



Generator ramp rates and dispatch inflexibility in bidding

Publication of final rule determination and final rule

The Australian Energy Market Commission has made a final rule to refine the existing requirements on generators to specify the minimum rates at which they may increase or decrease output.

The Commission's final determination

The Commission has decided to make a more preferable final rule following its assessment of a rule change proposed by the Australian Energy Regulator (AER). The rule proposed would have required ramp rates to reflect the maximum technical capabilities of generating plant.

Ramp rates are specified by generators as a component of the offers they make to the market, and govern the manner in which generation dispatch levels can be physically changed through time. In its rule change request, the AER raised concerns that, at times, generators use ramp rates to achieve commercial outcomes that can lead to inefficiencies in the wholesale market and in the management of system security.

In making its final determination, the Commission was not convinced that a change as extensive as that proposed by the AER was warranted and was concerned that the proposed rule might be difficult to apply in practice. However, in examining and consulting on the rule change request, the Commission concluded that some changes to the existing provisions that govern the minimum ramp rate requirements of aggregated generating units are likely to support more competitive market outcomes.

The more preferable final rule

Generators may elect to combine individual physical generating units into a single aggregated generating unit for the purposes of the market dispatch process. The existing rules require that, for each registered generating unit, generators must specify a minimum ramp rate that is greater than or equal to the lower of three megawatts per minute (MW/minute), or three per cent of maximum capacity, unless there is a physical or safety limitation on their plant. The Commission's more preferable rule extends these minimum ramp rate requirements to individual physical units that make up aggregated facilities.

Bringing the minimum ramp rate requirements for aggregated facilities to a level more commensurate with individually registered facilities will result in an almost 30 per cent increase in aggregate minimum ramp rate capability across the NEM. This should increase the range of dispatch possibilities available to the market, which should promote more efficient wholesale market outcomes.

In addition, rules that are applied consistently and proportionately to generators should ensure that the regulatory framework does not inadvertently influence investment decisions in favour of aggregated units. Investment based purely on commercial considerations can be expected to result in the provision of more efficient supply, in the long term interests of consumers.

The Commission has assessed the impact of this change on the market and, based on advice received from AEMO, is satisfied the more preferable final rule would maintain or enhance AEMO's ability to manage the secure operation of the electricity system.

The final rule will commence on 1 July 2016. This date has been selected to provide sufficient time for AEMO's systems and procedures to be updated and for participants to adjust to the new minimum ramp rate requirements.

The Commission's assessment of the AER's proposed rule

In considering the rule change request, the Commission carefully examined the issues raised by the AER relating to inefficient outcomes in the wholesale market and in the management of system security. The Commission's conclusion that a change as significant as that proposed was not warranted was informed by its assessment that the extent of these inefficiencies is likely to be limited in the context of the overall market. In particular, information provided by AEMO indicated that such an extensive increase in minimum required ramp rates is not necessary to efficiently manage system security.

To seek to resolve the issues identified in the rule change request by requiring generators to always offer the maximum technical capability of their plant would have also risked creating a disincentive to invest in flexible plant, as generators that are able to provide greater ramp rate capability could have been disproportionately impacted.

Finally, the Commission was concerned that the proposed rule might have been difficult to apply in practice. The Commission's view is that a trade-off exists between ramp rate capability and costs incurred, and this would have made it problematic to require the AER to determine whether the ramp rates submitted by generators represent a true reflection of the technical capability of their generating units at any given time.

For information contact:

AEMC Chairman, **John Pierce** (02) 8296 7800

AEMC Chief Executive, **Paul Smith** (02) 8296 7800

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

19 March 2015