## **Network connections project: Stage one amendments**

#### **Submission form**

#### Introduction

The Electricity Authority Te Mana Hiko seeks views on the DG proposals in the 'Network connections project: Stage one amendments' consultation paper. To assist you, this submission form includes the questions in that paper in one place, in Microsoft Word and in tabular form.

You are not limited by the questions provided and are encouraged to provide other comments you think are relevant to the Authority's proposals.

### **Submission details**

Submitting organisation	
Contact person	
Contact email	

### 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?

## Agree with proposal.

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?

## Agree with proposal.

- C) Do you support the proposed Process 3 for large DG applications (≥300kW), 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?
  - Agree with proposal.
- D) Do you think the Authority should apply any of the proposed changes for large DG to medium DG applications also?

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

Agree there needs to be standardised policies across the country.

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

Agree with proposal.

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

G) For Process 3 for medium load (>69kVA and <300kVA) 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?

I agree with proposal as there needs to be finite timeframes to respond to connection or upgrade requests. These timeframes should also be reasonable to enable faster investment decisions to be made by the applicant (i.e. we might need to find an alternative site, or spread load across multiple existing sites, etc.).

### H) For Process 5 for large load (≥300kVA) 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 large load application process, if any?
- We are building out EV charging infrastructure across multiple depots around NZ to support several hundred large electric vehicles.
- Most of our large connection requests are and will be > 1,000kW
- As part of this work, we assess multiple new and existing sites to develop. This
  assessment needs to include available site power. This assessment is typically done
  during large competitive tenders, where we have had to account for all costs and
  mobilisation risk of connections. These tenders are typically around 3 months. To
  date, the responses from EDBs on connections have been longer than this leaving us
  exposed (this includes paying design fees straight away and collaborating with EDBs
  several months before these tenders are released).
- There needs to be greater transparency around what the available site power is at a site, and what could be available following grid reinforcements (including from a

time-of-use perspective as our peak loads are overnight and daytime loads are relatively small).

- There also needs to be greater transparency around the costs associated with these site connections and grid reinforcements, as well as timing to deliver.
- The above also needs to be available within finite timeframes to work in with commercial realities of operating a business.
- NOTE: Under the current process, we have little choice but to submit and pay for applications at multiple sites, even though we might not follow through with these applications. If we don't do that, we run the risk of delivering the project late leading to contractual ramifications. This is an in-efficient use of time.
- NOTE 2: we have the ability to be flexible with our loads and want to be able to optimise the cost of connections against purchasing / leasing and developing new sites, utilising other existing depots and/or modifying our schedules to fit in with the grid power limitations. The current process is much more black and white (i.e. are we installing a 1MW 24/7 electric boiler or not) and not flexible enough to work through the challenges and opportunities of electrifying vehicle fleets.
- Regarding timelines: these are too long and need to be halved at least. If left at these proposed timeframes, I will be forced to apply for new connections early using very conservative peak loads. This is because we wouldn't have received the timetables and done the weeks of modelling to create schedules that then feed into energy and power assessments, and finally into dynamic load management to optimise the loads. If I wait until that is all done, then we will be commercially exposed.
  - I also assume these timeframes can run concurrently across initial, interim
    and final applications? If they are stackable, then they need to be reduced by
    80%. I appreciate and understand the challenges EDBs face assessing these,
    but we just need to get better tools and more resources. Alternatively,
    electrification efforts will be stalled.

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?

It would be better to keep medium connection requests simple relative to large load connections which I believe the current proposal aims to achieve. Large load connections require more detailed designs and network planning considerations, with associated longer lead time equipment.

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

The proposal makes sense. However, we might not know the outcome of a tender for a few months after we submit. We need to have some assurance that the capacity we worked with in the proposal is still going to be available when we find out if we are successful.

K) What else does the Authority need to consider beyond the proposals in this paper and why?

There needs to be a more defined process for when grid reinforcements are required. We are currently trying to work through grid reinforcements required for new site power connections at 3 sites. There has been no process for how these projects are to be designed and completed, even though it has been several months since the EDB knew that we wanted the grid reinforcements to enable higher site power connections at these sites. Until this is resolved, it is difficult to manage risk and commercials for transitioning to electric fleets at scale.

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?

Agree with proposal as this then provides us an additional indication of potential challenges with electrifying certain existing depots or when we search for new sites for development.

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

Agree as it would be good to have a central body hold all info.

# 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?

This is something I have been asking EDBs around the country to provide for the last 2 years. Ideally, they provide capacity and also existing peak loads (both daytime and nighttime) down to the feeder level. Again, we need to make planning and investment decisions around how and where we can electrify fleets, which is also usually part of competitive tenders for 9+ year contracts. Therefore having access to good data on this means we can act quickly and refine our strategy and commercials to get the best outcome (eg. electrify more vehicles).

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

Further to the above, any details on the time-of day existing loads against capacity would be good to then enable us to look at our load management for charging electric bus fleets. In a tender, this part of the process needs to be done with 2 weeks so is currently very difficult to optimise. Also, having some form of link to other connection requests in area that go onto same feeder / off same zone substation would be good.

Proposal E questions: Update the regulated terms for DG

P) What are your thoughts on the proposed changes to the regulated terms?
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?
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?
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?
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?
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?
V) What other terms do you think the Authority should define 0and what definitions do you propose for those terms?
Proposal I question: Make minor and incidental amendments to Part 6

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?
Transitional arrangement questions
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.
Y) What proposals do you consider the most important? How long do you think is needed to implement these?
Code drafting question
Z) Do you have comment on the Authority's drafting of the proposed Code changes? What changes would you make, if any?