Proposed grid connection queue management system

NZ Wind Energy Association Submission June 2022



Transpower

By email: communications@transpower.co.nz

Introduction

- The New Zealand Wind Energy Association (NZWEA) appreciates the opportunity to provide a submission on the new generator grid connections: proposed grid connection queue management system.
- 2. The Association supports Transpower's recognition of the critical importance of the National Grid and the need for effective and efficient processes and systems to enable the connection of new electricity generation.
- NZWEA considers the time given for the industry to provide feedback on the proposed queue management system, noting the extension to 20 June, is not commensurate with the strategic importance of the National Grid in supporting decarbonisation of the energy sector.

Executive Summary

- 4. NZWEA agrees with Transpower's problem definition and supports introducing a new grid connection queue management system.
- 5. The objective of the proposed queue management system is to enable the effective and efficient connection of new generation. New connections are a critical path activity to enable decarbonisation and detailed processes, information sharing, and transparency will be essential to ensure that the unintended consequence of poorly defined projects derailing those with greater merit does not occur.
- 6. In reviewing the proposed principles of the queue management system, the Association supports Transpower's open access basis of operation and being fuel / project agnostic.
- 7. The Association does however consider the queue management system needs to reflect the differences in the proposed renewable technology being assessed. In particular that wind energy has a longer and more complex development cycle than some other renewable technologies.
- 8. NZWEA's response to Transpower's specific questions are as follows with more details in the following section:

	Question	NZWEA Response
1.	Is the queue management system the best option	Yes.
2.	Core information to be provided	Developers should be required to provide an appropriate plan with delivery milestones for their

		given technology which reflects both the scale and nature of the proposed development.
3.	Cancellation factors	Grid connection agreements should be able to be cancelled if key project milestones are not being achieved in a reasonable timeframe.
4.	Treatment of those in the queue	A designated time should be provided to enable those already in the queue to meet the new connection requirements.

- 9. The Association has several other comments in relation to the proposed queue management system:
 - Scalability of capacity to support decarbonisation is key and Transpower should develop scenario planning to manage different levels of grid connection demand.
 - Transpower should advise the electricity sector of their current capacity to process new connections and how resources are being deployed to meet the increased level of demand.
 - The industry should have the opportunity to provide feedback on the new queue management policy before it is implemented.
 - It will be important to ensure a minimum standard of project planning has been developed before Transpower agrees to undertake a Concept Assessment Review. An appropriate fee at should also be charged to discourage speculation or inadequately developed projects being put forward for evaluation.
 - The level of fees charged for applications for a grid connection and further studies should also be set at an appropriate level to discourage speculation and support Transpower's ability to invest in providing the capacity to meet demand.
 - An increased level of disclosure of queue level activity should be provided to inform market participants.
 - The criteria for new connections in Renewable Energy Zones needs to be outlined.
 - The queue management processes need to be well defined to support new entrants to the electricity sector.

Response to Specific Questions

1. Do you consider the proposed queue management system is the best option, as opposed to other possible approaches? If not, why / what are those other possible approaches?

Yes.

The Association considers there is a risk that a significant bottleneck could occur before a project enters the queue management system given the Concept Assessment Review (CAR) can take from 5 to 10 weeks. In recognition the CAR is likely to see the greatest volume of activity the Association considers a minimum standard of information gathering and project planning should be defined prior to undertaking a CAR and an appropriate fee for Transpower's services charged. Requiring project planning and an appropriate fee should act as a mechanism to ensure applicants have completed appropriate early-stage

investigations and have an intent to develop rather than just working towards securing a future right to connect.

It is noted that having published requirements and fees may result in the increased use of independent consultants to support the development of project feasibility studies before developers engage with Transpower.

2. What core information should be provided by all potential developers to form the stage gates for grid connection? At what stage? (Project timelines, funding assumptions, land status etc?)

In implementing a queueing management system the Association considers Transpower should recognise the differences in the technologies seeking connection and in particular the development timeframes involved. For example, as shown in appendix 1, the development cycle and timeframe for a wind farm can be around 10 years and is considerably longer than some other renewable technologies.

A core requirement should be for the developer to provide an appropriate plan for their project which reflects the scale and nature of their proposed development and that key project milestones are set based on a defined set of assumptions. The Plan should demonstrate a clear intent to develop within a reasonable timeframe.

3. Are there any factors that should automatically trigger the cancellation of a grid connection agreement and the loss of place in the queue?

Yes, in particular not being able to complete key delivery milestones that are appropriate to the generation technology being proposed and scale of development.

The essential test should be whether the developer, when considering appropriate and potentially mitigating factors, can show evidence of intent and actions to progress the project to development within the advised timeframe.

Care will be required to ensure that a broad-brush approach, without taking into account project specifics, do not result developers losing their place in the queue. For example, wind farms generally occupy a larger land area than other technologies which increases complexity as it involves securing landowner agreements with multiple parties. Similarly completing studies (environmental and cultural assessments etc) to lodge a consent application can be more complex and time consuming given wide ranging environmental and amenity impacts.

Factors such as appeals to the Environment Court also need to be considered when assessing project delivery progress.

4. In the interests of fairness, how would you recommend a queue management system be applied to those already in the queue?

The objective of a queue management system is to enable the effective and efficient connection of new generation.

In achieving the above objective common standards and processes should be followed. For those generators already in the queue they should be allowed an appropriate amount of time to enable them to meet the new standards for their current status and in regard to future steps be required to comply with the queue management policy.

Other Comments

10. Scalability is key given the challenge of transitioning the energy sector to a higher level of renewables.

Transpower's Whakamana i Te Mauri Hiko Report published in March 2020 provided an insightful view of what is in front of the energy sector in terms of the growth and the challenges this would bring. The Report highlighted that growth would represent a sustained level of infrastructure development that New Zealand has probably not seen before and that Transpower was already experiencing a significant increase in inquiries from generation developers wishing to build new renewable projects¹.

The current volume of grid connection enquiries has occurred earlier than forecast and is exceeding available capacity hence the need to introduce a queuing system. To ensure obtaining a grid connection does not constrain the ability of the electricity sector to support decarbonisation the Association considers that Transpower should develop plans to support different activity levels.

11. Transpower should advise the electricity sector of their capacity to process new connections.

The Association considers that in addition to introducing a connection queue management system Transpower should publish a statement of capability as to its capacity to support new grid connections and how this has been developed to address the decarbonisation challenge.

In particular the resources that Transpower is prepared to commit to what is a critical path activity in enabling decarbonisation should be articulated.

12. The industry should have the opportunity to provide feedback on the new policy before it is implemented.

The Association notes Transpower intends to publish a new policy in July 2022. Given the critical role an efficient and fair grid connection process has in enabling electrification of the energy sector and on individual project viability NZWEA considers Transpower should undertake a further round of consultation prior to publishing the final policy.

13. It will be important to ensure appropriate standards and requirements are set and met before Transpower agrees to undertake a Concept Assessment Review.

The completion of the Concept Review Assessment is outside of the queue management system yet will consume Transpower resources and could create a significant renewables development roadblock. As noted in the Association's response to question 1 (above) the Association considers sufficient focus needs to be given to quality standards to manage the volume of applications prior to entering queuing system.

14. Fees should be set at an appropriate level

¹ Whakamana I Te Mauri Hiko Energy Futures Report March 2020- forward section page 4.

The level of fees charged for applications for a grid connection and further studies should also be set at an appropriate level to encourage quality applications, prevent speculation and support Transpower's ability to scale capacity to meet demand.

15. An increased level of disclosure of queue level activity should be provided.

The industry has welcomed Transpower's introduction of Envision Opportunities to provide improved information on available transmission capacity and notes principle 8 on the intent to provide additional information on grid connection enquiries.

The Association supports providing a higher-level base level of information on grid connection applications and queue management. In addition to current disclosures around number by type of generation further information should include the MW and number of projects in the queue at individual nodes.

The purpose of the additional information would assist developers in their appraisal of the grid impacts of projects under consideration.

16. Criteria for Renewable Energy Zones needs to be set.

The Association also questions how the proposed queue management system would relate to Transpower's proposal for renewable energy zones and asks that this be addressed in policy.

It will be important to ensure that standalone new generation projects are not disadvantaged by REZ's.

17. The queue management process needs to be defined to support new entrants to the electricity sector.

The electricity sector is seeing a significant increase in new entrants who will have limited experience in engaging with Transpower to secure a grid connection. It will therefore be essential that Transpower's queue management process provides clear guidelines and specifications generators will be required to meet for each of the queue steps.

About the NZ Wind Energy Association (NZWEA)

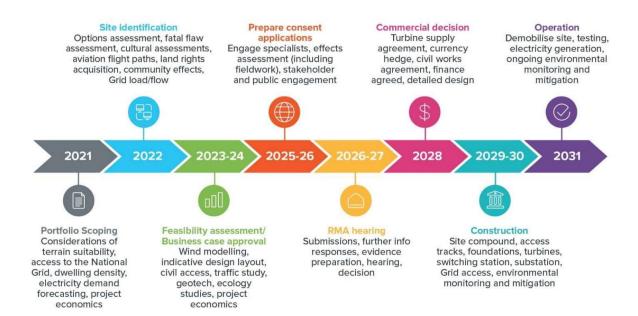
- The NZWEA is an industry association that promotes the development of wind as a reliable, sustainable, clean, and commercially viable energy source
- We aim to fairly represent wind energy to the public, Government, and energy sector
- Our members are involved in the wind energy sector and include electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting organisations and other providers of services to the wind sector
- By being a member of NZWEA you are assisting the development of wind energy in New Zealand and helping to reduce our greenhouse gas emissions to meet climate change targets.

The Association's strategy focuses on three key areas:

- Leveraging NZ's emission reduction imperative to enable the energy transition to renewables, particularly wind energy.
- Optimising wind energy's position and ensure the regulatory environment supports wind farm development.
- Expanding the opportunity for wind energy development to enable community and industrial projects including wind's integration with other technologies.

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Source: Te Waihanga - Infrastructure Commission

² See <u>www.tewaihanga.govt.nz/assets/Uploads/Te-Waihanga-Natural-and-Built-Environments-Bill-submission-to-Environment-Select-Committee.pdf</u>,.