2 November 2023

Energy and Resource Markets Branch
Ministry of Business, Innovation and Employment

By email: offshorerenewables@mbie.govt.nz

Developing a Regulatory Framework for Offshore Renewable Energy

Meridian is New Zealand's largest generator of renewable energy and operates six large hydro stations and five large wind farms. We have a sixth wind farm and a grid scale battery currently under construction. Since we were established Meridian has:

- invested $5 billion in new renewable generation projects;
- created 5,200GWh of new renewable generation;
- produced enough new renewable electricity to:
    - enable the removal of the equivalent of 2.2 - 5.2 million tonnes of CO_2 annually from the global atmosphere, compared to GHG emitting alternatives; or
    - enable removal of 1.2 - 2.8 million light fleet vehicles from the road; or
    - meet the energy needs of 715,000 households.

Meridian appreciates the opportunity to comment on the Government's second discussion document on the development of a regulatory framework for offshore renewable energy. Nothing in this submission is confidential.

Meridian has signed a memorandum of understanding with Parkwind for the exploration of offshore wind generation in New Zealand waters. Efforts will focus principally on the Taranaki coast and build on work already undertaken by Parkwind, including engagement with the iwi of Taranaki and key stakeholders. Depending on the outcome of the joint exploration, the two parties may decide to work towards a feasibility permit. Both parties are interested in long-term investments and relationships, following a build to own and operate business model.

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To date Meridian has been focused on onshore development given the lower levelized cost of energy. However, the economics of offshore developments may improve over time and as New Zealand's leading wind farm developer, we feel the time is right to learn more about the offshore potential and explore how this might add value to our portfolio.

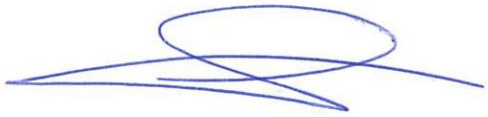
Parkwind and its parent company Jera (one of the world's largest generation companies) have a strong track record in developing, financing, constructing and operating offshore wind farms. The companies operate seven offshore wind farms off the Belgian, German, UK and Taiwanese coasts, with one of Japan's first offshore wind farms (Ishikari Bay) currently under construction.

While it is unclear at this stage whether offshore development will be economic in New Zealand relative to onshore alternatives, Meridian supports the development of a regulatory regime to accommodate any future investment. Meridian considers the regime should take a developer-led approach to both feasibility and commercial activities.

Appended are Meridian's responses to the detailed design questions in the discussion document.

We would be happy to discuss the views in this submission with Ministers and officials.

Nāku noa, nā



Sam Fleming
Manager – Regulatory and Government Relations

Appendix A: Responses to consultation questions

	Question	Response
1.	Following an initial feasibility permit application round, should there be both an open-door policy and the ability for government to run subsequent rounds? If not, why not?	Yes.
2.	What size of offshore renewable energy projects do you think are appropriate for a New Zealand context?	This is a commercial question to be considered by any potential developer and may change over time as the electricity market evolves.
3.	Do you think the maximum size of a project should be put forward by developers and set out in guidance material, rather than prescribed in legislation? If not, why not?	Maximum project size should not be prescribed in legislation – guidance can be given and the criteria should be robust enough to ensure projects are feasible. The characteristics of a feasible project are likely to change over the lifetime of the legislation and any statement on project size could quickly become outdated and a barrier to development. Project viability would be affected if constraints during feasibility stage reduce area and therefore capacity.
4.	Should there be a mechanism for government to be able to compare projects at the commercial stage in certain circumstances? If yes, would the approach outlined in Option 2 be appropriate or would there be other ways to achieve this same effect?	Meridian supports a developer-led, non-comparative process at the commercial stage. Comparisons should only be carried out at the feasibility stage. Once a feasibility permit has been secured investors should have confidence in the pathway to commercialisation. Investor confidence will be significantly limited if there is a mechanism for competing projects to slow and disrupt progress to commercialisation. All potential developers in a wide geographic area (e.g. Taranaki) will be commercially interested in the extent and likelihood of other development as the volume of expected wind generation concentrated in an area will impact on forecast nodal price outcomes, price participation, and ultimately revenues for any project. The commercial risks associated with other nearby projects

		should not give any developer grounds to slow or disrupt competing projects.
5.	Are the proposed criteria appropriate and complete? If not, what are we missing?	The types of criteria contemplated in the discussion document seem broadly appropriate. However, they are described as considerations for a decision-maker on a permit application, and not as criteria to be met by a developer. Developers would have increased certainty if is clear what they need to do or demonstrate in order to pass the assessment for each criteria, and how the overall assessment and permit decision will be made, for example is it a points-based assessment and/or are there elements that must be passed to the satisfaction of the decision-maker.
6.	Should there be mechanisms to ensure developers deliver on the commitments of their application over the life of the project? If yes, what should these mechanisms be?	Such mechanisms would be appropriate during the development of a project but once a generation site is powered it would be onerous to require ongoing reporting for the life of the asset.
7.	Is 40 years an appropriate maximum commercial permit duration? If not, what would be an appropriate duration?	Yes. In addition, a developer should be able to apply for a further commercial permit for repowering and continuing to operate at an existing site.
8.	Should a developer that wishes to geographically extend their development be required to lodge new feasibility permit and commercial permit applications? Why or why not?	Yes.
9.	Would the structure of the feasibility and commercial permit process as described enable research and development and demonstration projects to go ahead? If not, why not?	Research and development and demonstration projects should be enabled under a feasibility permit.
10.	Is there an interdependency between the case for revenue support mechanisms and the decision as to whether to gather revenue from the regime? What is the nature of this interdependency?	Yes. One would be a revenue stream for a project and the other would be a cost. In both cases the Crown would be the counterparty and the revenue and cost would net out for both parties. The simplest form of support would be to not impose added royalty costs.

11.	Is there a risk in offering support mechanisms for offshore renewables without offering equivalent support to onshore renewables? Are there any characteristics of offshore renewables which mean they require support that onshore renewables do not?	Meridian opposes financial support mechanisms for offshore renewable generation (or, for that matter, for any form of renewable generation). It is not clear what problem public financial support would be trying to solve. There is massive renewable electricity generation investment occurring from both incumbents and new entrants without any public financial support. Subsidies in any form (including to provide revenue stability) would be a cost to taxpayers that delivered no net gain in renewable generation. The subsidised generation would simply displace other economic options that would have been built anyway without any support. Subsidies also risk further market distortions that then require further interventions to correct. For example, in Australia subsidised rooftop solar resulted in very low or negative daytime prices, and subsequently challenges for the economics of firm thermal generation and security of electricity supply. A lack of generation subsidies has long been a strength of the New Zealand electricity market and as generators we are proud to deliver investment free of subsidy to meet demand at least cost. To the extent developers need revenue stability, for example in order to gain project financing, then there are commercial mechanisms that can be explored such as PPAs. For well-resourced businesses, intermittency of generation and revenue is less likely to be a concern, particularly when a project forms part of a wider generation portfolio.
12.	Should there be a revenue flow back to government? And, if yes, do you have views on how this should optimally be structured?	Offshore projects would occupy public space rather than private land. Royalty revenues for the Crown may be reasonable and could be equivalent to the land acquisition or access costs for onshore developments. However, the impact of royalties on project economics must be carefully assessed. Royalties should reasonably reflect use of

		public resources without overly deterring investment.
13.	Do you agree with the proposed approach to cost recovery? If not, why not?	Yes.
14.	Is there anything you would like us to consider as we engage with iwi and hapū on Māori involvement in the permitting regime?	Iwi, hapū, and whānau will be best placed to comment.
15.	Have we identified the key design opportunities to work collaboratively with iwi and hapū alongside consultation? Is there anything we have missed?	Iwi, hapū, and whānau will be best placed to comment
16.	Are there any Māori groups we should engage with (who may not have already engaged)?	Iwi, hapū, and whānau will be best placed to comment
17.	For each individual development, should a single consent authority be responsible for environmental consents under the RMA and the EEZ Act? Why or why not?	Meridian is comfortable with the status quo where there is the ability to make a joint application with the process administered by the EPA and ministerial power to establish a Board if Inquiry to consider the application in its entirety.
18.	Do environmental consenting processes adequately consider environmental effects such that it is not necessary to duplicate an assessment of environmental effects in the offshore renewables permitting regime?	Yes.
19.	Should the offshore permitting regime assess the capability of a developer to obtain the necessary environmental consents? If not, why not?	See our response to question 20 below.
20.	What is the optimum sequencing between obtaining feasibility permits, commercial permits and relevant environmental consent(s)?	The optimal sequencing would be for environmental consents to be obtained before a commercial permit, i.e. environmental consents could be a pre-requisite to the granting of a commercial permit. The two could overlap somewhat to expedite a project but the environmental

		consent should be granted first. This would mean the decision-maker for the commercial permit would not need to consider environmental matters or the ability of the developer to obtain environmental consents, reducing duplication of effort and costs to both the developer and the government.
21.	Are there are any other matters about the environmental consent regimes that you think need to be considered in the context of the offshore renewable energy permitting regime?	The offshore permitting regime should not duplicate environmental considerations. Meridian agrees that there may be value in expanding the scope of the National Policy Statement on Renewable Electricity Generation (or any equivalent in the National Planning Framework) so that the importance of renewable generation to the achievement of national emission reduction goals is recognised in environmental decision making under the EEZ regime as well as within territorial waters.
22.	How should the factors outlined influence decisions to pursue offshore renewable energy developments in the EEZ or the Territorial Sea? Are there other factors that may drive development in the EEZ versus the Territorial Sea?	In Meridian's opinion the regime should be open to developer-led projects in both the territorial waters of New Zealand and the EEZ. Feasibility work by developers will identify the most economic, and low risk sites for environmental consenting. Environmental impacts and competing uses are not likely to be distinctly different on one side of the marine boundary compared to the other. There is likely to be just as much variability within each area. Certainty the natural environment does not conform to jurisdictional boundaries.
23.	Are the trade-offs between a developer-led and a TSO-led approach, set out above, correct? Is there anything missing? What could we learn from international models?	Meridian supports a developer-led approach to give developers more control and confidence regarding cost and timeframes. Under a TSO-led approach, we would not expect transmission infrastructure to be publicly funded like the Netherlands, rather it would be Transpower capital expenditure that would be recovered from the connection customer over the life of the asset. Public funding of transmission would be a separate

		consideration as it would be a form of subsidy for offshore projects. Developer-led projects would still need to connect to the grid at an onshore grid injection point. The current Transpower connection queue could be a barrier for projects as investment decisions may not be made in the absence of confirmed grid access in a timely manner. Transpower states that the current connection queue process is for projects up to 500MW. However, bespoke connection arrangements may also need to be considered for offshore projects smaller than 500MW.
24	Which party do you think should build offshore connection assets? Can existing processes already provide the flexibility for this to be carried out by the developer?	Development and construction of offshore connection assets should be developer-led. The assets could be operated and owned by developers by designating the connection point at the onshore substation. Giving ownership and operation of multiple offshore transmission assets to Transpower adds risk to developers and significant additional operational risk for Transpower. In Meridian's opinion existing processes provide the flexibility for offshore connection assets to be built and maintained by developers.
25.	What are the potential benefits and opportunities for joint connection infrastructure? Do you agree with the barriers set out and how could these be addressed?	We agree there may be potential benefit in joint connection infrastructure and that developers could reach commercial agreements to reduce overall costs. However, the barrier identified will make this challenging as will the added complexity of competitors undertaking collaborative activities while remaining in compliance with the Commerce Act. These are barriers for developers to consider and overcome where the identified benefits of joint connection infrastructure outweigh the costs. We do not see a role for the Government.
26.	Do you agree with the representation of the timeline challenge for onshore interconnection assets? What opportunities might there be to front load planning work for interconnection	These challenges also exist for onshore generation developers and incentivise generation investment that most efficiently utilises the grid. If developers want to accelerate work on interconnection

	upgrades? What role do you see for the developer in this?	upgrades this should be achievable on commercial terms. For example, in 2019 Meridian and Contact entered into commercial agreements with Transpower to expedite work on the Clutha Upper Waitaki Lines Project and reduce transmission constraints in the event of a smelter exit. Similar arrangements could be agreed with an offshore developer to expedite interconnection works. However, Commerce Commission approval for any major capital expenditure would also be required.
27.	What changes might be needed in order to deliver the types of port infrastructure upgrades needed to support offshore renewables?	Developers would need to consider this challenge and come to commercial agreements with ports regarding any changes necessary to meet their needs.
28.	Should developers be required to submit a decommissioning plan, cost estimate and provide a financial security for the cost estimate? If not, why not?	Yes.
29.	Should the decommissioning plan, cost estimate and financial security be based on the assumption of full removal?	In other jurisdictions, regulations allow developers to agree alternatives to full removal based on minimising environmental effects. There is a risk of high levels of environmental damage during removal of buried elements (cables and foundation structures). Decommissioning should follow a best practice plan agreed by the environmental consenting authorities. The decommissioning plan, cost estimates, and financial security should be based on this consented best practice plan too, rather than require full removal at greater harm to the environment. This may just be a definitional question of what is meant by “full removal” under the proposed regime.
30.	What are your views on the considerations set out in relation to the calculation of the cost estimate and financial security value or suggested approach for financial security vehicle?	The considerations in the paper on cost calculation and financial security vehicles seem reasonable.

		In Meridian's opinion bank securities would be the vehicle most likely used by developers.
31.	What should the developer be required to provide in relation to decommissioning at the feasibility application stage?	Meridian agrees that a feasibility application should demonstrate an initial indicative understanding of decommissioning requirements, capability and experience to execute on those requirements, and plans to work towards a full decommissioning plan at a later stage. In addition, concrete decommissioning plans and security requirements should be included in a feasibility application to the extent that structures would be established during the feasibility stage (for example for research and development or demonstration projects).
32.	What ongoing monitoring approach do you think is appropriate for the decommissioning plan, cost estimate and financial security?	Given the conservatism and inflation adjustments built into the proposed initial cost assumptions, it may be that a less onerous approach could be considered. For example, a review every five years with the option for ad hoc reviews initiated by the Government when it becomes aware of material changes.
33.	Are there any other ways in which the regulatory regime could encourage the refurbishment of infrastructure or the recycling of materials?	Decommissioning plans should not be time bound and there should absolutely be scope to delay decommissioning to facilitate extensions to the economic life of offshore generation. Extensions to commercial permits should be allowed on the same terms as the initial commercial permit.
34.	Should offshore renewable energy projects applying for a consent to decommission be required to provide a detailed decommissioning plan related to environmental effects for approval by consent authorities?	Yes.
35.	How can the design of the regulatory regime encourage compliance so as to reduce instances of non-compliance?	Meridian agrees that the VADE model should be followed and that easily understood rules and guidance will be the key enablers of compliance.

36.	Is the compliance approach and toolbox, described above, appropriate for dealing with non-compliance within the regulatory regime?	Yes.
37.	Should the decision maker within the regime be the regulator but with an option for the Minister to become the decision maker in a specific set of circumstances? If not, why not?	Meridian supports decision-making by an independent regulator rather than a Minister because this would ensure an objective assessment by the relevant experts and greater consistency in the application of the regime across political cycles.
38.	Should there be an opportunity for public submissions on the commercial permitting decision? What would this capture that the environmental consent decision does not?	Meridian agrees that applications and decisions should be public. However, we do not see a need for duplication of the public submission process under the environmental consenting regimes. Another public submission process would add significant costs, would be a source of confusion for stakeholders, and would not improve the quality of decision-making under the new regime. We therefore support Option 1: notification only.
39.	Should permitting decisions be able to be appealed, and if so, which ones? Which body should determine such appeals?	Yes. Any decision of the regulator should be open to appeal to the High Court on a point of law or to judicial review.
40.	What early information would potential participants of the regime need to know about health and safety regulations to inform decisions about whether to enter the market?	Developers should be confident in their ability to meet high health and safety standards. We do not expect this to be a barrier to market entry.
41.	What are your views on the approach to safety zones including the trade-offs between the different options presented?	We agree that option 4 could be a good balance between different interests.
42.	Do you have any views or concerns with the application of these proposals to other offshore renewable energy technologies?	No. The regime should be technology neutral.