



19 December 2024

Electricity Authority

Via email: [connection.feedback@ea.govt.nz](mailto:connection.feedback@ea.govt.nz)

Tēnā koutou

**Network Connections Project: stage one amendments consultation paper**

WEL Networks appreciates the opportunity to provide a submission on Network Connections Project: stage one amendments consultation paper (the Consultation).

WEL Networks (WEL) is New Zealand's sixth largest electricity distribution company and is 100% owned by our community through our sole shareholder WEL Energy Trust. Our guiding purpose is to enable our communities to thrive, and we work to ensure that our customers have access to reliable, affordable, and environmentally sustainable energy.

We believe that extensive sector-wide alignment and coordination, involving policymakers, regulators, participants, and consumers is vital to an efficient future power system operation in New Zealand. This will require concerted efforts by many players to raise public awareness, improve data access, adapt technology standards, introduce flexible regulations, and establish effective national policy statements for the energy sector.

WEL supports the submission by ENA on the Consultation.

Should you require clarification on any part of this submission, please do not hesitate to contact me.

Ngā mihi nui

[Redacted signature]

[Redacted contact information]

## Questions

### **Proposal A questions: Amend the application processes for larger-capacity DG applications**

A) What are your thoughts on the proposal to replace nameplate capacity with maximum export power?

WEL does not support the proposal to use maximum export power for DG size thresholds.

The maximum export power is not a clear reflection on the complexity of assessing a DG application and its impacts on the network. This will simplify the capacity assessment but will not impact additional study requirements like protection, harmonics, voltage stability and fault ride through that may be required for larger DG.

It is also not certain whether maximum export power refers to maximum export under normal conditions (e.g. maximum of output minus load over all times) or under abnormal conditions (e.g. when load trips and all DG output is exported). When additional information is not required the application can be fast tracked by treating the initial application as the final application.

WEL supports including proposed active power export limits as part of the application.

If time of use data is available, we currently factor this into assessing >10 kW applications. If the applicant provides this upfront it would streamline the process.

WEL supports the proposal to record active power export limits alongside nameplate capacity.

B) Do you support the proposed Process 2 for medium DG (>10kW and <300kW), including the proposed requirements and timeframes? What are your thoughts on the proposed size threshold? What other changes would you make to the medium DG application process, if any?

Many applications in this range can be processed in line with the less than 10 kW process as they impose no network constraints. Having to provide the information outlined in Section 3 delays the processing of these applications. An alternative pathway at the EDB's discretion to assess the application in line with the less than 10 kW process will benefit both EDB's and distributed generators by speeding the application process.

The current proposal for the medium DG applications has very little streamlining over the existing large DG application process.



C) Do you support the proposed Process 3 for large DG applications ( $\geq 300\text{kW}$ ), including the proposed requirements and timeframes? What are your thoughts on the proposed size thresholds? What other changes would you make to the large DG application process, if any?

As per B).

No, WEL does not support this. If the idea is to break up DG applications into three blocks, then 500kW would be more appropriate cutoff size. In addition, the code requires us to complete the same level of analysis as if it were a larger DG site, the only difference to the EDB would be doing the same amount of work in a more compressed timeframe.

D) Do you think the Authority should apply any of the proposed changes for large DG to medium DG applications also?

No.

If you will require the EDB's to complete an entire network study regardless of size, what are you gaining by complicating the code further?

E) What are your thoughts on industry developing the detailed policies to complement the Code changes proposed in this paper?

WEL supports industry collaboration on developing complementary policies noting that some elements may sit better in Code provisions.

WEL considers that EDBs should be trusted to manage their own networks and develop policies and standards that support them.

F) What are your thoughts on the Authority's summary of capacity rights allocation?

WEL believes the term "capacity rights" needs further elaboration. Capacity rights are related to an EDB's congestion management policy. Capacity rights can be dynamic in nature. For example, a DG may be able to export all its output for most of the year and be constrained or limited by the EDB during times of reduced network capacity during outages. EDBs may choose in the future to move to applying dynamic operating envelopes to each connected customer which reflect the dynamic capacity of the network at the time. Capacity rights are not absolute, apply for a finite duration and can be revoked for non-compliance.

In the existing Code provisions, a conditional form of "capacity right" is implicit at the initial approval stage giving the applicant some assurance of the ability to inject into the network. The conditional "capacity right" will affect the likelihood of success for further DG applications planning to use the same network.

**Proposal B questions: Add application processes for larger-capacity load**

G) For Process 3 for medium load ( $>69\text{kVA}$  and  $<300\text{kVA}$ ) applications:

- Do you support the proposed process and why?
- What are your thoughts on the proposed requirements, size thresholds and timeframes?
- What changes would you make to the medium-load application process, if any?

- Do you support the proposed process and why?

WEL does not support this proposed process. This has not been a problem for us before and this process will require all jobs at this level to be reviewed by network planning where before, the majority of these jobs could have gone through our customer initiated works group and could decide what needs to go to network planning and what could be constructed without other departments input.

- What are your thoughts on the proposed requirements, size thresholds and timeframes?

We think that the timeframes need to be tighter on the applicant, the proposal is for them to have one year to submit a final application. It should be six months for the applicant to submit a final application as that is an excessive amount of time for a customer to make a decision on if they want to proceed or not. Medium load should be between 500 kW and 2 MW.

- What changes would you make to the medium-load application process, if any?

The requirements spelled out in section 3 is laborious for the EDB to complete for a 3.6A -16A @11kV connection. The time periods are tight but a scaled back response from the EBD to customer needs to be complete. The customer needs to know two things, what is the capacity of the network today, and what the customer cost would be to upgrade the network to get the requested capacity. Everything else for a 300kVA and less application is overkill. Fault levels are irrelevant as they will be served with a transformer and will never see 11kV network fault levels.

WEL believes that the proposed process formalises the risk for EDBs are currently seeing in that it gives the applicant the ability to 'capacity bank' potentially to block competitors, further there is no incentive for applicants to 'right size' their capacity application to actual current needs as opposed to theoretical future requirements.

Compensating the applicant in forgoing unneeded or unused capacity is a complex mechanism that has been overly simplified in the proposed process to point of being unworkable. In no case should compensation be able to greater than the applicant's actual costs for the forgone capacity.

H) For Process 5 for large load ( $\geq 300\text{kVA}$ ) applications:

- Do you support the proposed process and why?





<ul style="list-style-type: none"> <li>• What are your thoughts on the proposed requirements, size thresholds and timeframes?</li> <li>• What changes would you make to the large load application process, if any?</li> </ul>
<ul style="list-style-type: none"> <li>• Do you support the proposed process and why?</li> </ul> <p>Large customer connections, especially in congested areas, often require unique or bespoke solutions to the customer. Timelines will restrict the EDBs to provide the simplest solution as rather than investigate the most beneficial solution for the customer.</p> <ul style="list-style-type: none"> <li>• What are your thoughts on the proposed requirements, size thresholds and timeframes?</li> </ul> <p>For large customer loads, most of the time they are looking at getting the price for the service connection so they can complete their business case. The level of detail required for these applications might not serve what the customer really needs.</p> <ul style="list-style-type: none"> <li>• What changes would you make to the large load application process, if any?</li> </ul> <p>Remove the Interim Application portion and change the response time from one year to six months.</p>
<p>I) Do you think the Authority should apply any of the proposed changes for large load to medium-load applications also? If so, which ones and why?</p>
<p>No.</p>
<p>J) What are your thoughts on the Authority's summary of capacity rights allocation?</p>
<p>WEL assumes the reference to applicant generator in 5.193 is a typo and a load applicant is intended.</p> <p>WEL thinks the term "capacity rights" needs further elaboration. See response to question F.</p>
<p>K) What else does the Authority need to consider beyond the proposals in this paper and why?</p>
<p>At present, the manner in which new loads are connected are dealt with in each EDB's Connection and Operating Standard. Putting new processes for connection in Code provisions will require substantial revisions of these documents.</p> <p>Alternative options to proscribing processes for connection such as mandatory reporting process output performance appear not to have been considered.</p>



The economic impacts of delays and inefficiencies in connecting new generation at the transmission level is far more substantial than the economic impacts of delays and inefficiencies of connections at the distribution level. It is not obvious that approaches applied at the transmission level to connecting new generation should be replicated at the distribution level.

These Code changes are designed to fix loopholes and exploitation of the current Code, however, it does little to address the underlying issues and good faith communication between customers and EDBs.

**Proposal C questions: Require distributors to publish a ‘network connections pipeline’ for large-capacity DG and load, and provide information on this pipeline to the Authority**

L) Do you support the proposed network connections pipeline, why, why not? What changes would you make, if any? What are your thoughts on the scope of the information to be published?

WEL does not support this.

The problems that it is supposed to solve would have already been resolved by Process 4 and 5. We would remove it entirely. We strongly believe that customer should have the right to privacy and publishing information, even anonymously is still revealing about a customer’s intentions. We also do not agree that EDBs should be more like Transpower.

M) What are your thoughts on the proposal for distributors to provide information directly to the Authority on an ongoing basis?

We do not see why the Authority needs this information as it is a duplication of existing available information. We already provide AMPs, so how would this information be of more value or supplement what we already provide? Transpower and EDBs meet regularly to update demand and generation forecasts at GXPs. These forecasts will include significant new DG and load connections so that transmission planning should be adequately informed.

**Proposal D questions: Require distributors to provide more information on network capacity**

N) What do you think of the proposal to publish more information on network capacity? What challenges do you see with providing the data? What changes would you make, if any?

Having a published map of congestions would be a benefit to the EDBs as it would allow EDBs to provide customers with a high-level idea of what areas of the network would require significantly more costs and time to connect. Providing this map would be a large network cost to digitalize and process it so that a map could be continually published for customers.

O) What are your thoughts on the scope and granularity of the information to be published?

A customer needs to know at a high-level what areas are congested. If they want to know true costs, then they can submit a network application(s) and follow either Process 4 or 5.

**Proposal E questions: Update the regulated terms for DG**

P) What are your thoughts on the proposed changes to the regulated terms?

In general, WEL supports the changes to the regulated terms.

The exception to this is clause 22 Limits on liability. WEL considers that name plate capacity is a better unit for calculating liability as DG with maximum export power of zero will have a zero-liability limit.

Maximum export power does not reflect the potential system impact from mal operation of distributed generation or associated loads. Potential system impact is driven by the size of the generation, as such nameplate capacity should be retained.

**Proposal F questions: Add regulated and prescribed terms for load applications and amend dispute resolution requirements**

Q) What are your thoughts on the proposed regulated and prescribed terms for load? What changes would you make, if any?

WEL is concerned that the proposed process creates a situation where an EDB must provide an uneconomic or infeasible connection - i.e. the applicant refuses to enter into an individual connection agreement which addresses such issues, so then falls under the proposed prescribed terms. The proposed terms should explicitly specify that an EDB is not obligated to accept any and all connection requests, as the inference on current drafting suggests otherwise.

The proposed terms also lack any mechanism for the EDB to recoup investments made by EDB at the applicant's insistence to complete the connection at a level above and beyond that which the EDB considers is required. This means there is no incentive on the applicant to 'right size' their capacity requirements at the time of connection.

The liability limits in the proposed terms are significantly higher than generally used currently by WEL, representing a greater business risk for both EDB and applicant. In addition, there is no time-based limitations (only event based) on the full extent of the limitation.

The need for easements to authorise network equipment and ensure access for ongoing operation and maintenance do not seem to have been considered. Currently WEL makes the completion of easements part of our application process as our experience is that once the

connection livened there is no incentive for the customer to sign easements. This in turn creates difficulties into the future, including when maintenance work is required.

R) What are your views on the proposed dispute resolution changes for Part 6? In what ways could dispute resolution be further improved? What are your thoughts on the alternative options to deliver dispute resolution discussed in this paper? Do you have any feedback on the 20-business day timeframe proposed?

Our reading of these changes is that they clarify a distributor – participant dispute is handled by the Authority; and a distributor – applicant (non-participant) dispute is handled externally.

S) Do you consider the alternative contractual terms option discussed in this paper (and in the Distribution connection pricing consultation paper) would be better than the proposal without contractual terms? What are your thoughts on the other alternative options referred to?

WEL's preference is to retain our ability to directly contract with customers of connections where we are either requiring a reasonable capital outlay or includes dedicated assets such as a Transformer etc. These current contractual terms allow us to ensure that should the customer's claim of capacity requirements (even after applying a diversity factor) not come to fruition, we can re-model the Capital Contribution to gather our required regulatory returns to ensure we minimise any cross-subsidisation.

#### **Proposal G questions: Increase record-keeping requirements for distributors**

T) Do you support the proposal to increase the record-keeping requirements for distributors and why? What changes would you make, if any?

WEL does not support this. This places extra burden on the EDBs and the Authority has not made it clear how this information will be used to better the industry.

#### **Proposal H questions: Introduce new Part 1 definitions and amend existing definitions (Part 1 only)**

U) What are your thoughts on the proposed new definitions and amended definitions for Part 1 of the Code? What changes would you make, if any?

WEL has no comments.

V) What other terms do you think the Authority should define and what definitions do you propose for those terms?

WEL has no comments.





<b>Proposal I question: Make minor and incidental amendments to Part 6</b>
W) What are your thoughts on the proposed minor and incidental changes to Part 6? What minor and incidental changes has the Authority missed and what changes would you make, if any?
WEL has no comments.
<b>Transitional arrangement questions</b>
X) What are your thoughts on the transitional arrangements for the proposals in this paper? Submitters can consider individual proposals when responding to this question.
WEL has no comments.
Y) What proposals do you consider the most important? How long do you think is needed to implement these?
WEL has no comments.
<b>Code drafting question</b>
Z) Do you have comment on the Authority's drafting of the proposed Code changes? What changes would you make, if any?
WEL has no comments.