

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	Lodestone Energy Limited
Contact person	[REDACTED]
Contact email	[REDACTED]

General Principles

We concur with the need to amend the current Part 6 to help to manage an accelerated decarbonisation and electrification of New Zealand. Lodestone is supportive of the concepts put forward in this consultation provided there is specific added consideration given to a) the elimination of speculative project developers, b) enforce completion of projects in a timely fashion, and c) ensuring that there is pro-rata congestion treatment to all connected generation once operational.

Lodestone has completed three distributed generation (DG) connections with different networks (Top Energy, Horizon, Powerco) and has eight more current connection applications either underway or awaiting construction with a further four networks. Lodestone is very familiar with the current Part 6 and can offer some unique insight into opportunities for further refinement.

Many of the ideas and concepts put forward in this proposal should work to improve the ability to get new DG connected and ultimately aid in the decarbonisation of New Zealand. To ensure fast decarbonisation and efficient use of the sub-transmission system we suggest the following high-level principals:

1. Elimination of speculative developers: To avoid low cost, speculative development and 'capacity rights' banking, there should be meaningful fees payable throughout the connection process. This will have a two-fold effect of:
 - a. Increasing the funding available to networks to ensure connections are adequately resourced; and

- b. Reducing the amount of speculative interest that consumes the finite resource within networks and the allocation of connection capacity to capable organisations
- 2. Enforce completion of projects in a timely fashion: Timelines for completion should be prompt, objective, transparent, technology agnostic, and assessed through to connection works completion which is important to ensure that:
 - a. connections are progressed earnestly and applications only commence with a reasonable level of confidence in completion;
 - b. networks are provided unambiguous opportunities to reject slow progress to allow the best connections to rise to the surface;
 - c. the wider market can assess whether to 'follow' connection applications based on their merit and timeframe; and
 - d. connection applications are given effect to quickly.
- 3. Ensure equal treatment of connected generation once operational: Connections should have a reasonable ongoing expectation of their connection capacity in sub-transmission networks. The obligation to maintain connection capacity rights in system normal conditions will provide certainty required for investment. To build on the concept of consistency and certainty, the Electricity Authority should maintain more control over Congestion Management and Connection and Operations standards to ensure that connected parties are curtailed on a pro-rata basis in the event of temporary grid unavailability.

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?
Supportive. This aligns with practical approaches where applications already consider power factor adjustments for connection capacity. It also caters for instances where there is significant self-consumption of generation that consequently doesn't get injected into the network.
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?
Lodestone has no material comments on the medium DG 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?

Per the principles set out in the preamble, Lodestone suggests there needs to be meaningful fees payable throughout the process, objective and transparent milestones for progress, and clear connection capacity rights under system normal conditions. As such, Lodestone supports much of the proposal and suggests the following amendments:

1. Addition of a >5MW connection process. We believe the amendments would benefit from an additional process set out for large projects (>5MW) as these projects often require the most resource, timing and investment certainty. These projects are also significantly larger capital investments and will undergo a different level of design, risk and scrutiny. Projects greater than 5 MW require a different level of financial and corporate capability and therefore should have higher expectations of those organisations through the connection process.
2. There should be meaningful fees applied to each stage of the connection process that reflect the cost to adequately resource the various stages of an application. These costs should be non-refundable and at a magnitude that reflects the cost of the ultimate DG construction.
3. There is a need for a transparent network connection queue and suggested that milestones should be made public. This would hold all parties accountable while ensuring better transparency regarding project timelines and counterparty credibility.
4. The addition of principles for when and how a Network is required to remove a connection application from the queue should be stated and unambiguous.
5. The timeframes for completion should be shortened for large-scale developments ahead of Final Application Approval but the 18 months' timeframe to give effect to a connection following Final Application Approval should be maintained at 18 months and stated in the Code.
6. We recommend a new threshold >5MW for applications, requiring more rigorous evidence of financial backing and developer transparency. This approach would help differentiate between large-scale and smaller projects, ensuring more robust processes.

Lodestone has included a slightly amended process table for review in Appendix A. We suggest these changes will improve the ability to deliver low-cost connections quickly.

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

Lodestone is not directly experienced with medium DG applications. However, we understand the requirement for constructing smaller DG is less onerous and simpler in some ways. As such, Lodestone understands the need for different standards at different connection capacities.

For the avoidance of doubt, Lodestone does not believe there is any merit in creating different connection pathways for different technologies and suggests the connection process should remain technology agnostic.

E) What are your thoughts on industry developing the detailed policies to complement the Code changes proposed in this paper?
<p>Lodestone suggests that both the Connection and Operations Standards and Congestion Management Policies should either be set out in the Code or detailed in uniform policies across the industry.</p> <p>We suggest the following principles should apply to congestion in the event of a non-system normal event:</p> <ol style="list-style-type: none"> 1. Should first curtail dispatchable generation 2. Should be managed on a pro-rata basis for non-dispatchable generation
F) What are your thoughts on the Authority's summary of capacity rights allocation?
Lodestone agrees that connection capacity rights should be maintained in system normal conditions. This provides certainty of investment and allows non-coincident technologies to utilise the same part of the grid if economic.
Proposal B questions: Add application processes for larger-capacity load
<p>G) For Process 3 for medium load (>69kVA and <300kVA) applications:</p> <ul style="list-style-type: none"> • 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?
n/a
<p>H) For Process 5 for large load ($\geq 300\text{kVA}$) applications:</p> <ul style="list-style-type: none"> • 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?
n/a
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?
n/a
J) What are your thoughts on the Authority's summary of capacity rights allocation?
n/a

K) What else does the Authority need to consider beyond the proposals in this paper and why?
n/a
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?
Lodestone strongly suggests that networks should be transparent in the connection process. This information should be available to the wider market and the Authority. In this outcome, Lodestone is not clear what additional value is created by the Authority processing and/or further disclosing this information. Lodestone suggests the transparency from networks should provide enough clarity to inform decision making.
M) What are your thoughts on the proposal for distributors to provide information directly to the Authority on an ongoing basis?
Lodestone suggests the transparency from networks should provide enough clarity to inform decision making. The Authority should have access to the same information at the same time as the wider market.
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?
Lodestone (and the wider large DG market) has benefitted from the availability of sub-transmission information. The disclosures in the Asset Management Plans are sufficient to make informed decisions and build development strategies. Additional information on the types of conductors and cables that make up the sub transmission network would allow large DG developers to become more self-reliant on selecting viable connection options without network resource. Reporting beyond this level may have diminishing returns.
O) What are your thoughts on the scope and granularity of the information to be published?
Reporting beyond sub-transmission conductor and cable capacity may have diminishing returns.
Proposal E questions: Update the regulated terms for DG
P) What are your thoughts on the proposed changes to the regulated terms?

Lodestone has been required to use negotiated terms on all connections to date and has worked with multiple different contract templates. While we support measures to promote consistent connection terms nationally, provision of a national template suitable to long term financed utility scale DG projects may better serve that purpose. This could include additional provision such as those addressing conditions precedent; step-in rights for secured financiers; opportunity for disconnection and quick timelines for reconnection; billing and payment; response to regulatory change and insurance requirements.

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?

n/a

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?

n/a

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?

n/a

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?

Yes – distributors should have very clear and easily recallable records to ensure that activities have followed regulation and quickly resolve queries ahead of dispute.

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?

Lodestone has no comments on the new proposed language in the definitions. However, there could be new definitions included if Lodestone feedback is incorporated.

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

n/a

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?

Lodestone has not completed a comprehensive legal review and is not in a position to comment on incidental changes.

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.

The transitional arrangements seem appropriate given that the proposed changes create an effect through totality.

Y) What proposals do you consider the most important? How long do you think is needed to implement these?

Lodestone suggests the proposals should be considered in totality and therefore all changes should be considered without priority. A period of six months seems reasonable for the Authority to implement changes.

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?

Lodestone has not completed a comprehensive legal review and is not in a position to comment on incidental changes.

Category	Process 2 (DG 10kW to <300kW)	Process 3 (DG 300kW to 5MW)	Process 3b (DG >5MW)	Process 4 (load >69kVA to ≤300kVA)	Process 5 (load >300kVA)
Initial Application - Purpose	Allow the network to resource a connection application and inform the applicant of the viability, high-level cost and possible				
Mandatory initial application fee	\$10 / kW	\$5 / kW	\$1,000 / MW	✓	✓
Business days for distributor to process application	10	20	20	40 (otherwise approved)	40 (otherwise approved)
Application can be resubmitted with conditions	\$4 / kW	\$2 / kW	\$200 / MW	✓	✓
Application entered into network connections pipeline	Location, Size, Status	Location, Size, Status	Location, Size, Status	✓	✓
Interim Application - Purpose	Allow the network and applicant to agree to milestones for progressing the development within prescribed long-stop dates.				
Maximum time to make interim application	6 months after initial approval	6 months after initial approval	6 months after initial approval	12 months after initial approval	12 months after initial approval
Mandatory Interim Application Fee	\$50 / kW	\$20 / kW	\$3,000 / MW		
Business days for distributor to process application	15	20	20	45, 60, 80 (otherwise approved)	45, 60, 80 (otherwise approved)
Time extensions if distributor reasonably requires	1	1	1	1	1
Time extensions if grid studies required	1	1	1	1	1
Application can be resubmitted at no cost	✓	✓		✓	✓
Application entered into network connections pipeline	Location, Size, Status	Location, Size, Status	Location, Size, Status, Milestones, Applicant	✓	✓
Final Application - Purpose	[Confirms the connection capacity and] requires the applicant to commit to firm timelines for delivery of the connection.				
Mandatory Final Application Fee	\$150 / kW	\$120 / kW	\$15,000 / MW ¹		
Maximum time to make final application	12 months after initial approval	60 business days after interim approval/disputes resolution	60 business days after interim approval/disputes resolution	12 months after initial approval	90 business days after interim approval/disputes resolution
External conditions proposed for final approval					
Business days for distributor to process an application	45 (otherwise approved)	20	20	30 (otherwise approved)	20, 30, 40 (otherwise approved)
Time extensions if distributor reasonably requires	1	1	2	2	1
Time extensions if grid studies required	1	1	2	2	
Applications can be resubmitted with conditions	✓	✓		✓	✓
Distributor to encourage complementary applications		✓			✓
Projects must meet milestones to retain position	✓	✓		✓	✓
Application entered into network connections pipeline	Location, Size, Status	Location, Size, Status	Location, Size, Status, Milestones, Applicant	✓	✓
Final Application Reimbursement Worked Example					
Connection Capacity	23 MW				
Need date	Oct-26				
Final Application Fee	\$ 345,000				
Re-imbursed on the following schedule:					
	%	Connected Capacity (MW)	Re-imburement		
Proposed Need Date	25%	10	\$ 37,500		
First Anniversary	25%	23	\$ 86,250		
Second Anniversary	25%	23	\$ 86,250		
Third Anniversary	25%	23	\$ 86,250		
			\$ 296,250		