Anna Collyer
Chair
Australian Energy Market Commission
Level 15, 60 Castlereagh Street
Sydney NSW 2000
Lodged via https://www.aemc.gov.au/contact-us/lodge-submission

28. September 2023

Dear Ms. Collyer,

Re: ERC0363: Enhancing investment certainty in the R1 process

Vestas welcomes the opportunity to provide our feedback on the AEMC's consultation paper published on 17 August 2023 regarding the R1 process.

Vestas has a vision to become the global leader in sustainable energy solutions, and everything we do revolves around the development and deployment of sustainable energy solutions.

We would like to express our support for this rule change request proposed by the Clean Energy Council with the aim to reduce the level of uncertainty that generators face during the connection process, enabling a reliable and cost-effective integration of renewable energy into the network.

This process will also help to accelerate the deployment of renewable energy generation such that the targets stipulated by the respective States and Commonwealth could be achieved in time.

Please refer to the appendix for our responses for each question presented on the consultation paper.

Should you wish to discuss any aspect of our comments, please contact Marco Aurelio Lenzi Castro via mlzto@vestas.com or 0488 152 925, or the undersigned.

Yours sincerely

Vestas - Australian Wind Technology Pty. Ltd.

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Appendix: Responses to the consultation paper questions

Question 1: Do you agree that the absence of NER obligations on parties to the R1 process is contributing to poor engagement and process delays?

Yes, the NER is not clear in relation to the obligations that are on parties entering the R1 process. From our experience, the rules should be amended to address the following topics:

- The scope of studies that need to be redone is not clearly articulated. If changes are made to plant design post receiving 5.3.4A that do not necessarily affect the agreed generator performance standard (GPS), how should they be captured without reassessing all the studies that were performed at the time of receiving 5.3.4A Letter?
- What pathway can proponent take if their plant can no longer commit to the capability that was agreed upon the Connection Application stage?

In addition, the streamlined connection process approach to R1, under the ongoing connection reform initiative, should be extended to include the cases where a reduced scope based on the changes that have occurred from the time the 5.3.4A letter was received to finalizing the detailed design.

In our view, the NER obligation on parties would be positive in structured management of the R1 stage changes, but it will not per se enhance investment certainty and further changes are needed, as discussed in the following questions.

Question 2: How do connecting parties currently manage uncertainty regarding timeframes for the R1 modelling package assessment and to what extent does public data (e.g., AEMO connection scorecard) assist?

Uncertainties regarding timeframes are managed to an extent through design tolerances during the connection application and design deviation control during detail design and execution stages, as well as by being transparent about unforeseen plant alteration and notifying NSP and AEMO in a timely manner.

However, since such alternatives are not available in all circumstances, performance margins or sometimes early start of R1 preparation might also be considered.

Therefore, the proponent usually adopts a conservative approach to account for last minute changes in the studies and due to the limited capacity to share the risks.

With respect to AEMO connection scorecard, despite the overall information offered, it does not provide a clear and accurate timeframe for each connection stage. The main effort should be speeding up the whole process and not only setting deadlines for each party.

For instance, where an agreed GPS exists, we suggest to promote the joint assessment of R1 and 5.3.9 applications to save time, cost and eliminate duplication of studies.

Question 3: Does the existing process for renegotiating technical performance standards create barriers for enabling connecting parties to negotiate efficient system security and reliability outcomes?

Yes, the current process presents substantial risks especially in circumstances where previously agreed GPS requirement can longer be met or reassessing the impact of changes on existing generators. It is assumed that the proponent needs to redo all the studies and redo model validation.

In practice, there is limited room for renegotiation and maintaining the current arrangements would not reduce the economic impact on the projects and, ultimately, for end consumers, as well as it would not necessary increase the security and reliability of the electric system.

Question 4: Do you agree that there are problems with the way the R1 process seeks to resolve external systems issues?

Yes. The connection of new loads, power plants, or other major equipment, as well as changes to the configuration of the grid have impact on the R1 modelling, resulting in additional work load to redo all the simulations, and a material impact when an unforeseen investment, such as a STATCOM, is requested by AEMO or NSP to mitigate the issues created by the external causes.

In addition, the quality of the releasable user guides (RUGs) made available to industry for wide area assessment purposes can be improved to enable an accurate assessment of plant dynamics in the grid.

Question 5: How material is the absence of an independent, external dispute resolution process for the efficient negotiation of technical performance parameters before registration approval?

It is material when AEMO, NSP and proponents cannot resolve the issues associated with outlining the scope of studies needed to deliver the GPS. Also, in cases where a plant exhibits different response across AEMO and NSP wide-area-network (WAN) studies.

Question 6: Would the proposed timelines provide sufficient certainty about the duration of the R1 model assessment phase?

No, but they provide more clarity on the different sub-tasks and associated timing to achieve registration would be very useful.

In order to reduce the risks associated with the duration of the R1 assessment phase, an alternative would be limiting the number of opportunities for AEMO and NSP to raise new comments and requests about different aspects of the studies, which result in endless interections between the parties and long delays to finish the whole process.

Ideally, AEMO and NSP should provide all comments at once, within the proposed timelines, and if they are not satisfied with the response, they could only raise questions with the aim to clarify their previous demands.

Question 7: Do you agree with the CEC's proposal for materiality guidelines, including whether they could appropriately define materiality thresholds for the categorization of connection types?

Yes. The proposed guidelines to be developed by AEMO in partnership with key representatives of the industry should provide objective criteria for applicants to perform the self-assessment to identify how material would be the expected impact on the power system due to the deviations from the agreed GPS.

Considering that establishing a fixed threshold measured in dolars would be challenging and not applicable to all cases, an alternative could be working with key performance parameters and their respective ranges (%) to allow small deviations without affecting the safety and reliability of the power system.

Question 8: What are your views about the proposed pathway for each connection type, including the assignment of obligations and the allocation of costs and risks?

The proposed pathway provides support for generators especially in circumstances where the minor issues have no detrimental impact on power system security and reliability.

However, as mentioned previosly, the materiality guidelines should provide objective self-assessment criteria to allow similar projects in different regions to receive the same treatment in terms of path forward for achieving registration.

In addition, AER should address how NSPs investment would be recoverd to mitigate the impact on generator's performance due to network changes caused by other players (Type 2), such as the connection of power plants or large loads and insertion of new elements to the network, as well as to reduce NSPs risks and avoid eventual issues for generators to have their Type 2 self-assessment confirmed.

Question 9: What are your views about the CEC's proposal for dispute resolutions?

The current process does not deliver effective results and one of the reasons could be that proponents might not feel comfortable in requesting a formal dispute resolutions, because they already have or want to build a heathy and long term relationship with NSPs and AEMO.

Therefore, we support CEC's proposal to introduce a guidance to industry on how to call upon assistance from third party to allow issues are resolved in a pragmatic manner.

Question 10: Do you support the CEC's proposed model or do you prefer an alternative approach? Are there any modifications to the CEC's proposals that you believe may improve it?

We support CEC's proposed model.

Question 11: Do you agree with the proposed assessment criteria? Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

Yes, we overall agree with the assessment criteria, which in our view should be used to achieve the following outcomes:

- Increasing the reliability of the grid by reducing the barriers for new renewable power plants.
- Reducing the GHG emissions by avoiding unecessary delays on renewable energy projects.
- Fomenting innovation and flexibility by revising the current rules to allow solutions with minimum technical and economic impacts.
- Strengthening the principles of good regulatory practice by reducing unnecessary risks for connection parties.