



Part of Energy Queensland

11 December 2020

Mr Merryn York
Acting Chair
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

Dear Ms York

RE: ERC0256 Generator Registrations and Connections

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex) welcome the opportunity to provide comment to the Australian Energy Market Commission (AEMC) in response to its consultation on the National Electricity Amendment (Generator Registrations and Connections) Rule (Consultation Paper). Ergon Energy and Energex are distribution network service providers in Queensland.

Ergon Energy and Energex broadly support the proposed rule change and have provided responses to some of the questions raised in the Consultation Paper in the attached response template.

Should the AEMC require additional information or wish to discuss any aspect of this submission, please contact either myself, on 0467 782 350 or Barbara Neil on 0429 782 860.

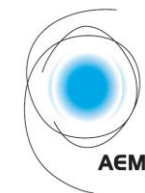
Yours sincerely

A handwritten signature in cursive script that reads 'Trudy Fraser'.

Trudy Fraser
Manager Regulation

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Encl: Ergon Energy and Energex responses to the consultation questions



Generator registrations and connections – consultation paper: stakeholder feedback template

The template below has been developed to assist stakeholders in providing their feedback on the questions posed in this paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper.

Organisation: Ergon Energy and Energex

Contact name: Barbara Neil

Contact details (email / phone): Barbara.neil@energyq.com.au / 0429 782 860

Questions		Feedback
Chapter 1 – Introduction		
Question 1: Proposed assessment framework (p. 5)		
1	Do you agree with the proposed assessment framework or are there any additional assessment criteria the Commission should use when assessing identified issues and possible solutions?	Ergon Energy and Energex suggest that consideration should also be given to any potential future reforms and changes to the direction of the make-up of generation. Furthermore, when assessing possible solutions, any proposed changes to connections under Chapter 5 of the National Electricity Rules (NER) should look to harmonise as much as possible between distribution and transmission obligations.
Chapter 2 – Participation of smaller-scale generation in central dispatch		
Question 2: Issue identified by AEC – increase in non-scheduled generation in the NEM (p. 15)		
1	Do you agree with the AEC that transition in the NEM's generation mix is trending towards having a greater proportion of non-scheduled generation?	In considering future generation mix, Ergon Energy and Energex refer to forecasts of variable generation considered in the Australian Energy Market Operator (AEMO) renewable integration study and the Integrated System Plan.

Questions		Feedback
2	Do you expect the capacity of non-scheduled generation as a proportion of total generation capacity to maintain the same growth trend into the future? If not, how do you expect this trend to change over time?	No comment.
Question 3: Issue identified by AEC – the forecasting and dispatch process (p. 16)		
1	Do you consider that the current penetration of non-scheduled generation in the NEM is causing difficulties or inefficiencies in the forecasting and market scheduling process?	No comment.
Question 4: Assessment of the proposed solution (p. 18)		
1	Do you consider that lowering the threshold for classifying new generators as non-scheduled would help to address the issues the AEC has identified for the efficient management of the power system? Why or why not?	Ergon Energy and Energex have no objections to this proposal. In practice, both distribution network service providers request most generation above 5MW to be scheduled or semi-scheduled (with AEMO's agreement), given the impact this generation has on the network. This enables us to appropriately manage large generation sources on the distribution network. ¹
2	How much of an improvement to the accuracy of AEMO's forecasts would scheduling new generators above 5 MW nameplate capacity have, compared with requiring this of all new and existing generators above this size?	No comment.
3	Do you think the costs associated with the AEC's proposal to reduce the thresholds have	No comment.

¹ <https://www.aemc.gov.au/sites/default/files/content/f586685e-bb74-4608-9d20-77ef1d676c3d/RuleChange-Submission-ERC0203-Energy-Queensland-170801.pdf>

Questions		Feedback
	been adequately captured? How would these costs vary depending on whether the generator was scheduled or semi-scheduled?	
4	Do you agree with the AEC that the costs of participating in central dispatch have fallen to the extent where the market benefits of increasing the proportion of scheduled generation outweighs the costs to participants? Why or why not?	No comment.
5	Do you agree with the AEC that its proposed scheduling threshold does not need to be made consistent with the thresholds that apply to system security management and technical connection requirements? Why or why not?	In our view, the 30MW threshold provides confusion and inconsistency for generators connecting to the distribution network. Any generator connecting under Chapter 5 of the NER should have the same technical and information requirements in order to ensure network service providers (NSPs) have sufficient information to manage the network.
6	If made, should the AEC's rule change only apply to new generating units at the time of their registration and AEMO's existing practise of grandfathering the changes apply to existing generators registered inconsistently with the new provision?	We support grandfathering existing connection arrangements for the short-medium term, where there is no change to the generating system. However, we consider that it may be appropriate to introduce a transitional period of ten years or consider transitioning to new arrangements where there is a significant change to the generating system.
Question 5: Timing of the proposed solution (p. 19)		
1	Do you consider that the penetration of unscheduled generation has reached a level where a decision needs to be taken to lower the thresholds to require this generation to participate in central dispatch? Why or why not?	From a network perspective, unscheduled generation is an issue because of the inflexibility of non-scheduled systems to respond to network conditions. As such, we are investigating the use of dynamic operating envelopes as a method of ensuring the security of the local network for connections under 5MW.

Questions		Feedback
2	If not, what level of penetration would need to be reached before it is warranted to place more scheduling obligations on this category of generator?	No comment.
Question 6: Is the proposed threshold of 5 MW nameplate capacity appropriate? (p. 21)		
1	Do you believe AEMO's 5 MW generator registration exemption threshold would serve as a reasonable threshold for participation in central dispatch? If not, what do you think this threshold should be?	Ergon Energy and Energex consider this is an appropriate threshold, as this aligns with the threshold which differentiates Chapter 5 from Chapter 5A of the NER.
2	Do you think that factors other than the size of a generator should factor into whether a generator is required to participate in central dispatch? If so, what should these other factors be?	No comment.
Question 7: Alternative solutions (p. 23)		
1	Do you have any suggestions for information which would satisfy these criteria to make the existing scheduling framework more accessible for small generators?	No comment.
2	Would AEMO's forecasting and market scheduling process benefit from partial visibility of non-scheduled generators?	No comment.
3	Can you suggest ways that participants could provide this information without becoming bound to the obligations of the existing dispatch process? Would the New Zealand	No comment.

Questions		Feedback
	approach, or the approach taken in relation to wholesale demand response in the NEM, be appropriate?	
4	Do you consider the benefits of implementing these alternative arrangements would outweigh the prospective additional system costs they might impose on the market by increasing the complexity of AEMO's operations?	No comment.
Chapter 3 – Exemptions in the registration process		
Question 8: Exemption issues – AEC (p. 31)		
1	Do you share the AEC's concern about the impacts of generator exemptions and non-scheduled classifications on the number of generators (and proportion of total generation) subject to scheduling obligations? Why or why not?	Ergon Energy and Energex consider that the technical performance and stability impact of a generator is also of concern for the connecting NSP and AEMO, in addition to the impacts of scheduling. As such, we have formalised generator performance expectations for exempt generators to better inform proponents of the expectations ahead of time.
2	Do you agree there is an issue with AEMO classifying generators as non-scheduled where it is satisfied that: <ul style="list-style-type: none"> a) the primary purpose of the generator is local use and it would rarely, if ever, send out generation above 30 MW? b) the individual generating units do not have the physical attributes to participate in central dispatch 	In our view, the impact of the generation on the network is more meaningful than an arbitrary size of 30MW. For example, a 10MW generator co-located with a load, that never exports beyond its connection point, has less network impact than a 10MW full-export generator connected to the distribution network.

Questions		Feedback
	(regardless of whether they are part of a bigger system)?	
3	Do you share the AEC's concern about a lack of transparency surrounding AEMO's decisions to provide generators with registration exemptions or classify their generating units as non-scheduled? Why or why not?	No comment.
Question 9: Exemptions issues – Mr Vermeer (p. 31)		
1	What are your views on Mr Vermeer's concerns with the connection process for embedded generation owned, operated or controlled by entities that intend to be exempt from the requirement to register as a generator?	<p>In accordance with AEMO's guide for generator exemption and classification, proponents must include:</p> <ul style="list-style-type: none"> a) a copy of the performance standards agreed with their connecting NSP; or b) a letter from their connecting NSP stating that their generating system is intended for use in a manner the NSP considers is unlikely to cause a material degradation in the quality of supply to other Network Users.² <p>As such, the NSP must be confident in the performance of the system and its potential impact on the network. As noted in our response to Question 8 above, aside from the management of dispatch and power flows, the technical performance of a generating system is of primary concern to the NSP. Understanding of this performance will often occur late in the project life cycle, as design decisions are confirmed, and therefore it is not appropriate to endorse exemption without adequate technical analysis.</p>
Question 10: Exemption solutions – AEC (p. 32)		
1	What are your views about the relative costs and benefits of the AEC's proposal to narrow the circumstances set out in the NER for exempting generators from the requirement to	No comment.

² https://www.aemo.com.au/-/media/Files/Electricity/NEM/Participant_Information/New-Participants/Generator-Exemption-and-Classification-Guide.docx#:~:text=Any%20person%20who%20owns%2C%20controls,the%20generating%20system%20to%20a

Questions		Feedback
	register or classifying generating units as non-scheduled?	
2	Besides the nameplate capacity, what would you consider to be appropriate reasons to provide an exemption or classify a generating unit as non-scheduled, such that they are not required to participate in central dispatch?	No comment.
3	Are you in favour of the NER requiring AEMO to publish its reasons for making these exemption and classification decisions? Why or why not?	We note that publishing reasons for the decisions may raise privacy concerns. To address this, we suggest it may be more appropriate for AEMO to publish anonymised case studies or examples to inform the market.
Question 11: Exemption solutions – Mr Vermeer (p. 33)		
1	Do you consider that Mr Vermeer's proposed solution appropriately addresses the connection issues for embedded generators between 5 and 30 MW? Why or why not?	Ergon Energy and Energex are supportive of clarifying the technical requirements of exempt generators for the certainty of generation proponents, and confidence in the network for the NSP. We have worked internally to clarify the requirements for proponents seeking connection to our networks. ³ However, we are not supportive of the 'conditional exemption' proposal. Once a generator is connected to the network, it is essential that the NSP understands how the generator will operate and the impact it will have on the network. Therefore, upon connection, connections studies and performance standards must have been agreed. This would then inform whether the NSP could support an exemption to registration.
2	Do you agree that there are potential inconsistencies with the solutions proposed by the AEC and Mr Vermeer? If so, do you have any recommendations for how they could both be accommodated?	No comment.

³ Refer Ergon Energy and Energex standard STNW1175

Questions		Feedback
3	Do you consider that the issue would be more appropriately addressed outside of the NER through changes to AEMO's procedures and processes?	We note that broader changes to the NER will be required if the non-scheduled category is removed. However, the rules can remain largely unchanged if use of this category is restricted with these requirements defined in the AEMO guidelines and procedures.