



Electra Generation Limited
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Electricity Authority Board Members

c/- Submissions

Electricity Authority

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By email: submissions@ea.govt.nz

Dear Board Members

Re: Consultation Paper – Review of distributed generation pricing principles

Introduction

Electra Generation Limited (EGL) is owned by Electra Limited being the electricity lines company operating in the Kapiti and Horowhenua district. Currently EGL owns and operates 4.7MW of gas and diesel generation located in Papakura Auckland, known as the Papakura Power Station. The generation is connected to the local electricity distribution company at 22kV and the gas transmission network at Hunua. The generation plant operates at a higher than average cost (compared across IEGA members) due to its fuel, location and ability for responding to short duration peak demands. EGL purchased the Papakura site (2016) which was built in 2007 and has since relied on the Electricity Governance (Connected of Distributed Generation) Regulations 2007.

Submission

EGL are a member of IEGA and support the IEGA submission. Further EGL do not support the Electricity Authority's proposals because it removes a key revenue and adds costs that could have two negative outcomes:

1. Decommissioning of peaking generation due to reduced profitability. This would remove market ability to increase supply for peak demand and give effect to an overall change in the balance of market supply and demand at critical times. Loss of generation response to peak demand will likely trigger significant capital expenditure on the national grid that would have otherwise been deferred;
2. And or, a new period of excessive peak price fluctuation due to change in behaviour by generators. We note the 2016 winter peak demands are not often reflected in spot price and therefore significant capital expenditure on the national grid will still be highly likely. This period will be short lived as load customers will not cope well with price uncertainty. Instead of encouraging increased consumption within current grid capacity the proposal may encourage reduced consumption.

- Transpower also share the view that this proposal could materially raise peak demand¹. We note that Transpower have identified voltage security risks in 2023 brought about by closure of Upper North Island generation. It is our view that the EA's DG Pricing Principle proposal is far too risky to proceed with, given this significant existing problem on NZ's electricity system.
- We consider the proposal has poorly defined how Transpower would replace ACOT payments to DG and effectively target the avoidance of capacity constraints. We believe there is significant industry wide work to establish an equitable and robust replacement. The proposed implementation in 2017-18 does not give time to establish this and therefore unlikely to be an improvement on the current pricing principles. We also note that the EA proposal would by-pass the distributor and as such misses an opportunity to create a whole of value chain solution i.e. inclusion of ACOD.
- Our view is the existing ACOT payment system based on RCPD has been effective in providing a simple and actionable pricing signal that is directly relative to avoiding load customer payments. This success is demonstrated in the current participation of DG.
- The proposal returns the market to the state that existed before 2003 – 2007 when the government undertook consultation and finalised the Electricity Governance (Connection of Distributed Generation) Regulations. The Government at that time acknowledged DG was having immense difficulties negotiating with monopoly network companies for connection and recognition of the value of avoided and avoidable costs of transmission and distribution.
- EGL's experience is that negotiating a connection agreement with a monopoly can take more than 6 months and incur significant legal costs. Instead of the proposed removal of the Pricing Principles it would be better to be more prescriptive on Part 6, Regulated Terms and pricing principles, so as to make connection of DG more straight forward and cost efficient across the industry.
- EA must recognise existing assets. Current proposals for DG are inconsistent with the EA's approach in the TPM whereby existing asset owners/consumers can seek a prudent discount.
- EGL currently contribute to connection costs and share ACOT with the distributor. There is no evidence that EGL pay only incremental costs. We are very uncertain as to what the potential charges might be and the potential financial impact on EGL's business if connection costs increase. Further the proposal has created significant investment uncertainty, all EGL's future investment decisions are now on hold as a result of the EA's proposal.
- The proposal places DG at a competitive disadvantage to grid connected generation which does not pay for the use of the distribution network. Also Transpower has a prescriptive formula for calculating connection charges which is in the Code in the TPM for grid connected generation. The EA's proposal for DG is completely unregulated.

¹ Referenced from Transpower's consultation document; Section 3.5.2 and 7.1.2. Waikato and Upper North Island Voltage Management Long List Consultation July 2016.

Suggested solutions

- Retain the Distributed Generation Pricing Principles section of the Code. Consult with DG and network companies to further prescribe basis for connection agreements under regulated terms and Pricing Principles so as to promote more efficiency across the electricity system.
- Recognise that existing DG is an efficient market response to the trade-off between production costs and transport costs. The transmission and distribution network have been designed and built around existing DG.
- Further prescribe the pricing principles so that network companies have a mechanism to recover from customers their service based payments to DG as a distributed generation allowance.
- Maintain the current structure of connection costs otherwise the Authority is placing DG is at a distinct competitive disadvantage to grid connected generation.
- The Authority must rely on their proposed TPM to ensure that 'efficient' service based payments are made to DG by Transpower and the network companies. Network companies and Transpower will not understand the value of how DG is reducing or avoiding their transmission charges until the TPM is settled.
- Further accept the suggested solutions by IEGA, Pioneer Energy and Trustpower.

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Appendix A Format for submissions

Question Response

Q1. Do you consider that the proposed Code amendment described in section 4.1 is preferable to the status quo and the alternatives described in section 4.6? If not, please explain your preferred option(s) in terms consistent with the Authority's statutory objective.

The proposal is not preferable to status quo as it removes a tangible benefit without replacing it with a clear and fair platform needed for investment in DG. The proposal that ACOT incentives will be simplified could instead mean that Transpower will be implicated in complex consultation, negotiations and litigation between many parties after the current tested clear rules are replaced with no common pricing rules.

Decoupling ACOT with electricity transportation costs will create inequity between generators and load customers. The TPM proposal already addresses regional transport value and ACOT should be coupled to these costs for incentivizing efficient system architecture.

Further Transpower is not an efficient entity for engaging with the many DG currently operating. Distributors and Retailers perform that function much better.

Alternative 3 is preferable to the proposal (after status quo) because it acknowledges Transpower as a stakeholder but not having a direct connection to the DG. This also leaves much of the pricing arrangements for avoided costs in place allowing more efficient contract negotiations.

Alternatives 1 and 2 are not preferred as they transfer benefits generated by DG to the distributor. These options don't recognize that DG consume additional resources to deliver peak time generation. i.e. increased fuel consumption and efficiency decrease.

Q2. Do you consider that the proposed Code amendment described in section 4.1 complies with section 32(1) of the Act, and with the Code amendment principles, and should therefore proceed?

As referenced 32(1) as follows:

(a) competition in the electricity industry:

No; this amendment creates investment uncertainty for DG and therefore reduces generation competition across the grid. There will be less DG as a result and load customers will be more reliant on transmission transportation even though this may be the lessor efficient energy route.

(b) the reliable supply of electricity to consumers:

The amendment proposal does not indicate or provide argument for improved reliability of supply.

(c) the efficient operation of the electricity industry:

This amendment seeks direct payment and therefore engagement with many DG customers and is not efficient use of the industry participants. Retailers and distributors much better resourced to engage directly with Distributed Generation and Embedded Generation.

It is our general view that generators that are located close to load avoid unnecessary transportation and contribute to a more efficient electricity system overall. DG may be higher cost energy producers and the market needs to be able to balance transportation with production costs. For this to occur ACOT will need to be coupled with regional costs as proposed in the TPM. Removal of the ACOT provision will unfairly transfer benefits created by generation cost inputs to load customers.

Q3. Do you have any comments on the drafting of the proposed Code amendment described in section 4.1? (The drafting is included in Appendix B.)

The proposed amendments are simple deletions that remove basis for structured methodology to avoid transportation costs. The proposed drafting provides no industry wide / bespoke basis for allocating avoided costs for both transmission and distribution. The industry may settle on less efficient allocations as a result.

Q4. Do you consider that the proposed Code amendment should come into force at a single date, or should it be phased in?

We believe this amendment would be better come into force on a single date however the current proposal of 2017 and 2018 lead time is too short for the industry to adjust. We believe phasing should be 5 years with ability to reallocate contracted ACOT from distributor to Transpower immediately.

Q5. Is the proposed phasing for the Code amendment appropriate? (The phasing is discussed in section 4.3.) If not, what alternative phasing or dates would you propose and why?

As discussed Q4, Consultation Paper

Q6. If the proposal were to proceed, do you consider that there would be barriers that might prevent agreements being reached between Transpower and distributed generation owners to efficiently reduce or defer transmission network costs? If so, what are these barriers? Please consider both existing and proposed new distributed generation.

Transpower as a wholesale electricity carrier will engage well with larger generators but be unable to engage with the many smaller generators. Domestic housing is projected to be a significant contributor to falling consumption and the proposal fails to impose this fairly across all generators including small embedded residential generators (like solar). Transpower is not the most efficient point of contact. Retailers and distributors are better positioned to implement bespoke allocation principles across the whole supply chain.

Q7. If the proposal were to proceed, do you consider that there would be barriers that might prevent agreements being reached between distributors and distributed generation owners to efficiently reduce or defer distribution network costs? If so, what are these barriers? Please consider both existing and proposed new distributed generation.

EGL's experience is that reaching agreement on the connection is expensive and can take over 6 months to negotiate. Removal of ACOT will further remove any bargaining power afforded to the

generator. As a result of the removal of the Pricing Principles could mean an increase in disputes heard by the EA Rulings Panel or discouragement of investment in generation.

Q8. If the proposal were to proceed, do you consider that those distributors that were no longer able to recover the cost of making ACOT payments would cease making such payments?

We believe the distributor's response of stopping ACOT payments would be the obvious commercial response to the proposed changes.