



27 March 2006

Australian Energy Market Commission  
PO Box H166  
AUSTRALIA SQUARE NSW 1215

Dear Sir/ Madam,

## ENFORCEMENT AND COMPLIANCE WITH TECHNICAL STANDARDS UNDER THE NATIONAL ELECTRICITY RULES

Thank you for the opportunity to comment on the Issues Paper "Enforcement And Compliance With Technical Standards Under The National Electricity Rules" dated January 2006.

Please accept this letter and attachment as Powerlink Queensland's ("Powerlink") contribution to this aspect of the consultation process.

### **General Comments**

Powerlink generally supports the Commission's view that there may be scope for the NEM objective (S33 of the NEL) to be better served through further refinement of the NER processes.

The National Electricity Code (now Rules) was amended in February 2003 to require Generators to register technical standards (with NEMMCO) and for the Generator to put in place programmes that ensure compliance with the registered performance standard (and the Rules). The Rules required approval of the compliance programmes by both the relevant NSP and NEMMCO.

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The stated intent of the Code amendments at the time was to capture or grandfather the existing Generator performance, rather than to impose a higher level of performance on Generators. The registered performance standard provided NEMMCO a mechanism to ensure that derogated performance standards, Connection Agreement standards (as at the performance standards commencement date), and plant standards were consolidated in a way that enabled generator compliance programmes to be meaningful.

Powerlink understands that whilst Generators generally have submitted performance standards to NEMMCO for registration, not all proposed standards were registered. Consequently, many Generators do not have registered performance standards with NEMMCO for all technical performance aspects. The grandfathering provisions have now fallen away (with the exception of Tasmania) as part of the new National Electricity Law which took effect on 1 July 2005.

Generators are required under the Rules to have and comply with Connection Agreements with NSPs. Connection Agreements in place at the performance standards commencement date may not specifically cover all technical parameters set out in the Rules.

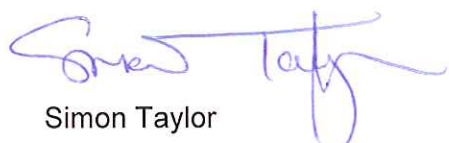
Where a Generator compliance programme is in place (approved or unapproved), it is unclear what performance standard is applicable due to the lack of registered standards. Self-assessment by the Generator therefore becomes problematic. Further, it is unclear how NEMMCO can approve the programme where the performance standards are not registered, as the applicable standard is not identified.

It is unclear how the registered performance standards interact with the Rules defined standards when plant is modified. An improvement in the plant may be better than the registered standard but still not meet the minimum standard in the Rules. This seems to be inconsistent with the intent of the technical standards review. Similarly, the status of the registered standard is unclear if a Connection Agreement for existing plant needs to be extended.

Powerlink has made selected comments on the matters raised by the AEMC in the attached document.

We would welcome the opportunity to discuss our submission with you at your convenience. Should you have any queries, please feel free to contact Byron Carter on 3860 2174.

Yours sincerely,



Simon Taylor

**MANAGER NETWORK CUSTOMERS**



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### Setting Performance Standards

Powerlink agrees with the Commission's assessment of the relevant technical performance standards to be considered under this review. A common theme from the comments below is that the roles and obligations of NEMMCO and the NSP should be better defined to ensure a clear understanding of roles.

### New Standards

For new connections, the process for establishing new performance standards under the Rules generally converges towards a tripartite position (between the Generator, NEMMCO and NSP) and achieves the desired outcomes, where agreement can be reached. The roles and obligations of NEMMCO and the NSP could be better defined.

### Grandfathered Standards

For connections established prior to the performance standards commencement date, the process of modifying performance standards or renewing the Connection Agreement (and renewing the existing standard) is more problematic. There are two scenarios where difficulty arises:

- the Generator proposes a performance standard that is less than the minimum access standard but consistent with (or better) than the registered performance standard; and
- the Generator proposes a performance standard less than the minimum access standard and NEMMCO has not registered a performance standard with respect to that Generator.

In both the circumstances described above, it is unclear whether the NSP can accept the performance standard proposed by the Generator, as the NSP has no ability under the Rules to accept a standard less than the minimum access standard (irrespective of whether NEMMCO accepts the proposed standard or has previously registered the performance standard) except if a derogation exists. This arrangement appears to be at odds with the stated intent of the grandfathering arrangements introduced in February 2003, as it indirectly forces the generator to improve generator performance to comply with the minimum access standard in the event that they modify the performance standard (to improve it) or renew their Connection Agreement.

Powerlink recognises that the derogated standard is the derogated standard at law and may not reflect the plant capability irrespective of whether the standard has been registered.

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Powerlink suggests that the Commission's review should:

- clarify the original intent of the Code changes - i.e. whether Generators with performance below the minimum standards can have this apply as their registered performance standard through renewal of their Connection Agreement;
- clarify whether an NSP can accept a registered performance standard irrespective of the minimum access standard;
- clarify whether an NSP can accept a the performance standard of equipment as stated in a Connection Agreement on 13 November 2003 irrespective of the minimum access standard;
- consider further prescription of NEMMCO's role under Clause 5.3.4A(b) to include an obligation to accept or, reject and nominate an alternative performance standard; and
- consider whether the process of registering performance standards should be reinstated in the Rules to provide a more effective mechanism to consolidate derogated performance standards, connection agreement standards and plant standards for the purposes of the compliance programme.

### **Ability to Change Standards**

Powerlink would welcome the Commission clarifying the following aspects of the technical standards:

- S5.2.5.1 reactive power capability – specify how should this be derived (from the plant characteristic or settings on protection and control equipment);
- S5.2.5.2 harmonic voltage distortion – the plant standard requires compliance with AS1359, which does not appear relevant as it only deals with telephonic harmonic factor. Would compliance with IEC 60034-1 may be a more appropriate plant standard;
- S5.2.5.3(b) fault ride through capability – whether it is intended that a Generator must ride through a three phase fault even where this is not considered a credible contingency event ; and
- S5.2.5.10(a) pole slipping – given that it is not possible with current technology to “prevent pole slipping”, consider an amendment so that each unit has a “protection system to promptly detect and trip it in order to prevent further pole slipping”.

Powerlink would welcome the opportunity to contribute towards the review of any specific standards.



## **Compliance Programmes**

Powerlink considers that the compliance programme framework contemplated by the Rules intuitively should work in principle. However, in practice, the rollout of the compliance programmes has anecdotally been unsuccessful.

Powerlink supports the economic principle that the compliance regime should provide reasonable assurance of ongoing compliance whilst maintaining the NEM objective of promoting "efficient investment". Inherent in this principle is that the compliance regime may not guarantee an absolute standard of compliance for all aspects of the technical standards.

In the vast majority of circumstances, the ability of a participant to comply with the relevant technical standards is hard-wired in the equipment settings including the Automatic Voltage Regulator "AVR" and Power System Stabiliser "PSS" and protection settings. The assessment of these settings under the compliance programme reasonably ensures ongoing compliance. Given this context, real-time performance monitoring would add very little to the effectiveness of the compliance programme. Therefore, Powerlink would encourage the Commission to review of 4.15(a)(1) and consider whether a participant should only need to reasonably ensure that its plant meets or exceeds the performance standard.

Powerlink suggests the Commission should consider:

- if it serves the NEM objective that Generators must demonstrate an absolute standard of compliance pursuant to Clause 4.15(a)(1); and
- should NEMMCO's role under Clause 5.7.3(b) be further prescribed (i.e. to accept or, reject and nominate alternative compliance mechanism).