



17 December 2020

Australian Energy Market Commission
Reference: ERC0256
Project name: Generator Registration and Connections
Submitted online.

Generator Registrations and Connections

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Australian Energy Market Commission (the Commission) consultation paper, Generator Registrations and Connections (Consultation Paper).

This submission contains the views of Stanwell and should not be construed as being indicative or representative of Queensland Government policy.

1. Introduction

Mr Damien Vermeer (Mr Vermeer) and the Australian Energy Council (AEC) are to be commended for their work undertaken in preparation of their respective rule change requests. We acknowledge that the AEC rule change request was submitted in 2018, and that it remains relevant to the Australian energy landscape.

Stanwell acknowledges the frustrations and barriers faced by intending generators as identified by Mr Vermeer, and we share the AEC's concern that the Australian Energy Market Operator's (AEMO) ability to manage the power system is being compromised due to a lack of transparency related to non-scheduled generators (currently making up approximately 33.4 percent of registered generation¹).

We note that this is not the first time the impact of non-scheduled generation in the central dispatch process has been discussed. In 2017, Stanwell made the observation in response to ERC0203²) that:

"The future NEM is likely to have increased participation by distributed generators, non-scheduled generators, aggregators and price responsive loads. As a result,

¹ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, Table 2.2, p 11.

² AEMC, Non-scheduled generation and load in central dispatch, 2016-2017, <https://www.aemc.gov.au/rule-changes/non-scheduled-generation-in-central-dispatch>.

*AEMO will have decreased visibility and control over the electricity market unless measures are put in place to provide AEMO with these resources. This has implications for both dispatch efficiency, system security and ultimately costs for consumers*³.

Stanwell maintains this view expecting the proportion of smaller scale generation units and systems in the NEM will continue to grow as cost of goods decrease and advancements in technology offer large and small stakeholder's new ways to optimise small scale assets.

The cadence of accountability must be expanded to ensure a secure, reliable and efficient power system.

Stanwell supports the promotion of transparency into non-scheduled generator classification and exemption determinations, lowering the threshold of non-scheduled generators to increase visibility of operations to enhance central dispatch process, and reducing complexities and barriers for investment in the smaller generators.

The rule change requests clearly address the assessment framework and we urge the Commission to consider our recommendations that would require AEMO to adopt a similar public disclosure process to the AER for non-scheduled registrations and exemptions, and for the Commission to apply the proposed rule changes to all non-scheduled generators granting exemptions only to existing non-scheduled generators on a case-by-case basis.

2. Assessment Framework

Stanwell considers that the assessment framework⁴ applied by the Commission is suitable for determining whether the proposed rules are likely to promote the national energy objective (NEO). Our comments on each of the principles is provided below:

- **Enhance security and reliability.** Stanwell considers that the number and portion of non-scheduled generators, and their ability to impact the central dispatch process, has increased to a point whereby the uncertainty and opaqueness they introduce can harm the secure and reliable operation of the power system. The benefits that non-scheduled generators supply to the market can be enhanced through increased transparency and participation in the central dispatch process. The proposed rule changes would deliver improvements to AEMO's market scheduling and forecasting process by increasing visibility, driving efficient investment and operational decisions, and expanding the cadence of accountability across the market.

³ Stanwell Corporation Limited, Submission to AEMO draft determination ERC0203, p 2.
<https://www.aemc.gov.au/rule-changes/non-scheduled-generation-in-central-dispatch#:~:text=In%20particular%2C%20the%20proponents%20consider,to%20inefficiencies%20in%20the%20market.&text=the%20costs%20of%20scheduling%20may,flow%20through%20to%20consumer%20prices.>

⁴ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, p 4.

- **Promote transparency.** Mr Vermeer's and the AEC's rule change proposals promote transparency for a range of stakeholders. By requiring AEMO to publish generator applications and decisions to approve an application, or otherwise, on the AEMO website it would provide guidance for intending participants about the registration process whilst also demonstrating that a due diligence process has been applied by AEMO when approving, denying or applying conditions to applications.

Whether or not all generators participate in the central dispatch processes, AEMO's ability to deliver key market reports such as the Electricity Statement of Opportunity (ESOO) and the Integrated System Plan (ISP) will be improved by gaining visibility of the intention and capabilities of more generators. As per Table 2.1⁵ of the Consultation Paper, AEMO currently does not have visibility of 4,348 megawatts (MW), or 7.55 percent of the market; approximately 39 percent⁶ of all registered generators.

- **Promote efficient investment.** Promoting transparency to an existing 4,348 megawatts (MW), and what we anticipate being a larger portion of the NEMs generation portfolio moving forward, will enhance AEMO's forecasting and planning activities.

Higher quality market reports, improved transparency, and earlier opportunities for engagement between intending participants, AEMO and network service providers (NSPs) (potentially through conditional licenses) will drive efficient investment in the design, planning, construction and commissioning phases of generation projects.

Operational (short term running) and investment (maintenance programs) decisions of other participants will also benefit from more accurate forecasts such as the medium-term projected assessment of system adequacy (MTPASA) and short-term projected assessment of system adequacy (STPASA).

- **Minimizes administrative and regulatory burden.** Stanwell foresees that smaller participants could be nervous about administrative changes and the cost of compliance. Stanwell agrees with the AEC statement that costs have fallen substantially in recent years⁷.

Stanwell considers the reference to \$10 million in this Consultation paper⁸ is misleading without full disclosure about the type of participants surveyed to generate this estimate and the range of responses. Cost concerns are covered in more detail in section 6.3 of this submission.

We consider a large degree of compliance concerns and costs can be reduced by improving information available to participants. Initiatives to improve training, develop compliance templates and opening communication channels to answer participants questions would help smaller generators transition if these rule changes proceed. There are several experienced third parties that could assist AEMO in establishing training and compliance programs, which can be tailored to individual generators business requirements.

⁵ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, p 14.

⁶ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, Table 2.2, p 11.

⁷ AEC, Generator Registration Thresholds Rule Change Request, 15 December 2018, p 2.

⁸ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, p 18.

3. Stanwell recommendation – Public disclosure process for registration

The following recommendation expands on the AEC's rule change request requiring AEMO to publish its reasons for granting exemptions⁹.

Stanwell recommends that AEMO adopts a similar public disclosure process for registrations and exemptions to that undertaken by Australian Energy Regulator (AER) during retail exemption¹⁰ and retail authorisation¹¹. Under the National Energy Retail Law (NERL) Part 5, section 91 the AER must publish on its website a copy of a retailer's authorisation application (public not confidential version), the period for written submissions and any other information as the AER considers appropriate. Decisions to approve an application with or without conditions, or to refuse an application are also published on the AER's website¹².

In addition to the applications and AEMO's decision regarding registration and exemption, Stanwell considers that where a participating asset is deemed as non-scheduled, it should be flagged to the market whether the generators dispatch data will be publicly available or not.

Stanwell considers several benefits could be achieved from the adoption of our recommendation.

- Material published would act as a reference to intending participants. Their understanding of the requirements prior to applying would better inform decision making during project design, planning, construction and operation.
- It could minimize the risk of AEMO being challenged with regards to fair and equitable decision making. This risk is likely to rise given the ever-increasing number of generator applications, the establishment of zones (including and excluding projects), and potentially during transition to different technical standards.
- Increased transparency about new participants would enhance short term and long term operational and investment decisions of market bodies and other stakeholders.

Stanwell does not provide a cost estimation for AEMO undertaking this task but considers an estimate may be best sought from the AER. We also note that this disclosure process could be extended to all registered participants under section 2.1 or applied specifically to specific generator categories.

⁹ AEC, Generator Registration Thresholds Rule Change Request, 15 December 2018, p 2.

¹⁰ <https://www.aer.gov.au/retail-markets/retail-exemptions>

¹¹ <https://www.aer.gov.au/retail-markets/authorisations>

¹² NERL, Part 5, Section 96 and 97.

Whether or not our recommendation progresses, Stanwell supports the AEC's proposal to require AEMO to publish its reasons for granting exemptions, as does Mr Vermeer:

*"The author is supportive of further transparency in the AEMO exemption from registration process for generators in the 5-30 MW nameplate range"*¹³.

The requirement to publish applications and decisions does not limit AEMO's discretionary powers, it would demonstrate how AEMO's discretionary powers has been applied.

Stanwell disagrees with the Commission's view that there are inconsistencies between the rule change requests:

*"the AEC's proposed solution involves restricting AEMO's ability to provide exemptions or reclassify generators, while Mr. Vermeer's would see that embedded generators of a particular size could be granted conditional exemptions"*¹⁴.

Stanwell considers that both proponents are addressing two separate issues that can be addressed under a single rule change process. The AEC is asking for more transparency to the reasons behind AEMO's decision making process, while Mr Vermeer would like to see the granting of conditional exemptions. Conditional exemptions (with a very clear set of conditions) could be granted under transparent measures that the AEC is seeking.

4. AEC – Generator Registration Threshold Rule Change Request

The potential for smaller scale generation units and systems to impact the power system has been increasing for several years. All generators have a responsibility to contribute to the secure and reliable operation of the power system and must adapt as our power system landscape changes.

Stanwell supports the AEC rule change proposals and provides the following comments on specific elements of the proposals.

- A.** Reducing the threshold for scheduled and semi-scheduled generation registration from 30MW nameplate capacity to 5MW.

The proportion of smaller scale generation units and systems in the NEM will continue to grow as cost of goods decrease and advancements in technology present new opportunities to optimise small scale assets. The NEM's reliance on smaller scale generation to support the secure and reliable operation of the system is increasing; the rules need to reflect this change by expanding the cadence of accountability. Reducing the threshold for scheduled and semi-scheduled generation registration from 30MW nameplate capacity to 5MW will achieve this.

¹³ Mr Vermeer, Re: Rule change request – Conditional exemption from registration for new embedded generators between 5-30MW, p 12.

¹⁴ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, p 33.

- B.** If AEMO grants a specific exemption beyond the standing exemption, it will be obliged to publish its reasons for doing so, and any conditions attached to such exemption, within ten business days of making its decision.

Stanwell supports this rule change proposal. Please refer to our recommendation above about how this may be achieved.

- C.** Deleting rule 2.2.3(b)(1) to remove the relevance of whether a generator commonly sends out generation above the threshold at the connection point.

Stanwell supports this rule change proposal, agreeing with the AEC's reasoning that "presence of load between a generator's terminals and its network connection point is relevant only to market settlement and is irrelevant to the generator's importance in the dispatch and scheduling process"¹⁵.

- D.** Amending rule 2.2.3(b)(2) to have the exemption tests refer to generating systems rather than generating units.

As noted by the AEC, "as the rule stands, a large generating system with many small units can readily be granted an exemption since the size of the generating units falls below the 30MW threshold". The ability of participants to control and optimise individual generating units (and other technologies) collectively as a generating system, is expected to increase. Stanwell support's amending 2.2.3(b)(2) to refer to generating systems because not only does it reflect existing and future use of generating assets, but it also promotes technology neutrality allowing for participants to include storage and demand assets within those generating systems.

- E.** Inserting a new Rule 2.2.3 (g) requiring AEMO to publish its reasons for classifying any generator greater than 5MW as non-scheduled.

As per our recommendation and response to item 2 of the AEC's rule change request, Stanwell supports the publication of reasons related to the registration of generators.

5. Mr Vermeer – Conditional exemption from registration for new embedded generators between 5-30MW

Stanwell agrees with Mr Vermeer's observation that the pathway to connection and technical standards are unclear and ambiguous. Not only does this present a barrier to entry, but it deteriorates the ability of intending generators to effectively communicate with the market operator and NSPs leading to inefficient outcomes and sub-optimal use of assets.

¹⁵ AEC, Generator Registration Thresholds Rule Change Request, p 2.

Mr Vermeer has highlighted a handful of confusing and ambiguous requirements faced by an ‘intending exempt participant’¹⁶. Stanwell recognises recent efforts to improve documentation by publishing a fact sheet about *Intending Participation*¹⁷ and the *Schedule of Rights & Obligations of Intending Participants*¹⁸. However, we believe that further improvements can be made through engaging both existing and newly established participants to clearly understand pain points during registration and connection processes. AEMO and NSPs must also be forthcoming about the challenges they face during the registration and connection process, and potential ongoing problems, caused by unclear, ambiguous or complex rules.

Stanwell agrees that conditional exemptions would help to address the ‘chicken-and-egg’ problem as described in Mr Vermeer’s rule change request. We also consider that a conditional process could be extended to registrations, encouraging earlier engagement between stakeholders and potentially improving AEMO and NSP ability to forecast and plan.

However, we acknowledge there is a degree of risk arising from the provision of conditional exemptions and/or registrations and relying on that information in forecasting and planning purposes.

Conditional exemptions and/or registrations must be subject to meeting criteria before energisation and commissioning takes place. We suggest requiring the publication on AEMO’s website of a Directors declaration and business plan specifically outlining how all of the criteria will be met not only prior to energisation and commissioning, but for the ongoing operation of the asset.

The cost of failing to satisfy any condition should rest with the intending participant, unless there is clear evidence another party has failed to follow due process.

6. Other Comments

6.1. Cost

The Commission refers to the 2017 final determination on the non-scheduled generation and load in central dispatch rule change request (ERC0203):

“ENGIE suggested the costs of scheduling would be in the order of \$13,000 in establishment costs, and ongoing annual costs of between \$7,500 and \$37,500 depending on how active the participant was in the market. SA Water estimated the

¹⁶ Mr Vermeer, Re: Rule change request – Conditional exemption from registration for new embedded generators between 5-30MW, p 4.

¹⁷ AEMO, Intending Participants in the NEM, https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/intending-participant/fact-sheet-nem-intending-participants.pdf?la=en

¹⁸ AEMO, Scheduling of Rights & Obligations of Intending Participants, V4, 3 June 2020 https://aemo.com.au/-/media/files/electricity/nem/participant_information/registration/intending-participant/schedule-of-rights-and-obligations-of-intending-participants-2020.pdf?la=en

establishment costs at \$95,000 and annual costs of \$260,000. Feedback from the AEMC's industry workshop suggested the annual costs could be heading towards \$10 million per annum for a participant that is actively trading during business hours. It was noted that companies can contract the trading activities to a third-party and this would reduce their costs, depending on their levels of bidding and rebidding activity"¹⁹.

Stanwell considers the reference to \$10 million in this Consultation paper²⁰ as misleading without full disclosure about the type of participants surveyed to generate this estimate and the range of responses. We consider the ENGIE estimation to more closely aligned to the real cost depending on how active the participant is.

As noted in section 2, we consider compliance costs particularly during a transition period if the rule change progresses, can be reduced if AEMO helps to deliver training, provides compliance templates and opens communication channels with participants.

6.2. Grandfathering or Exemption

Stanwell acknowledge that organisations owning and operating non-scheduled generators will have invested in those assets for a range of reasons that should be recognised when applying the proposed rules.

We recommend the Commission adopt a case-by-case exemption approach that will enable the proposed rule to have the largest impact on improving the management of the power system, but also recognises the different businesses that own and/or operate the assets. Stanwell considers that the proposed rule should automatically apply to all new participants and existing participants. On application, and within a specified time frame, an existing participant should be allowed to demonstrate to the AER why the new rule shouldn't apply to them. Assessment criteria could include:

- What the core function of the business is. This provides the opportunity for the generator to demonstrate if the main purpose is to generate revenue from electricity, if generation is used to offset energy usage or if electricity generation is a by-product of another function of the business; waste management, for example.
- If the generator has the technological capability to participate in central dispatch and provide additional market services. This draws out whether a participant can or cannot invest in resources to become a scheduled generator. The AER should test this by assessing past performance and against a statement of future intention.
- If the generator owns more than one registered generating unit or system. Generally speaking, if more than one unit or system is owned by a generator then there is intention to derive benefit from the power system. Furthermore, the cost of updating technology and resources will be lower as it is distributed across more than one asset.

¹⁹ AEMC, Rule Determination Non-scheduled Generation and Load, 17 September 2017, p 63.

²⁰ AEMC, Generator Registrations and Connections Consultation Paper, 8 October 2020, p 18.

Whether the generator, owner or operator control other scheduled or semi-scheduled generators. If yes, the technological and organizational capability to participate in central dispatch already exists and therefore this generator should not be exempt.

Adopting the exemption approach for the implementation of the proposed rule, would:

- Avoid creating unintended competitive advantages for existing participants.
- Avoid creating competitive disadvantages to incoming participants.
- Reduce regulatory complexity; and
- Create a fair and level playing field.
- Promote greater efficiency and transparency in the central dispatch process.

Stanwell considers that 12 months between the final determination and the commencement of the proposed rule changes would provide sufficient time for market bodies and participants to prepare and assess exemptions and implement changes. All exemptions should be published on AEMO's website.

7. Conclusion

In conclusion, the growth of non-scheduled generators in number, size, proportion and capability means their ability to impact the power system, both positively and negatively is increasing and warrants the progression of these rule changes.

Stanwell considers that the Commission's assessment framework will be met by the rule changes and that the benefits to AEMO and all stakeholders will outweigh the cost of increased compliance for non-scheduled generators.

We urge the Commission to consider our recommendations that would require AEMO to adopt a similar public disclosure process for non-scheduled generator registrations and exemptions to that which the AER utilises for retailer authorisations, and for the Commission to apply the proposed rule changes to all non-scheduled generators granting exemptions only to existing non-scheduled generators on a case-by-case basis.

Stanwell welcomes the opportunity to further discuss the matters outlined in this submission. Please contact Jennifer Nielsen on (07) 3228 4155.

Yours sincerely,



Ian Chapman
Manager Market Policy and Regulatory Strategy