Meridian Energy Australia Pty Ltd
Level 15, 357 Collins Street
Melbourne VIC 3000

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Dominic Adams
Australian Energy Market Commission
PO Box A2449
Sydney South, New South Wales 1235

Project number: ERC0222

Dear Dominic

Generator Technical Performance Standards

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (**MEA Group**) thank the AEMC for the opportunity to provide comments on its draft determination in relation to the review of generator technical performance standards.

As you are aware, MEA Group is the owner and operator of the Mt Mercer and Mt Millar Wind Farms as well as Powershop Australia, an innovative retailer committed to providing lower prices for consumers which recognizes the benefits for consumers of a transition to a more renewable-based and distributed energy system. In addition, MEA Group is the registered generator for the Hepburn Community Wind Farm, has recently purchased the Hume, Burrinjuck and Keepit hydro power stations and has entered into a number of power purchase agreements with new renewable energy projects in NSW and Victoria.

MEA Group appreciates the complexity and range of stakeholder views the Commission is seeking to address as part of this rule change. On the one hand, AEMO have raised genuine concerns in respect of its ability to manage system security given the changing nature of the power system and the existing regime any new connections would be connected under. On the other hand, the Commission needs to balance the views of industry, the NEO and of course customers. In its consideration of customers the Commission must ensure the final determination delivers an efficient outcome, not just the most convenient outcome for all stakeholders. Therefore, moving to a regime where the automatic access standard is the expectation for all connecting parties, unless they can demonstrate otherwise, is unlikely to yield the most efficient outcome for consumers given the power system currently operates in a safe and secure manner with numerous parties connected under the minimum access standard.

MEA Group's position in respect of AEMO's request that the application of the final rule determination be applied to all connection applications from 11 August 2017 onward remains unchanged. MEA Group supports the Commission's proposed timeframe for implementation as being both pragmatic and fair for all parties and encourages participants and AEMO to work with the Commission, and one another, constructively to achieve a negotiated outcome that represents a fair and reasonable allocation of risk.

As always MEA Group seeks to place the consumer at the forefront of any proposed rule change. Consequently, MEA Group reminds the Commission that as an industry we need to be cognisant of prioritising the consumer, the market and the system, and that we don't inadvertently seek to make life easier for some in the industry at the expense of the consumer. With that in mind we note that whilst it may be attractive to some parts of the

industry to require all new connecting parties to meet the automatic standard, that solution by its very definition contradicts the objectives set out in the NEO and would likely result in a "gold plated" system, which is far from the best outcome for consumers, the market or the industry.

MEA Group as a strong supporter of community-owned generating systems agrees with the Commission's approach to only apply the draft determination to those generating systems capable of registering as a non-scheduled generator – minimum of 5MW installed capacity.

MEA Group is of the view that generators remain the best placed to operate their plant, not the system operator. We also have concerns that in a broad sense, handing control of all generators to AEMO introduces the risk that if AEMO were to make a mistake (not that we're saying they would) then this would affect the entire system, assuming all connected parties were under AEMOs control. MEA Group continues to support local frequency control efforts as highlighted in its submissions to the Commission under various frequency frameworks and reliability review as the most efficient mechanism for maintaining system frequency as opposed to relying solely on the AGC system.

Question	Response
Active Power Capability	
MEA Group understands both the Commission's and AEMOs intent to improve the efficient operation of the power system in requiring all semi-scheduled and scheduled generating units to "have the capability to receive instructions via the automatic generation control system". However, MEA Group is concerned that a reliance on the AGC system may not provide the efficient outcome the industry is seeking. In its earlier submission on this matter to the Commission, MEA Group noted that "the proposed changes will only yield maximum benefit if the operating philosophy and protocols underpinning the system are also improved". Whilst MEA Group agrees with the intent of this rule change we remain unconvinced that the AGC as a tool (ostensibly a load following generation controller) is the correct mechanism to regulate active power across all generating units in the NEM if it is the frequency of the system that AEMO is ultimately seeking to maintain. MEA Group notes recent independent studies that have identified the time delay associated with SCADA equipment across the NEM and the AGC and suggests that a better outcome for system stability may be for generators to reintroduce some form of local frequency control at their respective connection points. MEA Group understands the intent behind the Commission's proposed requirement for "all generating systems to have the capability to operate in frequency response mode (subject to energy source availability)", however MEA Group is concerned this may unduly impact smaller community energy projects that would see an increase in their capital cost with potentially limited improvement to system security and benefit to the consumer. The following requirements of the rule change also raise concerns in respect of a small non-scheduled generator's ability to meet the access standard, i.e. "amends the automatic access standard for frequency control, to state that generating systems must have the capability to offer all of the market ancillary services for provision of frequency control". It is unclear how much benefit AEMO would derive from requiring small non-scheduled generating units to meet this requirement.	
Remote Monitoring & Control	
This rule change expands AEMO's powers "to allow AEMO to require a number of additional remote monitoring and control capabilities" which MEA Group generally supports. However, we do not understand why AEMO's coverage needs to expand to include non-scheduled generating systems with nameplate capacity of less than 30MW. We suggest that a threshold of 15MW would be appropriate to exclude those generating systems where it may not be economical as part of an upgrade to meet the proposed minimum access standard and where there would be negligible improvement for system security or benefit to the consumer.	
Reactive Power Capability	
MEA Group supports the retention of the minimum access standard that does not require reactive power capability. MEA Group has no objection to the Commission's recommendation that reactive power capability	

Question	Response
become an AEMO advisory matter. MEA Group does have concerns in respect of AEMO or the NSP requiring reactive power capabilities where a clear requirement for it cannot be demonstrated by AEMO or the NSP. MEA Group notes there is no avenue for appeal should the connecting party disagree with the NSP or AEMOs assessment of the requirement (or otherwise) of reactive power capability.	
Reactive Power Control	
MEA Group is concerned that the draft rule, which "provides that the mode of reactive power arrangements apply **irrespective of the connection point voltage and the capacity of the generating system**", will pose significant barriers to entry for small or community-owned generating systems with what MEA Group perceives as negligible benefit for a secure operating system. This is consistent with MEA Group's previous submission which noted that "MEA Group remains a strong supporter of community energy projects and would be disappointed in any rule change that created a prohibitively high barrier to entry for these projects… That said, where those projects with an installed capacity below 30MW and above 5MW can meet the automatic access standards as described in the proposed rule change without significant cost, MEA Group believes it would be prudent for them to do so."	
Reactive current response during disturbances	
MEA Group is comfortable with the proposed draft determination in respect of reactive current response during disturbances.	
Continuous uninterrupted operation	
MEA Group supports "amending the definition of continuous uninterrupted operation to provide greater clarity to network users". We are also supportive of AEMO and the Commission's proposed changes to introduce "new requirements for generating systems to maintain continuous uninterrupted operation for certain multiple low voltage disturbances and requiring asynchronous generating systems to meet existing requirements to maintain continuous uninterrupted operation for particular partial load rejection events".	
System strength	
MEA Group remains strongly opposed to the inclusion of a minimum system strength rule and agrees with the Commission that this issue is more appropriately addressed through the framework created by the Managing Power System Fault Levels rule. MEA Group agrees there is little benefit to the consumer in mandating a minimum system strength requirement in the GPS, the benefits of which can only be realised when all proposed connecting parties are connected resulting in a level of gold plating that directly conflicts with the NEO.	
Consequential changes	
MEA Group agrees that the Commission has adequately considered the consequential changes as a result of these changes to plant where equipment is upgraded or augmented "allows applicants to negotiate between the level of their existing agreed performance standard and the automatic access standard, and includes new references to specific access standards that are deemed to be affected (and therefore must be renegotiated) when altering certain listed equipment." Provided connected parties cannot be made worse off as a result of these consequential changes, then MEA Group remains supportive as it would be a contradiction of the NEO for a rule change to be introduced that provided a disincentive for equipment upgrades on existing plant connected to the NEM on the basis it was no longer economical or technically possible for that existing plant to meet the new rules.	
Transitional arrangements	
MEA Group's position in respect of AEMO's request that the application of the final rule determination be applied to all connection applications from 11 August 2017 onward remains unchanged. MEA Group supports	

Question	Response
the Commission's proposed timeframe for implementation as being both pragmatic and fair for all parties and encourages participants and AEMO to work with the Commission, and one another, constructively to achieve a negotiated outcome that represents a fair and reasonable allocation of risk.	

If you have any further questions please feel free to contact me.

Yours sincerely

Ed McManus
Chief Executive Officer
Meridian Energy Australia Pty Ltd