

Via email: reviewconsultation2022@ea.govt.nz

14 December 2022

Promoting competition in the wholesale electricity market in the transition toward 100% renewable electricity

Mercury welcomes the opportunity to provide feedback to the Electricity Authority (the Authority) on the consultation paper *Promoting competition in the wholesale electricity market in the transition toward 100% renewable electricity*, October 2022, (Consultation Paper). No part of this submission is confidential.

The Consultation Paper seeks feedback on whether and what changes to the wholesale electricity market settings are required to promote competition for the long-term benefit of consumers in the transition toward the aspirational goal of 100% renewable electricity generation by 2030.

Mercury supports in general the Authority's proposals to strengthen settings that promote wholesale market competition and the view that more fundamental structural options are currently not justified based on available evidence. In particular, Mercury considers that the Authority should focus on measures that enable investment in new renewable generation as this would best promote competition and enable the decarbonization of the New Zealand economy. As such, the present submission addresses the following points in turn:

- Promoting competition between generators by reducing the barriers to investment in renewable generation;
- Preparing a roadmap of the Authority's proposed measures; and
- Impact of carbon prices on electricity prices.

Further comments are provided in response to the Authority's consultation in the annex.

Process of competition amongst generators

Mercury considers that the Authority's proposals to strengthen settings to promote wholesale market competition, if appropriately implemented, would promote wholesale market competition during the decarbonization and electrification of the economy.¹

Mercury supports in general the Authority's conclusion that changes in spot prices appear to be explained mostly by underlying demand and supply factors.² This outcome is consistent with a real-world process of competition in the wholesale market that is effective and that enhances economic efficiency.

Mercury also recognizes the importance of the threat of market entry to promoting competition, and the value of measures that reduce the barriers to entry and enable entrants to invest in renewable generation. Addressing barriers to investment should enhance competition by enabling incumbents and entrants to engage in a rivalry over investing in renewable generation. This rivalry will become more important looking forward as demand and supply conditions become more dynamic. This is expected to create commercial opportunities more generally that will incentivize innovation and investment along the energy supply chain, including the diversification of sources of renewable

¹ Summarised in the Consultation Paper, Table 1 *Proposal to strengthen settings to promote wholesale market competition*, page v

² Consultation Paper, page ii.



generation, batteries, distributed energy and demand responses. It is expected to involve decisions regarding the timing and location of significant, irreversible investments, where there is uncertainty.

The Authority's proposals to strengthen settings to promote wholesale market competition is an appropriate starting point for considering measures that would promote this rivalry.

Roadmap for proposals to strengthen settings that promote wholesale market competition

Mercury proposes that the Authority prepare a plan that brings its proposals to strengthen settings that promote wholesale market competition together with Boston Consulting Group's (BCG's) preferred pathway, titled *Smart System Evolution*, in its report on *The Future is Electric: A Decarbonization Roadmap for New Zealand's Electricity Sector*

BCG's preferred pathway encourages a whole-of-system transition, including batteries, distributed energy and demand responses. It shows how the sector can contribute to reducing emissions faster and deeper than under the Emissions Reduction Plan, reaching 98% renewable generation by 2030 and resulting in greater household energy affordability. BCG estimates that this will require an unprecedented investment of \$42 billion in total in the 2020s across generation, transmission and distribution infrastructure. This investment, combined with accelerating electrification of transport and heat, will deliver 8.7 Mt CO₂-e of emissions reductions in 2030, equivalent to a 27% reduction in energy emissions over the next 8 years.³

BCG considers that its roadmap of its priority recommendations over this decade would:⁴

- support the accelerated development of renewables;
- encourage the right energy and capacity mix;
- scale-up transmission and distribution investment;
- enable a smart electricity system;
- drive decarbonization through electrification; and
- enable the implementation of the roadmap.

Mercury proposes that the Authority work with the industry to bring its proposals together with this preferred pathway as they traverse decisions that should be coordinated over the whole system.⁵ This coordination is particularly important because \$12.1 billion of the \$42 billion investment noted above would be in renewable and flexible generation assets, which would be a significant driver of competition amongst the generators.

Impact of carbon prices on electricity prices

Mercury agrees with the Authority's conclusion that overall, the acceleration in the renewable investment pipeline suggests carbon pricing is achieving its intent:⁶

Authority-commissioned survey of the investment pipeline indicates renewable generation development has accelerated. Committed investment is now ~2.5 times the average rate achieved in the last decade. And there is a substantial ~8,000 GWh/year of actively pursued renewable generation that could be in service by 2025. Most of those projects are solar farms, a large share of which are large overseas developers.⁷

³ BCG report, page 3.

⁴ The roadmap is summarised in the BCG report diagram *Roadmap of priority recommendations in the 2020s*, page 18

⁵ Mercury also notes that there also additional material that might feed into this process including the Authority's [Vision for the Future](#) and the Market Development Advisory Group Price *Discovery in a renewables-based electricity system* options paper which sets out five key areas of action.

⁶ Consultation Paper, page 26.

⁷ Consultation Paper, page iii.

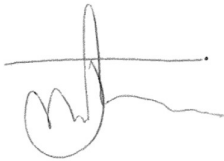


More generally, the BCG report indicates that the level of investment in renewable generation needs to accelerate irrespective of the pathway the energy sector takes. BCG assess five pathways that cover possible future states of the sector, including: *Business-as-usual*; *Renewable Energy Pioneer*; *Mega Infrastructure Build*; *Green Export Powerhouse*; and *Smart System Evolution* which is its preferred pathway.⁸ BCG note that for all pathways there is a sharp increase in renewable capacity and generation by 2030, which is a function of carbon prices, amongst other things.⁹

Mercury considers that the carbon price will in general be key to accelerating investment in renewable generation, which in turn as noted above is a significant driver of competition amongst the generators.

Mercury looks forward to engaging with the Authority and industry on progressing proposals to strengthen settings to promote wholesale market competition.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Nick Wilson', with a horizontal line above it.

Nick Wilson
Head of Government and Industry Relations

⁸ BCG report, page 67

⁹ BCG report, page 72.



Annex: Authority consultation questions with Mercury’s responses

Consultation Question	Proposed response
Chapter 2: Competition for the long-term benefit of consumers	
1. Do you agree that a key competition issue in the transition is that it weakens competition in extended times when intermittent generation cannot run?	Whether competition is weakened when intermittent generation cannot run for extended periods in the future will depend on the scope of investment across the whole-of-system. An expectation looking forward of such periods creates competitive opportunities in the long run that drives innovation and investment. This is expanded above under the heading <i>Process of competition amongst generators</i>
2. Do you have any comments on the contents of this chapter?	No.
Chapter 4: Investment in net new renewable generation	
3. Do you have any comments on the impediments to generation investment?	<p>With respect to the network connections, BCG suggests that today’s just-in-time approach to transmission and distribution network investment is not suitable for the expected rapid increase in electrification and renewable generation development.</p> <p>Mercury notes that Transpower through the <i>Net Zero Grid Pathways</i> programme is working to support rapid electrification and renewable generation development, which appropriately executed would promote competition.</p> <p>In addition, getting the settings right for the resource management reforms currently underway is crucial to promoting competition. This should reflect the need to accelerate investment in renewable generation.</p>
4. Do you agree that the lag in investment is not due to anticompetitive behaviour to slow down investment and discourage entry, or can you provide instances or other evidence to the contrary?	No. The Authority notes “... <i>based on the scale of new investment being actively pursued and interviews with developers on the investment pipeline, there is currently no evidence that is suggestive of anti-competitive behaviour by incumbents aimed at discouraging entry</i> ”. ¹⁰
5. Do you have any comments on the role and impact of carbon pricing on investment and wholesale market competition or the other contents of this chapter?	See discussion above under the heading <i>Impact of carbon prices on electricity prices</i> .
Chapter 5: Implications and options	
6. Do you agree with the Authority’s overall conclusion that it currently considers that continued reliance on the current conduct-based measures to mitigate the exercise of market power remains broadly appropriate in the transition toward 100% renewable electricity?	Mercury agrees in general with the Authority’s overall conclusion that continued reliance on the current conduct-based measures to mitigate the exercise of market power remains broadly appropriate in the transition toward 100% renewable electricity.
7. Do you agree with the objective and evaluation criteria set out in this chapter?	Mercury agrees in general with the objective and evaluation criteria.

¹⁰ Consultation Paper, page iv.



8. Do you have any comments on the contents of this chapter?	No.
Chapter 6: Options to address market power	
9. Are there any other options that would promote wholesale electricity market competition in the transition that you consider would be more effective and efficient?	Mercury considers that increasing demand response participation will enhance the process of competition across the sector. BCG notes a smarter, more flexible electricity system will save around \$10 billion on an NPV basis to 2050, incorporating demand response, smart electric vehicle (EV) charging, and distributed energy resources. Investment in new technologies like distribution network visibility and coordination will unlock many of these measures, enabling at least 2 GW of demand-side flexibility by 2030 and 5.8 GW of demand-side flexibility by 2050.
10. Do you have any comments on the contents of this chapter?	No.
Chapter 7: Options to facilitate the entry by new generation	
11. Are there any other options that would better facilitate efficient investment in renewable generation to promote wholesale electricity market competition in the transition?	<p>The Authority invites MBIE and MfE to investigate evidence for, and the merits and feasibility of, applying pro-competitive conditions on consents for renewable generation, specifically suggesting use-it-or-lose-it conditions as an example.¹¹</p> <p>Mercury, as a general point, considers that it is crucial to carefully assess across the whole system whether such a regulatory proposal (or any proposal) would promote competition or raise the risk of unintended outcomes. At one level, ensuring there is an efficient consenting pathway will be important but the Authority's reference to the use-it-or-lose-it condition is an example of a measure that may be detrimental to the process of competition in a dynamic market, as it may create a barrier to investing by removing options for managing risk.</p>
12. Do you have any comments on the contents of this chapter?	No.

¹¹ Consultation Paper, paragraph 7.46

