The Future Operation of New Zealand's Power System

Appendix B Format for submissions

Submitter: Waipā Networks Limited

Questions followed by Comments
Q1. 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.
Waipā Networks considers section 3 to be an accurate summary.
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.
Waipā Networks agrees with the broad categories for change drivers. How the market/consumers respond to the drivers will determine the impact we will see on the networks. The extent to which networks will be able to utilise the features of the drivers, such as technology to control, and coordination of the variable load and generation will influence network development and operational costs. The response of the networks will be in part enabled by regulation regime, and in part how they develop their innovation practices.
Q3. Do you have any feedback on our description of each key driver?
Waipā Networks has no feedback on the driver descriptions.
Q4. What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.
Waipā Networks believes that Distributors having granular visibility of their LV networks through near real-time access to smart meter data is a foundational enabler of the development of flexibility and ancillary markets. This will in turn enable increased coordination and market development through data exchange and analysis between participants. With visibility and control capability established, there is also a need to ensure the participants can perceive and actually realise value from participation, instead of just doing it to serve network needs. We also believe that regulation has a key role to play through DER visibility (for example via an enhanced Registry) and equipment standards.
Q5. Looking at overseas jurisdictions, what developments in future system operation are relevant and useful for New Zealand? Please provide reasons for your answer.
Waipā Networks has no comment regarding this.

Questions followed by Comments
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.
Current obligations generally do not limit uptake of DER and IBR. Standardising connection and information/visibility requirements will support future efficiencies as (i)parties intending to connect these resources tend to operate across network boundaries, and (ii) networks can share insights and practice guides saving R&D costs.
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.
Waipā Networks considers that there will be increased level of coordination required once the foundational considerations in our Q4 answer are addressed. The extent of coordination needed is still an unknown and will be largely dependent on the form and pace of the key drivers identified in Section 4 of the paper. The regulatory regime should be set to ensure all parties whose actions impact operability of the power networks should share appropriate level of information. Increased coordination between the transmission system operator and distribution system operators to ensure that common resources are dispatched equitably, e.g., DER may cause congestion on the distribution network but relieve transmission constraints.
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.
Waipā Networks does not believe there are existing conflicts of interest in relation to the concurrent network ownership, operation, and planning roles. We have seen no evidence to suggest this is the case. We believe these roles are a natural fit concurrently and ultimately all three work together to ensure coordination and quality of service for end consumers. We do acknowledge that there is potential for perceived conflicts of interest as the flexibility and ancillary markets develop, and service providers and consumers rely on Distributors to objectively make decisions in each of the ownership, operation and planning roles. We believe this can be managed through the development of industry guidance and policy documents such as those relating to connection processes and policies for dynamic despatch of DER, for example. The Code could be updated to provide core requirements around these processes and policies. With regards to any regulatory management of potential conflicts of interest, we believe this would need to be managed carefully to avoid making assumptions that conflicts of interest exist, or that they exist in every circumstance.

Questions followed by Comments
For example, in the case of non-traditional solutions such as Distributed Generation a Distributor may have a remote section of its' network with voltage and reliability challenges. DG might be an economical solution for this over significant additional "poles and wires" investment however the market may not be sufficient for a service provider to invest. The Distributor should still be able to invest in and operate the non-network solution itself provided their policies and procedures clearly can demonstrate no conflict of interest occurred in the decision.
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.
Waipā Networks has no further views on the matter.