

AUSTRALIAN ENERGY MARKET COMMISSION

SYSTEM SECURITY AND RELIABILITY ACTION PLAN

Updated 2 April 2020

Two page infographic summarising system security and reliability work program.



SYSTEM SECURITY

A stable power system:
the power system operates within defined technical limits, even when a major power system element disconnects from the system

Underway **Frequency control work plan**
Working with the ESB, AEMO and the AER on designing new, coordinated and lowest-cost ways to deliver frequency control services over the medium to longer term.

April 2019 Final report **Reliability Panel review of the frequency operating standard**
The standard has been restructured and consolidated to avoid duplication and improve the obligations it places on AEMO to manage the power system frequency.

May 2019 Final determination **Improving intervention compensation and settlement processes rule**
Rules to improve administrative processes related to AEMO's interventions in the market, for example the way generators are compensated after a direction to help maintain system security or reliability.

June 2019 Final determination **Reliability Panel assessment of protected event request**
Request by AEMO to declare the risk to South Australia's power system from destructive winds as a "protected event".

Aug 2019 Final report **Investigation into intervention mechanisms in the NEM**
Evaluating the effectiveness of the interventions framework in light of the increasing use of directions by AEMO to manage system security, and recommending changes to the interventions framework.

Dec 2019 Final report **Review of system black event in South Australia**
Forward-looking assessment of what changes to regulatory frameworks are needed to manage new risks faced by the power system, drawing on what has been learned since the South Australian black system event in 2016.

Dec 2019 Final determinations **Increasing consistency in application of intervention pricing**
Creating consistency in the pricing approach used when AEMO activates the RERT or issues a direction, and clarifying when AEMO is to use intervention pricing.

Dec 2019 Final report **Reliability Panel Generator compliance template review**
Updating the template to incorporate recent changes to generator technical performance standards and improve clarity and usability.

Mar 2020 Final determination **Mandatory primary frequency response rule**
Requiring generators to respond automatically to changes in power system frequency.

Apr-May 2020 Consultation papers on associated rule changes **Investigation into system strength frameworks in the NEM**
Evaluating the current frameworks for managing system strength and recommending any changes needed to reduce the costs of providing ongoing maintenance of power system security.

Apr 2020 Final determination **Improving the provision of system restart ancillary services**
Updating the arrangements under which the services that "jump start" the power grid after a system black are provided, including more rigorous testing processes.

Sep 2020 Draft determination **Incentives for primary frequency response rule**
Developing mechanisms or arrangements to increase the provision of primary frequency response, to help manage frequency deterioration.



SYSTEM SECURITY AND RELIABILITY ACTION PLAN

Updated 2 April 2020



WHOLESALE RELIABILITY

Enough capacity to meet demand: having sufficient generation and demand response capacity to supply customer needs

Underway

AEMC/AEMO/AER virtual power plant trial

Trial to inform changes to regulatory frameworks and operational processes so VPPs can play a bigger role in the energy market. In Australia grid-connected VPPs are focussed on coordinating rooftop PV and battery storage.

Dec 2019 Final determination

Demand management incentives for transmission businesses rule

Development of demand management incentives to apply to transmission businesses.

Apr 2020 Consultation paper

Transparency of unserved energy calculation rule

Seeks to clarify and simplify the definition of unserved energy used in post-event analysis of supply interruptions.

Apr 2019 Final determination

Early implementation of ISP priority projects rule

Streamlining the regulatory processes for key time-critical projects identified in AEMO's Integrated System Plan.

Feb 2020 Final determination

Changes to medium term reliability forecasting rule

Seeks changes to the medium term projected assessment of system adequacy (MT PASA) - a forecasting exercise to assess whether electricity supply is expected to meet demand across a two year horizon.

Jun 2020 Final determination

Wholesale demand response rule

Seeks to introduce a new mechanism to enable more wholesale demand response.

May 2019 Final determination

Enhancement to the RERT rule

Boosting the NEM's emergency reserve – the Reliability and emergency reserve trader mechanism.

Mar 2020 Final determination

Victorian jurisdictional derogation on RERT contracting

Proposal to introduce multi-year emergency reserve contracts in Victoria on an interim basis.

Mid 2020 Consultation paper

Integrating energy storage systems in the NEM

Seeks to recognise and define energy storage systems in the rules and provide a framework that supports their participation (and business models where there are a mix of technology types behind a connection point).

Aug 2019 Final report

Definition of unserved energy project

Reliability Panel project to clarify and simplify the definition of unserved energy used in post-event analysis of supply interruptions.

Mar 2020 Background paper

Reliability Panel new resources on reliability standard

Background paper on current considerations and an easy-to-read factsheet on what the standard means and how it is used.

Mid 2020 Consultation paper

Generator registration thresholds rule

Reducing the threshold for registration as a generator from 30 MW to 5 MW.

Oct 2019 Final determination

Transparency of new projects rule

Enhancing publically available information about new generation projects, as well as allowing developers of these projects to register with AEMO to get access to key technical information such as network modelling data.

Mar 2020 Final report

Reliability Panel annual review of market performance

Review of the performance of the national electricity market in terms of security, reliability and safety over 2018-2019.

Sep 2020 Draft rules for consultation

Reforms to access arrangements review (COGATI)

Developing draft rule change requests to progress the proposed access model to change how generators access and use the network.

Pending completion of access review

Reforms to transmission charging review (COGATI)

Developing rule change requests to improve the inter-regional transmission charging regime so that it adequately attributes the cost of interconnectors to those who benefit from them.

