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Australian Energy Market Commission
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Sydney South NSW 1235

Submitted by email to aemc@aemc.gov.au

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Generator Registrations and Connections

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Consultation paper from the Australian Energy Market Commission (the Commission) on Generator Registrations and Connections.

Snowy Hydro welcomes the proposal to lower the default threshold for being classified as non-scheduled from 30 MW to 5 MW nameplate capacity leading to new generators above 5 MW nameplate capacity being classified as scheduled or semi-scheduled, unless an exemption is granted by AEMO.

The proposal for non-schedule generation to bid into central dispatch will improve the price discovery process for all classes of participants. Without an efficient price discovery process there would be market and operational inefficiencies, from reduced confidence in pre-dispatch prices, inaccurate reserve forecasting and procurement by AEMO, reduced ability for AEMO to manage the central dispatch process and inefficiencies in pricing of financial contracts. The non-schedule generation should not however remain with supply, if we want to achieve the truly transparent market then non-schedule load should also be assessed.

As the NEM continues to evolve the obligations should not remain only with generators with the market having no understanding of the future market intentions for the demand side of the market. With the introduction of the Retailer Reliability Guarantee (RRO) and the Wholesale Market Demand Response (WMDR) mechanism there has never been a more important time for frequent updates and market transparency for demand. Requiring loads to inform the market of their intent and honouring this intent would reduce some uncertainty from the price discovery process.

Loads which are responsive to spot price or intend to be responsive to spot price have no obligation to be classified as schedule load. Non schedule market loads switch consumption without notifying other Market Participants of their intentions to consume which consequently impacts on the spot market. This creates unnecessary uncertainty and risks for all Registered Participants.

AEMO already has a request for batteries of 5 MW which have potential to impact power system security that must be registered in the NEM and treated as a scheduled participant. The Australian Energy Council (AEC) approach is competitively neutral, does not advantage one technology over another and supports a transparent approach that aids price discovery. This will allow for information asymmetries to be removed and allow all technologies to be treated on an equal footing.

Cost and Benefits associated with the proposal

The price discovery process will become more challenging in a dynamic NEM environment over time, with increasing distributed generation and demand response. System and market operators require information about consumption decisions to perform their own functions which necessitates common scheduling, dispatch and other information provision obligations. The scheduling features necessitate a number of obligations and incentives consistent with the obligations imposed on current scheduled generators. These include compliance with dispatch targets, bidding and rebidding obligations and incurring Frequency Control Ancillary Services (FCAS) contribution factors deviating from dispatch targets, as these obligations are vital for maintaining the integrity of the central dispatch and price setting process.

Quantifying the benefits of the proposed rule changes is difficult, however the changes will result in market participants changing their behaviour by having additional data to inform their operational decisions and bidding practices. This would promote more efficient operation of the market with a significant amount of non-scheduled supply. As noted in the consultation paper¹ there is currently 4,252MW of registered non-scheduled generation capacity from generating units with a nameplate capacity greater than 5 MW which represents 7.5 per cent of total registered generation capacity in the NEM.

Figure 1: Registered generation in the NEM (MW) (September 2020)²

GENERATOR SIZE GROUPINGS	SCHEDULED	SEMI-SCHEDULED	NON-SCHEDULED
Above 30 MW	41,780 MW	10,782 MW	3,157 MW
15 MW — 30 MW	462 MW	152 MW	752 MW
10 MW — 15 MW	—	23 MW	167 MW
5 MW — 10 MW	—	15 MW	176 MW
Below 5 MW	—	—	96 MW
Total	42,241 MW	10,971 MW	4,348
% of total	73.51%	19.09%	7.55%

Source: AEMO, *NEM registration and exemption list*, 9 August 2020, available [here](#).

A clear benefit is that a greater and more diverse level of participation on both sides of the market, demand and supply, will:

- Enhance security and reliability
- Promote transparency
- Promote efficient investment
- Minimises administrative and regulatory burden³

The Consultation Paper correctly notes that *“unlike scheduled or semi-scheduled generators, non-scheduled generators are not required to participate in central dispatch, which means that their availability intentions are not used as direct inputs into AEMO’s*

¹ AEMC, Generator Registrations and Connections, Consultation paper, 8 October 2020, pp11

² AEMC, Generator Registrations and Connections, Consultation paper, 8 October 2020, pp11

³ AEMC, Generator Registrations and Connections, Consultation paper, 8 October 2020, pp4

*forecasts, such as the medium-term projected assessment of system adequacy (MTPASA) or the short-term projected assessment of system adequacy (STPASA)*⁴. This means that their intentions or activities are invisible to the market operator and other participants allowing the market operate more efficiently. The benefits of improving the market are immeasurable.

Snowy Hydro believes if the Commission considers that costs are significant then implementing a different scheduling threshold for generators in the 5-30 MW size should be assessed if demonstrated that it would reduce costs and continue to provide the benefits of transparency. However we believe the proposal to reduce the scheduling threshold to 5 MW is consistent with AEMO's current practice of automatically granting generator registration exemptions for systems less than 5 MW in size.

It is important that the Commission when assessing the costs with scheduling it understand that the five minute settlement rule change was imposed with considerably higher costs for more dubious benefits. Snowy Hydro therefore asks the Commission to give greater deliberation to the ability for the wholesale NEM design to remain capable of meeting the current and upcoming challenges being imposed by the changing dynamics within the power system when assessing the costs and benefits associated with the proposal.

Timing of the Proposed Solution

With the five minute settlement rule expected to be implemented next year, the uptake of non-schedule generation and load is likely to significantly increase. Therefore the problems associated with the impact on non-schedule response is likely to increase as there would be a further erosion in the efficient price discovery process.

Assuming a continuous growth in the extent of non-scheduled generation in the NEM Snowy Hydro's position is that the appropriate to implement the Australian Energy Council (AEC)'s solution is now. We understand the ESB's post 2025 market design two-sided market reforms are also assessing scheduling and the Commission should seek to complement and evolve the outcomes from this rule change.

The two sided market is proposing basing obligations on the kinds of services provided to the market, however significant work needs to continue in this space. As the Commission and ESB continue to work to evolve the scheduling obligations through a 'lite' proposal there needs to be an understanding that any scheduling obligations should have consequences for not responding and not providing a service otherwise the scheduled service will not have a reason to improve the reliability and performance of the service. As such until this is undertaken, we believe the AEC rule change should be implemented with further work to be undertaken to schedule both load and supply.

System and market operators require information about consumption decisions now to perform their own functions which means there should be common scheduling, dispatch and other information provision obligations for consumers participating in demand response.

⁴ AEMC, Generator Registrations and Connections, Consultation paper, 8 October 2020, pp7



Snowy Hydro appreciates the opportunity to respond to the Commission on the Consultation Paper on the Generator Registrations and Connections and any questions about this submission should be addressed to panos.priftakis@snowyhydro.com.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'P. Priftakis', with a horizontal line drawn through the middle of the signature.

Panos Priftakis
Head of Wholesale Regulation
Snowy Hydro

