Orion

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Submissions
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SUBMISSION ON DISTRIBUTED GENERATION ELIGIBLE FOR ACOT

Introduction

1 Orion New Zealand Limited (**Orion**) welcomes the opportunity to comment on the "Draft list of distributed generation eligible to qualify to receive avoided cost of transmission payments under regulated terms – Lower North Island" consultation paper (the **paper**) released by the Electricity Authority (Authority) in May 2018.

2 In summary:

2.1 The list strikes us as counter-intuitive, with the potential to create uncertainty.

2.2 The approach and application of the method is somewhat unclear.

2.3 To a considerable extent both of these problems reflect the way the Authority's decisions were implemented in the Code.

3 Perhaps the most obvious observation about the list (and the previous LSI list) is that it is long. In fact it would appear to be the case that, where the modelling identified a GXP where *any* DG was required to meet the GRS, then *all* of the DG linked to that GXP is required.

4 The counter-intuitive nature of the list might then create uncertainty as to whether being on the list entitles the connection to ACOT payments. The paper seems to anticipate this, and attempts to address it in paras 3.16 and 3.17:

> 3.16 The proposed list identifies distributed generators that will be eligible to qualify to receive ACOT payments on the regulated terms. To actually receive such ACOT payments, distributed generators must still meet the other existing requirements, and particularly the requirements set by distributors. For example, distributors have generally paid ACOT to distributed generation that:
>
> (a) is connected to the distribution network under the regulated terms in Part 6
>
> (b) generates during regional coincident peak demand (RCPD) periods
>
> (c) has export capable metering (this is the case for about 99% of distributed generation).
>
> 3.17 As well, many distributors have a policy of not paying ACOT to distributed generation with capacity under 10 kW.

5 We are not sure this assists much. The words: "[DG] that will be eligible to qualify to receive ACOT payments on the regulated terms." is decidedly leading. Two of the criteria for distributors paying ACOT (3.16 (a) and (c)) are necessary conditions – they will always be

required before payments could be made - while the third (b) is precisely the problem that the Authority was trying to solve – DG reducing transmission charges via RCPD but not necessarily reducing transmission costs. If distributors continue to apply the condition it seems likely that:

5.1 All of the DG that is in the list that currently receives ACOT payments will continue to receive such payments.

5.2 A large number of (mostly small) DG connections might feel they are entitled to ACOT payments based on being on the eligible list, and might reasonably expect ACOT payments, and

5.3 The ACOT payment must be based on the nameplate capacity of the DG (as set out in Schedule 6.4 clause 2(a)(i) of the Code), rather than being based on the contribution during RCPD.

6 Together these two could lead to ACOT payments that are greater than at present.

7 The condition set out in 3.17 of the paper is not one that we apply, and we are unsure on what basis the paper concludes that "many distributors" apply a ">= 10kW only" rule. We consider it to be at odds with the requirements of the pricing principles in Schedule 6.4 of the Code.

8 As we see it the fundamental problem here is the way the Authority changed the Code to achieve its objective of reducing ACOT payments. The Code requires (Schedule 6.4 clause 2A) reporting on eligibility in terms of DG that is "required" to meet the GRS, but this is not the basis on which transmission charges are set and applied, and nor is it a measureable 'cost' in any useful sense. It is also not the only way that DG might contribute to lower transmission costs, for example by helping to defer investment.

9 Moreover, the Code process does not, in our view, clearly allow consideration of alternatives – for example demand response - to meet the GRS at lower cost than the DG. Such alternatives would presumably make the eligible list shorter.

10 A superior approach would have been to consult on how best the Code could be changed to meet the objective before actually changing the Code.

11 In terms of the method used by Transpower - as far as we understand it - we have the following comments:

11.1 The method applied appears to conclude that where *any* DG connected to a GXP is required to meet the GRS then *all* DG connected to the same GXP is required. To us this does not logically follow. A better method may have been to start with the measured load outcomes, and progressively add back the DG (we suggest starting with the larger instances of DG that are actually receiving ACOT payments currently, since these are the focus of the Code change) until such time as the increased load leads to the GRS test no longer being met.

11.2 A further implication of this is that the amount of DG in place in an eligible region as at the rather random date of 6 December 2016, was all required. This seems like an odd coincidence. It also raises the questions of:

11.2.1 How additional DG connected after that date, say on 7 December 2017 would be assessed - it would be very surprising if it was not also eligible under this model, but then at what point would additional DG not be eligible under this model?, and

11.2.2 Was the GRS met before the very last DG was added prior to 6 December 2016?

11.3 The method is described as using information on DG operation from the reconciliation manager (para 2.1, page 10). We are not sure what information is being referred to, but for any DG that is ‘behind’ load (and we suspect most of the smaller DG is) the reconciliation process can only reveal export (if it is metered), not generation. Thus some estimation would be required to accurately add the generation output back. If we have this wrong and the nameplate capacity has been added back, then this is likely an overstatement, as no generation is on 100% of the time, and there would be reason to believe that some types of DG in particular would have very low output during trading period 37 on 14 August 2014 (see Table 4, appendix A.2).

11.4 The method does not seem to provide much information on the *value* of the DG, which presumably would be revealed by what cost is avoided by the DG providing a substitute to alternative investment or expenditure. This information would help any distributors that thought ACOT payments should be reduced, but didn’t have any good basis for working out by how much.

Concluding remarks

12 Thank you for the opportunity to make this submission. Orion does not consider that any part of this submission is confidential. If you have any questions please contact Bruce Rogers (Pricing Manager), DDI 03 363 9870, email bruce.rogers@oriongroup.co.nz.

Yours sincerely

Bruce Rogers
Pricing Manager

Appendix: Responses to specific questions

Submitter: Orion New Zealand

Number	Question	Response
Q1.	What, if any, changes should be made to the list of distributed generation in the lower North Island that is eligible to receive ACOT payments under the regulated terms? What are your reasons?	The list appears to be too long and we presume this reflects the method used.
Q2.	If you own generation identified in Transpower's report as "notionally embedded" and you consider your plant is distributed generation, please provide information to show the capacity of your plant and where / how it is connected to a distribution network?	No comment.