## SUZLON ENERGY AUSTRALIA PTY LTD



13 February 2009

Ian Woodward Chairman The Reliability Panel Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

Via e-mail: panel@aemc.gov.au

Dear Mr Woodward,

## Submission on AEMC Reliability Panel Technical Standards Review – Draft Report

Suzlon Energy Australia Pty Ltd (SEA) is the largest turnkey constructor and operations and maintenance service provider of grid connected wind farms in Australia. We are a subsidiary of Suzlon Energy Ltd of Pune India, the world's fifth largest manufacturer of wind turbines.

In Australia, we are presently delivering over 450 megawatts of wind power generation across five wind farms, for a range of utility and investor clients.

SEA appreciates the opportunity to comment on the draft report on the Reliability Panel's review of technical standards in the NEM.

We are concerned that a number of the Reliability Panel developed principles have the potential to undermine the effective and efficient operation of the electricity market. We are particularly concerned about the possibility outlined in Principle 6 that generators could be required to upgrade to a higher performance standard after a connection agreement has already been negotiated. This places an unacceptable level of risk on new generation projects.

Our feedback on each of the principles is summarised in the following table. Should you wish to discuss any aspect of our comments please contact the undersigned.

Yours faithfully,

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## **SEA** response to proposed principles:

	Reliability Panel Developed Principle	SEA response
Principle I	Access standards should be aligned with the system standards wherever appropriate.	The current access standards (ie. Schedule 5.2 of the National Electricity Rules (NER)) for generators do appear to overlap with the system standards (S5.1a) and provide an avenue to negotiate the required level of performance. If the performance standards were to be strictly aligned with the system standards, it would not necessarily support the National Electricity Objective (NEO), that is with respect to "promote efficient investment in,". For example, compliance with the temporary overvoltage curve in Figure S5.1a.1 of the NER would require significant capital cost but the connection point may never be susceptible to such a high voltage profile.
Principle 2	Access standards should support the efficient operation of the power system.	It is our view that other factors such as the market rules have a greater influence in supporting the efficient operation of the power system as well as commercial factors. Access standards on the other hand support the integrity of the power system.
Principle 3	An access standard proposed by a connection applicant should be rejected when it fails to meet the level of the minimum access standard. The minimum access standard denotes the performance level where there is a high degree of certainty that any network user, employing any technology, located at any point on the national grid, would adversely impact system security, the quality of supply to other network users, or where relevant, the operation of the power system in accordance with the system standards.	The minimum access standard is a level of performance whereby a connection applicant cannot negotiate anything below this level. The minimum access standard has previously been defined to be a "do no harm" access standard and does not always pose a high degree of certainty in leading to an adverse impact on system security. For example, the minimum access standard for clause S5.2.5.11 (Frequency control) is an appropriate standard for wind power plants considering they very seldom participate in frequency control. If the minimum access standard is a threat to system security or quality of supply to other network users, the current Rules provide a framework for Network Service Provider (NSP) and NEMMCO to propose an alternative negotiated access standard that is acceptable to them.



	Reliability Panel Developed Principle	SEA response
Principle 4	An access standard proposed by a connection applicant should be accepted when it meets the level of the automatic access standard. The automatic access standard denotes the performance level where there is a high degree of certainty that any network user, employing any technology, located at any point on the national grid, could connect to the power system and not adversely impact system security, the quality of supply to other network users, or where relevant, the operation of the power system in accordance with the system standards.	The automatic access standard is a level of performance that should be automatically accepted by the connecting NSP and NEMMCO. It is understood the connecting NSP or NEMMCO could not demand a higher level of performance than the automatic access standard for each of the applicable technical standards. Satisfying the automatic access standard does not necessarily avoid an adverse impact on system security. For example a generator could satisfy the automatic access standard for S5.2.5.1 (Reactive power capability), however, this may be insufficient to support the voltages say following a non- credible contingency that has been declared as a credible contingency, in which case NEMMCO will need to procure additional amount of reactive power ancillary services.
Principle 5	A connection applicant may negotiate an access standard below the level of the automatic access standard, but above the level of the minimum access standard, where this does not adversely impact system security, the quality of supply to other network users, or where relevant, the operation of the power system in accordance with the system standards. A negotiated access standard must reflect the technical capability of the equipment to be connected, and connection applicants must prove why their plant cannot meet an automatic access standard.	The minimum access standard is effectively a negotiated access standard and should be considered as an acceptable performance standard if the connecting NSP and NEMMCO are able to discharge their responsibility under the NER. As mentioned above the minimum access standard is a "do no harm" standard and access should not be denied on this basis.
Principle 6	A lower performance standard should be permitted at the time of connection on the condition that equipment is upgraded in the future if a higher performance standard is deemed necessary.	This would provide considerable power for the NSP's and NEMMCO to demand the inclusion of this condition in the relevant connection agreement. It would be difficult to predict what is required in the future or how the shape of the network will transpire. This provision poses considerable risk to the viability of generation projects. This condition will be perceived as a means of subsidizing other connection applicants with connections into the future and possibly the NSP's to discharge their obligations under the Rules. SEA strongly disagrees with this condition.



	Reliability Panel Developed Principle	SEA response
Principle 7	The performance standards under a connection agreement are protected for the duration of those agreements, and a performance standard may only be changed when agreed to by the relevant network user, the relevant NSP, and NEMMCO.	Currently any physical change to the plant requires the affected performance standards to be re-negotiated even though the plant is able to satisfy the pre-existing performance standards. SEA believes this requirement is unnecessary if the change/alteration to the plant satisfies the pre-existing performance standards.
Principle 8	Technical standards should be technology, size and location neutral.	Agreed, however, there should be scope for negotiating the level of performance standards as the strength of the connection point varies with location.
Principle 9	Technical standards should apply to NEMMCO, NSPs, Market Network Service Providers, and Generators and Customers whose equipment is registered with NEMMCO.	SEA agrees that technical standards should apply to Generators.
Principle 10	Where market arrangements can replace a technical standard, then this should be considered.	SEA agrees with the Panel's position with respect to the technical requirement for reactive power.
Principle	Technical standards should be specific, clearly defined, unambiguous and consistent.	Agreed. They should be a coherent set of technical standards that are interlinked, and not assessed in isolation.
Principle 12	Technical standards should be measurable and assessable, in a form that allows effective compliance programs to be developed and maintained, and be enforceable.	Some performance standards are measurable and assessable such as fault ride through – following a system incident it could be assessed. On the other hand impact on network capability is not readily measurable.
Principle 13	The technical standards should place obligations on the party that is most capable of responding to that obligation in a manner that advances the National Electricity Objective (NEO).	How is "most capable of responding" going to be determined when assessing a number of applicants wanting to connect generation in a similar location. As mentioned above this provision would give power to the NSP's to demand a higher level of performance to future proof the network through the generators. This provision would also subsidize future connection applicants. Hence SEA disagrees with this principle.

