



F2018/004447

17 August 2018

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

***Generator Technical Performance Standards Rule Change – Draft Rule Determination (ERC0222)***

Dear Mr Pierce

The Energy and Technical Regulation Division of the Department for Energy and Mining, South Australia (Division) welcomes the opportunity to comment on the Draft Rule Determination (the Determination) for the Generator Technical Performance Standards Rule Change published by the Australian Energy Market Commission (the Commission).

The Division is broadly supportive of the AEMC's draft determination and notes that in most instances it has adopted Australian Energy Market Operator's (AEMO) proposed amendments. The Division considers that the proposed amendments to the rules reflect the changing needs of the power system and should assist in maintaining power system security and quality of power supply.

This submission provides the Division's views on specific aspects of the draft determination which are particularly important given the transformation of the South Australian energy market.

The Division notes that as the generation mix in South Australia changes, the share of energy supplied by generation with active power control capabilities to manage frequency is reducing. The Division therefore shares AEMO's concern that there could be future shortfalls in the provision of frequency control ancillary services (FCAS) and risks to the security of the power system as existing generation retires.

The Division therefore supports the AEMC's draft determination to amend the minimum access standard to require all generating systems to have the capability to operate in frequency response mode, allowing them to more quickly complete the process of becoming a FCAS provider. The Division also supports amending the requirements of the automatic access standard, to specify that to meet the automatic access standard, a generator must be capable of offering measurable amounts of all of the market ancillary services for provision of frequency control.

The Division also supports the proposed requirement for all scheduled and semi-scheduled generating systems to have automatic generation control capability. Having greater numbers of generators possess this capability is likely to assist in maintaining frequency within the normal operating band and may be used to support system security in the future.

In regards to system strength, the Division notes that AEMO had proposed that generators are capable of continuous uninterrupted operation for a short circuit ratio of 3.0 at the connection point. AEMO also proposed that AEMO and the network service provider would have the ability to negotiate a lower short circuit ratio where appropriate.

AEMO proposed this as they consider the *Managing power system fault levels rule* does not allow network service providers to require capability from a generating system to make efficient use of the available system strength.

The Division notes that the AEMC has determined not to make this amendment as it considers the framework created by the *Managing power system fault levels rule* is likely to be sufficient to address the risks to power system from reductions in system strength.

The experience in South Australia, where AEMO has declared a Network Support and Control Ancillary Services gap in relation to system strength, has been that there are significant challenges in the NSP being able to address system strength issues quickly and at a reasonable cost. The Division also notes that the costs faced by the NSP are directly passed on to consumers.

The AEMC notes that matters relating to the coordination of generation and efficient use of and investment in network capacity are being considered as part of the AEMC's *Coordination of generation and transmission investment review*, and that such issues could be considered as part of that review. The Division, however, considers that as there are already issues with system strength appearing in the network and that there is a significant amount of new generation seeking connection it would seem an appropriate opportunity to have new generation contribute to addressing system strength issues. This would be preferable approach to proactively manage system strength, instead of leaving it to NSPs to manage after system strength issues appear on their network.

The Division therefore supports AEMO's proposal that generators are capable of continuous and uninterrupted operation for a short circuit ration of 3.0 at the connection point. The Division notes that in principal this is the approach that the Essential Services Commission of South Australia has adopted to address system strength through its technical licence conditions for electricity generators and considers such an approach should be adopted in the National Electricity Rules.

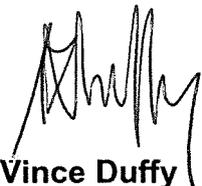
The Division supports the proposed amendments to the negotiating process for connections and considers that they will improve clarity of the negotiating process and better support the maintenance of power system security.

The Division notes AEMO's concern that if the final rule is not promptly implemented a large number of generation systems may be connected under current arrangements that are outdated. The Division therefore supports the AEMC implementing the rule as quickly as possible, noting that the AEMC is unable to make rules that have a retroactive effect.

The Division looks forward to the Commission's further consideration of these important matters over the remainder of the review.

Should you wish to discuss the submission in further detail, please contact Mr Mark Pedler, Principal Policy Officer, on (08) 8226 5501 or Mr David Bosnakis, Jurisdictional Systems Security Engineer on (08) 8226 5521.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Vince Duffy', with a stylized, cursive script.

**Vince Duffy**  
Executive Director  
Energy and Technical Regulation  
Department for Energy and Mining

