

29 January 2018

Submissions
Electricity Authority
PO Box 10041
Wellington

By email: submissions@ea.govt.nz

Re: Consultation Paper - List of distributed generation eligible to qualify to receive ACOT, lower South Island

Thank you for the opportunity to provide comment on the above Consultation Paper.

Contact generally supports the Authority's approach to determining the eligibility of existing distributed generation (DG) in the Lower South Island region. However, we have some general comments on the methodology used in the analysis and have set these out below.

1. Broader Benefits of DG should be considered

Contact supports a reduction in system losses and operational flexibility (with respect to maintenance outages and associated grid backbone, regional, or local constraints on the grid) being included in the consideration of the benefits that DG has on the grid. However, we think consideration should also be given to the costs associated with the value of lost load (VOLL) in the event that a maintenance outage and N-1 situation results in a loss of supply, whereby DG can reduce the level of lost demand.

2. Voltage support benefits of DG

Having read section 2.1 of Transpower's report on key inputs, we agree that there are specific cases where DG offers voltage support (under and over voltage), and in these cases the actual power factor or mode of operation of this generation should be modelled to accurately determine the benefit or otherwise.

3. DG contribution over top twenty trading periods

We agree with the approach set out in section 2.2 of the Transpower report on demand assumptions and that this approach needs to evolve to include the lowest

20 trading periods (or similar) within the methodology to accurately identify the benefit or adverse effect that DG has on grid export constraints and voltage support on a grid backbone, regional, or local basis.

If you require further clarification on any of the comments above please do not hesitate to contact me directly.

Yours sincerely,

Gerard Demler

A handwritten signature in blue ink, appearing to read 'Gerard Demler', with a long horizontal flourish extending to the right.

Transmission Manager