16 May 2019



Suzanne Falvi Executive General Manager Australian Energy Market Commission PO Box A2499 Sydney South NSW 1235

Dear Ms Falvi

EPR0070 – Investigation into intervention mechanisms and system strength in the NEM, Consultation Paper

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comments to the Australian Energy Market Commission (AEMC), on its consultation paper on *Investigation into intervention mechanisms and system strength in the National Electricity Market* (NEM) (the consultation paper). This submission is provided by Energy Queensland, on behalf of its related entities Energex Limited (Energex), Ergon Energy Corporation Limited (Ergon Energy Network), Ergon Energy Queensland Limited (Ergon Energy Retail) and Yurika Pty Ltd (Yurika) and is available for publication.

About Energy Queensland

Energy Queensland is a Queensland Government Owned Corporation that operates a group of businesses providing energy services across Queensland, including:

- Distribution Network Service Providers (DNSPs), Energex and Ergon Energy Network:
- a regional service delivery retailer, Ergon Energy Retail; and
- an affiliated contestable business, Yurika, which includes Metering Dynamics Pty Ltd.

Energy Queensland's purpose is to "safely deliver secure, affordable and sustainable energy solutions with our communities and customers" and is focussed on working across its portfolio of activities to deliver customers lower, more predictable power bills while maintaining a safe and reliable supply and a great customer service experience.

Our distribution businesses, Energex and Ergon Energy Network, cover 1.7 million km² and supply 37,208 GWh of energy to 2.1 million homes and businesses. Ergon Energy Retail sells electricity to 740,000 customers.

The Energy Queensland Group also includes Yurika, an energy services business creating innovative solutions to deliver customers greater choice and control over their energy needs and access to new solutions and technologies.

Key Messages

Energy Queensland supports the timing of this consultation paper, especially as it relates to managing system strength and the inertia frameworks. In addition, we welcome the rule changes submitted by the Australian Energy Market Operator (AEMO). Our key messages are outlined below.

Assessment principles - While we support the AEMC's proposed assessment principles, we note that there is a failure to recognise the importance of 'good engineering practice' in assessing the recommendations on potential changes considered in this consultation paper. For example, some solutions may be seen as market driven; however, the engineering principles and technical implications need to be factored into the assessment framework.

Hierarchy of intervention mechanisms – Energy Queensland considers that an optimal hierarchy of intervention mechanisms to deliver the best outcomes for consumers could follow this sequence - Directions, Reliability and Emergency Reserve Trader process and finally, load shedding. However, Energy Queensland also wishes to highlight the opportunity that DNSPs have in being able to use demand response to ensure system security and manage reliability impacts for customers. Our distribution network businesses, Energex and Ergon Energy Network, have effectively used load control mechanisms to manage peak loads for security purposes for many years. Combined, both network businesses have around 1.2 million customers, representing around 874 MW of diversified non-firm load control that can be called upon during network contingencies. Energy Queensland also established an affiliated contestable business, Yurika, which has developed a Virtual Power Plant product that can potentially further support system security.

Energy Queensland supports a reasonable endeavours 'least cost' principle approach to inform the hierarchy of intervention mechanisms. However, it is also equally important to have regard for power system reliability more generally to ensure that consumer needs are met.

Compensation – It is reasonable that the total amount paid for any particular intervention mechanism deployed is published to inform the market of opportunities and challenges. While Energy Queensland does not support commercially sensitive information being made public, we support an approach that provides as much transparency as possible, given customers ultimately pay compensation.

In terms of the quantum of compensation, Energy Queensland recommends careful analysis and consideration of the long-term impacts when determining the appropriate level of compensation for directed generators. More generally, it is also important to consider whether there is a market failure in terms of AEMO having to intervene in order to maintain system security.

System strength requirements – A significant concern is the level of uncertainty around system strength generation dispatch levels in the future. We understand that some transmission network service providers have developed certain minimum dispatch scenarios. However, there are outstanding risks to be resolved in terms of future commitment levels of large generators. The AEMC should have regard for this when addressing emerging system strength and shortfalls.

While inverter systems do have the ability to impact network system strength, the impact is dependent on the size of the inverter system and the strength of the part of the network they are connecting to. Generally, residential photovoltaic (PV) systems are relatively small, and therefore, even if they are connected to weaker networks, they will not have a significant impact on system strength. However, Ergon Energy Network's and Energex's joint *Standard for Connection of Embedded Generating Systems to a Distributor's HV Network* (the Standard), addresses system strength impacts from larger PV systems, that is, greater than 1.5 MW. Under this Standard, these larger systems have to comply with additional technical requirements including system modelling when connecting to weaker parts of the distribution networks.

Energy Queensland looks forward to continuing to work with the AEMC on this consultation. Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact me on (07) 3581 6787 or Alena Chrismas on (07) 3851 6784.

Yours sincerely

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