

26 May 2023

Dr Steven Jay
System Operator
Transpower New Zealand
PO Box 1021
WELLINGTON

By email: system.operator@transpower.co.nz

Dear Steven

Security of Supply Assessment 2023

1. This is a submission from the Major Electricity Users' Group (MEUG) on Transpower's draft "*Security of Supply Assessment 2023*"¹ published for consultation in May 2023.
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Members may lodge separate submissions.

2023 assessment reflects current trends facing electricity sector

3. Overall, MEUG believes that the System Operator has done a thorough job of updating the Security of Supply Assessment (SoSA) to reflect the factors, challenges and trends facing the electricity sector between 2023 to 2032. The SoSA provides clear analysis of a range of plausible scenarios, testing the changes in key inputs, and what this subsequently means for New Zealand's security and capacity standards.
4. As noted in our submission on the 2022 SoSA,² MEUG encourages the System Operator to treat electricity distribution businesses' (EDBs) forecasts of increased demand from increased electrification with some caution. Their forecasts could be overstated, for reasons we already noted in 2022:
 - a. Firstly, EDBs have an incentive to err towards high demand forecasts because, for many EDBs, customers rather than shareholders bear the cost of any overbuild.
 - b. Secondly, summing individual EDBs lists of new lumpy demand does not consider aggregate national supply and contractor constraints that might limit implementation.
5. While encouraging progress is being made with electrifying process heat, we note that

¹ <https://www.transpower.co.nz/system-operator/information-industry/invitation-comment/invitation-comment-draft-security-supply>

² 2022 *Security of Supply Annual Assessment submission*, MEUG submission to the System Operator, 8 June 2022, <http://www.meug.co.nz/node/1212>

the Climate Change Commission has also stated that “.....the Government may have overestimated how quickly emissions reductions from process heat can be achieved.”³

6. The 2023 SoSA clearly demonstrates the challenges ahead as we integrate more intermittent renewable electricity generation into our system, while reducing the level of thermal generation. The SoSA analysis illustrates that it is simply not a “like for like” replacement when changing the generation mix, as it comes with challenges for the electricity system, impacting factors such as capacity and flexibility. The broader sectors’ work on increasing both the level of new generation, and how we integrate this generation, will be key to ensuring a well-managed transition to greater renewables.⁴
7. Finally, as we noted in last year’s submission, we believe it would be beneficial if the SoSA modelled the option of Tiwai load having a greater degree of flexibility to assist with managing dry year events. On 5 April 2023,⁵ Meridian and New Zealand Aluminium Smelters Limited (NZAS) announced that they are entering into a demand response agreement for 2023/2024 (conditional on the Electricity Authority’s approval). We believe it would be helpful for this type of arrangement to be modelled going forward beyond 2024, to understand the potential from these types of arrangements.
8. 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 Page 119, 2023 Draft advice to inform the strategic direction of the Government’s second emissions reduction plan, Climate Change Commission, April 2023, https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/erp2/supporting_documents/CCC4940_Draft%20ERP%20Advice%202023%20P02%20V02%20web.pdf.

⁴ For example, MBIE’s current consultation on consenting improvements for renewable electricity generation, and the Market Development Advisory Group’s (MDAG) work on price discovery in a renewables-based electricity system.

⁵ <https://www.meridianenergy.co.nz/news-and-events/meridian-and-nzas-demand-response-agreement>.