

31 August 2023

John Clarke
System Operator
Transpower
PO Box 1021
WELLINGTON 6011

Sent via email: system.operator@transpower.co.nz

Dear John

Evolving security of supply assessment in New Zealand

1. This is a short submission from the Major Electricity Users' Group (MEUG) on Transpower's Paper "*Evolving security of supply assessment in New Zealand*"¹ published for consultation in July 2023.
2. This submission does not contain any confidential information and can be published on Transpower's website unaltered. Members may lodge separate submissions.

Well considered assessment that captures the challenges facing the system

3. MEUG congratulates the System Operator on preparing a robust yet succinct security of supply assessment of New Zealand's electricity system. The System Operator has outlined the key issues facing the sector as we transition to net zero emissions by 2050 and a greater level of electrification. As outlined in prior submissions:
 - We recognise the greater uncertainty introduced into the market from a greater share of intermittent generation (wind and solar), and the impacts this has on thermal generators and demand-side participants. We support the Electricity Authority looking into possible solutions to improve both the accuracy and frequency of intermittent generation forecasts into the spot market, in coordination with the System Operator.²
 - It will be important to carefully manage the energy transition, as we increase the level of renewable electricity generation while reducing the role of thermal

¹ https://tpow-corp-production.s3.ap-southeast-2.amazonaws.com/public/bulk-upload/documents/EvolvingSecurityOfSupplyAssessmentsNZ_FINAL.pdf?VersionId=Aoqf7iIsHgyComHT_Vtz4rA2AgZ5v_wtk

² *Review of forecasting provisions for intermittent generators in the spot market*, MEUG submission to the Electricity Authority, 26 July 2023, <http://www.meug.co.nz/node/1304>

generation in the electricity system.³ Concept Consulting's⁴ analysis provides useful insight into the shifting role for thermal generation over the coming decades.

- We support Transpower's work with the Electricity Authority to better manage supply risk for winter 2023, given a substantial increase in the frequency of trading periods when the available supply is tight (or insufficient) compared to projected electricity demand and normal reserve requirements.⁵
 - Positive progress is being made on process heat decarbonisation, with many business exploring opportunities to convert process heat to electricity.⁵ For example, the announcement⁶ between NZ Steel, the Government and Contact Energy to install an electric arc furnace, halving its coal use. Projects such as this will have an impact on system demand and as the paper notes, place a greater reliance on the electricity system. We support measures to ensure this increased reliance is adequately reflected in the System Operators analysis.
 - While we believe that demand-side participation in the electricity sector has potential and is already occurring, we consider that targeted action is required to explore how demand side management can play a greater role in the market. This is an area where we would like to work closer with the Electricity Authority and Transpower.⁵
4. MEUG regularly reviews the resources provided by the System Operator, such as the Security of Supply Assessment, Electricity Risk Curves, and the New Zealand Generation Balance. These resources provide useful insights into market conditions. We also regularly attend the System Operator industry forums which provide useful insights into the work the System Operator has underway.
 5. Due to the high level of consultations currently underway in the energy sector, we have only been able to provide high-level comments. However, MEUG and its members would welcome the opportunity to discuss this report with the System Operator further at one of our monthly member meetings. We believe this would provide useful consumer input for the System Operator while enabling members to understand the challenges ahead. To set up this meeting, or if you have any questions regarding our submission, please contact MEUG on 027 472 7798 or via email at karen@meug.co.nz.

Yours sincerely



Karen Boyes
Major Electricity Users' Group

³ *Ensuring an orderly thermal transition*, MEUG submission to the Electricity Authority, 25 July 2023
<http://www.meug.co.nz/node/1303>

⁴ https://www.ea.govt.nz/documents/3147/Appendix_C_-_Concept_Consulting.pdf

⁵ 2023 Draft advice to inform the strategic direction of the Government's second emissions reduction plan, MEUG submission to the Climate Change Commission, 23 June 2023, <http://www.meug.co.nz/node/1298>

⁶ <https://www.rnz.co.nz/news/political/490351/nz-steel-to-receive-up-to-140m-to-recycle-scrap-steel-using-electricity-instead-of-coal>