grid australia
BACKBONE OF THE NEM

30 April 2015

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

Lodged online: www.aemc.gov.au

Dear John

Optional Firm Access, Design and Testing – Draft Report (EPR0039)

Grid Australia welcomes the opportunity to make a submission on the Australian Energy Market Commission (AEMC)'s Optional Firm Access (OFA) Draft report and recommendations (released 12 March 2015).

While at a conceptual level OFA has the potential to improve the operation of the National Electricity Market, Grid Australia supports the AEMC's conclusion that in the current investment environment, OFA does not contribute to the achievement of the National Electricity Objective (NEO).

Grid Australia also agrees with a number of the AEMC's other key findings and conclusions, including that:

- The balance of expected benefits and costs of OFA could shift in favour of implementation if there is a major shift in market conditions or government policy settings that drive the need for higher levels of new investment;
- Monitoring of NEM conditions be undertaken to determine if and when the necessary conditions exist for OFA to be considered for implementation at some point in the future;
- A set of criteria or triggers be developed based on consultation with industry participants that can be applied to determine when the necessary conditions for considering OFA for implementation may exist in the future;
- Tasmania be excluded from any initial operating OFA model due to a number of key differences between Tasmania's circumstances and those of other jurisdictions;

- The pricing element of OFA requires more work if OFA is considered further for implementation in the future; and
- There should not be another NEM transmission congestion and access focused review for a considerable period of time – as the AEMC has pointed out there have been eleven reviews that have focussed in this area since 1997.

The AEMC has made significant progress in developing the key elements of an OFA model (e.g. establishing planning standards, operating standards, access allocation, the design and operation of the Long Run Incremental Cost pricing model and investment/ regulatory processes). However, should the necessary conditions exist in the future to warrant further consideration of OFA, further development of the model would be required to provide assurance that its implementation is practical and workable.

Grid Australia notes that the AEMC is deliberating on whether to make additional recommendations in its Final Report as a result of some stakeholder proposals put forward in submissions to the October 2014 Supplementary Pricing Report. These include alternative options to a full OFA implementation and some potential incremental changes to existing transmission regulatory investment arrangements. These proposed changes raise the following issues.

Application of the Regulatory Investment Test – Transmission (RIT-T) to network replacements in addition to augmentations

Grid Australia notes the AEMC's consultant, Ernst and Young, has suggested that exposing generators to transmission replacement decisions could lead to potential savings across the market. However, any such benefits would only apply in limited circumstances involving relatively major network replacements on major flow paths that impact on network transfer capability or generation dispatch.

Current NEM planning processes such as the Transmission Annual Planning Report already require transparency of network replacement plans and the consideration of viable alternatives to 'like for like' asset replacement.

In its 25 June 2009 Final Rule Determination on the RIT-T (Appendix B), the AEMC stated:

> The Commission considers that it would represent an unnecessary regulatory burden to require assessment under the RIT-T for reconfiguration investments which have, or are reasonably considered to have, no material impact on *network users,* even if these investments are over $5 million. Such investments are similar to like-for-like replacement where no other options exist. Given the very wide variety of circumstances where this clause may apply, the Commission regards that the clause makes appropriate provision for the TNSP to reasonably determine, given the information available to it at the time, whether a reconfiguration has material impacts on network users, i.e. impact transfer capability.

The AEMC concluded that investments where no other options exist or where there are no material impacts on network transfer capability, and therefore other users, do not warrant application of the RIT-T. Grid Australia considers that this assessment remains valid today.

Recent examples where alternatives to like-for-like asset replacement have been proposed include those in TransGrid's most recent Revenue Proposal (p.50), which includes deferrals and decommissioning of capacitor banks at various sites and the decommissioning of a substation transformer in the Newcastle area due to changed economic circumstances.

Monitoring of conditions for OFA

The AEMC concluded that:

> "… from a functional perspective, the optional firm access model could be implemented in the NEM, and, in a changing and uncertain investment environment would contribute to the National Electricity Objective, provided implementation risks could be managed"[1].

The AEMC accordingly proposes that the final report will identify arrangements for monitoring conditions in the NEM to provide indicators that relate to the likely benefits of optional firm access. Grid Australia supports this approach. We consider the indicators should be accompanied with an assessment of the net value to the NEM of deployment. Without this, the indicators would be open to wide interpretation and provide little value in informing policy direction.

For the purposes of evaluating the risks associated with transmission investment (covered in chapter 4 of the draft report) and efficient investment in network capacity (covered in chapter 5 of the draft report) the indicators should be determined having regard to the National Transmission Network Development Plan. This provides a strategic view of the efficient development of the NEM wide transmission networks over a 20 year planning horizon and coordination with this would support a consistent basis of assessment.

The AEMC proposes that the monitoring function be undertaken as an adjunct to its annual Last Resort Planning Power (LRPP) functions. However, Grid Australia notes that the purpose of the LRPP is to ensure timely and efficient inter-regional transmission investment. This is a very different purpose from the monitoring function the AEMC is now proposing to assess the benefit of adopting OFA in the future. Grid Australia is concerned that merging these two distinct functions would detract from the original rationale for the LRPP, which was to manage the risk of a failure in efficient inter-regional planning.

[1] AEMC, Draft Report - Volume 1, Optional Firm Access, Design and Testing, Section 11.3, page 84

Possible incremental changes to the current AER Market Impact Component of the Service Target Performance Incentive Scheme (STPIS)

It was proposed that the scheme cover all periods, not just outage periods and that the scheme be better-linked to measures of market value (pp.69-70).

The purpose of the Market Impact Component of the STPIS is to link TNSP operational decision making to the market impacts of those decisions. Without the OFA Firm Access Planning Standard or similar in place, there are no decisions a TNSP can make in respect of network congestion under system normal conditions beyond those that already exist under the RIT-T and NCI component of the STPIS. It is not evident that any changes in TNSP behaviour, and hence improved market outcomes, would result from including system normal congestion in the STPIS. Including system normal congestion would also arguably dilute the existing incentive to manage network outage impacts. .

Other Matters

Finally, Grid Australia would like to comment on two matters of detail that arise from the Houston Kemp report "Historical analysis of coordination between transmission and generation investment in the NEM – A South Australian case study for the Australian Energy Market Commission" (2 February 2015).

<u>Generators locating on interconnector flow paths</u>

Examples have been highlighted of generators that have located along interconnector flow-paths that have degraded interconnector capacity and reduced the envisaged inter-regional benefits in RIT-T assessments. Specifically, the following statement made by Houston Kemp does not appear to take account of a number of relevant factors:

> "Every 1 MW of wind farm capacity offsets more than 1 MW of interconnector capacity (and we understand it to be more in the region of 1:2 to 1:3)"

This conclusion and what if anything should be done about it is open to debate.

For example, the last wind farm to be connected in the south east of South Australia was commissioned in 2010. Houston Kemp's analysis for the period between 2011 and 2014 is not capable of identifying the effects of the wind farms on the interconnector at the time of connection. This raises questions of how Houston Kemp has accounted for the following changes that have occurred since the connection of the wind farms in 2010:

- Addition of a distribution connected 20 MW gas turbine by a major electricity customer in the south east of South Australia;
- The connection of 511 MW of PV systems in South Australia between 1 January 2011 and 30 December 2014, and

- Average demand in the south east of South Australia has reduced from 81 MW in 2011 to 54 MW in 2014.

Claims made that generation location decisions have increased network support costs

The AEMC's consultant, Houston Kemp, in its supporting analysis stated that:

> "the decision of the Mount Millar and Cathedral Rocks wind farms to locate on the Eyre Peninsula has increased the amount that ElectraNet pays GDF Suez for providing network support at Port Lincoln above what would have been if these wind farms were not located there".

Further, Houston Kemp concluded that:

> "the reduced volume that Port Lincoln generators can sell in the spot market is directly as a result of these wind farms (Mount Millar and Cathedral Rocks)".

Both Cathedral Rocks and Mt Millar were first registered in 2005. ElectraNet has examined its network support costs and finds no evidence that costs have changed as a direct result of the subsequent connection of the two wind farms. An increase in the cost of network support occurred when ElectraNet procured additional network support capacity at Port Lincoln in order to achieve the jurisdictional reliability standards mandated in the South Australian Electricity Transmission Code (ETC). The procurement of the services of one additional gas turbine was unrelated to the presence of the wind farms on the Eyre Peninsula, and was driven by the level of capacity required.

Grid Australia would welcome the opportunity to discuss with the AEMC any of the matters raised in this submission, or any other issues, ahead of the AEMC finalising its report to the COAG Energy Council by the middle of 2015.

Please do not hesitate to contact me on (08) 8404 7983 or korte.rainer@electranet.com.au if you wish to discuss any matter raised in this submission.

Yours sincerely

Rainer Korte
Chairman
Grid Australia Regulatory Managers Group