



1 August 2017

Ms Anne Pearson  
Chief Executive  
Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

Dear Ms Pearson,

**ERC0203 – Draft Rule Determination – National Electricity Amendment (Non-scheduled generation and load in central dispatch) Rule 2017**

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC), on its consultation on the *National Electricity Amendment (Non-scheduled generation and load in central dispatch) Rule 2017 – Draft Determination*. This submission is provided by Energy Queensland, on behalf of its related entities Energex Limited (Energex), Ergon Energy Corporation Limited (Ergon Energy) and Ergon Energy Queensland (EEQ).

Energy Queensland generally supports the AEMC's decision not to make a draft rule requiring additional market participants to participate in the central dispatch process. In particular, Energy Queensland supports this decision on the basis that the materiality of the issues raised in the rule change requests are insufficient to warrant making the proposed changes.

Energy Queensland notes that on 26 June 2017, discussions were held with the AEMC and the Department of Energy and Water Supply, where Ergon Energy raised concerns with the decision to not require non-scheduled generation load to participate in the central dispatch process as it presents certain challenges in regards to connection applications. The AEMC suggested these challenges be explained in a submission to the Draft Determination.

The challenge largely arises as a consequence of Ergon Energy's large radial network configuration, where a number of feeders may have a much lower capacity rating compared to a more strongly interconnected network. This is of particular consequence where multiple embedded generators are seeking to connect to this network. A non-scheduled generator of under 30 MW connected to parts of the Ergon Energy network can represent a significant proportion of the available network capacity. Due to being non-scheduled, it must be assumed that maximum export will occur 24 hours a day, which in turn can restrict the ability of other generators to connect to the network, and also limit the utilisation of existing assets.

Although the attached example relates to an existing situation on Ergon Energy's network, Energex have expressed that these challenges are also beginning to arise on their distribution network.

As such, Energy Queensland suggests that consideration be given to implementing an approach that is network dependent rather than a one size fits all arrangement. Notwithstanding, Energy Queensland notes the Draft Determination suggests that the Australian Energy Market Operator (AEMO) has a range of powers to address forecasting issues and maintain system security, including security issues arising from the behaviour of market participants. For example, clause 3.8.2(e) of the National Electricity Rules (NER) provides AEMO with a power to require a registered participant to participate in central dispatch. Energy Queensland would welcome further discussions with the AEMC to determine if this provision would assist with the issues outlined above.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact either myself on (07) 3851 6416 or Trudy Fraser on (07) 3851 6787.

Yours Sincerely



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*Encl: Ergon Energy example of existing generator enquiries at a single location*

## ATTACHMENT A – EXAMPLE OF MULTIPLE GENERATOR ENQUIRIES AT SINGLE LOCATION

The diagram below outlines an existing situation where multiple embedded generators are looking to connect to the Ergon Energy distribution network. When assessing a connection application for a new generator, Ergon Energy takes the following approach:

- existing connections; and
- projects with an accepted offer to connect in accordance with Chapter 5 of the NER by way of an executed agreement

will be considered as connected to the distribution network.

Due to confidentiality obligations, Ergon Energy is unable to advise applicants of any other proponent in the area. For example, if 2 non-scheduled generators (G3 and G4 - assuming maximum generation export capacities of 22 MW and 14 MW respectively) connect to a feeder with a maximum capacity of 105 MW, any subsequent generation applications by scheduled or semi-scheduled generators (G1 and G2) will have a maximum transfer capacity of 69 MW without requiring augmentation. As demonstrated in the below scenarios, this can result in a significant waste of time, money and effort.

The Scenarios that can play out in this example include:

1. If G1 enters into a Connection Agreement (CA) first, then:
  - a. G2 may still connect, and if no augmentation is requested, a constraint equation for the 105 MW feeder will be managed by AEMO for G1 and G2.
  - b. If G2 is 2nd to enter into a CA, G3 and G4 will only be able to connect if they fund augmentation works on F1 (up to 127 MW for G3 and 119 MW for G4).
2. If G2 enters into a CA first, then:
  - a. G1 may still connect, and if no augmentation is requested, a constraint equation for the 105 MW feeder will be managed by AEMO for G1 and G2.
  - b. If G1 is 2nd to enter into a CA, G3 and G4 will only be able to connect if they fund augmentation works on F1 (up to 127 MW for G3 and 119 MW for G4).
3. If G3 enters into a CA first, then:
  - a. G2 will be advised that their maximum transfer capacity (MTC) without augmentation is now 83 MW (105 MW – 22 MW).
  - b. Both G1 and G2 can connect (without augmentation) with a MTC of 83 MW each, the final one connecting will need to fund the establishment of a constraint equation with AEMO.
4. If G3 and G4 are 1st and 2nd to enter into a CA, then:
  - a. G1 and G2 will be advised that their MTC without augmentation is now 69 MW (105 MW – 22 MW – 14 MW).

Please note that the constraint equation for G1 and G2 will be based on the 105 MW constraint on the 132 kV feeder, however G3 and G4 can operate at any time.

ATTACHMENT A – EXAMPLE OF MULTIPLE GENERATOR ENQUIRIES AT SINGLE LOCATION

Obviously if a number of larger non-scheduled generators connected first there would be no ability for semi-scheduled generators to connect without augmentation.

