



Declaration of lack of reserve conditions

AEMC invites submissions on consultation paper

The Australian Energy Market Commission (AEMC) has commenced consultation on a rule change request from AEMO that seeks to replace the current contingency-based definitions of lack of reserve (LOR) conditions with a system triggered by a wider range of risks than those presently allowed for in the definitions.

Context and the current LOR framework

Reserves in the NEM refer to spare capacity – they indicate the difference between available resources to meet demand for energy, and the level of energy demanded.

The lack of reserve (LOR) conditions and declarations of these under the National Electricity Rules (NER) form part of the existing framework used to maintain reliability in the NEM.

There are currently three types of reserve levels specified in the NER:

- LOR1 applies if there are insufficient reserves to cover two successive credible contingencies (e.g. the loss of large, conventional generating units).
- LOR2 applies if there are insufficient reserves to cover a credible contingency, such as the loss of the largest generating unit.
- LOR3 conditions would represent load shedding (i.e. the interruption of electricity supply to consumers).

The declaration of LOR conditions is a key mechanism by which AEMO communicates the short-term risk of involuntary load shedding to industry, government and customers. The effect of issuing a market notice following the declaration of LORs is to encourage any spare supply to be offered into the market, thereby minimising the risk of load shedding.

The rule change request

AEMO considers that the existing definitions of LOR conditions, which are based on the concept of credible contingencies, no longer represent an accurate risk of load shedding. This is because there are now increasingly variations that are completely unrelated to contingencies occurring frequently. For example, short-term large-scale wind and large-scale solar generation forecast errors can lead to large variations. In some instances, the changes in these variables can be even larger than the loss of the largest generator (the credible contingency).

AEMO therefore considers that there needs to be a more sophisticated approach to predicting the risk of load shedding. AEMO considers that the current contingency-based LOR framework is not compatible with this approach.

As a result, AEMO is proposing that:

- the current contingency-based LOR definitions be removed from the NER and be replaced with a high-level description of what lack of reserves are
- the details of the LOR framework be moved to a guideline to be developed by AEMO, supported by a high-level framework for the guidelines in the NER
- it use a probability assessment to declare LORs, although initially, this would still be based on the current contingency-based framework.

Under AEMO's proposed solution, the high-level framework in the NER for the guidelines would set out what it should include when preparing the reserve level declaration guidelines, what the probability assessment it plans to use for declaring LORs must take into account and consultation details for amending the guidelines.

Submissions to the consultation paper are due by 19 September 2017.

Issues for consideration

The consultation paper discusses a range of issues that the Commission is seeking feedback on, associated with this rule change request, including:

- any potential unforeseen consequences and risks that may result from the proposed changes to the framework
- any views on what aspects of the proposed framework should be in the NER and what aspects should be in the guidelines
- any views on AEMO's proposed probabilistic assessment methodology
- the adequacy of the proposed level of consultation.

The consultation paper and AEMO's rule change request are available on the AEMC website. Stakeholders are invited to make written submissions in response to issues raised and the rule change request by **19 September 2017**.

Reliability frameworks review

The AEMC has recently self-initiated a review into the regulatory and market arrangements underpinning reliability frameworks in the NEM: the *Reliability frameworks review*. An issues paper for this project was also published on 22 August 2017.

In particular, the adequacy of the definition of credible contingency events in relation to either reliability or security is outside of the scope of this rule change request since it is being considered through the Review.

The consideration of this rule change request will occur concurrently, and in coordination with, the review. Any forums, meetings and workshops held as part of the Review may also be used to progress the assessment of the rule change requests, subject to the statutory rule change process requirements being met.

Process for this rule change

In its rule change request, AEMO noted that it desires to have this rule in place this summer to enable the LOR framework to immediately benefit from the tool it is developing.

The Commission recognises the importance of making a final determination for this rule change request by summer. However, the nature of the proposed changes in this request is such that the Commission considers industry should have sufficient opportunity for consultation.

The Commission is proposing to assess this rule change request through the standard timeframe, but treat it as a priority. The timeframes that stakeholders have to consider the issues raised will stay the same as those used under the standard rule making process.

For information contact:

AEMC Executive General Manager, **Suzanne Falvi** (02) 8296 7883

AEMC Director, **Victoria Mollard** (02) 8296 7872

AEMC Senior Adviser, **Sarah-Jane Derby** (02) 8296 7823

Media: Communication Director, Prudence Anderson 0404 821 935 or (02) 8296 7817

22 August 2017