



19 May 2016

John Pierce
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Lodged online: www.aemc.gov.au

Reference: ERC0203 – National Electricity Amendment (Non-scheduled generation and load in central dispatch) Rule

Dear Mr Pierce

Origin Energy Ltd (Origin) welcomes the opportunity to comment on the rule change proposal submitted by ENGIE and Snowy Hydro that seeks to include non-scheduled generation and load into central dispatch.

Origin believes there is some merit in exploring the idea of including non-scheduled generation and load into central dispatch if it leads to a more open and transparent market. However caution should be exercised to ensure that the benefits of the suggested reforms outweigh the regulatory costs to smaller participants.

A number of issues have been raised in both submissions and Origin will explore these in more detail under the following headings:

- Transparency in dispatch and pre-dispatch.
- Investigation into the magnitude of the problem.
- Generator eligibility threshold.
- Proposed mechanisms and solutions.

Transparency in Dispatch and Pre-Dispatch

A primary indicator of an efficient market is accurate pricing based on the fundamentals of supply and demand. Market distortions as described by the rule change proponent can result in information asymmetry, that impedes the ability of a generator or load to respond to price signals.

As stated in the consultation paper, one of the primary purposes of the pre-dispatch schedule is:

“to provide wholesale market participants with sufficient information for them to make informed and timely business decisions relating to the operation of their scheduled generation and load.”¹

Electricity market participants require confidence that the market is accurately signalling the need for further scheduled generation.

Investigation into the magnitude of the problem

In carrying out its deliberations, Origin suggests the AEMC seek to ascertain the magnitude of the problem the proposed rule is intended to resolve. ENGIE have highlighted that the volume of non-scheduled generation is anticipated to increase over time. We note, however, that this forecast includes intermittent generation such as Solar PV which is outside the scope of the rule change.

¹ AEMC, Consultation Paper – National Electricity Amendment (Non-scheduled generation and load in central dispatch) Rule 2016, April 2016, p.6

Without an understanding of the potential growth in the types of non-scheduled generation (which are the subject of this rule change), it will be difficult to determine their future impact on the dispatch process and market efficiency.

Additionally, the views of AEMO could prove informative as they should be well placed to comment on the historical price impact that non-scheduled generation has had across NEM regions. One would expect non-scheduled generation to have a larger impact on smaller demand regions such as South Australia. Price fluctuations in SA are magnified due to the high level of intermittent generation, lower levels of demand, and interconnector constraints.

The above considerations are likely to reveal the true extent to which non-scheduled generators currently influence pricing outcomes in the NEM and can aid in determining if the benefits of the proposed reform outweigh the costs of regulatory compliance for non-scheduled generators.

Generator eligibility threshold

In Origin's view there are instances where non-scheduled units have, for all intents and purposes, effectively participated in the central dispatch process by responding to price signals. If the AEMC finds that the issues described by the rule change proponent are of sufficient materiality it may be appropriate that non-scheduled generators that have shown this capability are formally incorporated into the central dispatch process, or be required to provide more information to the market.

Origin notes that currently section 2.2.3(a) of the NER grants AEMO the ability to classify as scheduled, a generator that has the characteristics of a non-scheduled generator. Non-scheduled generators that do not have the physical or technical ability to participate in the central dispatch process (2.2.3(b)(2) and 2.2.3(f)) should continue to be exempt from this process.

Proposed mechanisms and solutions

Origin recognises that if the same bidding requirements were placed on small generators, as for scheduled generators, this could prove to be burdensome. Option 1, ENGIE's preferred choice, effectively requires smaller generators to maintain a full bidding system, which could represent a significant impost.

Origin does not support ENGIE's Option 3, where proxy bids would be entered by AEMO on behalf of small generators. This has the potential to contravene the NER under Rule 3.8.22A if a misleading bid was placed because AEMO was not fully informed of a generation unit's capability.

Under ENGIE's "Soft Scheduled" option (option 2), non-scheduled generators would be required to provide information on their expected generation profile, but would not be expected to meet the full requirements under central dispatch. Though we agree that this could provide a reasonable compromise, the need for monthly conformance reporting along with new rules to set tolerance limits for non-conformance could introduce added complexity.

Origin suggests that a pared back version of AEMO's online portal known as the Market Management System (MMS) could be a cost effective solution if this rule change proposal were to be implemented. This portal allows participants to manually adjust their bids within an appropriately secured internet connection and credentialed environment.

Origin proposes that a simplified version of the MMS portal be developed for non-scheduled generators between 5MW and 30MW (See Table 1).

A simplified MMS format will allow generators to have a rolling 7 day bid which would work as follows:

- Participants would enter their anticipated availability for 7 days under the "Maximum Availability" column. This value represents the best endeavours of the unit and can be changed intra-day if the plant changes availability.
- Set the participants preferred 10 price bands increasing monotonically.

- Place volume data (MW values) under the preferred price band.
- All data must be entered as per current market rules, by 12.30pm the day before (D-1).
- Data will roll forward unless changed by the participant.
- Volume and availability can be changed intra-day in compliance with the rebidding framework as detailed under 3.8.22 of the NER (valid bid reason, time adduced etc). The bid would apply from the next Dispatch Interval to the end of the Trading Day.

For example, if a unit had 30MW of availability and wanted to reserve 5MW for prices above \$300/MW and above, it could place 25MW into a price band with a value of -\$1,000, and 5MW into a price band with a value of \$300.

This standing bid could continue indefinitely without daily input from the generator. This would reduce expenditure on in-house bidding systems allowing bidding to be done via a secure environment over an internet connection. It will also require less daily input from generators, allow them to maintain a price responsive signal, and provide other market participants with greater transparency of the demand/supply balance.

Date	Maximum Availability (5-30MW)	Price Band									
		1	2	3	4	5	6	7	8	9	10
Day											
D+1											
D+2											
D+3											
D+4											
D+5											
D+6											

Table 1: Simplified MMS format for scheduled Generators.

Origin believes that this web based interface model would provide a better solution than ENGIE's "Soft Scheduled" option because it:

- provides small generators with the ability to adjust their bids on a 5 minute basis if they so choose;
- is similar in scope to the bidding systems of larger generators;
- mimics the potential price responsiveness that is assumed to currently take place by observing differing volumes across price bands;
- reduces costs by removing a requirement to build in-house bidding systems; and
- has a rolling bid function which reduces the amount of rebidding required by smaller participants.

Snowy Hydro's proposal to include in dispatch loads above 30MW that are able to respond to price signals, could also utilise a similar system. Under "Maximum Availability" a participant could place the value of their maximum demand response and spread the desired values across various price bands.

Should you have any questions or wish to discuss this information further, please contact James Googan on james.googan@originenergy.com.au or (02) 9503 5061.

Yours sincerely,

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