Reliability frameworks review - final report

The AEMC has today published the final report in its review of existing arrangements that support the delivery of reliable electricity supply.

The final report makes a series of recommendations to implement and develop mechanisms in the NEM aimed at supporting reliable outcomes for consumers at lowest cost. It also concludes a number of Finkel Panel recommendations concerning reliability that were directed to the AEMC.

Context for this Review
The generation mix is moving from a system supported mostly by larger, synchronous generation to a system, with a comparatively greater number of generators, larger volumes of variable renewable generation, customer-connected distributed energy resources as well as storage capability and a more active demand side. These fundamental step changes in power system technologies raise new opportunities for the entire community. They also raise new risks for the reliability and security of electricity supply.

The Commission’s Reliability Frameworks Review is a core part of its reliability and security work program. This Review’s primary purpose has been to examine existing arrangements to make sure they are flexible and modern enough to facilitate the transition across all parts of the NEM.

Overview of final report
This final report concludes this stage of this review and provides recommendations for further actions that will encourage the efficient use of new technologies and business models to meet the needs of consumers at lowest cost, now and in the future. These recommendations have been developed in consultation with stakeholders. It also concludes a number of key Finkel Panel recommendations.

Finkel Panel recommendations
With respect to the Finkel Panel recommendation to:

- develop a mechanism to facilitate wholesale demand response, the Commission recommends a package of options to do so, discussed in the next section.
- assess the suitability of a day-ahead market, the Commission considers that a “US-style” day-ahead market (whereby unit commitment decisions would move from market participants to the system operator) is not suitable in the NEM in order to manage reliability outcomes – it would not be in the long-term interests of consumers.
- assess the need for a strategic reserve to enhance or replace the Reliability and Emergency Reserve Trader (RERT), this is being considered through the Enhancement to the RERT rule change process.

Facilitating wholesale demand response
An active demand-side characterised by the active participation of consumers promotes efficient outcomes in the wholesale market. The package of recommendations proposed seeks to remove barriers to demand response and provides a range of additional tools for parties to undertake wholesale demand response, while preserving the market-based arrangements in the NEM that allow for flexible and resilient frameworks.
Specifically, the package of rule change requests proposed to facilitate demand response in the wholesale market includes:

- a voluntary, contracts-based short-term forward market be implemented.
- allowing demand response aggregators and providers to be recognised on equal footing with generators, i.e. implementing a mechanism for wholesale demand response.
- allowing consumers to engage multiple retailers / aggregators at the same connection point, i.e. implementing multiple trading relationships.

AEMO and ARENA have indicated that they will undertake demand response trials, which will be informative given the complexities, practicalities and costs involved.

**Improving transparency of information**

Provision of information is critical to reliability outcomes in the NEM by allowing market participants, the system operator, regulators and policy makers to make better-informed decisions. The report contains three recommendations to promote transparency of the forecasting process, while minimising the costs that will flow through to consumers.

The proposed rule changes seek to increase transparency of AEMO forecasting methodologies and periodic reporting by the AER on differences between forecast and actual values of forecasts.

Contract markets play an important role in supporting reliability in the NEM. Increasing transparency of contracts is important in assisting market participants, end users and policy and regulatory agencies to make efficient decisions. The AEMC acknowledges recent ACCC recommendations requiring the reporting of such information and is committed to working with industry to make data on electricity contracts available to the market in a form that enhances transparency of energy costs.

**Improving wholesale market outcomes**

In addition to exploring the suitability of day-ahead markets for the NEM, the Commission also analysed the current ramping capacity (or flexibility) of the NEM and concluded that there is enough ramping supply to meet demand. However, the Commission will, working with AEMO, consider what the future ramping needs of the NEM may be. This collaborative work will include considering any necessary changes to current arrangements given real time outcomes being observed by AEMO in SA resulting from increased interventions because of low system strength. These issues arise in the absence of the full implementation of the AEMC’s minimum requirement system strength levels framework.

**Interventions**

The AEMC will holistically review the NEM intervention mechanisms of directions and instructions, including the rules governing them, from the perspective of how interventions occur and operate as a suite of mechanisms (including in relation to the RERT), in regards to both reliability and system security. This will be conducted in parallel with the enhanced RERT rule change request.

**Next steps**

As noted above, the report has identified possible improvements as the market continues to transform. The AEMC will progress these as part of the reliability work program in the coming months, including the recommendations and rule changes referred to above.