

The Reliability Panel
Australian Energy Market Commission
PO Box A2449
Sydney South
NSW 1235

panel@aemc.gov.au

17 June 2008

Dear Sir/Madam,

Thank you for your invitation to comment on the Issues Paper on the Reliability Panel Technical Standards Review (the Paper).

The Clean Energy Council (the Council) is Australia's national clean-energy industry peak body, formed in 2007 through the merger of the Australian Business Council for Sustainable Energy (BCSE) and the Australian Wind Energy Industry Association (Auswind). With a membership of over 450 businesses, the Council covers a quarter of Australia's total electricity production including gas, wind, hydro and bioenergy; and the spectrum of business in the low-emission energy and energy efficiency sectors including solar PV, solar hot water, biomass, geothermal and cogeneration. Our members are committed to tackling climate change, while developing financially viable businesses operating and a robust clean energy industry.

The National Electricity Rules (the Rules) were amended in March 2007 with the making of "the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007 No.2". This Rule was incorporated in Version 13 of the Rules and has applied since that time, however it has not been in operation long enough to fully determine the effectiveness of the changes or to identify all the problems that may still exist in the Technical Standards sections of the Rules.

Below the Council addresses briefly the questions raised by the Reliability Panel in the Paper.

Are the current standards of the correct form?

The Council believes that the standards should all be written in the form of negotiated standards, with the minimum and automatic standards there as guidelines. In practice few, if any, generators can meet the complete set of Automatic Standards. The Rules should require that NEMMCO and the NSPs negotiate in good faith for the lowest practical standard at each connection point within the bounds of the system standards. This should minimise the cost of connection and so the minimise the long-term costs to consumers.

Further, the Council has concerns with the definition of "Automatic Access Standard" as stated in the Paper and doesn't believe "no degradation" is the most appropriate wording for that concept. The Standards should be set to

support the Power Systems Standards rather than being based on historic plant performances. The AEMC covered this well in its Rule determination for the National Electricity Amendment (Technical Standards for Wind and other Generator Connections) Rule 2007 when they stated:

“The negotiating range comprises:

- an automatic access standard where, if connected plant achieves that standard, then the system standards are expected to be met; and
- a minimum access standard which denotes the level below which there would be an unreasonable risk of the system.”

The Council believes this is a better articulation of the concepts. However, this also needs to be considered for each actual application and the point at which it connects to the network.

Are the current standards set at appropriate levels?

The Council believes that a number of the Minimum Standards detailed in the Rules are set too high. They do not recognise range of size of generators and the different locations where connections are made. The standards needed to apply for generators from the smallest (5MW connected within the distribution network) to the largest (750MW connected to the transmission network). At present, many of the minimum standards are set too high for small generators, even though such generation will have no detrimental impact on the system or the network. Minimum standards should represent the true minimum; which in many cases should place only limited or no requirements on the generator.

Is the scope of the technical standards appropriate?

Several standards go beyond technical standards and into areas best covered by market arrangements. Market forces can easily and efficiently manage areas such as ancillary services and reactive power and hence there should be no mandatory requirement to provide reactive power. The current Standards are adding unnecessarily to the costs of building generation assets and are unlikely to lead to the optimum amount or location for the reactive plant. The Rules should be amended to ensure that all reactive power provided is appropriately paid for. Further, the Rules should be amended to clarify the responsibilities of NSPs and NEMMCO with respect to the provision and dispatch of reactive power to ensure that the most appropriate body manages both the procurement and dispatch of the service.

Are the technical standards well structured in the Rules?

The current technical standards have a few areas which could be improved. The new standards (version 12 onwards) have open statements that need tightening, and many of the standards have a ‘general requirement’. The general requirements can be very difficult to assess, draft and commit too. For example: S.5.2.5.5 requires the inclusion in the standard of “any operational arrangements necessary to ensure the generating system including all operating generating units will meet its agreed performance levels under abnormal network or generating system conditions”. This is intended to capture situations where the generating system is dependent on its auxiliary plant to meet the performance level, or transmission outages. However, ‘abnormal network’ conditions is an extremely broad phrase and network

engineers tend to avoid trying to qualify such terms when setting a standard. There are other examples where the 'general requirement' tends to be drafted as a catch-all phrase which is extremely difficult to quantify or qualify.

Note in the Partial Load Rejection (PLR) standard (S.5.2.5.7) the general requirement requires: "the **actual** PLR performance must be recorded in the access standard". Given that the industry has not yet determined a method for testing machines for PLR, and that Technical Standards are agreed and registered prior to building a generating unit, this requirement seems somewhat illogical.

Are the obligations between the NSPs and network users consistent?

Currently the Rules place many obligations on generators to ensure that their plant performs, but only requires NSPs to use their best endeavours in managing their plant. This appears inequitable given that the bulk of system incidents are caused by the networks. The Technical Standards should place appropriate obligations on NSPs.

Which aspects of the technical standards need more urgent review?

The current technical standards have not been in use for long enough to identify the areas in need of urgent review easily.

Should you or your staff have any questions or points of clarification on this letter, please contact Mr Rob Jackson on (03) 9929-4105 or by email at rjackson@cleanenergycouncil.org.au.



Rosemary Warnock
CEO