

9 June 2023

Mike Hayward
Manager, Markets
Ministry of Business, Innovation and Employment
PO Box 1473
WELLINGTON 6140

Sent via email: energyinfo@mbie.govt.nz

Dear Mike

Electricity Demand and Generation Scenarios 2023

1. This is a submission from the Major Electricity Users' Group (MEUG) on the Ministry of Business, Innovation and Employment (MBIE) consultation document "*Electricity Demand and Generation Scenario (EDGS) 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.² Members may lodge separate submissions.
3. We have focused our comments on specific areas of the document, and noted where our responses address a particular consultation question.

Important role of EDGS as electricity system transitions towards low emissions economy

4. MEUG acknowledges the important role that the EDGS document plays, with its use explicitly incorporated within Part 4 regulation of the *Commerce Act 1986*.³ The EDGS provides the Commerce Commission with an independent set of electricity demand and generation scenarios that the Commission can use to assess Transpower's planning proposals for future capital investment in the electricity transmission system. It is important that these scenarios are both robust and representative of plausible futures, as the decisions made by the Commerce Commission have key outcomes:
 - a. Providing Transpower with the necessary funding to undertake work on New Zealand's electricity transmission system, providing a reliable, safe, and effective transmission system, as well as supporting our country's aspirations for greater electrification for a low-emissions economy.
 - b. Setting the transmission charges that will be paid by all electricity consumers

¹ <https://www.mbie.govt.nz/dmsdocument/26447-consultation-document-edgs-2023-pdf>

² We agree to having quotes from this submission included in the compiled list of next steps.

³ As described on page 6 of the consultation document.

(be it directly or indirectly) across the country.

5. The cost of electricity is a key input into the operations of MEUG members, and therefore, we seek to ensure that the Commerce Commission can run a robust process when determining the level of expenditure that can be invested into our network and recovered from end-users over the life of the assets. We need to be confident that the information used within the modelling is as accurate as possible, reflects the costs that are seen in the energy sector, and provide the Commission with a way to undertake rigorous analysis.
6. For these reasons, it would be helpful to understand:
 - a. How does the EDGS align or compare to other energy scenarios developed by Government and stakeholders, for example, the Climate Change Commission's work, the assumptions used in Transpower's Security of Supply Assessment, and BusinessNZ Energy Council Energy Scenarios?
 - b. Do the four proposed scenarios align with the action needed to achieve the country's 2050 net-zero emissions target?
 - c. Does the "constraint" scenario go far enough with sensitivity analysis around GDP, so that it could test outcomes if there was a recession?

Frequency of updates⁴

7. MEUG would be comfortable with MBIE updating the EDGS every three years, to ensure that it can incorporate the best data available and to consider any future trends that may impact upon the electricity sector. This timeframe would also enable MBIE staff to balance this work programme alongside other ongoing workstreams.
8. However, we would encourage MBIE to consider the option of updating the EDGS on an ad-hoc basis if there was a "material event or change" that impacted one or more of the key assumptions. Any material change should be considered by the Commerce Commission during the assessment process, and would no doubt be flagged by both Transpower and stakeholders during consideration of a project proposal. It would be more streamlined to update the EDGS before consideration of a project, so it could be robustly considered in the analysis.

Robustness of assumptions informing the EDGS

9. MEUG has the following comments on the key assumptions for the 2023 update of the EDGS:
 - a. **Demand response:** It would be helpful if more information was provided on the demand-side response assumptions (it simply notes "Medium" for the reference case). It would be ideal if it referred to any existing data on demand response potential⁵ or even an energy quantity or percentage of demand. MEUG would welcome further discussion on this assumption.
 - b. **Industry and commercial energy use:** While it is helpful to break down process heat by temperature requirements, we question whether it would be help to also separate industry and commercial use. The scale of operations

⁴ This section relates to question 3.

⁵ For example, possible demand response load on electricity distribution networks, or the demand side work undertaken by the Market Development Advisory Group, as part of its work on price discovery in a renewables-based electricity system, <https://www.ea.govt.nz/projects/all/pricing-in-a-renewables-based-electricity-system/>

and heat requirements vary considerably across this large grouping.

- c. **Volume of biomass for process heat:**⁶ We query whether MBIE has considered the total potential volume of biomass available in New Zealand, and if so, how much of this may be allocated to process heat needs (compared to competing uses).
- d. **Future activity or closures of large energy users:**⁷ We believe that information on these assumptions is best gathered through direct engagement with businesses. This will provide the most accurate level of information, although noting that there may be a degree of commercial sensitivity around the information that could be publicly disclosed.
- e. **Role of Tiwai smelter.**⁸ We agree that it is sensible to explore the issue of potential Tiwai closure as a sensitivity to the Reference scenario. It would also be beneficial if MBIE modelled the option of Tiwai load having a greater degree of flexibility to assist with managing dry year events. On 5 April 2023,⁹ Meridian and New Zealand Aluminium Smelters Limited (NZAS) announced that they are entering into a demand response agreement for 2023/2024; this was approved by the Electricity Authority on 8 June 2023.¹⁰ 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. We also raised this idea with Transpower, through consultation on its 2023 security of supply assessment.¹¹

Robust process for updating the EDGS

10. MEUG welcomes the opportunity to comment on the assumptions used to update the EDGS. However, we note that MBIE intends to “*publish a compiled list of next steps on the MBIE website [but]...will not be making any individual submissions public*”.¹² We disagree with this approach.
11. We believe a robust consultation process should involve transparency of views submitted by all stakeholders, alongside the final decision taken by the government department or regulator. Confidential or commercially sensitive information should of course be withheld, but it is usual practice to publish all submissions where the stakeholder has declared that there is no confidential information. We consider that there is benefit in seeing other parties’ submissions, as it may illicit ideas that consider further consultation or consideration. We also note that for many submitters, including MEUG, it is standard practice to publish our submissions on our website.

⁶ This section relates to question 10.

⁷ This section relates to questions 11 – 12.

⁸ This section relates to question 13.

⁹ <https://www.meridianenergy.co.nz/news-and-events/meridian-and-nzas-demand-response-agreement>.

¹⁰ <https://www.ea.govt.nz/news/press-release/electricity-authority-approves-meridian-clearance-application/>

¹¹ Our submission to Transpower is available here: <http://www.meug.co.nz/node/1289>

¹² Page 4 of the consultation document.

12. MEUG has reviewed Transpower's submission, which is now public on their website.¹³ We believe there is merit in exploring:
- a. The use of an **industry forum or working group** to inform MBIE's decisions on the detailed assumptions that underpin its EDGS, and
 - b. Providing the EDGS **input assumptions specified in tabular forum**. We agree that this would make it easier for stakeholders to engage.
13. If you have any questions regarding our submission or would like to obtain any further information, please contact MEUG on Privacy of natural persons or via email at Privacy of natural persons

Yours sincerely



Karen Boyes
Major Electricity Users' Group

¹³ https://tpow-corp-production.s3.ap-southeast-2.amazonaws.com/public/uncontrolled_docs/TP_Sub_EDGS2023_06June2023.pdf?VersionId=8EodHRrm2uwPmQFWOF5QTi.Q5Syd6_IV