MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Consultation submission form

The Ministry of Business, Innovation and Employment (MBIE) would like your feedback on:

A proposed reliability obligation to manage dry-year risk.

Please provide your feedback by **5pm, 21 July 2026**

When completing this submission form, please provide comments and supporting explanations for your reasoning where relevant. Your feedback provides valuable information and informs decisions about the proposals.

We appreciate your time and effort taken to respond to this consultation.

Instructions

To make a submission you will need to:

1. Fill out your name, email address, phone number and organisation. If you are representing an organisation, please provide a brief description of your organisation and its aims, and ensure you have the authority to represent its views.
2. Fill out your responses to the discussion document questions. Where possible, please provide us with evidence to support your views. Examples can include references to independent research or facts and figures.
3. If your submission has any confidential information:
    i. Please state this in the email accompanying your submission, and set out clearly which parts you consider should be withheld and the grounds under the Official Information Act 1982 (Official Information Act) that you believe apply. MBIE will take such declarations into account and will consult with submitters when responding to requests under the Official Information Act.
    ii. Indicate this on the front of your submission (e.g. the first page header may state "In Confidence"). Any confidential information should be clearly marked within the text of your submission (preferably as Microsoft Word comments).
    iii. Note that submissions are subject to the Official Information Act and may, therefore, be released in part or full. The Privacy Act 1993 also applies.
4. Submit your feedback:
    i. By email to *electricitymarkets@mbie.govt.nz*
    ii. By mailing your submission to:

    Electricity Markets Policy
    Building, Resources and Markets
    Ministry of Business, Innovation and Employment
    PO Box 1473, Wellington 6140
    New Zealand

Submitter information

MBIE would appreciate if you would provide some information about yourself. If you choose to provide information in the section below, it will be used to help MBIE understand how different sectors view the proposals and options for requiring and achieving minimum onshore fuel stockholding. Any information you provide will be stored securely.

Your name, email address, phone number and organisation

Name:	Jad El Sebaaly, Vice President Asia
Email address:	Privacy of natural persons
Phone number:	
Organisation:	Karpowership is part of the Karadeniz Holding group. We develop, own and operate Powerships (floating power plants) and Liquefied natural gas infrastructure fleet. In addition to its head-quarter in Turkey, the group has an USA facility and Singapore operation, with capabilities to deliver GW power capacity over future years. The group pioneered the Powership concept in 2010 and now operates a fleet of 45 Powerships with more than 8,000 MW of installed capacity. It also owns and operates 11 LNG assets, including floating storage and regasification units and LNG carriers, deployed across more than 20 countries.

☐ The Privacy Act 1993 applies to submissions. Please tick the box if you do **not** wish your name or other personal information to be included in any information about submissions that MBIE may publish.

☐ MBIE may upload submissions and potentially a summary of submissions to its website, www.mbie.govt.nz. If you do **not** want your submission or a summary of your submission to be placed on either of these websites, please tick the box and type an explanation below:

I do not want my submission placed on MBIE's website because... [insert reasoning here]

Please check if your submission contains confidential information

☐ I would like my submission (or identifiable parts of my submission) to be kept confidential, and **have stated** my reasons and ground under section 9 of the Official Information Act that I believe apply, for consideration by MBIE.

Questions for the consultation

Q1. Do you agree with the analysis in this chapter of why New Zealand does not currently have sufficient dry-year firming? If not, where do you disagree?

☐ Yes ☒ Yes, with changes ☐ No

Karpowership broadly agrees with the analysis and proposed framework set out in the consultation paper. New Zealand's electricity system is facing increasing resilience challenges arising from greater exposure to climate-related variability, the retirement of ageing thermal generation assets, declining domestic gas supply, and the growing share of intermittent and weather-dependent renewable generation.

Karpowership supports measures to strengthen system resilience through the availability of long-duration firm capacity and secure fuel supply. Furthermore, we would like to highlight that there are alternative proven technologies that may not have been known and considered during the development of the consultation paper; for instance, a fast-track deployable solutions can provide immediate interim support to system adequacy and help moderate price volatility during periods of supply stress. While the Government and market participants continue to pursue investment in permanent onshore infrastructure, there remains an unavoidable gap between policy intent, investment decisions, and the commissioning of new assets.

Q2. What do you consider to be the principal remaining barriers to investment in additional dry-year firming following the recent reforms to improve fuel adequacy (Government procurement of an LNG importation facility)?

Beyond fuel adequacy, we see the following main barriers. Firstly, the tenor gap: conventional project development and financing approach necessitates new firm generation secures offtake contract that are longer tenure than buyers are willing to sign. Secondly, plant of this kind is capital-intensive and earns its revenue only in infrequent dry years, which makes it difficult to finance. Thirdly, new land-based firm generation takes a long time to consent and build. Fourth, continued reliance on existing ageing thermal plant dampens new investment, as the consultation paper itself identifies.

We would add one more barrier that has become significant recently and is not fully addressed in the document: the global supply of large gas turbines. Three companies, GE Vernova, Siemens Energy and Mitsubishi Heavy Industries, together supply around 90 per cent of the market for large-scale turbines. Analysis by the Institute for Energy Economics and Financial Analysis finds that these suppliers now face order backlogs of seven to eight years, with turbine costs rising towards US$2,400 per kW. Company reporting shows the same pressure. GE Vernova reported in its first quarter 2026 results that its gas power equipment backlog and slot reservation agreements grew from 83 GW to 100 GW in a single quarter, and that it now expects to reach at least 110 GW by the end of 2026. Its gas turbines are sold out through 2030.

A party that wants to build new firm thermal generation in New Zealand therefore cannot simply order the equipment. It has to join a multi-year global queue. This adds to the financing and timing problems the document describes, because it lengthens the time between the decision to invest and the delivery of firm energy to the system.

Q3. Do you agree that, despite the recent reforms to improve fuel adequacy, information, roles and tools, further measures are still needed to strengthen incentives to invest in dry-year firming? If not, please explain why not?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree

Karpowership agrees that further measures are needed. The reforms already underway strengthen the framework. They include better information, clearer roles, and improved fuel adequacy through the LNG import facility. On their own, however, they do not create a firm commercial incentive to secure long-duration firm energy in advance. As the consultation paper notes, better information and clearer accountability help the market recognise risk earlier. They do not resolve the tenor gap, the capacity project financing difficulty, or the timing problem that have held back investment. A more direct incentive is therefore a reasonable addition, provided it is designed so that new and independent supply can compete to meet it, rather than being met only from resources that obligated parties already own.

Q4. Do you agree that there is value in building new measures on existing regulatory architecture, rather than creating an entirely new regime from first principles? Why or why not?

☒ Yes, I agree ☐ No, I don't agree

Please explain your views.

The existing regulatory regimes are based on models commonly in place in other countries. The issue is fast changing and new dynamics in the global environment. The combination of the rapid growth in Data Centre energy demand and international conflicts is both becoming a risk to domestic supply adequacy and global equipment supply chains and costs. This suggest that existing regulatory regimes need to be modified to adapt to this changing external environment not replaced.

Long-term Obligation

Q5. Do you agree that a long-term obligation should be introduced to strengthen incentives to secure sufficient dependable winter cover in advance where a forecast winter energy adequacy shortfall is identified? If not, why not?

☐ Yes, I agree ☐ No, I don't agree

We would not presume to say whether the obligation is warranted. But as the consultation paper shows, ordinary market signals have not reliably brought forward enough long-duration firm energy in advance. A forward-looking obligation is a reasonable way to strengthen those incentives without displacing a market-led approach.

Q6. Do you agree that the long-term obligation should be placed on large wholesale purchasers rather than on, say, generators or the market more broadly? If not, which parties should hold the obligation, and why?

☒ Yes, I agree ☐ No, I don't agree

Karpowership does not have a strong view on who should hold this obligation. Placing it on the large electricity buyers makes sense, because they arrange the supply and the contracts that consumers rely on. We therefore agree with the proposal.

We would add one point, and it applies whoever holds the obligation. The rules should allow companies buy dependable cover from independent providers, including new entrants, is more likely to add new firm generation and keep costs lower for consumers.

Ultimately it is the responsibility of the New Zealand to step in where a commercial solution cannot be supplied by market participants. No participant should be compelled to make non-economic investment decisions.

Q7. Do you agree that a de minimis threshold should apply to limit the obligation to wholesale purchasers with a material winter load? If so, is the 500 GWh threshold appropriate, and should it be measured by reference to aggregate load over the winter period?

☐ Yes, I agree ☐ I agree in part ☒ No, I don't agree

Please explain your views.

This could lead to distorted pricing. Encouraging demand responses mechanisms would be more targeted and efficient.

Q8. Do you agree with the proposed staged approach under which a warning notification would be issued five years out, a binding obligation would be issued three years out and compliance would be assessed one year out? If not, what timing or trigger approach would be preferable?

☐ Yes, I agree ☒ I agree in part ☐ No, I don't agree

Please explain your views.

An early warning protocol makes sense if it is achievable in practice.

Q9. Do you agree that any identified adequacy shortfall should be allocated among obligated wholesale purchasers by reference to their shares of expected winter demand? If not, what allocation approach would be preferable?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree ☐ Not sure/no preference

Please explain your views.

This would seem a logical methodology.

Q10. What forms of cover should be eligible to meet the long-term obligation?

Karpowership suggest that the eligibility should depend on whether a resource can reliably deliver electricity when it is needed. It should not depend on the technology used or on who owns the asset. We support MBIE's stated intention to remain technology-neutral and not to prescribe a single solution.

On that basis, eligible cover should clearly include firm, fuel-backed, dispatchable generation supplied under contract by third parties, including independent and new-entrant suppliers

Q11. How should the compliance framework be designed? In particular, what evidential standard should apply, and how should the regime address more difficult issues such as hydro treatment, attribution, portfolio treatment, shared arrangements and double counting?

This is a complex question that requires addressing by independent market experts and beyond our level of understanding of the market.

Q12. Should the regime deal with arrangements that appear compliant in advance but later fail because of counterparty failure, project delay, force majeure or similar events? If so, how?

☐ Yes, I agree ☐ I agree in part ☐ No, I don't agree ☒ Not sure/no preference

Q13. Should penalties for non-compliance be designed and calibrated to tilt investments to comply without overly encouraging inefficient over-procurement? Please explain your reasoning.

☐ Yes, I agree ☐ I agree in part ☐ No, I don't agree ☒ Not sure/no preference

Please explain your views.

[insert response here]

Q14. What other design features, transitional arrangements, or implementation issues should be considered to ensure that the long-term obligation is workable, proportionate, cost-effective, and beneficial for consumers?

The criteria should be capable of being met by a provider that is not yet a market participant. New firm energy from outside the existing fleet will, by definition, come from parties that are not registered participants at the point of contracting. If the evidential requirements assume the counterparty is already registered and connected, they will exclude the new entrants the regime is intended to attract. We suggest the criteria allow a contract with a party that is not yet registered, subject to a clear pathway for that party to be registered and connected before the relevant winter. This is an implementation detail, but it determines whether third-party cover is available in practice.

Short-term Obligation

Q15. Do you support the introduction of a short-term obligation as a targeted backstop where a near-term winter reliability risk emerges despite the operation of the long-term obligation?

☒ Yes, I agree ☐ No, I don't agree

Karpowership supports a short-term obligation as a targeted backstop. Even where cover has been secured well in advance, conditions can deteriorate during the year. A mechanism that requires a response before winter is a reasonable safeguard.

Q16. Do you agree that the short-term obligation should apply to large generators whose contribution to annual energy supply exceeds a defined *de minimis* threshold? We welcome views on whether 2,500GWh of expected annual generation is the appropriate threshold.

☐ Yes, I agree ☐ I agree in part ☒ No, I don't agree

Please explain your views.

Refer to our response to Question 6.

Q17. Do you consider the proposed trigger – projected hydro storage crossing the Watch Curve within 90 days if it declines at an assumed rate of 18GWh/day – is appropriate? If not, what alternative trigger should be considered?

☐ Yes, I agree ☐ I agree in part ☐ No, I don't agree

Please explain your views.

We do not have the level of understand of Hydro operation and characteristics to comments.

Q18. Do you agree with the proposed monitoring period, notification process, three-week response window, and approach to switching off the obligation if conditions improve? If not, what alternative process would be preferable?

☐ Yes, I agree ☒ No, I don't agree

This would not encourage robust and implementable solutions from creditable parties. As an alternative there is potential to identify avoidable costs based on a 'countdown' timeline which could be a workable mechanism.

Q19. Do you agree that each obligated generator's obligation should be determined by reference to the winter load its portfolio is expected to support, including its own retail load and relevant contractual commitments? If not, what alternative basis should be used?

☐ Yes, I agree ☐ I agree in part ☐ No, I don't agree

Please explain your views.

See response to Question 6.

Q20. What forms of firm energy fuel cover should qualify under the short-term obligation? In particular, how should hydro be treated, including whether, and in what circumstances, existing stored water should be capable of counting toward compliance?

We do not have the level of understand of Hydro operation and characteristics to comments.

Q21. How should compliance be assessed? We welcome views on what evidence should be required, and how the Authority should approach questions of firmness, attribution, double counting, and reliance on third-party arrangements (including examples of how these matters are addressed in other jurisdictions).

This is a complex question that requires addressing by independent market experts and beyond our level of understanding of the market.

Q22. How should the regime deal with arrangements that appear compliant in advance but fail in practice because of upstream supply failure, transport disruption, force majeure, counterparty failure, or similar events?

This is a complex question that requires addressing by independent market experts and beyond our level of understanding of the market.

Q23. How should penalties for non-compliance be designed and calibrated so that they provide a credible incentive to secure genuine firm fuel cover without encouraging inefficient or disproportionate responses?

Please explain your views.

This is a complex question that requires addressing by independent market experts and beyond our level of understanding of the market.

Q24. What other design features, transitional arrangements, or implementation issues should be considered to ensure that the short-term obligation is workable, proportionate, cost-effective, and beneficial for consumers?

This is a complex question that requires addressing by independent market experts and beyond our level of understanding of the market.

Additional section: rationale for Karpowership's floating LNG-to-power solutions as a mitigation

The table below sets out how Karpowership's floating LNG-to-power solutions respond to the risks identified in the consultation paper. It reflects the perspective of an external provider, informed by a global fleet and by project experience in conditions comparable to New Zealand's.

#	Risk category	Risk Description	Mitigation: how Karpowership responds
1	Socio-Economic: energy adequacy	Up to 3 TWh of long-duration firm energy could be needed to insure against a significant three-month dry period.	Floating powerplant capacity are pre-built and ready for deployment (currently available 2GW capacity) can be sized to meet peak demand throughout the year, particularly in the winter period (1 April to 30 September), backed by LNG secured under contract. The generating equipment already exists and is installed, so it is not caught in the multi-year queue now affecting new turbine supply.
2	Socio-Economic : fuel availability	Declining domestic gas supply limits how much existing gas-fired generation can run in a dry year. Moreover, the industrial gas users may face high gas prices in such dry weather conditions, as experienced in the past years.	Karpowership's FSRU capability allows imported LNG to be regasified and supplied to the system. This adds a fuel source and reduces reliance on New Zealand's declining domestic gas. Domestic gas that would otherwise be burned to generate electricity is not consumed, so an equivalent volume remains available to other users. This complements the Government's LNG import facility (Action 1.1).
3	Financial: tenor gap	Conventional LNG-to-power projects may require offtake of at least ten years, and more likely fifteen to twenty-five years for a security-of-supply asset, which counterparties are unwilling to provide.	The capital is already committed and the asset exists, so the investment case does not depend on very long offtake. Cover can be matched to the winters for which a shortfall has been identified.
4	Physical: investment timing	Existing aging powerplants (eg. Huntly's Rankine units) are subject to reliability, efficiency and availability challenges; and high carbon intensity from utilizing coal / other dirty fuel imports. Such powerplants	A Powership can be deployed within about three months of commercial closure. Where regulatory approvals and onshore transmission connection works are required, a realistic timeframe for delivering power into the grid is around 9 to 12 months. The plant is not the constraint; the consents and the connection are. Cover is committed under contract for the term of the agreement.

		are nearing or overdue for retirement and needs replacement immediately.	Redeployment is possible only at the end of that term, so capital is not stranded if the requirement changes.
5	Socio-Economic: price volatility and cost to consumers	Sharp wholesale price spikes in stressed winters, alongside the objective of minimising long-run cost to consumers.	Karpowership generating units can ramp up in less than two minutes, and reach full output in less than five minutes, which gives a fast response to changes in demand. Modular engines in blocks of around 20 MW allow capacity to be matched closely to what the grid needs. Large combined-cycle plants typically ramp in blocks of the order of 100 to 300 MW, which can increase fuel use when only part of the output is required.