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19 December 2017

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

Lodged online via: www.aemc.gov.au

Dear John,

ERC0208 Draft rule determination: Inertia Ancillary Service Market

TransGrid fully supports efforts to maintain power system security and welcomes the opportunity to respond to the AEMC's draft determination on the proposed Inertia Ancillary Service Market rule change.

TransGrid is the operator and manager of the high voltage transmission network connecting electricity generators, distributors and major end users in New South Wales and the Australian Capital Territory. TransGrid's network is also interconnected to Queensland and Victoria, and is instrumental to an electricity system that allows for interstate energy trading.

TransGrid supports the AEMC's draft rule determination to not make a draft rule introducing a market mechanism for power system inertia at this time. As identified by the AEMC and stakeholders, there are a number of reasons in favour of not implementing a market mechanism for additional levels of inertia at this time, including:

- The *Managing the rate of change of power system frequency* final rule (published on 19 September) addresses the need for minimum levels of inertia to maintain the 'secure operating level'. This rule places an obligation on TNSPs to make these minimum levels of inertia, as determined by AEMO, continuously available[1]. As a result, there is no urgency to introduce a complementary mechanism for additional levels of inertia at this time.
- The minimum levels of inertia are yet to be determined by AEMO, and are expected to be set by the end of June 2018. Once the minimum level of inertia requirements is identified, any residual benefits that may arise from additional levels of inertia will more easily be identified.
- Given the constraints placed by AEMO to manage low system strength issues in South Australia and the resulting impacts on the Heywood Interconnector, there are limited market benefits that could be obtained through additional levels of inertia at this time.
- Further consideration is needed to understand how to accurately value inertia in conjunction with the application of constraints that manage other system security

[1] AEMC 2017, *Managing the rate of change of power system frequency*, Rule Determination, 19 September 2017, Sydney.

requirements, including system strength and system stability. There may also be the potential to co-optimise the provision of ancillary services

Changes in Australia's electricity sector are underway, with a transition towards renewable generation and the complex issues arising in relation to the design of the National Electricity Market (NEM) and the security of supply. Concurrently a National Energy Guarantee (NEG) policy is being developed, and its interaction with existing market arrangements remains unclear at this time. Given this context, and until more detail information is made available and stakeholders have been adequately consulted, TransGrid agrees that it is not the appropriate time to design and introduce a mechanism for additional levels of inertia.

More recently, on 18 December 2017 the Australian Energy Market Operator (AEMO) released a consultation paper on the development of a NEM-wide Integrated System Plan (ISP), as recommended by the *Independent review into the future security of the NEM* (Finkel Panel's *Blueprint for the Future*)[2]. The ISP outlines the different operational and technical requirements of the power system, such as inertia and frequency controls, and the ability of different technologies and NEM participants to provide these requirements via different services[3]. It is important that future policy changes take into consideration the ISP, as well as the long-term requirements for different power system security services such as inertia, to allow for better long-term development of the network and non-network alternatives by transmission network service providers (TNSPs).

Given the need for solutions to remain flexible enough to accommodate different jurisdictions and circumstances, NEM-wide solutions should not be rushed through to satisfy locational-specific issues, especially as they have long-term implications. Designing an efficient market is complex and, given this context, TransGrid supports the AEMC's draft rule determination to not design and implement a market for these services at this time.

TransGrid also supports the recommendations arising from the Finkel Panel's *Blueprint for the Future*; including recommendation 2.2 which assert that *"a move towards a market-based mechanism… should only occur if there is a demonstrated benefit*"[4]. That is, if a market-based solution is to be developed in the future, it is important that it is tested to demonstrate that it provides the lowest long-term solution for consumers as opposed to alternate solutions. Without the appropriate conditions for an efficient market, in particular sufficient participants to ensure effective competition, technically-specific or locational dependent services may be best provided via other solutions[5].

TransGrid also supports the submission made to the AEMC by Energy Networks Australia in relation to this draft rule determination, which also aligns with our submission to the *Frequency control frameworks review* (EPR0059) on 8 December 2017. In particular, any further assessment of any new inertia ancillary services markets or arrangements should include sufficient consideration of the role of TNSPs.

Given that TNSPs are required to provide a minimum level of inertia, there is an opportunity that the lowest cost solution for additional levels of inertia may be provided via co-optimisation

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[2] Finkel et al. 2017, *Independent Review into the future security of the National Electricity Market,* Commonwealth of Australia 2017, p124.

[3] AEMO 2017, *Integrated System Plan Consultation*, December.

[4] Finkel et al. 2017, *Independent Review into the future security of the National Electricity Market,* Commonwealth of Australia 2017, p21.

[5] Ibid, p53.

of transmission investment. As such, an alternative approach that deserves consideration is for TNSPs to coordinate, procure or provide a range of ancillary services including additional levels of inertia, for a commensurate return for the risks managed and services provided. However, while lowest cost long-term solutions in some circumstances may involve TNSPs providing a range of services rather than investing in the asset base, the current regulatory framework lacks incentives for TNSPs to provide these services. Currently, costs for providing these services are recovered via pass-through arrangements which have a cash flow impact, as these costs are recovered up to two years after they are incurred. In our view it is more important to remedy these concerns prior to any further consideration of additional mechanisms, such as an inertia ancillary services market.

We recognise that this issue is complex and the AEMC intends to continue its assessment of the appropriate design of an inertia market mechanism through the recently initiated *Frequency control frameworks review*. TransGrid will be pleased to work with the AEMC and other stakeholders to consider this issue within these two consultative processes.

If you would like to discuss any matter raised in this submission, please contact Rebecca El-Khoury in the first instance on 02 9284 3299.

Yours sincerely,

Anthony Meehan
Executive Manager, Regulation