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Dr John Tamblyn
Chairman
Australian Energy Market Commission
By email: submissions@aemc.gov.au

Dear Dr Tamblyn

Re: Issues Paper – Enforcement and compliance with technical standards under the National Electricity Rules

Transend Networks Pty Ltd (Transend) welcomes the opportunity to provide the following comments on the matters raised in the Issues Paper - Enforcement and compliance with technical standards under the National Electricity Rules (Rules).

1. Overview

The planning and development framework of the power system infrastructure forming the National Electricity Market taking account of technical standards is built upon three key premises, being:

- a) Network service providers and owners (NSPs) are responsible for planning, development, connection, and implementation.
- b) NEMMCO is responsible for managing power system security and dispatch within the constraints inherent in the power system as provided by NSPs.
- c) AER is responsible for overseeing and enforcing the Rules.

A result of this framework is that NSPs have the responsibility to negotiate and to enter into connection agreements with generators and loads and to provide within these agreements for ongoing compliance with the performance standards (agreed as per Rules clauses 5.3.6(b)(1) and 5.3.7(d)). Inherent within this framework is the need for NSPs to be in a position to:

- a) negotiate the connection agreements inclusive of performance standards,
- b) monitor, report, and enforce compliance with the connection agreements, and

- c) that they must be provided with the resources to fulfil this responsibility and the mechanisms to ensure that they can be fulfilled.

It should also be noted that as a condition of its licence Transend has an obligation to maintain a residual power system security capability to cater for the unlikely event that the Tasmanian power system becomes invisible to NEMMCO.

The following high level comments are made with these fundamentals in mind.

- Transend's view is that the performance standards, and by implication the system standards, have two broad compliance issues: those associated with power system security and those associated with connection agreements.
- The Rules need to have a consistent and single party accountability framework to ensure that there is an effective and efficient compliance, monitoring and enforcement regime.
- Accountability should be allocated to parties neutral to market outcomes but who have an interest in the management of constraints. Transend believes that achieving single party accountability is as important as any refinements to the technical standards for effective compliance to be enforced.
- There should be a sound and economically justifiable basis for the derivation of technical standards, and how these link into load supply security, reliability, quality and the cost for each aspect. Even with clearly defined links the ability to measure or assess compliance is critical to the enforcement of the Rules.
- There is a need for clarity on the roles and responsibilities, obligations and powers regarding compliance monitoring, testing, and enforcement.
- Compliance monitoring is dependent on the availability of appropriate tools, processes, and resources. The Rules need to define the type of monitoring required and how the costs are recovered of installing, maintaining, and utilising the data provided by this equipment.

The detailed responses below are provided with the aim of ensuring a framework that addresses these comments.

2. Issues Paper – Questions and responses

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

Transend is of the view that the role of the AEMC in respect of this review is directed primarily at the management of compliance with the existing technical standards

contained within the Rules. However, in setting technical standards the AEMC must be cognisant of both Australian and International Standards and practices. Transend does not consider that it is in the best interests of the Australian NEM to “re-invent the wheel” or unjustifiably and unnecessarily impose Australian specific standards.

The rationale or basis for the existing standards may not reflect the current market requirements and there needs to be a clear link to the impact on load security, reliability and costs where the standards are not met.

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?

This question relates to the connection of new parties or the modification to existing connections rather than the process of making changes to the Rules.

Performance standards should be appropriately provided for under connection agreements and their establishment is covered by processes for seeking connection or modifications to connection under the Rules.

The key issue is the delineation of the roles between NEMMCO and NSPs. The prime commercial instruments are connection agreements and these are a matter for NSPs and connected parties. To do otherwise would logically conclude that a separate “performance standard” agreement between NEMMCO and connected parties would be required. These “performance standard” agreements would necessarily contain many provisions similar to those in connection agreements. This would not be conducive to enhancing efficiency and the conclusion of agreements as the negotiations would in effect become tri-partite. The more efficient model would see the responsibility for connections remaining with NSPs and that NSPs should seek NEMMCO’s comments on proposed performance standards and impacts on power system security.

This is all on the basis that NEMMCO’s obligation to operate the power system in real time in a secure operating state has to be managed within the technical envelope of the power system and limitations imposed by the market including the performance of generators and loads and the outcomes of the impacts of the regulatory test on the justification of network augmentations.

Concerns with this model are the NSP’s ability to arrive at appropriate negotiated performance standards and their authority for implementing “end of the day” remedies for rectification of non-compliances.

The ability of an NSP to negotiate appropriate performance standards could be provided for in the Rules by requiring all parties to negotiate in good faith and in accordance with good electricity industry practice. If the NSP and NEMMCO are in agreement as to the required level of performance standard, which is a likely position, then reliance on good electricity industry practice would be robust.

In relation to the authority of rectification processes and remedies for breaches that are contained within connection agreements an option that could address this concern is to include provisions relating to compliance of connection agreements within licence conditions and to provide the licensor with appropriate remedy powers recognising that the AER may institute proceedings for breaches of the Rules. These remedy powers would be upon the reasonable advice of NSPs or NEMMCO. It should be noted that NEMMCO also has rectification provisions under Rules clause 4.15(i).

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?

Transend completed the process of entry into the NEM on 29 May 2005. A key part of that process and registration was to ensure that connection agreements and derogations appropriately reflected the capability of Tasmanian generation. Loads did not require registration.

The presence of long-term derogations means that the access standards might be viewed as being inappropriate as this implies that continuing with the derogated standard would not cause any system security or quality of supply issues. This of course would only apply on a case-by-case basis.

Reviews of connected party performance standards should occur whenever there is a demonstrable benefit in improving their performance standard. In fact, as part of the regulatory test, NSPs are obliged to investigate non-network solutions when considering investment options. This then raises the question of who should fund any upgrades and from whom the costs should be recovered. This type of issue will be the subject of the Chapter 6 review.

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?

This question relates to two issues:

- a) revising connected party performance standard, and
- b) revising the Rules' automatic and minimum access standards.

Connection agreements do not necessarily have specific provisions that directly relate to re-negotiation of performance standards. The basis of the current Rules is that the negotiated or derogated performance standards prevail until such time as the connected party makes "significant" changes to its facilities.

If a participant requests a change to its performance standard then that would be negotiated in accordance with modification to a connection.

If a participant seeks changes to a third party's performance standard then, under the existing Rules, that would need to be negotiated between those parties. NSP involvement would be limited to implementing any changes.

Transend considers that changes in technology require an ongoing review of both the system and access standards by the Reliability Panel. This will allow fair and equal treatment of all participants (new and old alike). On this basis Transend would like to see regular reviews of system and access standards undertaken in a mandatory period of say five years. Other reviews could be undertaken in response to changes in the requirements on the power system. The timing of the introduction of changes needs to be agreed and assigned an appropriate priority based on the potential for system security breaches or power system impacts (both positive and negative). A key part of this process would be a transition framework.

The Rules should outline a process for coming to an agreement if there are disputes on timing. This will allow efficient implementation as participants could optimise their plant upgrade to minimise disruption and cost (e.g. undertake modifications or upgrades when other work on the plant is planned).

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

There are a number of technical standards within the Rules where direct measurement of compliance is impractical; for example, harmonic injection in an environment of existing harmonics. In the instance of new or modified connections compliance in such circumstances is demonstrated at the design stage and ongoing compliance is assumed if the performance of the connected equipment is maintained as per the design. The NSP can in general only monitor its own compliance with system standards and from that make observations concerning the performance of connected parties.

In these cases it is normally post-event analysis that highlights possible compliance issues. For these standards it is necessary to undertake computer modelling in order to identify potential issues. The accuracy and validity of this modelling is dependent on the accuracy and validity of the models used, particularly in respect of generating plant and automatic control equipment utilised on the power system. Transend is of the view that increased emphasis needs to be placed on the provision of validated plant models by the owners of that plant to the NSPs to permit network simulations to be undertaken with confidence.

Transend notes that some of the performance standards are defined broadly and generically and often are not specifically applicable to certain classes or types of plant.

The revised technical standards for wind generation and other technology need to be concluded as a high priority due to the increased penetration of this technology.

Transend is of the view that NEMMCO's involvement in some areas of detailed assessment, eg due diligence reviews of connection studies already done by the NSP, may be unnecessary and leading to a costly and wasteful duplication of resource and effort. Transend considers that any additional studies required by NEMMCO can be included in the NSP connection studies and reported to NEMMCO as needed instead of having NEMMCO repeat the studies.

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

While there is a framework for compliance programs within the Rules, Transend's opinion is that these have yet to be fully tested and should provide for periodic review as experience requires. A high level of confidence in the compliance plans should be possible providing there are sufficient incentives for participants to carry out periodic tests or analysis of their plants for compliance or auditing purposes.

Transend considers that the form and content of the compliance program could be better defined within the Rules with a specific timetable set for periodic auditing, possibly once every five years. The detailed auditor's report and findings would then be made available to the NSP to review and assess for potential non-compliance issues.

The detailed compliance plan could be incorporated as a schedule into connection agreements, however Transend believes that the ongoing compliance accountability should be placed on the participant as it is ultimately their asset that must meet the performance standards. Again Transend considers that a single accountability for compliance is essential.

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

Transend does not consider that it is reasonable to expect a participant to meet an absolute standard of compliance when this cannot be guaranteed through a compliance program.

Transend believes that it is important that a standard set of tests, procedures, documentation, and analysis requirements should be prepared at the time of connection or modification to connection, or as part of the completion of a connection agreement required for existing plant. This should then form the basis for periodic (predefined) reporting from participants. On the results from such tests and studies the plant should be accepted as being compliant until it can be demonstrated that it is in breach of the performance standards.

As noted earlier, this approach would require reasonable confirmation of performance and validated plant models, which should then be used to analyse scenarios that are not feasible for physical testing.

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

This particular issue is one of governance and the interplay between the role of connection agreements and the Rules, clause 4.15. Connection agreement remedies should be permitted to take their course recognising that NSP advice to NEMMCO may result in additional constraints on the operation of the market until the breach can be rectified.

It is important that breaches are reported accurately and in a factual manner for the purpose of assessing the impacts on NEMMCO's ability to maintain power system security. Transend considers that a defined process is needed which promotes honest reporting rather than one that focuses on identifying and penalising a breach.

Transend's view is that all breaches cannot be dealt with in the same way. Blanket application of penalties weakens the process and loses credibility in the market. In practice there can be a naturally occurring drift in plant parameters and set points and such breaches may be only periodically discovered by auditing. Transend does not consider penalising such instances is appropriate and would only create disincentives to an effective compliance regime and could frustrate investigations.

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?

In a framework of connection agreements and associated compliance plans it is appropriate that NSPs are provided with the appropriate funding to ensure that generator and load compliance obligations are met and to prepare reports for the AER on an exception basis. This approach could align with NSP regulatory reporting obligations. Reporting of NSP breaches, essentially associated with quality of supply issues rather than system security, is already part of licence obligations.

The framework also needs to recognise the role of licensees and their associated reporting requirements.

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?

Transend considers that it is important that the monitoring role is visible and publicly accountable. This may include a requirement to periodically publish information on the conduct of investigations and material non-compliance issues.

Transend believes that formal public reporting of the outcome of the AER's monitoring role, including identifying non-compliance instances and the action taken will act to increase awareness of the compliance requirements of the Rules by market

participants, which in turn may result in the implementation of improved compliance monitoring procedures.

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

Transend considers that NEMMCO's role in determining the timeframe to rectify a breach could conflict with connection agreement provisions that should address this issue. This is an example of the governance structure that could be reviewed in arriving at a total compliance framework.

In seeking to determine the timeframe for rectification, account should be taken of the impact of outages and/or constraints for rectification works on the market, the cost to the market, and the risk to system security and quality of supply. In all cases the assessment should be weighted in favour of minimising market impact even if this disadvantages the participant.

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

Transend has indicated that the governance of performance standards in relation to the interplay between connection agreements and current Rules provisions needs to be reviewed.

13. Should NEMMCO be required to inform the AER of potential non-compliance 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?

As stated previously Transend considers that there are governance issues that should be reviewed.

Transend is of the view that the AER should be informed of all incidents on non-compliance at the time they are discovered including the actions being undertaken to remedy the non-compliance. A key part of this is that the AER would not proceed with action until connection agreement processes have been frustrated on the advice of the NSP. This reporting should not apply to potential non-compliance issues but only to factual occurrences.

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

Transend considers that it is important to have test procedures and methodology established and agreed during the connection process. This should then form the basis of the ongoing compliance process. NEMMCO is actively involved under Clause 5.3.4A of the Rules in agreeing system security related negotiated performance

standards, via the connection study process, and ultimately as the holder of the registered data.

Participants should be given incentives to disclose material non-compliance issues. Conversely, a less lenient approach should be taken with those who seek to conceal issues of non-compliance or frustrate investigations.

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?

Transend supports the position that NEMMCO's investigation is a review of the system security implications and sequence of events and the AER's role is to review for compliance with the Rules and the NEL and these are distinct. As with other governance issues, the interplay with NSP incident reviews for connection agreement issues needs consideration.

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?

Transend considers that the threat of enforcement action would act as a disincentive to provide information. However, careful consideration and classification of what information is deemed to be routine information and what information is potentially for enforcement may assist in overcoming some of the issues here. This will allow technical information to be correctly packaged from a participant perspective. Attention to the conditions under which enforcement actions would proceed will also encourage information exchange. When third party litigation is possible, information would require appropriate confidentiality protection.

The Rules should make it clear that some information gathered routinely is not specifically applicable for enforcement but for advancement of the industry. Clarification is needed as to what is and what isn't legally binding. With totally process driven information there is a risk of making the information flow overly bureaucratic. This can mask issues from surfacing in a timely manner and slow down the detection of potential system security related issues.

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

In setting the level of penalties consideration should be given to the purpose of the penalty in providing incentives to prevent or rectify breaches. Are the incentives aimed at "compensating" the affected parties or are they aimed at the costs of remedying the breach? Aiming the penalty at compensation may expose participants to risks that would lead to higher costs to the market.

If the breach has power system security implications that constrains the operation of third parties or could cause them damage then the risk of litigation could provide adequate incentives. NEMMCO's regular publishing of constraint library modifications would highlight any issues that impact on the market.

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?

Please refer to question 17.

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?

Transend considers that following frustration of the connection agreement process the infringement notice approach could be used in cases where there has been a prolonged breach of the technical standards with relative inaction by the party in breach. The use of an infringement notice may illicit an appropriate response without the delays and costs involved in undertaking court action.

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?

Transend considers that NEMMCO should 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.

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

NEMMCO has an over-riding obligation to dispatch the market in a least-cost manner within the constraints of maintaining power system security and if this is done then the most cost-effective dispatch of available plant and interconnectors will occur.

If NEMMCO reasonably believes that there is a breach that has power system security implications then NEMMCO should have the mechanism to limit dispatch of that plant. If there are no system security implications of the breach then there is possibly no reason for NEMMCO to limit dispatch. Under these circumstances the breach may be permitted to continue until power system security implications arise. There may be scope for granting NEMMCO greater discretion in constraining potentially non-compliant generators as opposed to applying constraints on interconnectors or constraints that may adversely affect other participants. However, this approach should be cognisant of the overall cost to the market with the aim of minimising that cost.

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

Transend considers that careful and appropriate determination of the Rules will assist in limiting the opportunities for a participant to gain financially from a breach. The technical standards within the Rules should ensure plant has appropriate capability and is effectively monitored for compliance. If a party deliberately breaches its performance standards for financial gain they would have to surely make it known publicly to be taken into account in dispatch and to take effect. Consequent disclosure of deliberate breaches and the subsequent response from participants, licensors, NSPs, and the AER should be a powerful incentive to prevent such activities. Alternatively, if they know of a breach and fail to disclose it then they run the risk of facing the consequences of causing damage to third parties.

Commercial issues need to be separated from technical matters to facilitate the free-flow of technical information on a seamless basis between NEMMCO, the NSP, the AER, and participant.

Transend notes that there is a distinction between fair and unfair market advantage and this should be defined and acknowledged within the compliance regime.

Should you have any queries in relation to this response please contact Roger Riley, Manager Connections on 03 6274 3910 or email roger.riley@transend.com.au.

Yours sincerely

[by email]

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