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By Email: submissions@aemc.gov.au

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Dear John

Submission on Technical Standards Issues Paper

VENCorp welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) Technical Standards Issues Paper (Issues Paper). VENCorp believes that appropriate technical standards are integral to the efficient and effective operation of the National Electricity Market (NEM).

The National Electricity Rules (NER), as they are currently written, contain a number of shortcomings that the Issues Paper has failed to raise. In particular, there are three issues of significance which, if addressed could improve the NEM's operation. They are:

- the obligations on TNSPs to register or comply with performance standards
- responsibilities for negotiated connections; and
- technical requirements for windfarms.

These issues are discussed below.

TNSP Performance Standards

TNSPs are largely exempt from having to register or comply with performance and access standards for the maintenance of their power system assets. Their technical performance is neither investigated by NEMMCO should a system incident occur nor reviewed by the Australian Energy Regulator, during its revenue cap setting process.

A case in point was the events of 13 August 2004 which were initiated by an explosive failure of a current transformer (CT) at Bayswater Power Station. This followed the failure of two other CTs prior to this major event. While VENCorp notes that NEMMCO investigated the outcomes of the events, its investigation did not consider the cause of the failures or how these issues may be addressed by the TNSPs going forward. This is highlighted in NEMMCO's report which noted:

"Based on the above information provided to NEMMCO by the relevant TNSP's, NEMMCO considers that the failure modes of the Bayswater event and two previous current transformer failures at Tarong and Jeeralang are not similar.

NEMMCO has been advised by the relevant TNSPs that it is common practice for the TNSP's to share important asset management information such as failure modes of high voltage equipment on a routine basis. NEMMCO supports such information interchange being maintained."

This approach is in contrast to the outcomes of NEMMCO's investigation of the 14 March 2005 events which resulted in significant penalties being imposed on NRG Flinders. VENCorp therefore considers there will be significant benefits to the NEM if a consistent regime is adopted which ensures that all parties, be they generators, customers or TNSPs are held accountable for any significant failures.

Further, as was raised by VENCorp in its submission to the AEMC's Revenue Cap Issues Paper, with the exception of Victoria, VENCorp is not aware of a requirement on any other TNSP to deliver any pre-determined levels of service in exchange for regulated revenue. In Victoria, VENCorp enters into an agreement with the asset owning TNSPs specifying the technical operation of the network with rewards and penalties assigned to levels of asset availability. One approach to improve service quality and accountability would involve linking transmission revenues to transmission asset ratings and capabilities.

Connection standards accountability

Chapter 5 of the NER enables a new connection to be established at a level below the automatic access standards. Connections below the automatic standards are subject to negotiation between the TNSP, NEMMCO and the connection applicant. However, the NER does not clearly define who is ultimately responsible for setting these negotiated connection standard level – the TNSP or NEMMCO. VENCorp believes that these negotiated processes would be improved if the AEMC addressed this issue of responsibility.

Windfarm connection standards

The increasing number of windfarms has highlighted a number of inadequacies in the NER, which were not designed for the magnitude of windfarm developments. In Victoria, the Victorian State Government has established a target for up to 1,000 MW of Wind Energy to be located in Victoria by 2006 with a longer term goal to have 10% of Victoria's electricity consumption from renewable resources by 2010.

Windfarm connections introduce issues not normally associated with the connection of scheduled generators. In South Australia, where there have been significantly greater numbers of wind farm connections and applications, the South Australian Electricity Supply Industry Planning Council (ESIPC) was required to make recommendations on how to best accommodate the projected number of wind farm connections. VENCorp believes that some of the ESIPC's key recommendations need to be elevated to the NER, thereby enabling a nationally consistent approach to windfarm connections.

At the Commonwealth level, the Ministerial Council on Energy established a project, run by the Wind Energy Policy Working Group (WEPWG) to consider issues concerning the entry of renewable energy generation. The WEPWG released a discussion paper in March 2005 identifying a number of issues which it recommended needed to be addressed with urgency. However, these proposals do not appear to have resulted in any NER change proposals. VENCorp believes that this would be an opportune time for these issues to be included in the current review.

VENCorp notes that NEMMCO has recently submitted Rule changes relating to the technical standards for new generation, particularly wind generation. VENCorp supports this initiative and the broad principles underlying these proposals.

VENCorp believes that the AEMC must consider each of these three issues in this consultation and will be happy to meet with the AEMC to discuss any of the issues identified above. VENCorp has also prepared a response to the specific questions raised in the Issues paper which are outlined in the attachment.

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

Yours sincerely

M Zema

Matt Zema
Chief Executive Officer

Specific Comments on AEMC questions

1. **Are there other technical standards that the Commission should consider as part of this review?**

   See comments in letter.

2. **Is the process for establishing new performance standards effective in achieving desired outcomes for the power system. Is NEMMCO's role in the process effective or does it need to be more clearly defined?**

   Connections at the automatic access standard are not an issue. However, the process is rather complicated and can be time consuming if a participant wishes to connect at a negotiated access standard, which also requires involvement of NEMMCO. The NER time frames for negotiation of access standards (and NEMMCO's involvement) requires review.

3. **Are performance standards for existing plant, which were defined with reference to a derogation, an accurate representation of the capability of the plant? Are there events that should trigger a review?**

   While most of the performance standards derogations for existing plant in Victoria are appropriate, there are some derogation clauses that are not entirely appropriate (i.e. Schedule 9A3.5 and 9A3.6). Some generators were granted derogations for technical performance, even when they appear to be capable of meeting the relevant NER requirements.

   For example, many Victorian Generators were granted a derogation for "response to disturbances" as outlined in Schedule 9A3.6, inappropriately in our view. Under the derogation, eight power stations are relieved from the obligation "to maintain continuous operation" if system frequency falls below 49.5 Hz, when operating experience over the last 10 years (and earlier) strongly indicates that they all comply with the original obligation in the NER.

   Further, the process of NEMMCO's incident investigation should always have as an objective to determine whether the existing performance standards are adequate or whether they need revision. It should be an independent body that reviews such recommendations – at present the Reliability Panel is the closest thing but it has governance and independence issues.

4. **Should there be a mechanism to modify a performance standard, either at the request of the participant or to take account of changes in the requirements on the power system?**

   An independent body, at the request of participants, could trigger a review of performance standards. However, individual participant requests should not be accepted unless there is significant support from other participants in the same class.

5. **Are there any aspects of the content of the various technical standards specified in the NER that require clarification?**

   Yes, there are several aspects that require clarification. In particular, a number of clauses in Schedule 5.2 should be clarified, including S5.2.5.2, S5.2.5.3, S5.2.5.8, S5.2.5.11, S5.2.5.12 and S5.2.5.13.

   For example, S5.2.5.3 of the NER has several issues. Firstly, the 0.175 seconds figure quoted in part (b) of the clause was originally derived for one particular power station, relating to backup protection clearance time, and it eventually found its way into the NER (having originated from the Victorian Electricity System Code). This number is understood to be applicable at very few other locations in the NEM, and at most other locations a larger number would generally be applicable.

It would be preferable to state the principle in the NER, rather than a particular number (which will always be location dependent). In addition, for part (b) and (c) of this clause it is not clear whether the voltage dip to zero is on one, two or three phases, and should be clarified. This has been a contentious issue in some recent connection negotiations.

6. **Is the current framework for compliance programs effective in establishing and maintaining compliance with performance standards?**

The current framework is not considered effective, as the NER compliance regime framework is too vague to yield consistency and adequacy of compliance programs across the NEM, and with this uncertainty system security for the NEM could not be considered to be defined with a high level of confidence. Also, compliance programs for TNSPs do not currently have to be agreed, which is a shortcoming (unlike Generators which have to reach agreement with TNSP).

7. **Is it reasonable to expect a participant to meet an absolute standard of compliance when this cannot be guaranteed through a compliance program?**

The regime should be one of testing and then remedy within a reasonable time rather than meet an absolute standard. However, there are some technical requirements that are essentially matters of design, and for these compliance cannot be practically demonstrated during normal service.

8. **Are there sufficient incentives to ensure that all breaches of performance standards are reported to NEMMCO by participants?**

There is little incentive for participants who caused incidents to report breaches, as such breaches may well lead to penalties being applied to the responsible participant.

9. **Is the AER the appropriate body to monitor compliance? Is the AER's current approach to its monitoring role appropriate? To what extent should it monitor reactively or proactively? What other approaches to the monitoring role may be cost effective?**

The AER can be the appropriate body, provided it is proactive and has access to appropriate technical expertise to assess compliance, which is one of its current shortcomings. The AER needs to be seen to be monitoring compliance with NER, and applying penalties, to ensure that participants do the right thing.

10. **Should there be some form of public reporting on the outcome of the AER's monitoring role, including identifying non-compliance instances and what action has been taken to correct those non-compliances?**

Public reporting would be desirable, to ensure transparency and consistency of the process.

11. **Is NEMMCO's role in determining the timeframe to rectify the breach appropriate and does NEMMCO have sufficient guidance in making that determination?**

NEMMCO's role may not always be appropriate, particularly for events where they do not have technical expertise in rectification measures, a situation that may well worsen with time. TNSPs could assist in some instances where they have relevant expertise, but only where the TNSP is not the causer of the breach.

12. Is the enforcement regime, including the powers of the AER adequate for the effective enforcement of breaches of performance standards?

Yes, but noting that resourcing at AER may be an issue as there is a significant amount of work and expertise required to take a breach through to applying of penalties and appeals and so on.

13. Should NEMMCO be required to inform the AER of potential noncompliance earlier than at the end of the rectification period? Should NEMMCO refer the issue to the AER in all cases, or should NEMMCO have some discretion to extend the period for compliance?

NEMMCO should be required to inform AER as soon as they have completed their incident report, particularly if load has been shed. NEMMCO should also have the discretion to extend rectification period.

14. Are there other matters that the NER should require to be taken into account in proceedings?

VENCorp has no response on this issue.

15. Are there good reasons for having two investigations into power system incidents? Does this dual process assist in resolving issues by separating operational matters from enforcement matters, or does it place an inappropriate burden on participants? Do the AER and NEMMCO have appropriate power to conduct their investigations?

There may be merit in having two investigations, as one investigation may uncover causes that another investigation may not. This would however be more expensive for participants. NEMMCO's investigation should also review the technical standards involved in the particular incident.

The powers of the AER and NEMMCO would appear to be insufficient to deal with this issue.

16. Does the threat of enforcement action by the AER act as a disincentive to provide information to NEMMCO on a co-operative basis, if it is to be shared between the two organisations?

There is an inherent disincentive, whether or not two organisations are involved, due to the possibility of penalties being applied to the person divulging the information. Maybe a 'whistleblower' approach, which enables the 'whistleblower' to be exempt for prosecution, could be explored.

17. Are the penalties for breaches of performance standards adequate?

There would be merit in applying a two-tiered approach to penalties, with penalties increased significantly for participants who do not voluntarily divulge a breach. This may help "encourage" participants to divulge breaches

18. Is there a case for determining a technical standards penalty provision which better reflects the potential costs for end users of non-compliance? If so, what should the level of that penalty be?

While it is difficult to estimate potential end user costs for non-compliance, it may be possible to investigate some approaches. For example, the penalties could be related to the value of lost load (where applicable), or the risk of same if load is not lost.

19. **How might an infringement notice approach be applied in ensuring compliance with technical standards? Are there other orders which may assist in ensuring compliance with technical standards?**

VENCorp has no response.

20. **Should NEMMCO be required to consider the commercial incentives or opportunities provided by its actions in managing the impact on power system security of a breach of performance standards?**

As an independent body NEMMCO needs to apply good governance in this process by acting transparently and meeting their responsibilities in the NER, on a consistent basis.

21. **Is clause 5.7.3(e) sufficiently clear to allow NEMMCO to use this clause to manage a power system incident?**

The hurdle should be lowered so that is NEMMCO holds the reasonable opinion that there in non-compliance with a technical standard by a connected party then it can restrict or disconnect them.

22. **What other alternatives could be considered to address the issue of a participant gaining financially from a breach of its performance standards?**

The way the question is put suggests that there is anti-competitive behaviour and therefore a TPA breach. As noted above NEMMCO needs to apply good governance in this process by acting transparently and meeting their responsibilities in the Rules.