

5 December 2023

Transpower

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Submission on the draft Security of Supply Annual Assessment 2024

Introduction

1. Energy Resources Aotearoa is New Zealand's peak energy advocacy organisation. Our purpose is to enable constructive collaboration across the energy sector through and beyond New Zealand's transition to net zero carbon emissions in 2050.
2. This document constitutes our submission to Transpower on the *Invitation to Comment: 2024 Security of Supply Assessment: Reference Case Assumptions and Sensitivities* (the consultation document). Also relevant for further reading is our earlier submission on the draft *Security of Supply Annual Assessment 2023*, available here: <https://www.energyresources.org.nz/dmsdocument/245>.
3. We commend Transpower for conducting this modelling and report on an annual basis. Security of supply is of crucial importance to New Zealand's economic and social well-being – and this will be even more so as we increasingly electrify more sectors of our economy (process heat and transport) through the low-emissions transition.

Responses to questions

Question 1: Do you agree with the proposed assumptions used for the reference case? If not, please provide further details and what you consider would be reasonable alternate assumptions.

4. In our submissions on previous assessments, we argued that under policy settings to date it is much more realistic to assume that gas supply and/or thermal capacity is constrained as the default (i.e., as part of the Reference Case).¹ However, we acknowledge Transpower's response that constrained gas supply is still considered as a sensitivity.

¹ See our 2021 submission at <https://www.energyresources.org.nz/dmsdocument/194> and our 2023 submission at <https://www.energyresources.org.nz/dmsdocument/245>.

5. We note the new National-led Government has signalled a suite of pro-investment policies, including the unwinding of the 2018 ban on new oil and gas exploration; a review of the decommissioning regime for oil and gas installations; and the abandonment of the 100% renewable electricity target and the Lake Onslow project. The default assumption should be constrained supply until these measures have been implemented, if not beyond, given the investment lead times involved.

Q2. Do you agree that the proposed sensitivities represent the key security of supply uncertainties facing the New Zealand electricity sector over the assessment horizon (2024-2033)? If not, please provide further details and which of the above-described sensitivities you would replace with alternatives or remove (if not needed).

Low gas demand flex

6. We strongly support the new inclusion of low gas demand flex as an independent sensitivity following feedback on the last annual assessment. While we agree that gas demand response from large users can be an important mechanism for ensuring security of supply into the electricity system, this sensitivity ensures we recognise that it cannot be taken for granted. We agree this is a key security of supply uncertainty.
7. Our strong preference is that this flexibility is contracted well ahead of time to ensure it is available when needed, on terms acceptable to the large users (who, it should be emphasised, can bear a significant opportunity cost in releasing their gas to the market). Ideally policy settings would support a dynamic and vibrant gas sector which has sufficient gas supply, gas storage, and gas-fired generation capacity to manage the risk of demand response being required in the first place.
8. By the same token, we support the Gas Industry Company's frequent comments (in response to previous consultations) that electricity security margins should not be upheld by eroding the security of supply in the gas sector, nor imposing damaging impacts on gas-using businesses and the New Zealand economy.

Other sensitivities

9. As in previous years we support the inclusion of the other supply and demand side sensitivities. We offer below some specific comments on some of these sensitivities:
 - constrained thermal development – per an EnergyLink [report](#) we commissioned earlier this year, the electricity system highly likely needs new gas-fired peaking capacity and it is appropriate to consider this risk that (for whatever reason) this capacity does not come to market;
 - dry-year risk – this is a well understood risk, though underappreciated by laypeople. The independent Energy Link report referenced in the previous

bullet explored this sensitivity and it (predictably) reveals significant implications for supply and demand. Given the importance of mitigating dry-year impacts, it could also be worth adding into the scenario work consideration of consistently dry hydrology.

- low gas supply – see our comments in response to Question 1 above.

Q3. Do you have any thoughts on our proposal to include a section in the Security of Supply Assessment report looking at the implications of increasing the proportion of renewable generation on security of supply margins?

10. We support its ongoing inclusion.

Concluding remarks

11. Thank you for the opportunity to provide input and commentary on this critically important work. Transpower’s annual assessments provide a sober and credible picture of the supply and demand risks facing New Zealand’s electricity sector.