Appendix B Format for submissions Submission By: John Irving – Power Engineering Consultant, World Bank

Questions	Comments
01. Do you consider section 3 to be an accurate summary of the existing arrangements for power system operation in New Zealand? Please give reasons if you do not agree.	I think the EA is being cutely circumspect with its view of "existing arrangements" which have long been dominated by incumbents placing obstacles to reform and the introduction of these existing technologies
Q2. Do you agree that we have captured the key drivers of change in New Zealand's power system operation? Please give reasons if you do not agree.	Yes, although there is nothing new in with regard to the technology described in the EA report. The only surprise is that the EA has suddenly taken due notice of developments in the rest of the world and seems to be much more on the side of the consumer.
Q3. Do you have any feedback on our description of each key driver?	No – the main thing is for the EA not to be distracted by the warnings of technical/commercial disaster by incumbent industry cartels. I am sure there will be a pushback to the ideas expressed in this paper by gentailers and distributors.
Q4. What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.	The greater use of wireless internet to identify and inform power pricing opportunities so small domestic operators to participate in the market. In particular the lessons learned from NZ VPP experiences should be adopted asap ¹ .
Q5. Looking at overseas jurisdictions, what developments in future system operation are relevant and useful for New Zealand? Please provide reasons for your answer.	There is nothing particularly special about the NZ power system – aside from this observation being a myth to obstruct competition and change. One major development in the next decade will be an HVDC submarine interconnection (at half the cost of Lake Onslow) with Australia that will offer significant benefits in power trading
Q6. Do you consider existing power system obligations are compatible with the uptake of DER and IBR-based generation? Please provide reasons for your answer.	Of course they are. If the regulatory changes are made to enable the greater use of DER/IBR the technical issues, if any, can be resolved as they occur.
Q7. Do you consider we need an increased level of coordination of network planning, investment and operations across the New Zealand power system? Please provide reasons for your answer.	No. NZ prides itself in operating an open market – despite the fact it has long been dominated by the gentailer cartel. Any move to nationally "coordinate" planning will of course be driven by the existing players as necessary to protect their markets.
Q8. Do you think there are significant conflicts of interests for industry participants with concurrent roles in network ownership, network operation and network planning? Please provide reasons for your answer.	Yes – and in particular the distributors who are covered by price setting arrangements that are designed to continue on the basis of Business As Usual. For example Distributors should be enabled to provide local/street consumers with overnight battery storage services to enable the greater penetration of rooftop PV
Q9. Do you have any further views on whether this is a good time for the Authority to assess future system operation in New Zealand, and whether there are other challenges or opportunities that we have not covered adequately in this paper? Please provide reasons for your answer.	I am concerned this might sort of crystal gazing about the future became a delaying tactic for further reform. For example concerns about "duck curves" have often been cited as a reason to curtail PV. There will be many more disruptive technologies coming to the market and rather than trying to anticipate them it would be better to open-up the system to competition and see what issues may need to be dealt with

¹ https://www.pv-magazine.com/2022/11/11/virtual-power-plant-to-trade-grid-stability-services-in-new-