Feedback form: New Zealand's draft National Infrastructure Plan

Your details

Organisation (if applicable)

Position (if applicable)
Email:
[redacted]

[redacted]

About you

Please tell us which best describes you

- ☒ **New Zealand citizen or resident**
- ☐ **New Zealand business owner/operator**
- ☐ **Industry professional**
- ☐ **Community organisation representative**
- ☐ **Local government representative**
- ☐ **Central government representative**
- ☐ **Researcher**
- ☐ **Other (please specify): Click or tap here to enter text.**

Sector or topic of interest

Please list or briefly describe the topics or sectors you are providing feedback on:

The electricity sector.

Permissions

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☒ I would like to sign up to receive updates and communications via my email address

Publishing feedback

We might publish the feedback that you provide to us, but we will only publish your feedback if you give permission. We will remove personal details such as contact details and the names of individuals. If you do not want your feedback published, please let us know below.

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Official Information Act responses

Your feedback will be subject to requests made under the Official Information Act 1982 (even if it hasn't been published). We always remove personal details from content released under the Official Information Act.

Date: 17/07/2025

Your feedback

- *When providing your feedback, please let us know which chapter/recommendation/topic you are responding to.*
- *Alternatively, you may indicate that you are addressing challenges, gaps or opportunities not covered by the draft National Infrastructure Plan.*
- *Please explain, and if possible, provide examples or evidence.*
- *Please also include any proposed change or improvements that would address your feedback.*

Dear Sir/Madame,

Thank you for the opportunity to submit comments on the draft Infrastructure plan.

My comments are in relation to Box 18 Figure 34 page 111 and section 7.4 pages 139 – 143.

The future emphasis appears to be on renewable (as in Solar and wind) electricity projects. The pie chart (Fig.34) on page 111 reinforces this observation. Renewable energy as produced by solar and wind is not by itself sufficient and could lead to complacency. **The present and likely ongoing problem that has to be solved along with generating more electricity relates to having sufficient immediate dispatchable baseload to counteract the times when intermittent solar and wind are not delivering power and in a manner that the distribution system can cope with continuously and securely at minimum cost**. It is a matter of balance and it this aspect that I think the draft report should give more credence to for the following reasons:

1. **Risk** which manifests itself in numerous ways:
   a. Offshore wind is internationally demonstrably showing itself to be expensive. Just observe the number of contracts that are not proceeding. Part of this relates to cost of equipment, installation and maintenance but another component is the additional cost of transmission. On shore wind suffers similarly especially in the longer term as the best sites get utilized first.
   b. Transmission infrastructure as it relates to transmission lines e.g. Cook Strait cables and all the transmission lines and substations from the South Island and North Island. Especially in New Zealand these are at greater risk due to the orientation of our tectonic plates and vulnerability to earthquakes and lahars. Not to mention the ongoing costs of replacements and maintenance.
   c. Solar and wind farms are generally spread over large areas and a cause of loss of habitat and degradation to the land. In the case of wind farms "roads" must be built causing erosion.
2. **Generating electricity closer to the demand.**
   In New Zealand that is particularly true of the "golden triangle" - Auckland, Hamilton and Tauranga.
3. **Ensuring Compliance with the Paris climate change accord 2050.**

To avoid the risks mentioned above and **to minimize the costs associated with the whole of the National electric infrastructure system** it is important that the draft document addresses these points. It seems to me that in the transition period to 2050 that gas and more especially in the longer term geothermal (as being a renewable energy) are the answers to providing the dispatchable base loads to complement wind and solar. However, if it is proven that geothermal cannot provide the sufficient base load required that nuclear reactors should be considered just as it was in 1968 when 4 x 250 MW reactors were to be built at Oyster Point on the Kaipara Harbour**. This would generate electricity closer to the demand and provide the opportunity of reducing the costs associated with the whole of the present electric infrastructure system**. Your draft document should allude to this possibility, giving the facts as above, so that debate can start. In this respect mention should be made of the excellent Royal Commission Report 1978:" Nuclear Power Generation in New Zealand".

The pie chart Fig.34 on page 111 represents the sum of forward projects submitted. However, if you are of the opinion that the mix of projects does not meet what you consider to be an OPTIMUM solution (as defined above) then you should not shy away from saying so in the draft document.

In my submission (submitted 04/12/24 Reference NIPC24-0002960) to the Infrastructure Commission I commented on the necessity for having a 50 -70 plus year planning horizon. Your draft report should allude to this.

In short, I would like to see the draft document take a less "mechanical" approach. The solution demands a holistic approach and a strategic vision of what can be achieved to ensure the future electric infrastructure takes advantage of modern technology. An efficient low-cost electric infrastructure is an absolute key to achieving a growing economy.

Yours sincerely

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