

Your ref: ERC022

7 November 2017

Suzanne Falvi  
Executive General Manager  
Australian Energy Market Commission  
Level 6, 201 Elizabeth Street  
Sydney NSW 2000

Dear Suzanne

**re: Generator Technical Performance Standards Consultation Paper**

ElectraNet welcomes the opportunity to respond to the AEMC's consultation paper on the Generator Technical Performance Standards rule change proposal.

ElectraNet is party to a separate submission from Energy Networks Australia which is broadly supportive of the rule change proposal and addresses a number of specific technical issues.

The purpose of this submission is to provide additional comment on the impact of higher technical standards for grid connected generators in the South Australian region.

ElectraNet supports the rule change proposal which seeks to 'future proof' the power system against increasingly variable and challenging operating conditions.

ElectraNet has extensive experience with the integration of non-thermal generation into the South Australian region over many years. The high penetration of renewable generation in particular has been assisted by the licencing guidelines (the Guidelines) of the Essential Services Commission of South Australia (ESCOSA) which have been in place in various forms since 2005. The Guidelines have been developed and periodically reviewed by ESCOSA on the advice of first the Electricity Supply Industry Planning Council (ESIPC) of South Australia and subsequently the Australian Energy Market Operator (AEMO).

While the Guidelines have required generators - principally inverter connected - to meet standards which are higher than those of the National Electricity Rules (the Rules) these requirements have enabled connection to the SA transmission network of over 1,500 MW of grid scale generation since 2000. Evidence suggests that investments in bankable projects, supported by the significant renewable energy resources of South Australia, have been able to move forward under clear, consistent and achievable technical standards. Conversely, periodic declines in new connections have largely been attributed by proponents to uncertainty in environmental policy.

The latest revision to ESCOSA's generator licensing Guidelines has been in operation since August 2017, following an interim version implemented in March 2017, based on advice from AEMO.

The licencing standards applied by ESCOSA in South Australia do not appear to have impacted on connection activity to date. A number of large scale renewable connections have progressed or are progressing under these latest arrangements.

We note that some concerns have been raised by proponents in relation to requirements for high voltage withstand and multiple fault ride through. However, the Guidelines have provided sufficient flexibility to date for these concerns to be addressed and certain technological limitations to be allowed for. ElectraNet suggests that similar flexibility be provided for as part of the negotiating framework in the revised Rules.

Moving forward, ElectraNet supports a consistent national technical framework for the connection and operation of generation throughout the National Electricity Market (NEM) and supports the AEMO rule change proposal, which would allow ESCOSA to revoke its special licencing conditions for generators in South Australia.

ElectraNet also notes the introduction in July 2017 of additional requirements for generation to provide either fast frequency response or inertia services as a condition of receiving development approval in South Australia. While it is too early to determine the impact of these requirements on future investments in South Australia, it should be noted that the AEMC has made significant progress in finalising rule changes and reviews focusing on system strength and inertia during 2017, with the following now concluded:

- Emergency Frequency Control Schemes Rule change
- System Security Market Frameworks Review
- Managing Rate of Change of Frequency Rule change
- Managing Power System Fault Levels Rule change

Accordingly, the merit of the additional requirements currently administered by the South Australian Office of the Technical Regulator should be reconsidered moving forward in light of these new national arrangements.

Should you have any questions regarding this submission please contact Bill Jackson in the first instance on (08) 8404 7969.

Yours sincerely



Simon Appleby  
**Senior Manager, Regulation & Land Management**