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Electricity Authority

By email: reviewconsultation2022@ea.govt.nz

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

Introduction

1. Energy Resources Aotearoa is New Zealand's peak energy advocacy organisation. We enable collaboration across the energy sector through and beyond New Zealand's transition to net zero carbon emissions in 2050.
2. This submission on the Electricity Authority (the Authority)'s *Promoting competition in the wholesale electricity market in the transition toward 100% renewable electricity* (the Issues Paper) should be read in conjunction with our December 2021 submission available at: www.energyresources.org.nz/dmsdocument/205.
3. The body of this submission discusses the proposals that we consider highest priority. *Attachment 1* provides a summary of our views on the full Issues Paper.

Overarching points

The scale of the electrification challenge means we need all options on the table

4. The Issues Paper reinforces that 400-500 MW of new electricity generation (and/or demand response) capacity – and associated transmission and distribution infrastructure – needs to be built every year until 2050. This roughly equates to doubling our current 10 GW capacity in the next 30 years, primarily with wind and solar (both variable generation sources with lower capacity factors than thermal, geothermal, and hydro). Our *Fuelling the Energy Transition* report explores the energy gap that emerges across a range of scenarios, finding that a market- and technology-led transition will minimise these at least cost.
5. The scale of this challenge is exacerbated by the fact most other countries across the world will also be pursuing an aggressive buildout of renewable electricity generation capacity at the same time, to meet their own emissions reduction commitments to 2050. This suggests significantly increased global demand for the resources and skills needed to meet this challenge, much of which New Zealand imports.



6. As shown by our recent *Fuelling the Energy Transition* report and BCG's *The Future Is Electric* report, natural gas can and should play a key role in helping to fill the energy gap through the transition. A continued role for natural gas fast-start peaking enables a focus on the 'big prize' of electrification across the wider economy, particularly in transport and process heat.¹

We support the Authority's focus on facilitating new investment

7. We support the Authority's overall focus on facilitating new capital investment in generation/demand response capacity and infrastructure, rather than on structural market reform. The (threat of) new market entry is one of the most powerful drivers of competitive market behaviour. As the Issues Paper notes, any structural response to allegations of the exercise of market power must meet a very high evidential threshold, and will take time to implement, with resultant protracted disruption to the electricity market.

Settings should support additional thermal fast start peaking investment

8. We are optimistic New Zealand can meet the electrification challenge, but all options should be on the table so that they can be explored by market participants. Small-scale pumped hydro, batteries, and demand response will each play a role in meeting growing peak demand – but they will not be sufficient without the support of gas peaking capacity.
9. Our December 2021 submission on the Authority's *Market Monitoring Review of Structure, Conduct and Performance in the Wholesale Electricity Market* details the critical role of gas peaking as a backup to unlock renewable generation investment.² This will become even more critical soon – New Zealand's top 10 largest peak demands in the last 10 years all occurred in the past two winters.
10. Transpower's recent *System Operator Winter Review Paper* similarly emphasises the need for additional flexible (fast-start, rather than slow-start) capacity to address significant recent and forecast peak demand growth.³ Its scenarios show that in low wind conditions, additional capacity will be required to cover peaks if more than 480 MW of slow-start thermal capacity is not offered.
11. New fast-start gas peaking plant is already consented, and could be built within a year or two, but remains unconstructed. A critical focus should be creating the environment that allows fast-start thermal projects to be committed (provided they stand on commercial grounds).

1 See our report here: <https://www.energyresources.org.nz/assets/Uploads/Fuelling-the-Energy-Transition-Full-Report.pdf>

2 Submission available at: <https://www.energyresources.org.nz/dmsdocument/205>

3 See Appendix 1 of the report: https://tpow-corp-production.s3.ap-southeast-2.amazonaws.com/public/bulk-upload/documents/Market%20insight%20report%20-%20Winter%20Review%20-%2011%20Nov%202022.pdf?VersionId=QaQVHc8zmQ6_FpC_Ux7G0imodObF9Vt2

Comments on proposals

The Authority will analyse thermal generation transition risks to 2030

12. The Issues Paper commits the Authority to exploring thermal generation transition risks in the context of demand to 2030, its role in hydro firming and more prevalent solar and wind generation, and options to mitigate transition risks.
13. We support this work and welcome any opportunity to provide input. The risk of the premature exit of fossil fuelled thermal peaking and its potential consequences for energy security and energy affordability needs to be fully understood and incorporated into the Gas Transition Plan due in 2023.
14. We agree with the Authority that the primary driver for progressive exit of fossil fuelled generation (particularly from baseload and flexible generation) should be the market (as opposed to regulatory intervention or mandate).
15. We note the Authority's concurrent consultation on managing risk to consumers through winter 2023 (building off Transpower's recent work in this space) and will engage actively with this process, again emphasising the need for a supportive investment environment for fast-start gas peaking capacity as part of a suite of solutions to the peak demand challenge.

Improving disclosure of gas information

16. The Issues Paper invites MBIE to progress policy work to amend the Electricity Industry Act 2010 so that section 46 (information requirement) powers include parties in industries critical to security of supply, such as the gas industry, that are not direct participants in the electricity market. The Issues Paper envisages this would include access to information on supply agreements with parties outside the electricity sector; how deliverability between customers is prioritised when supply is constrained; and storage infrastructure limitations.
17. We strongly oppose this proposal. We favour market-based responses if allocation issues arise, and our preference is therefore the status quo. As a general principle it is for generators to manage their fuel supply risks as other market participants do, and they are well practiced at doing so. We have also seen recent innovation in this space with Genesis' offering of Market Security Options.
18. We do not believe a public policy rationale has been sufficiently established and evidenced to justify this measure, and it appears to border on regulatory overreach. Further information about the problem should be provided to give the market confidence this measure is necessary.⁴

⁴ Note these proposals also needs to address the risk of government failure. Here our use of the term 'government failure' does not convey a political judgement nor is it necessarily pejorative. Rather, we use the term in its public economics and public administration sense whereby government policy can lead to a misallocation of resources. Examples include regulatory creep and bureaucratic failure.

19. Gas supply agreements are highly commercially sensitive, and a proposal such as this brings risk of unintended consequences such as undermining the very investment confidence the Authority seeks to support, and undermining incentives to contract for gas.
20. If this proposal is taken forward for further assessment and development, this assessment must carefully balance its expected benefits with its significant risks and must involve robust protection of commercially sensitive information. At the very least we would expect to see clear articulation of the case, showing how the public benefits of such a proposal would outweigh its private costs.

Addressing regulatory uncertainty arising from ongoing policy work programme

21. The Issues Paper identifies several sources of regulatory uncertainty that continue to act as barriers to new investment in renewable electricity generation capacity. These include the:
 - ongoing development of the Gas Transition Plan and National Energy Strategy (due in 2023 and 2024 respectively);
 - NZ Battery Project (which among other options is exploring the Lake Onslow pumped hydro proposal); and
 - aspirational 2030 100% renewable electricity target.
22. It invites MBIE to bring forward completion of the Gas Transition Plan, National Energy Strategy, and NZ Battery Project to address this regulatory uncertainty.
23. While we agree that these are ongoing sources of regulatory and policy uncertainty, and that an earlier resolution to this ongoing work would generally be desirable, any acceleration has a countervailing risk of undermining the quality and transparency of its outputs. This risk is particularly relevant given the immense energy policy workload and resourcing constraints across the system.
24. On balance we therefore support the Gas Transition Plan and National Energy Strategy proceeding on their status quo timelines. Our strong view is that these should be taken as opportunities to 'reset' the narrative by acknowledging and reaffirming the critical role of the natural gas sector through and beyond the energy transition.
25. Regarding the NZ Battery Project, we support a timely conclusion to Phase 1 (due early 2023) that rules out further development of the Lake Onslow proposal.⁵ The project has been flawed from the start because its terms of reference did not include gas storage as a potential cost-effective solution.

5 For more commentary on why we do not support development of the Lake Onslow pumped hydro proposal, see pages 51-55 of our report, *Fuelling the Energy Transition*:
<https://www.energyresources.org.nz/assets/Uploads/Fuelling-the-Energy-Transition-Full-Report.pdf>

26. The 2030 100% renewable electricity target is also identified as a source of uncertainty, but the Issues Paper does not specify a solution. We have consistently argued that the target should be dropped. In our view this would be the most effective and immediate step the Government could take to support the rapid investment in new renewable generation capacity required through the 2020s. This position enjoys support from a wide range of sector participants and commentators, including the Interim Climate Change Commission and the Climate Change Commission.
27. Consented gas-fired fast start peaking generation cannot proceed while the target – even if ambitious – remains in place, because it brings a credible risk of future government intervention to achieve it. These critical investments cannot be justified with an assumed end date of 2030.⁶
28. Finally, we note the significant detrimental impact the 2018 ban on new offshore oil and gas exploration has had on investment confidence, both within the oil and gas sector but also more broadly. The ban directly contravenes the Authority's position – shared by us – as referenced in paragraph 14 above that the exit of fossil fuelled generation (and fossil fuels more generally) ought to be market driven.
29. Given the enduring role of natural gas through the transition, reversal of the ban would support the investment (both in existing and in new fields) required to secure affordable and reliable supply of gas over the medium-long term. This in turn will support increased investment in renewable electricity supply.
30. In our view this is a blind spot in the Authority's analysis, given it is a first-order solution to the problems being discussed.

Measures to highlight and facilitate investment opportunities

31. The Issues Paper suggests:
 - producing an annual electricity generation investment opportunities report (MBIE);
 - establishing a one-stop shop for overseas investors in renewable electricity generation (MBIE); and
 - publishing guidance for overseas investors in renewable electricity generation (Overseas Investment Office or OIO).
32. In the absence of a specified market failure our general view is that the competitive market is the best means to identify opportunities, with myriad domestic and international investors actively exploring projects. The dramatic

6 Note we do not support the 2035 50% renewable total final energy consumption target on the same basis – that it constrains options.

increase in generation enquiries being fielded by Transpower suggests a market failure is not present.

33. To the extent that regulatory regimes are proving barriers to investment, a 'one stop shop' portal or guidance from officials might be a helpful low-cost solution. But we suggest that the regulatory regimes in question should themselves be assessed to ensure they are – both in substance and in implementation – efficient and proportionate to any risks they are designed to manage.

Conclusion

34. The transition to an increasingly renewable electricity system raises significant challenges to the long-term benefit of consumers (including issues of competition as is the focus of this consultation).
35. The required investment in new electricity generation (and demand response) capacity is historic in its scale and its pace. We strongly support a market-led approach as the most efficient and effective means to deliver against this challenge. We welcome the Authority's focus on addressing residual barriers which undermine this market approach (notwithstanding our view on any specific proposals).
36. Clearly, the most immediate and effective means to unlock this investment is to remove as many policy barriers as possible, as quickly as possible. But we caution against bringing forward work already underway – given the risk this undermines its quality or procedural integrity. We continue to seek resolution of the NZ Battery project in early 2023 that rules out further progression of the Onslow pumped storage proposal.
37. An interim 'quick win' is already obvious: the aspirational 100% renewable electricity target is stymying critical investment in new fast start gas peaking, and in the renewable electricity generation capacity it would support. It should be dropped. We encourage the Authority to consider recommending as such – we strongly believe this would be in the long-term interests of consumers.

Attachment 1: Summary of submission

Proposal	Our view
<i>1. Steps the Electricity Authority is taking or proposing to constrain the exercise of market power</i>	
Continue proactive monitoring and enforcement of trading conduct in the spot market and investigate the application of trading conduct rules to the forward market.	N/A
Investigate mechanisms to accelerate the development of the demand response market (in addition to its current work programme).	N/A
Conclude the current consultation on the proposal to prohibit inefficient price discrimination in very large contracts and, following the consultation process, determine whether to implement a disclosure, monitoring, and voluntary clearance regime.	N/A
Clarify disclosure requirements about current or expected constraints that could impact generation capacity and arrange a centralised location for disclosure.	N/A
Explore better information sharing processes and obligations with the Commerce Commission on any information the Authority collects that may raise concerns about restrictive trade practices, collusion, or misuse of market power.	We support. Establishing efficient information sharing among agencies (assuming appropriate information security parameters are in place) is best practice.
<i>2. Steps the Electricity Authority is taking or proposing to facilitate investment in renewable generation</i>	
Undertake regular monitoring of progress on generation investments, and an annual update of the investment pipeline and impediments.	N/A
Regularly collect information on offtake and 'firming' agreements (and if feasible declined requests) to understand and build the evidence base about the nature and scale of current and emerging access issues reported by developers of new generation.	We support on the basis this is voluntary. We note recent changes in the Code now mandate disclosure of mass market internal transfer prices by gentailers, which should provide transparency and data on any potential issues.

Proposal	Our view
Improve the Electricity Hedge Disclosure System to improve its functionality and make contract details more transparent.	N/A
Investigate and test the case for providing or requiring longer-dated futures (for instance products traded on the ASX).	N/A
Analyse thermal generation transition risks in the context of demand to 2030, its role in hydro firming and more prevalent solar and wind generation, and options to mitigate transition risks.	<p>We support. The risk of premature exit of fossil fuelled thermal peaking and its potential consequences for energy security and affordability need to be fully understood and incorporated into the Gas Transition Plan. We agree with the Authority that the primary driver for progressive exit of fossil fuelled generation (particularly from baseload and flexible generation) is the market, and this should remain the case (as opposed to regulatory intervention or mandate).</p>
<p><i>3. Options other entities could progress to constrain the exercise of market power</i></p>	
<p>MBIE to progress work to improve disclosure of information on availability of gas for electricity supply, in particular an amendment to the Electricity Industry Act 2010 so that section 46 powers include parties in industries critical to security of electricity supply, and in particular the gas industry.</p>	<p>We do not support. We favour market-based responses if allocation issues arise, and our preference would therefore be the status quo.</p> <p>Gas supply agreements are highly commercially sensitive, and this could undermine investment certainty, chill investment in supply arrangements, and undermine incentives to contract for gas. We do not consider that the Issues Paper sufficiently evidences a market failure on this point.</p> <p>Any such proposal must carefully balance its expected benefits with its significant risks and must involve robust protection of commercially sensitive information.</p>

Proposal	Our view
<i>4. Options other entities could progress to facilitate investment in new renewable generation</i>	
<p>MBIE to bring forward the completion of the Gas Transition Plan, Energy Strategy, and NZ Battery project, as reduced uncertainty would contribute to more renewable generation investment, and so lower prices, sooner.</p>	<p>We do not support. Accelerated resolution would be desirable, but highly likely to undermine quality and transparency of outputs at a time when the energy policy system is under capacity and capability constraints with a heavy work programme.</p> <p>However, we do support ruling out of Lake Onslow pumped hydro by the end of Phase 1 (early 2023) of the NZ Battery project.</p>
<p>MBIE to produce an Annual Electricity Generation Investment Opportunities report, targeting international developers, with input from NZ Trade & Enterprise, Transpower, the Electricity Authority, Overseas Investment Office, and Ministry for Environment.</p>	<p>We do not support. No market failure is specified, and we consider the competitive market (with access to global capital and expertise) is already actively exploring opportunities. A multitude of private entities are more likely to identify commercial opportunities than officials.</p>
<p>MBIE to investigate the merit of a providing a one-stop shop for overseas investors in renewable electricity generation, to help navigate and streamline the regulatory requirements and agencies, and advice on relevant stakeholders they should engage with.</p>	<p>We support. In addition, we suggest that if the regulatory regime(s) are proving barriers to new investment generation, the regulations themselves should be assessed to ensure they are proportionate and efficient, both in substance and in application.</p>
<p>The Overseas Investment Office to publish, before the end of 2022, guidance for overseas investors in renewable electricity generation, and consider providing a helpdesk to support developers to navigate the Act's requirements.</p>	
<p>MBIE and the Ministry for Environment to bring forward their work to strengthen national direction for renewable electricity to inform local planning and resource management consenting. This should reflect the Government's 100% renewable electricity aspiration, electrification and renewable energy goals, and the implications for investment in renewable generation that needs to occur.</p>	<p>N/A</p>

Proposal	Our view
<p>MBIE and the Ministry for Environment to investigate the evidence for, and the merits and feasibility of, applying pro-competitive conditions on consents for renewable generation (e.g., use-it-or-lose it).</p>	<p>We do not support. We do not consider consents should intrude into the commercial terms and conditions of projects. A decision on whether to 'pull trigger' on a project is an inherently complex commercial question. Applying these conditions would undermine investment certainty and no market failure is evidenced to justify this.</p>
<p>Transpower to publish connection enquiries and connection studies and to streamline the application processes.</p>	<p>N/A</p>