



Declaration of lack of reserve conditions

AEMC invites submissions on draft determination

The Australian Energy Market Commission (AEMC) has made a draft rule that promotes short-term reliability in the NEM by modifying the existing framework for the declaration of lack of reserve (LOR) conditions to be more flexible, sophisticated and transparent. Submissions are due by 28 November 2017.

Background

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 declaration of lack of reserve (LOR) conditions is a key mechanism by which AEMO communicates the short-term risk of involuntary load shedding (i.e. the need to reduce or disconnect load from the power system) to the market. The effect of AEMO issuing a market notice announcing the declaration of LORs is to encourage a response from the market: generators may offer in more supply, or consumers can reduce their demand. Both responses have the effect of minimising the risk of load shedding.

This framework is therefore an important information mechanism that helps to maintain a reliable and secure electricity system through the promotion of efficient market responses to tight demand-supply conditions.

Overview of the draft rule

The existing LOR framework is based on deterministic descriptions of three LOR conditions (LOR1, LOR2 and LOR3) set out in the NER. In a world of energy that is changing, the existing framework, based on deterministic conditions, is no longer fit for purpose.

The draft rule removes the current deterministic descriptions of lack of reserve from the NER and replaces them with a single high-level definition for lack of reserve, as well as a requirement for AEMO to make guidelines that set out how AEMO will determine, at least three, lack of reserve conditions. Specifically, the draft rule:

- introduces the definition of lack of reserve conditions as: "when AEMO determines, in accordance with the reserve level declaration guidelines, that the probability of involuntary load shedding is, or is forecast to be, more than remote."
- includes the factors that AEMO must take into account when creating and amending the methodology to declare LORs
- requires AEMO to:
 - declare at least three LOR levels (to be called LOR1, LOR2 and LOR3)
 - explain how it will declare LORs
 - consult with all parties, rather than with a limited group of stakeholders, when amending the guidelines
 - review the guidelines at least once every four years.

The draft rule states that AEMO must develop and publish the reserve level declaration guidelines by 9 January 2018 if the final rule is made on 19 December 2017. A draft set of the guidelines for public consultation can be found on AEMO's website.

Further, the draft rule addresses a number of stakeholder concerns raised in submissions to the consultation paper, including by:

- obliging AEMO to declare at least three LOR levels to be called LOR1, LOR2 and LOR3, to maintain familiarity with the current framework

- introducing a more robust consultation procedure for amendments to the guidelines through requiring AEMO to use a shortened version of the (existing and well-understood) rules consultation procedures to improve transparency and oblige AEMO to consult with all parties
- explicitly allowing stakeholders to request an amendment to the guidelines

The Commission's draft rationale

LORs are currently declared based on the concept of credible contingency events. For example, AEMO will declare a LOR2 if available reserves fall below the size of the largest credible contingency.

In making its decision, the Commission noted that the power system is changing. The world of energy today is one that is constantly evolving. Nowadays, it is possible for forecast and availability errors, both on the demand and on the supply side, to be larger than the largest credible contingency, particularly on extreme weather days. These errors are not related to credible contingency events. Therefore, the current LOR framework does not consider such errors.

The draft rule will introduce a more flexible way for the Australian Energy Market Operator (AEMO) to declare lack of reserve conditions, including enabling it to incorporate changes occurring in the power system, while maintaining the existing clear transparency of the current framework. A probabilistic approach will enable AEMO to take into account all the relevant risk factors that could affect reserve levels, without limiting it to the singular concept of a credible contingency.

The intervention framework is unchanged

The NER confers on AEMO the ability to intervene to maintain system security and reliability, typically as a last resort. This intervention framework is separate from the LOR framework and is unchanged by this rule change.

Further, *how* AEMO intervenes has not changed either – AEMO will continue to trigger interventions based on the principles and procedures that are included in various guidelines, such as the *Reliability Standard Implementation Guidelines* and the *Reliability and Emergency Reserve Trader Guidelines*.

In terms of the various intervention mechanisms available to it, the NER require AEMO to exercise these in a least-cost manner. For example, AEMO can only procure the RERT in response to a predicted shortfall in reserves. To trigger interventions such as directions and the RERT, AEMO must take into account a number of factors, some of which are at its discretion. This has not changed.

The new framework may lead to a rise in the number of LORs declared. However, this does not automatically translate to more interventions. In fact, the new approach will more accurately capture the risk of involuntary load shedding, as well as promoting more efficient market responses to potential shortfalls in the short-term. A more accurate framework increases the possibility of a market response to LORs and could minimise the risk of interventions.

Consultation

In submitting its rule change request, AEMO noted that it would like to have this rule in place for this summer. The Commission recognises the importance of making a final determination for this rule change request by summer and is therefore treating this rule change as a priority, although it is being progressed through the standard timeframe.

The timeframes that stakeholders have to consider and respond to the matters are the same as those used under the standard rule making process.

The Commission invites submissions on this **draft rule determination**, including a **draft rule**, by **28 November 2017**. Following consideration of submissions, the Commission intends to publish its final determination on 19 December 2017.

The Commission encourages stakeholders to provide feedback to **AEMO on its draft guidelines**. Submissions in response to the content of AEMO's draft guidelines should be sent by email to lor2017@aemo.com.au by **14 November 2017**.

For information contact:
AEMC Executive General Manager, **Suzanne Falvi** (02) 8296 7883
AEMC Director, **Victoria Mollard** (02) 8296 7872

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

17 October 2017