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24 November 2006

Dr J Tamblyn
Chairman
Australian Energy Market Commission
Level 16
1 Margaret Street
SYDNEY NSW 2000

Dear Dr Tamblyn,

TECHNICAL STANDARDS FOR WIND AND OTHER GENERATOR CONNECTIONS

Thank you for the opportunity to comment on the AEMC's draft rule changes with respect to the Technical Standards.

While the Planning Council recognises that significant improvements have been made to the proposal since the first round of consultation, there are a number of outstanding issues that, in the opinion of the Planning Council still need to be addressed. Namely:

1. Definition of Continuous Uninterrupted Operation

A key measure of a generator's compliance with the standards is its ability to continue to operate during periods where frequency or voltage fluctuate within defined tolerances or during the moments of and immediately following a fault or other credible contingency.

As such, the clarity and enforceability of the definition of Continuous Uninterrupted Operation becomes of critical importance to the technical standards provisions.

The definition as proposed, suffers from a number of deficiencies that make it both hard to interpret and hard to enforce. In particular:

The phrase "operating during a disturbance" appears to allow those generators that were operating prior to the disturbance, but tripped off, inappropriately, as a result of the disturbance, to argue that they were not operating "during" the disturbance itself. The Planning Council would prefer the construction "operating immediately prior to the disturbance."

- The use of the term "disturbance" itself has the potential to cause confusion. While the specific type of disturbance associate with Continuous Uninterrupted Operation is defined in S5.2.5.5, it is not similarly referenced in the other S5.2.5.x provisions leading to uncertainty as to exactly when the Continuous Uninterrupted Operation definition would apply.
- The reference to "performance standards" in the definition has the potential to create a circular reference as the performance standards also refer back to the definition of Continuous Uninterrupted Operation. If the reference is to remain, it should refer to the specific provisions of the performance standards established under S5.2.5.8 and S5.2.5.9.
- While the Planning Council agrees that generating plant should not act "so as to not exacerbate or prolong the disturbance for other connected plant," it will be important to also ensure that the plant responds in such a way as to not cause a subsequent disturbance.
- References to Continuous Uninterrupted Operation tend to be in the form "generating units must remain in continuous uninterrupted operation for a disturbance ..." as per S5.2.5.5 (b) (1). Again, the use of the term "for" tends to limit the operation of Continuous Uninterrupted Operation to the length of the disturbance with allowing for performance immediately following the disturbance which is also a period of high risk. The Planning Council would prefer the formulation "as a result of a disturbance".
- In making these observations, the Planning Council has had the benefit of detailed discussions with the AER and NEMMCO and it supports the drafting changes proposed by those organisations.

2. Frequency disturbances

The ability to respond to a frequency disturbance introduces an exemption to the need to comply if the rate of change of frequency exceeds a given value. This effectively lowers the standard, yet the decision does not contain any justification as to the adequacy of the actual rate of change proposed.

3. Miscellaneous

In S5.2.5.5 (b) (1) (iii) (B), the use of the term "and" at the end implies that the event must be a credible contingency AND a three phase fault AND a two phase to ground The Planning Council suggests that the "and" should be replaced with an "or".

General Connection Issues

The Planning Council has a range of more general concerns with the proposed changes to the connection process and the ongoing application of technical standards as follows:

The value of having realistic automatic access standards is that they can reduce the cost and time taken to negotiate connection where good commercially available plant is available to meet those standards. The Rule changes proposed introduce a level of complexity and costly analysis into setting the automatic standard by requiring a full contingency assessment. The concept of negotiating to a level "as close as practicable to the automatic level" while appropriate in principle appears open to interpretation and difficult to administer. These features reduce the value of the automatic access standards. It would lower the barriers to entry if clear and achievable automatic access standards were offered and provide an incentive for potential new entrants to actually offer to that standard.

General Comments Relating to Process

As the AEMC will appreciate, the review of such a complicated area, and indeed of any aspect of the *National Electricity Rules* is a time consuming process. While this will always be the case, the Planning Council would urge the AEMC to consider ways to make the review of Rule changes more accessible and transparent. Such options as providing versions with colour marked changes or publishing in such a way that the new provisions are printed on one side of the page and the old provisions on the other would allow for a much simpler comparison of the two versions and a greater appreciation of the impact of the change.

Finally, the Planning Council notes that in the draft decision under 4.1.2 Frequency, the AEMC attributes the Planning Council as suggesting that for the minimum standard eliminates a number of technologies "because the depth of the extreme frequency band is greater than international standards require and because the time required to remain connected to the power system when the frequency is below 47.5Hz is excessive." The Planning Council would like to place on record that such a statement did not appear in its previous submission and the statement does not accurately represent the view of the Planning Council.

Thank you again for the opportunity to comment, I would be happy to elaborate on any of the areas highlighted should you wish to discuss that matter.

Yours sincerely,

David Swift
CHIEF EXECUTIVE