

Aurora Energy's submission

Measures for Transition to an Expanded and Highly Renewable Electricity System

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1. Introduction

- 1. We welcome the opportunity to submit our views in response to the issues paper on Measures for Transition to an Expanded and Highly Renewable Electricity System.
- 2. Our submission is focussed on the questions raised in parts 3 and 4 of the paper as these are the topics most relevant to our business.
- 3. No part of our submission is confidential.

2. Part 3: Networks For The Future

Q29. Do you agree we have identified the biggest issues with existing regulation of electricity distribution networks?

- 4. We agree that the regulatory environment for network investment does not currently provide adequate flexibility to respond quickly to changing circumstances. We have particular concerns with:
 - 4.1. The lack of clarity about the information required to support reopener applications lodged with the Commerce Commission (the Commission) and the uncertainty about the Commission's response timelines to applications once they are lodged. These uncertainties make it difficult for distributors to invest with confidence ahead of demand.
 - 4.2. The application of revenue caps by the Commission which limit distributors ability to recover the costs of network investment. While we understand the Commission's desire to limit the impact on consumers, we are concerned about the arbitrary way in which revenue caps are determined and the Commission's reluctance to acknowledge the financeability concerns raised by distributors. This creates a further barrier to distributors making the necessary investments required to support the energy transition.
- 5. We disagree with the assertion that connection practices for industrial decarbonisation and public EV chargers are creating a barrier for new connections. While there may be isolated instances where connection practices have provided frustrations for new connecting parties we are not aware of this occurring on our network. We encourage MBIE to quantify the extent of this perceived issue before pursuing any form of industry standardisation which may have unintended consequences.
 - Q30. Are there pressing issues related to the electricity distribution system where you think new measures should be looked at, aside from those highlighted in this document? How would you prioritise resolving these issues to best enable the energy transition?
- 6. No. The document covers the most important issues facing the electricity system.



- Q31. Are the issues raised by electricity distributors in terms of how they are regulated real barriers to efficient network investment? Please give reasons for your answer. Is there enough scope to address these issues with the current ways distributors are regulated? If not, what steps would you suggest to address these issues?
- 7. Yes, the current Part 4 regime is a real barrier to efficient network investment. The Part 4 regime was an appropriate regime to regulate capex based infrastructure providers in a steady state. However, the electricity distribution industry of the future will require a step change in investment and trade-offs between tradition capex investment and non-network opex solutions. We encourage a comprehensive review of Part 4 to ensure that it supports the changing demands of the sector.
 - Q32. Are there other regulatory or practical barriers to efficient network investment by electricity distributors that should be thought about for the future?
- 8. In addition to the points raised in the consultation document we would also like to draw attention to the deficiencies of the IRIS mechanism in its current form. The IRIS mechanism is intended to incentivise efficient expenditure, however the mechanism relies on accurate forecasting of costs. It is our view that determining a reliable forecast basis will not be possible in the current industry context where there is such uncertainty about the scale and pace of electrification. As a consequence, the current IRIS mechanism has become a reflection of forecast accuracy rather than efficient expenditure.
 - Q33. What are your views on the connection costs electricity distributors charge for accessing their networks? Are connection costs unnecessarily high and not reflective of underlying costs, or not? If they are, why do you think this is occurring?
- 9. From Aurora Energy's perspective the connection costs we charge for new connections are directly related to the underlying costs of connection. We do not require new connections to fund upstream network reinforcement. However, we are aware that some distributors may not have sufficient regulatory allowances, or may have financeability constraints that mean they need to seek customer contributions towards upstream network reinforcement.
 - Q34. If you think there are issues with the cost of connecting to distribution networks, how can government deliver solutions to these issues?
- 10. Each distributor in New Zealand employs a Capital Contribution policy that reflects their individual network circumstances and complements their funding allowances set by the Commission.
- 11. We fear that further regulatory intervention may have unintended consequences, such as introducing additional barriers to those distributors that are already operating an efficient connection policy. As mentioned in our response to Q29, we believe this issue has been overstated and we encourage MBIE to quantify the extent of this issue before introducing regulatory change.



- Q35. Would applying the pricing principles in Part 6 of the Code to new load connections help with any connection challenges faced by public EV chargers and process heat customers? Are there other approaches that could be better?
- 12. It is important to recognise that any changes that reduce connection costs for new connections will result in increases to the distributors Regulated Asset Base (RAB) which will ultimately be socialised amongst all customers through increased lines charges.
- 13. We believe that consistency is paramount to ensure intergenerational equity between existing customers that have paid for their connection costs under previous policies will not be subsidising new connections. We caution regulators against making changes that benefit a vocal interest group to the detriment of other consumers.
- 14. Furthermore we note that the calculations under Part 6 are complex to apply and may slow down the connection process for load customers.
 - Q36. Are there any challenges with connecting distributed generation (rather than load customers) to distribution networks?
- 15. Part 6 is no longer fit-for-purpose and we support a comprehensive review of this section of the Code.
 - Q37. Are there different cost allocation models addressing first mover disadvantage (when connecting to distribution networks) which the Authority should explore, potentially in conjunction with the Commerce Commission?
- 16. Our view is that First Mover Disadvantage issues are best addressed by ensuring distributors have sufficient capex allowances that allow funding of upstream network investment. This means that new consumer connections are only required to contribute their individual connection costs.
 - Q38. Should the Electricity Authority look at more prescriptive regulation of electricity distributors' pricing? What key things would need to be looked at and included in more prescriptive pricing regulation?
- 17. Electricity distributors have made good progress towards more efficient pricing as evidenced by the scores in the Electricity Authority's 2023 Distribution Pricing Scorecards. This indicates the Authority's principles based approach is effective. Introducing new regulation at this stage of distributors pricing reform risks slowing the rate of progress.
 - Q39. Do current arrangements support enough co-ordination between the Electricity Authority and the Commerce Commission when regulating electricity distributors? If not, what actions do you think should be taken to provide appropriate co-ordination?
- 18. We do not have sufficient visibility of the arrangements between the Electricity Authority (the Authority) and the Commission to adequately respond to this question. We suggest Increased transparency between the Authority and the Commission would be a good first step.



- Q40. Will the existing statutory objectives of the Electricity Authority and Commerce Commission adequately support key objectives for the energy transition?
- 19. Our experience to date has been that the existing statutory objectives do not adequately balance the needs of consumers and the wider societal benefit of a transition to renewable energy. As outlined in our responses to Q29, Q31 and Q32 the current regulation is creating significant barriers for distributors that are trying to invest for the demands of electrification.
 - Q41. Should the Electricity Authority and/or the Commerce Commission have explicit objectives relating to emissions reduction targets and plans set out in law? If so,
 - Should those objectives be required to have equal weight to their existing objectives set in law?
 - Why and how might those objectives affect the regulators' activities?
- 20. Ultimately this is a decision for government to weigh the relative merits of longer-term environmental outcomes and shorter-term consumer outcomes.
 - Q42. Should the Electricity Authority and/or the Commerce Commission have other new objectives set out in law and, if so, which and why?
- 21. We are concerned about regulators current capability to respond in a timely manner to issues such as processing reopeners. We are worried that adding further objectives to regulators workloads will further decrease the responsiveness of regulators.
- 22. Furthermore, we need to be mindful of the increasing cost of regulation and the impact this is having on consumers. Over the past two years our consumers have seen a collective increase in costs from the Electricity Authority and the Commerce Commission of 17%. It is our expectation that any increase in costs resulting from changing objectives are subject to the same cost-benefit scrutiny as distributors' expenditure.
 - Q43. Is there a case for central government to direct the Commerce Commission, when dealing with Electricity Distributors and Transpower, to take account of climate change objectives by amending the Commerce Act and/or through a Government Policy Statement (GPS)?
- 23. Ultimately this is a decision for government to weigh the relative merits of environmental outcomes compared to other objectives.
 - Q44. If you answered yes to question 43, please explain why and indicate:
 - What measures should be used to provide direction to the Commerce Commission and what specific issues should be addressed?

No comment.

• How would investment in electricity networks be impacted by a direction requiring more explicit consideration of climate change objectives? Please provide evidence.

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No comment.

3. Part 4: Responsive Demand and Smarter Systems

- Q45. Would government setting out the future structure of a common digital energy infrastructure (to allow trading of distributed flexibility) support co-ordinated action to increase use of distributed flexibility?
- 24. A common digital energy infrastructure would help the use of distributed flexibility. However, there are steps that need to be taken before considering this approach. The biggest impediment to the uptake of distributed flexibility is access to smart-meter data that supports visibility of the LV networks.
 - Q46. Should central government see how demonstrations and innovation to help inform how trade of flexibility evolves in the New Zealand context, before providing direction to support trade of distributed flexibility? If yes, how else could government support the sector to collaborate and invest in digitalisation now?
- 25. The flexibility industry in New Zealand is still evolving and in the short-term regulators should allow the industry the room to innovate and collaborate. As mentioned in our response to Q45, the primary focus for regulators should be improving access to smart-meter data.
 - Q47. Aside from work already underway, are there other areas where government should support collaboration to help grow and develop flexibility markets and improve outcomes? If yes, what areas and actions are a priority?
- 26. No comment.
 - Q48. Could co-funding for procurement of non-network services help address barriers to uptake of non-network solutions (NNS) by electricity distributors?
- 27. As covered in our responses in part 3 of this document, the largest barriers to the uptake of non-network solutions are the limitations of Part 4 regulation. Changes that alleviate the inherent capex bias in regulatory settings as well as increased regulatory allowances will be of more benefit than co-funding.
 - Q49. Would measures to maximise existing distribution network use and provide system reliability (such as dynamic operating envelopes) help in New Zealand? If yes, what actions should be taken to support this?
- 28. The promotion of dynamic operating envelopes would be very beneficial to the efficiency of distribution networks. Regulators could help facilitate the adoption of this technology by



developing common terminology, standards, and contractual templates across all participants in New Zealand.

- Q50. What do you think of the approaches to smart device standards and cyber security outlined in this document? Are there other issues or options that should be looked at?
- 29. We support the work already underway by MBIE including the smart device standards. However, having access to the information (where and what) from those smart devices (e.g., residential EV smart chargers) would greatly benefit EDBs. Currently, EDBs do not have visibility of residential EV smart chargers.
- 30. Registration or application to the EDB, would significantly improve understanding the network impact of these smart devices. This would facilitate well-informed investment planning, addressing immediate power quality issues and support the growth distributed flexibility as a solution to resolve constraints.
 - Q51. Do you think government should provide innovation funding for automated device registration? If not, what would best ensure smart devices are made visible?
- 31. Aurora Energy proposes a Registry and Code change by the Electricity Authority to allow for smart device details such as residential EV smart chargers installation. We expect this change could mirror the current requirements for distributed generation. This change would expediate visibility of such smart devices to the LV network.
 - Q52. Are extra measures needed to grow use of retail tariffs that reward flexibility, so as to support investment in CER and improved consumer choice and affordability?
- 32. We do not believe additional measures are required to incentivise the uptake of retail tariffs that reward flexibility. We expect that retailer tariff offerings will naturally evolve to match flexible technology with consumer preferences.
 - Q53. Should the government consider ways to create more investment certainty for local battery storage? If so, what technology should be looked at for this?
- 33. No comment.
 - Q54. Should further thought be given to making upfront money accessible to all household types, at all income levels, for household battery storage or other types of CER?
- 34. No comment.
 - Q55. Should government think about ways to reduce 'soft costs' (like the cost of regulations, sourcing products, and upskilling supplier staff) for installing local battery storage with solar and other forms of CER/DER storage? If so, what technology should be looked at?
- 35. No comment.
 - Q56. Is a regulatory review of critical data availability needed? If so, what issues should be looked at in the review?



36. Yes, we believe access to smart-meter data is critical for the management of networks in the future. We encourage a regulatory review that focuses on equal access to data for all participants on fair commercial terms. This requirement should include sharing data with, and from, flexibility traders.

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