the point at which the project's benefits to the market equals its costs. The diagonally shaded area below the Costs line is the cost savings to the market of deferring the project. This is estimated at $15 million ($5 million p.a. assuming 10% annualised costs x 3 years). Even if the project were deferred by one year, it would still represent a $5 million cost saving to the market.

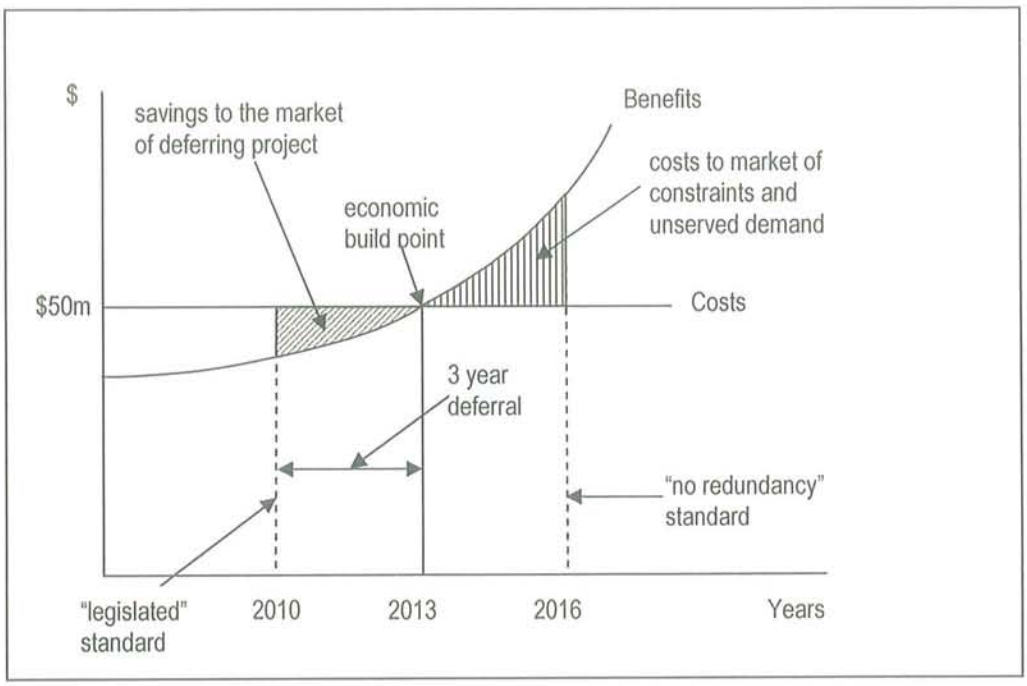

Figure 1: Economic analysis of project

The AER has estimated that total network investment in the NEM in 2007-08 to be approximately $1100 million[5]. If those projects were to be deferred by just one year, that would represent an annualised cost saving of approximately $60 million (assuming 40% of total network investment in that year are replacement assets).

The Issues Paper notes that the existing "legislated" planning standard applied to CBD areas often differ from those applied to metropolitan areas, which themselves differ from rural areas. VENCorp suggests that applying economic analysis (cost-benefits) to planning, it would not only result in appropriate planning between such areas but would also result in more efficient planning between CBDs or indeed within the same CBD area.

[5] Australian Energy Regulator, State of the Energy Market 2007, p.128

The National Electricity Law states that its objectives are "to promote efficiency and competition in the electricity supply industry" and "to promote the establishment and maintenance of a safe and efficient system of electricity generation, transmission, distribution and supply". Therefore, while the attainment of a reliable and secure electricity system forms part of the NEM objectives, those objectives need to be considered in the context of efficient investment, operation and use of the national electricity system. In other words, reliability and security are not attributes of the system that are to be achieved at any cost.

Conclusion

In conclusion VENCorp agrees with having a more transparent planning standard and if a common "legislated" planning standard were to be adopted, projects should be subject to scrutiny to assess their economic efficiency.

Should you have any questions please do not hesitate to contact Franc Cavoli on (03) 8664 6616 or Louis Tirpcou on (03) 8664 6615.

Yours sincerely

Matt Zema
Chief Executive Officer