

Exploring a Transitional Congestion Charge

NZ Wind Energy Association Submission

October 2020



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Transpower

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Introduction

1. The New Zealand Wind Energy Association (NZWEA) welcomes the opportunity to provide feedback on the development of a possible transitional congestion charge (TCC).
2. The Association in its submission ¹ to the Electricity Authority on their Transmission Pricing Review Consultation Paper ² advised that the one of the key outcomes the wind industry sought in relation to transmission pricing was:

‘Ensuring a form of peak pricing signal is retained that signals to customers that their demand drives future investment in transmission and distribution infrastructure investment and improves the ability of renewables such as wind energy to meet demand based on a flatter demand profile that reduces consumer total energy costs.’

3. The Association was therefore disappointed with the Electricity Authority’s decision to only approve a transitional congestion charge rather than a revised permanent peak pricing signal and views this as being inconsistent with the drive for cost reflective distribution pricing and the provision of effective pricing signals to end consumers.
4. NZWEA therefore supports progressing the development of a TCC.

Problem Definition

5. NZWEA considers there is an unquantified risk from removing the RCPD pricing signal in transmission pricing and supports the conclusions of Transpower’s Report on the role of peak pricing in the TPM ³.
6. In NZWEA’s October 2019 submission to the EA the Association agreed that the RCPD signal had unintended consequences and should be revised and further commented on the importance of an effective peak price signal as follows:

‘One of the key objectives of transmission pricing should be to signal to consumers that peak demand drives future investment in capacity.

The nodal price only includes the SRMC of transmission which is about the present use of the grid not a price signal for future investment which requires a LRMC.

¹ NZWEA Submission on the Transmission pricing review consultation paper October 2019.

² Electricity Authority 2019 Issues Paper Transmission pricing review consultation paper July 2019.

³ Transpower, The role of peak pricing in the TPM November 2018.

In the Association's view nodal pricing therefore does not provide an effective peak pricing signal which should arbitrage a consumption decision against an increase in benefit charge in the future.

Given RCPD is an absolute measure of network capacity utilisation the option of revising the methodology to increase the duration of the peak pricing signal and also introducing another measure related to aggregate volume would better support a renewables based electricity sector and mitigate any unintended consequences from disincentivising either demand response or distributed generation.'

7. At a time of a forecast substantial growth in the demand for electricity through to 2050, which will require significant investment as identified Transpower's Whakamana i Te Mauri Hiko Report ⁴ and other recent studies including the Productivity Commission's Low-emissions economy Report ⁵ and the Interim Climate Change Commission's Accelerated Electrification Report ⁶, every opportunity should be taken to improve generation, transmission and distribution asset efficiency and increase average utilisation.
8. The Association notes the analysis in Whakamana i Te Mauri Hiko that every GW of avoided peak demand would ultimately save the consumer approximately \$1.5 billion ⁷.
9. Therefore, introducing a transitional congestion charge represents a way to manage the risk of peak demand increasing. A TCC also represents an opportunity to support greater electrification from improving system efficiency to lower end consumer costs through avoided investment.

Considerations on Design of a Transitional Peak Charge

10. The Association notes the challenge of ensuring that any introduction of a transactional peak charge should ideally be aligned with the timing of distribution businesses and retail price changes to ensure the pricing signal is received by end consumers.
11. In determining where a transitional charge should be introduced, given the EA's requirement it be targeted at geographical areas only where likelihood of congestion, the Association considers the ability to meet grid reliability standards is consistent with the grid being constrained.
12. Power systems analysis therefore could be a useful starting point to identify where a TCC is required.

⁴ Transpower, Whakamana I Te Mauri Hiko , Empowering our Energy Future, March 2020.

⁵ Productivity Commission, Low-emissions economy, August 2018.

⁶ Interim Climate Change Commission, Accelerated Electrification Report, April 2019.

⁷ Transpower, Whakamana I Te Mauri Hiko , page 62 Demand-side Management of Peaks.

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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