

6 June 2023

Ministry of Business, Innovation, and Employment  
By email: [ElectricityRMA@mbie.govt.nz](mailto:ElectricityRMA@mbie.govt.nz)

## ***Submission on Strengthening national direction on renewable electricity generation and electricity transmission***

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### **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 on the MBIE and MfE consultation document *Strengthening national direction on renewable electricity generation and electricity transmission*.
3. We have read and acknowledge the Privacy Statement and welcome the opportunity to provide any clarification or discussion on the matters raised in our submission.

### **High level comment**

4. We support streamlining resource consenting processes, particularly for the maintenance and ongoing operation of existing infrastructure that is vital to supporting New Zealand's ongoing prosperity and wellbeing.
5. On principle, we believe improving consenting processes should be extended to all forms of electricity generation, not just to renewable energy projects. There is general consensus additional gas-fired peaking generation is needed to help maintain the stability of the electricity system as it approaches higher renewable penetration. We believe these projects ought to be afforded the same streamlined consenting process, should a positive investment decision be made, in support of a stable, affordable, and renewable electricity system.
6. The range of questions posed in the consultation document are highly specific and require detailed consideration. As a non-market participant Energy Resources Aotearoa is not directly involved in the performance of these activities. We therefore restrict our feedback to higher level considerations of the proposed NPS.

## Renewable electricity projects continue to benefit from thermal back-up

7. Costly and unpredictable consenting processes are a common criticism of the Resource Management Act 1991. We support the intent of the proposed changes to provide project proponents with more efficient and predictable consenting processes whilst resource management reforms work their way through the legislative and implementation process. However, we believe this should take a “whole of system” approach and should not discriminate between generation project type.
8. Energy is the lifeblood of the economy. A strong, resilient energy supply chain that delivers affordable and sustainable energy in a reliable and timely manner is critical to serve our ongoing economic and community wellbeing.
9. However, our electricity generation assets are increasingly weather dependent. Our growing share of renewable electricity relies on hydro, wind, and solar generation with seasonal and intraday intermittency that needs to be managed in real time. Our dependence on electricity, too, is set to increase dramatically as we progressively electrify more segments of our transport and industrial sectors.
10. We agree the ability to execute the pipeline of new renewable generation, including those at the community level, in a timely and cost-effective way is increasingly important. There is wide agreement that New Zealand’s electricity system will also need further investment in additional fast start gas peaking capacity to ensure the stability of the national grid.
11. Analysis also shows that natural gas will continue to play a critical role in winter capacity. The spate of insufficient generation notices from Transpower illustrate the importance of reliable, fast start generation to ensure the stability of the national grid.<sup>1</sup>
12. We draw to your attention a recent independent report we commissioned from Energy Link, which may provide useful context. The Energy Link report used a representative range of scenarios from Energy Link’s price path model to explore the potential role of natural gas in the electricity system out to 2038. It contains useful insights about the additional gas fast start peaking capacity that will be required across a range of demand scenarios, and the likelihood of gas supply being sufficient to meet this. It finds that up to 320 MW of new fast start gas peaking capacity could be required over the next 15 years.
13. You can access the report at the links below:
  - Summary report: <https://www.energyresources.org.nz/dmsdocument/242>
  - Full report: <https://www.energyresources.org.nz/dmsdocument/243>

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<sup>1</sup> Transpower recently committed to working with the electricity sector to manage peak winter demand during tight supply situations. See <https://www.transpower.co.nz/news/transpower-working-sector-manage-winter-capacity-risks> for further discussion on this issue.

14. Upstream natural gas supply is heavily dependent on ongoing investment in development of existing production fields, and that investment in turn is dependent on long term confidence about gas demand and policy settings. In light of the ongoing role thermal generation is expected to play in New Zealand's energy mix, it is vital this also be included in efforts to strengthen the efficiency and predictability of consenting processes.

### **Electricity transmission**

15. Given the central role electrification is expected to play in the decarbonisation of the economy, it is appropriate the NPS recognises the national significance and importance of this infrastructure.
16. Energy Resources Aotearoa supports a least-cost energy transition. Addressing the issue of driving overhead lines underground, at significantly greater cost, makes sense in this light.
17. Electricity demand in New Zealand is expected to significantly increase as we transition to a low emissions economy. The reference scenario for 2019 Electricity Demand and Generation Scenarios (EDGS) forecasts a 22% increase in electricity demand out to 2035, roughly the same period expected to be covered by this NPS.<sup>2</sup> This demand has the potential to increase by nearly 40% over the 2017 reference demand.
18. Given this demand affects not only the national grid, owned, and operated by Transpower on behalf of the government, but also the associated sub-transmission networks, Energy Resources Aotearoa recommends these networks be included in the Electricity NPS.
19. Broadening the scope to include distribution networks has the added benefit of enabling smaller, community-based generation projects to connect to their local distribution networks through a more streamlined consenting process.
20. Therefore, we recommend the scope of this NPS should be broadened to include these distribution networks.

### **Concluding remarks**

21. Thank you for the opportunity to provide feedback on the proposed improvements to the consenting process for electricity transmission and renewable energy projects. Energy Resources Aotearoa supports the need for streamlining these processes as we transition to a lower carbon economy.
22. We agree with the premise in the discussion document that increased renewable electricity generation will play a key in decarbonising the New Zealand economy.

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<sup>2</sup> Based on the 2019 Electricity Demand and Generation Scenarios (EDGS). We note MBIE is currently consulting on a 2023 update to these scenarios to explore potential future electricity demand and required generation capacity.

However, we stress that system wide consideration is required to assist in meeting the Government's decarbonisation goals – and this means recognising the role of new fossil fuelled fast-start generation capacity as part of that increasingly renewable system.

23. We also recommend including the vitally 33-66kV sub-transmission network in these efforts to streamline consenting issues.