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6/02/2018

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

Lodged online via: www.aemc.gov.au

Dear John,

Reliability frameworks review – consultation on interim report

TransGrid welcomes the opportunity to respond to the AEMC's interim report in relation to its reliability frameworks review.

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.

As recognised by the AEMC, Australia is in the midst of an energy transformation. This is primarily driven by community expectations, retirement of existing generation and advances in renewable energy technologies. These changes raise complex issues in relation to the design of the National Electricity Market (NEM) and have led to a greater focus on reliability of supply.

The governance framework, including the National Electricity Rules, should provide a robust framework which can adapt to these changes, and provide the basis for a reliable supply at the lowest cost to consumers over the long run. TransGrid understands that the review is not considering network reliability of supply but rather it is looking at the reliability of supply provided by generation and other balancing options like demand repsonse.

TransGrid is supportive that the AEMC is exploring ways to address concerns in the current design of the NEM and, in doing so, progressing several of the Finkel recommendations. However, it is critical that this work is undertaken concurrently with the development of the design and implementation of the Commonwealth Government's proposed National Energy Guarantee. The National Energy Guarantee consists of two parts: a reliability guarantee and an emissions guarantee. Retailers will be required to meet these guarantees through the contracts they enter into with generators or through the type of generators they invest in directly.

Currently, it is unclear how this policy interacts with the existing reliability frameworks. Until such information is available to stakeholders it is difficult to form a fully considered view on the appropriate design of the NEM reliability frameworks.

As part of its review, TransGrid understands that the AEMC is assessing the performance of the current reliability framework in the NEM. While this does not relate explicitly to the operation of the grid, TransGrid in its role as connecting electricity consumers to a safe, secure and reliabile

network has a number of perspectives on the efficient and reliable operation of the NEM.[1] In TransGrid's view, the current framework is not fit for purpose in the changing energy environment. We have provided comments in relation to shortfalls in the design of the current market against some of the key headings of the review below.

Forecasting

We agree with the AEMC's comments about the increasing degree of uncertainty of forecasts that are arising and will continue to arise as the penetration of intermittent generation sources rises. We support the AEMC exploring ways which variances in forecasts can be better managed through the forecasting process.

Contract markets

There is a concentration of players in the retail market and vertical integration of generation and retail businesses that may be distorting the contract market. The top 3 retailers represent greater than 75% of the market in some states.[2] This situation reduces the ability of new potential generators to enter into contracts on a level playing field.

An inability to obtain contracts typically results in increasing financing costs to generators who cannot find a retailer counter-party. This increased cost of capital may act as a barrier to new generators entering the market causing distortions and reducing the ability of the contract market to attract new generation to ensure reliability of supply.

More generally, given the changing mix and dispatch profiles of generation in the NEM it is doubtful that the current wholesale market design, which was designed to efficiently allocate an excess supply of coal fired generation, is an efficient mechanism for the future.

Wholesale demand response

TransGrid supports the use of technically feasible and cost-effective demand response in the National Electricity Market. The current market for demand response in the NEM is relatively immature and the full potential of innovation in demand response is yet to be realised. In relation to this, the Australian Renewable Energy Agency and the Australian Energy Market Operator are undertaking pilot projects under a demand response initiative to manage electricity supply during extreme peaks.

As a network service provider, TransGrid is supportive of demand response as it allows transmission businesses to be more responsive to changes in demand forecasts and the needs of consumers. The regulatory framework should allow for innovation by transmission businesses to actively build up the market, in the same way that an innovation scheme has been introduced for distribution businesses.

Need for a strategic reserve

We support the need for a strategic reserve in the short run to better enable AEMO to ensure reliability in the network during the transition period to higher renewable penetration. In the long term, TransGrid does not believe that a strategic reserve is the best method to deliver reliability. Reserve contracts procured by AEMO may be expensive and are not the means of supplying electricity to consumers at the lowest cost. As a potential solution to this issue, a broadening of the definition of unserved energy in the National Electricity Rules, used by AEMO to

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1 In November 2016, the NSW Independent Pricing and Regulatory Tribunal made recommendations to the Minister for Industry, Resources and Energy to setting a new reliability standard for the electricity transmission network in NSW. The new standard will apply to TransGrid from 1 July 2018.

2 AER, *State Of The Energy Market 2017*.

inform the market, may result in the need for strategic reserves less often.[3] A broadening of the definition would also better align it with the level of reliability experienced by consumers.[4]

Day ahead markets

We note that day ahead markets continue to be explored as tools to support reliability of supply in other markets. For example, Ontario is currently transitioning from a model of day ahead commitments to a financially binding day ahead market. The expected benefits of this transition are that "A Day-Ahead Market will provide market participants with price certainty ahead of real-time, increase operational certainty for both market participants and the Independent Electricity System Operator, and reduce out of market payments."[5]

These benefits appear consistent with the objective of improving reliability of supply being sought by the AEMC within this review. The AEMC correctly notes that the reform pathway to implement a US-style day ahead market may be long. However, TransGrid believes that the long term benefits of such a model, which include increased ability for generators to understand and manage congestion risks, are desirable as the network evolves to incorporate a greater number and diversity of generators.

TransGrid recommends that the AEMC continues to explore the potential of a day-ahead market to support the evolution of the NEM.

Broader reforms

TransGrid recognises that this review is taking place in the context of transformation of the electricity sector. We would therefore support the AEMC undertaking an assessment of all possible options, including significant reform of the existing reliability frameworks, in consultation with stakeholders.

The AEMC states that it has not considered how the regulatory investment test for transmission (RIT-T) operates in respect of interconnectors in the interim report as it considers there are more significant, threshold questions relating to the reliability frameworks that need to be resolved first.

TransGrid considers it appropriate that the significant issue of how the RIT-T operates in respect of interconnectors be considered through a separate process, noting that the AER is about to undertake a review of its RIT-T application guidelines. We also support AEMO's consultation on issues relating to the RIT-T as part of the development of its integrated system plan.

We appreciate the opportunity to comment on this interim report and look forward to engaging with the AEMC and other stakeholders further on this project. If you would like to discuss this submission, please contact Caroline Taylor, Manager Regulatory Policy on 02 9284 3715.

Yours faithfully

Anthony Meehan
Executive Manager, Regulation

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[3] The current definition of unserved energy in clause 3.9.3C of the National Electricity Rules excludes occurrences from multiple contingency events, protected events and non-credible contingency events. Occurrences similar to load shedding such as voluntary curtailment, mandatory restrictions and large market responses are also not included, even when the effect on consumers is similar to unserved energy.

[4] For example, on 10 February 2017 the unserved energy in New South Wales, as defined by clause 3.9.3C of the National Electricity Rules, was approximately 290 MWh. However, the actual consumer experience of unserved energy through voluntary curtailment and market or contractual arrangements was significantly higher than this.

[5] Independent Electricity System Operator, http://www.ieso.ca/en/sector-participants/market-renewal/market-renewal-day-ahead-market, viewed 1 February 2018.