

06 February 2018

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

Via electronic submission

Dear Mr Pierce,

RE EPR0060 – Interim Report on the Reliability Frameworks Review

TasNetworks welcomes the opportunity to make a submission to the Australian Energy Market Commission (AEMC) on the Interim Report of the Reliability Frameworks Review (RFR).

As the Transmission Network Service Provider (TNSP), Distribution Network Service Provider (DNSP) and jurisdictional planner in Tasmania, TasNetworks is focused on delivering safe and reliable electricity network services while achieving the lowest sustainable prices for Tasmanian customers. TasNetworks is committed to ensuring the reliability of the Tasmanian power system and this requires the prudent and efficient investment, operation, and maintenance of network infrastructure. In this regard, TasNetworks is appreciative of AEMC's efforts in undertaking a review of the reliability framework.

TasNetworks has contributed to and supports Energy Networks Australia's submission on the RFR. TasNetworks would, however, like to make several other comments on the RFR with a particular focus on the Tasmanian context.

Forecasting and information processes

TasNetworks supports AEMC's intention to enhance reliability through improvements in the NEM wide forecasting processes. In principle, TasNetworks supports the Australian Energy Market Operator (AEMO) having visibility of relevant information required to facilitate the efficient and effective operation of the wholesale market. For example, by knowing the extent and capabilities of wholesale demand response (WDR) mechanisms.

TasNetworks is concerned with how this objective may be achieved in practice however. It is not obvious how AEMO could access what would normally be seen as commercially sensitive contractual information. As identified by AEMC, one possible solution may be for retailers to play a more important role in forecasting demand. That is, so long as forecasting requirements were not too granular, retailers might be able to provide relevant information whilst also protecting the confidentiality of individual contractual obligations.

In contrast with other states in the National Energy Market (NEM), Tasmania is energy constrained as opposed to capacity constrained. Tasmanian generation is also dominated by hydro generation. Combined, this presents unique challenges to forecasting for reliability purposes, particularly over medium and longer term time horizons. Modelling assumptions around rainfall, the security of gas supply and contracted load-shedding are but three elements relevant to forecasting in the Tasmanian context. TasNetworks contends that any proposed changes to forecasting and information processes to enhance the reliability standard must give due deliberation to these, and other unique jurisdictional, forecasting considerations.

TasNetworks also considers it is critical for TNSPs and DNSPs to be able to monitor any generation that is injected into an electricity network. This includes cases where:

- generation from an embedded network is injected into the distribution network; and
- an embedded generator connected to the distribution network injects into the transmission network.

Similarly, TasNetworks contends allowing semi-scheduled generation to offer their availability on a trial basis could result in useful insights. When combined with the information gathered from monitoring electricity network injections, TasNetworks considers appropriate and innovative network investment, that ensures optimal reliability outcomes, is more likely to occur.

Credible contingencies

As noted in the interim report, AEMO has recently raised concerns that, in the current environment, the concept of credible contingency may no longer be appropriate to reliability and security outcomes. TasNetworks echoes the concerns of AEMO and considers that further clarity is desirable on what constitutes the critical single credible contingency for purposes of dispatching Frequency Control Ancillary Services (FCAS) and maintaining a secure operating state.

TasNetworks is particularly concerned fault ride through the behaviour of multiple distributed devices, and the potential for sympathetic tripping due to transmission network contingencies, may materially increase the impact of contingent events to the point that, in aggregate, the system impact of a mid-range contingent event could exceed the impact of the identified single critical credible contingency.

Notwithstanding the well documented issue of forecasting the varying contribution from solar PV and wind generation, TasNetworks contends predicting dynamic behaviour of asynchronous generation during transmission network contingencies is also worthy of further consideration. Particularly given this issue is likely to become increasingly material as more distributed and uncoordinated asynchronous devices are connected to the power system.

The contract market

As explained below, and reiterated in ENA's submission, the contract market in Tasmania is very different to the rest of the NEM. Currently, there are no ASX listed Tasmanian electricity derivatives. Given this, and the desire to reduce the risks faced by retailers operating in the Tasmanian market to a level comparable in the rest of the NEM, the Tasmanian Wholesale Contract Regulatory Framework (TWCRF) was introduced in 2014. Essentially, the TWCRF sets out the rules surrounding the provision of Tasmanian electricity derivatives by Hydro Tasmania to other electricity market participants.

The benefits to the framework are many and varied. As noted below, the framework:

- facilitates the efficient and transparent pricing of Tasmanian electricity derivatives;
- provides a direct mechanism by which participants can hedge Tasmanian exposures;
- guarantees sufficient liquidity for participants wanting to hedge Tasmanian exposures; and
- also allows an indirect method by which participants can enter into over the counter (OTC) derivative transactions that do not involve Hydro Tasmania. For example, by using the published Tasmanian derivative prices as reference prices in other OTC derivative contracts.

Given this situation, TasNetworks would be concerned if any proposed regulatory change to contract markets, that were deemed necessary at a national level, were to have unintended and negative consequences for Tasmania. TasNetworks suggests that any proposed changes in this regard give sufficient consideration to the jurisdictional differences within the NEM.

Demand response

As highlighted above, TasNetworks considers visibility into the capability and quantum of WDR within the NEM is to be encouraged. Without a more complete understanding of the firmness of WDR, appropriate, timely and cost-effective investment in network infrastructure may be compromised.

TasNetworks considers that care must be taken with any regulatory initiative that proposes to enhance and/or alter WDR such that the characteristics particular to each jurisdiction within the NEM are respected. For instance, where impacts on, or clashes with, existing jurisdictional arrangements may inadvertently result in poorer reliability outcomes for customers. In the Tasmanian context, two relevant examples are the system protection service and, as outlined above, the regulated nature of the contract market.

With regard to demand response aggregation services, TasNetworks notes that DNSPs are uniquely placed to fulfil and expand this role. DNSPs already provide a range of initiatives to incentivise customers to either reduce their consumption at peak times or shift their consumption to non-peak times. Two examples are:

- tariffs for residential appliance load control (hot water, pool pumps and air-conditioning); and
- contracted demand response to support network needs (shifting of commercial production times or shutting down of processes).

TasNetworks would, therefore, welcome any policy initiative that encouraged and expanded upon DNSPs' role in facilitating better network reliability outcomes via demand response mechanisms.

Day-ahead markets

TasNetworks does not consider the benefits from incorporating either a European or US style day-ahead market into the NEM would outweigh the costs given the information provided at this juncture. Particularly when the jurisdictional aspects of the contract market described above are taken into account.

In terms of a European style market, TasNetworks considers there are sufficient similar mechanisms within the NEM and associated financial markets to obviate any rationale for change. With respect to US style markets, TasNetworks considers the investment required to transition, implement and operate full nodal pricing would be high and with benefits being at-best only speculative at the current time.

TasNetworks would, however, welcome any future additional information or assessment on the experience with day-ahead markets in other jurisdictions that might better inform the debate on the implementation of day ahead markets within the NEM.

Interconnection

As noted by the AEMC, the reliability framework in the NEM is referred to as being primarily market-based. In principle, TasNetworks supports this approach but notes that there are occasions where purely market based considerations may not be appropriate. For example,

previous assessments of additional Tasmanian interconnection have not shown market benefits exceeding costs in typical scenarios. However, these studies have suffered from several constraints that have downplayed and/or excluded the strategic benefits to additional interconnection e.g. the optionality afforded to future NEM developments and energy security benefits. In reviewing the reliability standard, and over and above the points noted earlier, TasNetworks contends it is imperative that the full strategic value of network investments is recognised.

If you wish to discuss any aspect of this submission, I can be contacted via email (tim.astley@tasnetworks.com.au) or by phone on (03) 6271 6151.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Tim Astley', with a horizontal line extending to the right from the end of the signature.

Tim Astley

Team Leader, NEM Strategy and Compliance