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POWERING A BETTER NEW ZEALAND TOGETHER

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Transpower

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Submission on Security of Supply Assessment 2026 (SOSA 2026)

Introduction

- 1. Energy Resources Aotearoa is New Zealand's peak energy sector advocacy organisation. We represent participants from across the energy system, providing a strategic sector perspective on energy issues and their adjacent portfolios. We enable constructive collaboration to bring coherence across the energy sector through and beyond New Zealand's journey to net-zero carbon emissions by 2050.
- 2. This submission relates to <u>Transpower's SOSA 2026</u>, which assesses New Zealand's security of electricity supply across several measures with a ten-year forward horizon to assist with risk management. We last submitted on the <u>SOSA 2025</u> in June.

Introduction

- 3. Transpower, as System Operator, has a crucial role in the systemic leadership of the energy system.
- 4. The draft SOSA 2026 proposes a reference case that assumes the exit of Methanex, OMV's Maui field, and Ballance Agri-nutrients' Kapuni plant in 2027. Our submission focuses on whether these assumptions are reasonable, and what the ten-year forward horizon should be used for to plan for this possible eventuality, noting that the information was provided in confidence to Transpower for the purpose of realistic security planning.

Reference case assumptions

5. We consider Transpower's assumptions regarding future gas availability to be one of the most material risks in the SOSA, and we support the low-gas sensitivity as it represents the downside scenario that the system may realistically face over the next 5–10 years, in which gas demand significantly reduces.

- 6. It is important to model that the market would not suddenly be flooded with gas for electricity security, rather, there would be less gas produced. As a result, the reference case may understate security-of-supply risk, especially in winter and during sustained dry periods.
- 7. Transpower's 'low gas' sensitivity appears to model a smooth downward trajectory, whereas real-world decline is more likely to be non-linear, abrupt, and potentially contingent on operator decisions.
- 8. We wish to highlight the risks associated with investment uncertainty and low reinvestment rates, and conversely, the lower likelihood but chance that more gas might be discovered. It is important that Transpower asks the what if questions in its modelling, as we have pointed out in our latest submission on the Te Kanapu Scenarios. The electricity sector's ability to rely on gas depends on competing industrial and direct-use demand.

Acknowledging the potential for more gas

- 9. There is some credible potential for additional gas supply, particularly through development of mature fields. For example, a recent new production well in the Pohokura field is expected to deliver around 4 PJ per year, demonstrating that even in mature reservoirs, technical innovation can unlock more resource. Also, Todd's new Mangahewa wells are also producing tens of TJs per day, showing that investment now can produce results that matter for today's energy system.
- 10. The Government has signalled a stronger commitment to upstream gas investment with a \$200 million co-investment fund to promote natural gas supply. The fund was recently expanded to allow for a wider range of options for investment in existing and new fields over different time horizons to bring new gas to market quickly.
- 11. Furthermore, contingent gas resources have increased in MBIE's most recent reserves data.
- 12. However, Transpower should not underestimate the downside risks. The Government response has been to counter weak incentives to invest in new wells, or field life-extension, but in particular, new field exploration off-shore. Policy changes this year may materially alter investment timing or decision-making, and impact the supply of short-term available gas.
- 13. We question whether Transpower ought to model as a sensitivity the prioritisation of remaining gas for essential industries, should gas production drastically decline. In a tight supply scenario, electricity generation is likely to be the marginal user, and therefore the first to be curtailed.

Implications for the reference case

- 14. Because thermal generation remains the critical firming resource for tight periods, especially winter peaks, an optimistic gas assumption can lead to:
 - a overstated thermal availability;
 - b understated risk margins;
 - c understated reliance on demand response or voluntary conservation; and
 - d understated shortfall probability in extended dry years.
- 15. This has direct consequences for public policy, generation investment timing, and the framework for emergency management.
- 16. We therefore support the reference case as it stands. It is based on confidential information supplied by operators to inform security planning. This is a superior information base to forecast electricity security than the scenarios proposed in Te Kanapu.

Recommendations

- 17. We recommend that Transpower:
 - a continues with the current reference case and low-gas sensitivity to reflect constraints on the share of gas available to electricity generation should there be abrupt end-of-life decline scenarios, such as the reference case assumes;
 - b models as a sensitivity (and introduces as part of the proposed 'Expected Future Case' and the combination of sensitivities Transpower believes should be included):
 - the prioritisation of remaining gas for essential industries that rely on gas, should gas production drastically decline;
 - ii. a 'very low gas' or 'gas shock' sensitivity to assist with downside risk modelling; and
 - iii. the discovery of additional gas, based on recent policy decisions to expand the co-investment fund.
 - c introduces a realistic stress test that includes a scenario where industrial demand crowds out electricity sector use.

Concluding comments

- 18. Gas availability is the dominant uncertainty affecting security of supply in the medium term. Underestimating this risk will materially understate the likelihood of shortages in the SOSA.
- 19. Inclusion of a very low-gas sensitivity may help to ensure the SOSA provides a credible picture of system risk and supports informed policy and investment decisions so that supply of gas can meet demand for electricity and industry.
- 20. Inclusion of a sensitivity for additional gas supply, should it eventuate, as it would also materially change the outlook. We recommend these both be included, plus a sensitivity that provides for industrial vs electricity prioritisation of scarce gas, to assist with credible, realistic planning.