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Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

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ERC0222 – Essential Energy submission on the draft rule determination for generator technical performance standards

Essential Energy welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) draft rule determination: National Electricity Amendment (Generator technical performance standards) Rule 2018 (the draft rule).

We support a least cost industry transition to allow new generators with different technical characteristics to join the power system. Matching technical requirements to local power system needs will assist in keeping costs down for consumers, but there is a balance to be met between lowest cost to connect and maintaining system security for all consumers.

We support the ENA's submission in relation to this draft rule and wish to further expand on key issues as we have identified them below.

Remote Monitoring and Control / Voltage and reactive power control – Essential Energy does not support the inclusion of the ability for AEMO to remotely adjust the control modes and setpoints for areas of the network over which it does not have operational visibility. This network is typically the network to which non-scheduled generation is connected. We agree with the AEMC, that *"as there is an increased penetration of smaller non-scheduled generating systems in certain parts of the power system. These smaller systems may be connecting in parts of the power system with low voltage levels or low levels of system strength, and are likely to have an increasing impact on power system security. It may therefore be appropriate for these smaller generating systems to provide some level of remote monitoring and control capability."* However, Essential Energy does not agree that the provision of remote control capability to AEMO is the appropriate method to address this particular issue.

It is not clear why AEMO needs direct control at this level within the distribution network to deliver its overall power system security responsibilities. Essential Energy considers that a tiered approach to the management of these issues is likely to be in the interests of managing both system and local network security. This tiered approach would involve DNSPs maintaining the capability to operate the required remote-control capabilities of generation connected within the distribution system while agreeing to pass through AEMO control requests where local system conditions allow.

As it is currently not clear how AEMO intendeds to deploy this remote-control capability Essential Energy suggests further work is required between AEMO and DNSPs to balance these risks, as any move to bypass the requirements for DNSPs to manage local network operating state impacts may be counterproductive to system security.

Remote Monitoring and Control – Essential Energy agrees with the AEMC that monitoring and control capability do correlate with the local network and system strength of a particular connection

point and as such maintaining differentiation between the automatic and minimum access standards is appropriate.

Remote Monitoring and Control – Essential Energy supports the draft decision for the *"requirement for semi-scheduled and scheduled generating systems to have capability to provide information on active power limits and ramp limits"* and *"monitoring capabilities for status of run back schemes including information on scheme status and active power, reactive power or other control limits as appropriate"* Essential Energy expects that this will assist in balancing network access with both local network security and overall system security. Enabling smaller generators access to network capacity that is contingent on local distribution network consumption while providing AEMO with the visibility it requires to manage overall system security.

Provision of all enquiry forms – Essential Energy does not believe that the provision of all enquires received will assist in improving broader integrated system planning. AEMO currently receives visibility of projects at a stage that could be considered credible for inclusion within integrated system planning. Noting that;

- A significant number of enquiry forms that are submitted where the NSP provides a preliminary response do not end up as a connection and the location and capacity of the generation system can change as a project progresses through the connection process
- Any development by a project proponent at the enquiry stage of the connection process is at their own risk. Where the plant is found to be lacking the capability to meet the automatic access standard or a required level of negotiated access.

Voltage and reactive power control – Essential Energy supports the AEMC's draft approach to amending the automatic and minimum access standards to balance the need for the availability of all control modes generally, with the need for only specific control modes in some limited circumstances. In practical terms this will assist the connection of generators in weak and unregulated parts of the network.

Voltage and reactive power control – Essential Energy does not consider that the term *"with the agreement of AEMO and the Network Service Provider"* is required for the minimum access standard as the matter is already an AEMO *advisory matter*. This drafting could change the existing process where Essential Energy agrees a control mode with the generator proponent that balances generator performance with the impact on existing customers. This is then currently reviewed by AEMO as an advisory matter.

System Strength – Essential Energy supports the AEMC's draft decision not to include a new system strength access standard.

Reactive Power Capability – Essential Energy notes that the minimum access standard appears more onerous than intended. In aligning the drafting of the automatic and minimum access standards it appears the AEMC has included the requirement for a generator to provide the capability of cancelling any inherent reactive power drawn by its connection assets, to be zero at the generator connection point. Clarification of this requirement should be provided.

Should you have any questions on this submission, please don't hesitate to contact Natalie Lindsay, Head of Regulatory Affairs on (02) 6589 8419.

Yours sincerely

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