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Electricity Authority
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Sent by email to: submissions@ea.govt.nz

An operational review of Part 6 of the Code – second consultation

Introduction

1. Vector welcomes the opportunity to respond to the Electricity Authority's (Authority) consultation paper, *An operational review of Part 6 of the Code* (paper), dated 02 December 2013. No part of this submission is confidential and we are happy for it to be publicly released.

2. Vector's contact person for this submission is:

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3. Overall, Vector supports the Authority's review of Part 6 of the Code and its aim to simplify and streamline the connection process for small-scale distributed generation (SSDG). Vector also appreciates the Authority's efforts to revise its previous proposal having considered the submissions.

4. However, some improvements could still be made to the revised proposal. To this end, we hope that the Authority seriously consider s our comments and recommendations to clarify certain clauses.

5. Vector would also like to note that, in response to the Authority's consultation on the "Transmission pricing methodology: Avoided cost of transmission (ACOT) payments for distributed generation", we recommended a full review of Schedule 6.4 in addition to the current operational review of Part 6. This is because the issues raised by the Authority in relation to ACOT payments provide a valid prima facie basis for a review of distributed generation payment arrangements.

Overall Part 1A process

6. Vector considers that the revised low-cost, ex-ante approval process will provide a better platform for ensuring compliance for SSDG connections than

the previously proposed ex-post notification proposal. Vector supports the proposal on this basis.

7. The paper states that "other initiatives", together with a simplified connection process for SSDG, will help resolve the problem of non-notified SSDG connections (paragraph 3.1.4). However, these initiatives are not further explained. Vector **recommends** the Authority provide further information and consult with stakeholders on these initiatives on the basis that stakeholders should have the opportunity to comment before they are introduced.

8. Vector considers that the timeframe of 10 business days for processing a Part 1A SSDG application is too short, particularly given the proposal under clause 9H to deem implied distributor approval if the DG operator has not received notice within this timeframe.

9. Vector **recommends** that if the Code includes provision for implied approval, distributors should be given a timeframe of 15 business days to process the application. On balance we believe this is more appropriate because it provides a reasonable time for distributors to properly assess DG applications for the need to carryout inspections, and whether deficiencies or non-compliance exist.

Part 6 should provide for post-connection information

10. For Part 6 to be effective, it is essential that distributors receive notification that DG is connected, and other information such as the ICP identifier and provision of a certificate of compliance (CoC).

11. Vector **recommends** that an additional step be added to the operational requirements of Part 6 for each DG type (i.e. under Parts 1, 1A and 2) requiring DG operators to provide distributors, within a reasonable timeframe:

    i. Notification that the approved DG is connected and the date on which this occurred;

    ii. A copy of the CoC. The CoC must also state the particular standard (e.g. AS 4777) that the installation conforms to; and

    iii. The DG's ICP identifier (if one did not exist at the time of the application).

12. Vector's reasons are stated below.

Notification of connection

13. Notification of connected DG is a key concern for distributors. Not only is it important to know whether there is DG connected from a network safety perspective, but regulations require distributors to disclose information about

connected DG. However, distributors cannot know if or when DG is actually connected following an application approval unless notified.

14. Accordingly, if DG operators do not notify distributors of their connection distributors will have no way of knowing that DG has been connected and may breach their obligations to provide DG related information to the registry, under clause 7 of Schedule 11.1 of the Code. Distributors are also required to report the number of DG connections and capacity installed per year under Schedule 9e (i) of the Information Disclosure Determination, under Part 4 of the Commerce Act and doing so requires knowledge of the DG installation and its date of connection.

Certificate of Compliance

15. Vector supports the proposal under clause 2A(1)(e) whereby DG must be inspected and issued a CoC under the Electricity (Safety) Regulations 2010. This is an important feature of the application process as it helps ensure safety and compliance. However, Vector understands that a CoC is only available *post-connection*. This is recognised under clause 9B(4)(d), where DG applications only need to include a copy of the CoC "when available".

16. Vector considers that all DG connections under Part 6 (i.e. under Parts 1, 1A and 2) should be required to provide the CoC as soon as practicable. Vector also considers that the CoC should be required to state the standard the installation conforms to, e.g. AS 4777.1 or the relevant standard at the time. This will help provide distributors with certainty that the DG installation is designed and installed according to Part 6 requirements.

ICP identifier

17. Clause 9B(4)(b) requires DG applicants to provide the ICP identifier "if one exists". Vector considers that the Code must also require DG operators to provide the distributor with the ICP identifier as soon as practicable. The identifier is important and distributors cannot properly identify the DG site or meter without it.

Drafting of Part 6

18. Vector considers that the drafting of Part 6 could be generally improved through better wording and clarification. There are numerous cross references (especially in Part 1A) and several clauses with poor wording, which leave readers in doubt of their meaning and / or application. Vector's specific comments on drafting are below.

Ambiguous and inconsistent drafting

19. The proposed wording of clause 2A, Part 1 of Schedule 6.1, could be improved. Vector **recommends** including some words to the following effect in the heading of clause 2A, "…not required under Part 1 *but required under Part 1A*" (as highlighted). This is because the wording currently gives the impression that in the circumstances outlined in clause 2A no application is required, which is not the case.

20. Similarly in clause 2A(1), Vector suggests inserting reference to Part 1, e.g. "*Part 1* of this Schedule does not apply to distributed generation if…". This will help clarify the scope of clause 2A.

21. Clause 9A(2) seems to unnecessarily repeat the phrase "where the distributed generator has not elected to apply to a distributor under clause 2A(2)". Vector **recommends** deleting this repetition.

22. Clause 9B appears to be inconsistent with clause 2A(1)(a). It is not clear if this was intentional or a mere oversight. Clause 2A(1)(a) refers to clause 2(1)(a), (b) and (d). However, clause 9B(2)(c) appears to contradict this as it suggests clause 2A(1)(a) should also refer to clause 2(1)(c). Vector **recommends** the Authority clarify this.

23. There appears to be a drafting error under clause 2A(1). It is currently worded so that only DG that has been inspected and issued a CoC (along with other requirements) can apply under clause 9B. However as discussed above, only connected DG can be issued a CoC. This means that only connected DG could apply under clause 9B, which appears to be inconsistent with the proposed scheme. Vector **recommends** the Authority clarify this and amend the wording accordingly.

24. As mentioned above (paragraph 10) distributors do not connect DG to its network. DG operators physically connect the DG installation to a network. This is not consistently reflected throughout Part 6. For instance, clause 9H reflects this - "distributed generator may connect to the network" but other clauses use the phrase - "distributors must connect" (clauses 8, 9, 23, 24). Vector **recommends** the Code be drafted consistently to reflect the fact that DG is not connected by the distributor.

Unclear timeframes

25. It is also not clear how the timeframes set out in clauses 9G and 9H integrate with the situations that arise in clauses 9D and 9E.

26. Clause 9D does not prescribe what happens in the situation where the DG operator does *not* grant the distributor permission to inspect, or only grants permission on the last day of the statutory timeframe, making it challenging for the distributor to respond to the application. In such circumstances the

distributor may wish to decline the application but refusal to grant permission to inspect is not specified in clauses 9G or 9H as a reason to not grant approval for an application.

27. Under clause 9E the distributor can notify the DG operator that their application is subject to constraints and is then required to work with them to assess solutions. However, this is not covered in clause 9F and 9H as a reason for the distributor to not give approval. Thus the following scenario could occur: a DG operator would apply, the distributor would tell them they are not able to connect due to a constraint and then the distributor needs to work with the DG operator to find a solution. But unless that is all done within 10 (or, as we propose above, 15) business days, the timeframe will expire and the application is automatically approved. We do not believe this was the EA's intention.

28. To address these issues, Vector **recommends:**

    i. Including provision for the distributor to decline the application on the basis that an inspection which it has requested has not taken place. For instance, an additional deficiency could be added to clause 9F(1) to the following effect, 9F(1)(d) "the distributor has not been permitted by the distributed generator to inspect the distributed generation in a reasonable timeframe, despite giving two business days' notice"; and

    ii. Including reference to clause 9D and 9E in clause 9H(2) so that clause 9H(1) does not apply if the distributor has advised the distributed generator of a deficiency under clause 9F(2), inspection under clause 9D(1), or congestion under clause 9E(1).

Testing and inspection

29. Vector considers it would be beneficial to allow distributors under clause 7 and 22 (under Parts 1 and 2, respectively) to request testing and inspection or documentation to demonstrate ongoing compliance. It is not clear to Vector why distributors only have this right under Part 1A. That is, all approved and connected DG should be required to undertake *ongoing* testing and inspection to ensure ongoing compliance with the distributor's connection and operation standards.

30. Vector **recommends** clauses 7 and 22 include provision for distributors to request testing, inspection, or documentation, to demonstrate ongoing compliance and conformity and that non-conformity or non-compliance may result in the distributor requiring the distributed generator to disconnect (subject to rectification).

Reference to A4777.2

31. Vector is aware that the "A 4777" standard is in the process of being revised and will soon become the "AS/NZS 4777" standard.

32. Vector **recommends** the final Part 6 amendments be drafted in a way in which it can deal with such change, and any other future changes without requiring amendments. For instance, Part 6 could refer to the "relevant standard", where "relevant standard" is defined in Part 1 of the Code as AS 4777 or any successor to this standard.

Definition of "distributed generator" will not always apply to one party

33. The current Part 6 appears to only contemplate situations where the DG owner, operator and person in possession of the DG are the same person. In a market where SSDG is becoming increasingly popular and accessible, Vector considers that the Code needs to be able to cater for situations where the DG owner, operator and person in possession of the DG is not necessarily the same person, e.g. take for example a lease to own system where ownership and possession are separated, or other new technology solutions where possession and effective control is separated.

34. When such situations arise, application of the current Code is problematic. For instance, the Code is currently drafted in a manner where the "distributed generator must" do something. Given the range of obligations that are placed on the distributed generator in the Code, such separation of ownership / possession / control can create uncertainty when determining which person actually has the obligation. Vector **recommends** the Authority consider these issues and make any changes, as appropriate.

Proposed fees

35. The proposed fees set out in Schedule 6.5 do not appropriately reflect the actual costs incurred by distributors for processing applications and carrying out inspections. As a result, this means that electricity distributors would be subsidising DG operations at the expense of electricity consumers more generally. The costs of ensuring safety and compliance should fall on the party wishing to connect its DG, as they are the party creating such risks.

36. Vector **recommends** the Authority amend the maximum proposed fees to more adequately reflect actual costs. Vector suggests that such fees start at $120 per site for DG < 10kW.

Vector supports the Electricity Network Association's (ENA) submission

37. Vector agrees with the ENA's views as outlined in its submission. In particular, we agree that the Authority's cost benefit analysis is not robust and requires further work. In our view, the Authority must demonstrate a clear case for

these proposals, in other words there must be certainty that the benefits of the Authority's proposal will outweigh the costs.

38. Vector also agrees with the ENA that it is not practical to require distributors to provide a list of all locations on the network subject to export congestion. Determining such a list requires details of the load and voltage of all distribution transformers and LV cables, which distributors do not currently have. Distributors would need to install meters on all LV cables, monitor demand and voltage under different conditions and model the results in order to determine congestion. Furthermore, in some cases congestion cannot be identified until details of generating unit parameters are known. To this end, Vector supports the ENA's suggested changes to the export congestion provisions.

Yours sincerely,

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