8 May 2018

John Rampton
General Manager Market Design
Electricity Authority

By email: submissions@ea.govt.nz

Dear John

Connection and Electrical Connection Guidelines

We appreciate the opportunity to submit on the Authority’s Connection and Electrical Connection Guidelines published 10 April 2018.

First, we consider a diagram to show relationships between connection types is helpful but we suggest modification for accuracy. We consider the diagram does not correctly reflect the Code definition for interconnection point because the term excludes gateway NSPs. We propose a redrawn diagram in the Appendix. Our diagram introduces a new term non-grid NSP, which allows the term interconnection point to convey its Code meaning.

We have reviewed the guidelines relevant to the grid owner (chapter 5) for clarity and accuracy of content and references. Our comments are in table 1 below.

Table 1 Chapter 5 of the guidelines

<table>
<thead>
<tr>
<th>Document Reference</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.13 (d) footnote 35</td>
<td>The footnote refers to clauses 25 and 26 of schedule 11.1. These clauses relate to providing information on request and are not necessarily relevant to the connection process. We consider a more appropriate reference would be 15.14 “notice of changes to the grid”.</td>
</tr>
<tr>
<td>5.16 footnote 38</td>
<td>The guide refers to the local network owner making a request for calculation by difference, but it should be the trader, consistent with Code reference in the footnote (Clause 4 of schedule 15.4).</td>
</tr>
</tbody>
</table>

1 Interconnection point means a point of connection between—
(a) a local network and any other local network; or
(b) an embedded network that is not a gateway NSP and a local network; or
(c) an embedded network that is not a gateway NSP and any other embedded network
| 5.21  | The guide states that the NSP must not be decommissioned until the POC has been decommissioned and there is no possibility that electricity can flow. However, sometimes one NSP is replaced by another. We suggest rewriting 5.21:  
5.21 (a) where the POC is decommissioned or  
(b) where the continues to electricity flow but is reconciled a different NSP. |
| 5.23 footnote 43 | As per comments for footnote 35, a more appropriate reference would be to 15.14. |
| 5.26 | The guide covers steps the grid owner must take before allowing a connection including b) reviewing the metering designs where the grid owner does not provide the metering. We propose adding a reference clause to clarify that the connecting party must provide the grid owner with the design reports referred to in b). For example  
5.26A A participant other than the grid owner who provides a metering installation at a new grid POC must, before electrically connecting:  
a) provide a copy of the metering installation design report to the grid owner  
b) provide the grid owner with at least 3 months to review and comment on the metering installation design. |
| 5.27 a) footnote 51 | The guide refers to the NSP being *electrically connected* while the Code clause 10.29 refers to connection.  
10.29 *When grid owner may connect point of connection to grid* |
| 5.27 b) footnote 52 | The guide refers to the MEP for the NSP but the Code reference (Clause 10.26(7)) is the MEP for the *metering installation*. |
| 5.28 a) footnote 54 | 5.28 a) of the guide refers to not being electrically connected if the grid owner has disconnected for safety reasons, but Clause 10.33A (3)(a) refers to the distributor doing the disconnecting. Suggest  
(a) the distributor has disconnected the grid NSP. |
<p>| 5.32 footnote 55 | The footnote refers to clause 10.31A which is a distributor obligation. The footnote should be clause 10.29A which is a grid owner obligation. |
| 5.39-5.72 | This section covers the requirements for an NSP that is not a point of connection to the grid. The requirements cover both interconnection point NSPs and gateway NSPs. We consider using the term interconnection point in a general sense when it is also a specific term is confusing. We suggest a better term is <em>non-grid NSP</em> and have re-drawn the diagram at Figure 1 with the new term. |
| 5.39 (a) | The second sentence is not clear. |
| 5.39 (c)(ii) | The description is for a gateway NSP, but these are excluded under the definition of <em>interconnection point</em> in Part 1. |
| 5.46 (a) footnote 68 | The term <em>physically created</em> that should be replaced by <em>connected</em> (consistent with footnote 68 Clause 10.30(1)). |</p>
<table>
<thead>
<tr>
<th>5.46 (b) footnote 69</th>
<th>Footnote 69 Clause 10.30A (1) refers to electrically connecting and doesn’t really fit with the content under 5.46</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.57 (a)</td>
<td>Similar issue to 5.21. There are situations where the NSP is no longer required but connection will still exist. Ref 5.58 (b) and (c).</td>
</tr>
<tr>
<td>5.62(c)(ii) and (iii)</td>
<td>add for the metering installation to both (ii) and (iii), for completeness with the Code requirement 10.25 (3).</td>
</tr>
<tr>
<td>5.97</td>
<td>Edit sentence for clarity.</td>
</tr>
<tr>
<td>5.99 (c, d and f)</td>
<td>We consider c) d) and f) should be removed because they don’t relate to connecting and electrically connecting. The statements would be better in the MEP guideline.</td>
</tr>
<tr>
<td>Section heading before 5.120</td>
<td>The section heading refers to interconnection NSP but 5.120 refers differently to traders and ICPs.</td>
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</table>

Please contact me if you have any questions about this submission.

Yours sincerely

Micky Cave
Senior Regulatory Analyst
Appendix – Figure 1 redrawn

Point of Connection (POC)

- NSP
- ICP

Grid NSP
- GXP
- GIP
- GD – Grid Direct consumer
- GN – Grid to local network
- GG – Grid to generator

Non-Grid NSP
- Interconnection Point
- Gateway
- NP – Connections between local or embedded networks that are not a gateway
- EN – Primary connection for an Embedded network

Standard
- GN – Local network
- EN – Embedded network
- SB – Residual volume for network reconciled by differencing

Distributor only
- LN – Embedded network gateway
- SI – Shared unmetered load