Summary of submission for the connection and electrical connection guidelines

Question #	Submitter	Submission	Authority's response
Cover letter/email	Bruce Palmer	Please find attached a 3rd party submission on these guidelines. It raises three points: (i) the guideline is not completely correct with its definition of point of connection as being where line ownership changes. That definition precludes distributors having ICPs for their own consumption. (ii) the guideline assets twice that it is sufficient to check the network side of an isolation device for not being live. It is necessary to check both sides and to assume all lines are live unless proven otherwise. (iii) there is much use of the term PoC in connection with ICPs. The Act refers instead to "point of supply' which is a pivotal concept in defining the difference between "works" and "electrical connection". My suggestion is that terminology should be consistent.	 Agree. Guidelines have been amended Agree. Guidelines have been amended Disagree. Terminology is consistent, POS and POC have very different meanings and locations.

<table>
<tr><th>Question #</th><th>Submitter</th><th>Submission</th><th>Authority's response</th></tr>
<tr><td>Cover letter/email</td><td>Transpower NZ</td><td>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[1] for interconnection point because the term excludes gateway NSPs. We propose a re-drawn 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>
<tr><th>Document Reference</th><th>Comment</th></tr>
<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>
</table></td><td>Disagree. The gateway of an embedded network by definition is an interconnection point

Agree. Added as a separate paragraph

Agree. Guidelines have been amended</td></tr>
</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

Question #	Submitter	Submission		Authority's response
		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.	Agree. Guidelines have been amended
		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.	Agree. Guidelines have been amended Agree. Guidelines have been amended
		5.27 a) footnote 51	The guide refers to the NSP being electrically connected while the Code clause 10.29 refers to connection.	Agree. Guidelines have been amended

Question #	Submitter	Submission		Authority's response
			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.	Agree. Guidelines have been amended
		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 the distributor has disconnected the grid NSP.	Agree. Guidelines have been amended
		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.	Agree. Guidelines have been amended
		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 non-grid NSP and have re-drawn the diagram at Figure 1 with the new term.	Disagree. The gateway of an embedded network by definition is an interconnection point. However diagram has been clarified
		5.39 (a)	The second sentence is not clear.	Agree. Sentence has been rewritten
		5.39 (c)(ii)	The description is for a gateway NSP, but these are excluded under the definition of interconnection point in Part 1.	Disagree. The gateway of an embedded network by definition is an interconnection point
		5.46 (a) footnote 68	The term physically created that should be replaced by connected (consistent with	Agree. Guidelines have been amended

<table>
<tr><th>Question #</th><th>Submitter</th><th>Submission</th><th>Authority's response</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>footnote 68 Clause 10.30(1)).</td><td></td></tr>
<tr><td>5.46 (b) footnote 69</td><td>Footnote 69 Clause 10.30A (1)) refers to electrically connecting and doesn't really fit with the content under 5.46</td><td>Disagree</td></tr>
<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><td>Agree. Guidelines have been amended</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><td>Agree. Guidelines have been amended</td></tr>
<tr><td>5.97</td><td>Edit sentence for clarity.</td><td>Disagree</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><td>Disagree. The authority wants to ensure that participants understand their obligations in the connection and electrical connection process</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><td>Could not locate the section</td></tr>
</table>

See appendix 1</td><td>Disagree. The gateway of an embedded network by definition is an interconnection point</td></tr>
<tr><td>Cover letter/email</td><td>Unison Networks</td><td>Our submission firstly makes some general comments, followed by detailed feedback on several sections of the Guidelines.

General Comments

Unison observes that while the guidelines provide a summary of the text contained in the Code regarding connection and electrical connection, we were disappointed to see that there</td><td>Noted. Practical examples may be added at a later date as a refinement to the guidelines</td></tr>
</table>

Question #	Submitter	Submission	Authority's response
		are limited practical examples of how the Code/Guidelines should be applied to achieve operational efficiency. Practical guidance is extremely valuable, particularly in clarifying responsibilities, identifying best practice, and providing process flow diagrams: 1. Clarifying Best Practice of Participants and Responsibilities: Unison, other distributors and reconciliation participants face challenges in achieving and maintaining compliance with Parts 10, 11, and 15 as evidenced by the Authority's participant audits. Participants generally achieving the greatest compliance are those where most of activities (including responsibilities delegated by others such as MEPs) are carried out in-house, which makes it relatively more straight forward to ensure the integrity of the end-to-end process. On most larger networks, such as Unison, responsibilities are distributed across a range of participants and their agents and subcontractors. In many cases parties that need to coordinate activities have no formal relationships or arrangements, for example reconciliation participants not having any relationship with local agents authorised by the distributor, or local distributors having no arrangements with national MEPs. **Given the complexity of this operational landscape, clearer practical guidance could greatly assist in clarifying responsibilities, identifying best practice arrangements, and enhancing operational compliance and efficiency.** 2. Process Flow Diagrams: Connection and electrical	Noted. Practical examples may be added at a later date as a refinement to the guidelines Noted. Flow diagrams may be added at a later date as a

Question #	Submitter	Submission	Authority's response
		connection (including decommissioning) requires works to (a) establish/disestablish a point of supply (b) connect/disconnect of electrical installations, and (c) operate an isolation device to electrically connect/disconnect the ICP. Given that this involves interaction with (potentially) live conductors there are significant health and safety factors involved in these processes. Risks are further compounded by the number of parties involved[2]. Unison has direct experience of unsafe decommissioning where due to the number of different parties involved and issues of communication, decommissions have been carried out unsafely. We note the emphasis in the guidelines on the importance of safe practices as well as specific referenced to the fact that removal of conductors from a meter does not represent safe or complete disconnection. **We suggest that given these factors, more explicit guidance including process flow diagrams are provided for connection and electrical connection and disconnection processes.** Unison's specific drafting comments are provided below. **Conclusion** In summary, we believe that the Guidelines would benefit from the suggested additions we have outlined above, and from improved practical guidance:	refinement to the guidelines Noted, as above

[2] Parties include the consumer, requesting party such as a demolition contractor, the reconciliation participant, MEP, the MEP's subcontractor(s), the distributor, the distributors agent, and the requesting parties' agent who is usually an electrician.

Question #	Submitter	Submission	Authority's response
		• Clarifying responsibilities, identifying best practice arrangements, and enhancing operational compliance and efficiency, and • Process flow diagrams are provided for connection and electrical connection and disconnection processes. Including these suggested changes will enable the Guidelines to be a valuable operational document for distributors, MEPs and retailers in the connection and electrical connection of ICPs.	
Gen1	Contact Energy	See comments below.	Noted
Gen1	Genesis Energy	On the whole, we consider the Guidelines are understandable and the level of detail is correct. We have included some specific comments below, and noted what section those comments apply to.	Noted
Gen1	Nova Energy MEP & Michael Geddes ATH	Yes	Noted
Gen1	Orion NZ	Yes, Figure 1 is very useful.	Noted
Gen1	Wellington Electricity	Yes	Noted
Gen2	Contact Energy	See comments below.	Noted
Gen2	Nova Energy	Yes	Noted

Question #	Submitter	Submission	Authority's response
	MEP & Michael Geddes ATH		
Gen2	Orion NZ	We note that DUML ICPs are not included in the diagram. We appreciate that these ICPs don't represent an ICP that can be connected or electrically connected being often a 'representative' ICP at GXP for a population of streetlighting connections feed from that GXP on the streetlight circuit. Perhaps it should be noted why this type of ICP is not included in the diagram.	Agree. Diagram amended
Gen2	Wellington Electricity	Yes	Noted
Gen3	Contact Energy	This guideline is silent in recognising ICPs created prior to 7 October 2002 which share a connection with a network with another ICP and what steps if any a trader should consider.	Disagree. The guideline does include this detail, but does not specifically recommend what should occur to such ICP identifiers that existed before 7 October 2002.
Gen3	Genesis Energy	On the whole, we consider the Guidelines are understandable and the level of detail is correct. We have included some specific comments below, and noted what section those comments apply to.	Noted
Gen3	Nova Energy MEP & Michael Geddes ATH	No	Noted
Gen3	Orion NZ	No	Noted
Gen3	Wellington Electricity	No WE* have found the Connection and Electrical Connection Guidelines paper very easy to read and understand.	

Question #	Submitter	Submission	Authority's response
		This has been well written so any audience can pick it up and comprehend what is being explained and it is great to have the references to the Clauses within the Electricity Act include. WE* have responded individually to No 1 and No 5. We have no issues in this being published. It would be good to see more of these types of guide lines drafted and published in this manner.	Noted
Q1	Bruce Palmer	Assertion 2.2 is not correct in all circumstances. Network owners also have points of consumption on their network: (i) They consume electricity to monitor and operate remote switching (ii) They consume electricity for local supply in substations (SCADA, lighting, heating, security) (iii) They consume electricity in their depots, workshops and offices (iv) They offer EV recharge points to the public For these consumptions to be included in monthly balancing/reconciliation, they need to be metered (or have deemed unmetered load) and be assigned to a retailer. Otherwise the consumption will end up as part of unaccounted for energy (UFE). The challenge with assertion 2.2 is that where the network owner also owns the service line, there is no "change of ownership" therefore it cannot be a "POC" in terms of the guidelines. The Act defines a point of supply in terms of "exclusive fittings" which relate to the consumption of electricity on a property, and makes no reference to ownership. The following wording would address the matter: 2.2. *Generally*, a POC can exist only when….	Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		And add a footnote: *In situations where the network owner is also the consumer, a POC can exist without a change in ownership of electricity lines. In these circumstances, the POC will be where the electricity supply becomes exclusively for the network owner's consumption.*	Disagree
		Clause 2.11 and Figure 1 both have the same issue. The Electricity Act defines a "point of supply" with regard to consumers. It states where a point of supply is by default (in terms of either the property boundary, or the point within the property at which the supply first becomes exclusive). It allows the consumer and the network owner to define a different place within the property to be the POS should both agree. The POS defines what is considered to be the "electrical installation", versus what is considered to be "works"; this then defines both ownership and responsibility/liability.	Disagree. Terminology is consistent, POS and POC have very different meanings and locations.
		It is an important demarcation in the legislation. It is where supply is deemed to occur. However, the only reference to "point of supply" in the Guide is a footnote on page 7 that mentions it defines one of the ends of a "service line".	Point of supply is not used in the Code as a term
		Terminology should be consistent. • There is a point of isolation, which is where supply from the network to the installation can be isolated; often a network fuse. • There is a point of supply, defined in the Act, where the network stops and electrical fittings start, generally but not always also an ownership change of electrical lines. The point of supply is identified to Registry by an	Noted. Terminology is consistent

Question #	Submitter	Submission	Authority's response
		ICP number. • There is a point of metering (or of consumption, for unmetered load) which may also be a second point of isolation and controlled by the MEP/retailer (if a meter with kill-switch capability has been installed). A point of supply to a consumer is one type of POC. NSP is the other. When describing ICPs, "POS" is a more consistent term to use as it matches the legislation.	Disagree. POS defines where a network enters a property. POC defines where ownership changes and an electrical installation starts.
Q1	Contact Energy	**Section 2.11** This section appears incomplete as there is no reference to ICPs that represent Distributed Unmetered Load (DUML). Contact believes it is worth including a reference to DUML here since the connection/disconnection of lights associated with this type of load is specific to this scenario. **Section 2.16(d)** This section incorrectly references Distributed UML as a "Distributor only" ICP. It should refer to a "Trader" ICP. **Section 2.18** This section has not considered the following scenarios: (a) where a **customer network** becomes an embedded network and either the trader ICP for the gateway is decommissioned and replaced by a new distributor-only ICP or the trader ICP is converted to a distributor-only ICP; or (b) where ICPs have been amalgamated**.**	Agree. Drafting amended Agree. Drafting amended Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		Both of the above scenarios should be added to this Section of the guideline.	
Q1	Genesis Energy	No comment.	Noted
Q1	Nova Energy MEP & Michael Geddes ATH	No response	Noted
Q1	Orion NZ	**Is the section understandable?** Yes, Figure 1 is very useful. **Is the level of detail sufficient?** We note that DUML ICPs are not included in the diagram. We appreciate that these ICPs don't represent an ICP that can be connected or electrically connected being often a 'representative' ICP at GXP for a population of streetlighting connections feed from that GXP on the streetlight circuit. Perhaps it should be noted why this type of ICP is not included in the diagram. **Are any relevant issues left out?** No	Noted Agree. Figure 1 has been amended
Q1	Trustpower	Ok	Noted
Q1	Wellington Electricity	The use of swim lane diagrams to demonstrate the various steps of the new connection process would be useful to clarify the sequence and timing obligations for the various parties involved. A pictorial representation of Figure 1 "types of Connection" would also be useful in my mind.	Noted. Flow diagrams will be produced separately and at a later date
Q1	Wells	Yes, Yes, No	Noted

Question #	Submitter	Submission	Authority's response
	Instruments & Electrical Services		
Q2	Bruce Palmer	Clause 3.6 only goes part of the way. With an increasing prevalence of distributed generation (e.g. rooftop solar) and no absolute guarantee this generation has been connected to the supply through an approved and correctly-functioning inverter, it is quite possible for the network side of an isolation device to be de-energised, but still be live from the customer side. It is recommended to change the rule to: *As a rule, all service lines and conductors on both sides of any isolation device should be treated as live at all times until proved otherwise.* Clauses 3.9 and 3.15 have a similar rule. Clauses 5.105 and 5.109 however get this correct.	Agree. Drafting amended
Q2	Contact Energy	**Section 3.8** The word "been" should be included between the words "conductors" and "removed". **Section 3.10** It appears that there should there be additional wording added as to what constitutes a permanent disconnection. **Section 3.11** Please refer to our comments in Section 2.18.	Agree. Drafting amended Agree. Drafting amended Agree. Drafting amended
Q2	Genesis Energy	No comment.	Noted
Q2	Nova Energy MEP & Michael	No response	Noted

Question #	Submitter	Submission	Authority's response
	Geddes ATH		
Q2	Orion NZ	**Is the section understandable?** Point 3.15 is missing the word 'to' before electrically connect in the first sentence. We suggest that the underlined bolded sentence in point 3.6 would be more appropriately worded as "As a rule, both ~~connected~~ service lines and conductors on the network side of the isolation device should be treated as live at all times." We suggest that the underlined bolded sentence in point 3.9 would be more appropriately worded as "As a rule, both ~~all disconnected~~ service lines and conductors on the network side of the isolation device should be treated as live at all times." We suggest that the underlined bolded sentence in point 3.15 would be more appropriately worded as "As a rule, both service lines and conductors on the network side of the isolation device should be treated as live at all times." Given that this document is not specifically a safety document perhaps an alternative to inserting the 'safety' message throughout the document could be to state this once at the start of Section 3. **Is the level of detail sufficient?** At a high level my understanding is that the connection and electrical connection guidelines have a particular focus on reconciliation rather than the operations and maintenance of a network. That is, the focus is on when the metering is electrically connected. If so, perhaps this is important to point out clearly and early in the document. This may alleviate the debate that occurs around the definition of connection and electrical connection. **Are any relevant issues left out?**	Agree. Drafting amended Agree. Drafting amended Agree. Drafting amended Disagree. The risk is that a section may be read in isolation The guidelines follow the Code sequence, this is stated I the overview

Question #	Submitter	Submission	Authority's response
		N/A	
Q2	Trustpower	Ok	Noted
Q2	Wells Instruments & Electrical Services	Yes, Yes, No	Noted
Q3	Contact Energy	**Section 4.4** This section does not recognise the scenario where an **embedded network is transitioning to a network extension**. In that scenario there is no physical disconnection or decommission of the POC, only the metering point is disestablished. We believe that further work on this Section is required to recognise the difference between an electrical connection / disconnection of an interconnection point and a metering point being established / disestablished for settlement purposes. **Section 4.5** This section does not recognise the connection of additional DUML load onto an existing placeholder ICP and DUML database. In many cases new streetlights are livened when a network extension (subdivision) is energised by a distributor before a council has the roads vested into their ownership and also before any ICPs have been created for the network extension (subdivision).	Noted. The guidelines on secondary networks are to be reviewed. When this review is completed, this guidelines will also be updated. Agree/ Drafting amended
Q3	Genesis Energy	No comment.	Noted
Q3	Nova Energy MEP &	No response	Noted

Question #	Submitter	Submission	Authority's response
	Michael Geddes ATH		
Q3	Orion NZ	**Is the section understandable?** Yes **Is the level of detail sufficient?** Yes **Are any relevant issues left out?** Yes	Noted
Q3	Trustpower	Ok	Noted
Q3	Unison Networks	**Specific Drafting Comments** **(a) Isolation for electrical connection / electrical disconnection of a POC (section 4)** Paragraph 4.5 states that: *"Distributors should be aware of where ICPs are being connected on its network …".* This statement appears to mix up connection and electrical connection and fails to provide clarity of the wording in the Code. Unison submits that this should be redrafted to state: *"A distributor is responsible for the connection of installations to its network and should be aware of where ICPs are being connected on its network…".* Further clarification is then needed, along the lines of the following*: "Distributors may delegate the function of connection and electrical connection to suitably qualified, authorised agents. Distributors are responsible for ensuring their agents carry out activities in a manner that ensures obligations associated with connection and electrical*	Agree. Drafting amended Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		connection under the Electricity Industry Participation code are met."	
Q3	Wells Instruments & Electrical Services	Yes, Yes, No	Noted
Q4	Contact Energy	**Section 5.116** The mechanism to complete a physical disconnection safely is not fully reflected in the existing registry disconnection reason codes. For example, an outcome from the Christchurch earthquake was that a small number of commercial buildings that were damaged from the earthquake were not able to be physically disconnected because the only means to disconnect the property was from within the building itself at the transformer or main switch. In addition, there are a number of pre-7 October 2002 ICPs for commercial and industrial loads where the customers' main switch is the only isolation point available and the only other means of disconnection would require a network shutdown of a portion of the distribution network in order to undertake a network isolation. We recommend: • Registry reason codes are further expanded to include disconnection at distribution assets (transformer, HV switchgear, supply cable termination) which will require a status reason and codes for the EIEP7. • Clarification in this Guideline document that there are other mechanisms available to traders to complete a	Noted and referred to the Standing Data Formats Group Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		disconnection outside of the standard reason codes available on the registry. • Confirmation in this Guideline document that for an ICP with an AMI meter and a meter installation category other than 1 that it is not possible to remotely disconnect these meters. **Section 5.117** Traders should assign the appropriate valid reason code setting out the location of the disconnection (for example assign code 07 on the Registry for ICPs electrically disconnected remotely by AMI meter).	Partially agree. Drafting amended to say normally available. It is possible to remotely disconnect category 2 and greater by using an auxiliary switch and an external contactor Agree. Drafting amended
Q4	Genesis Energy	5.84 – As well as potential financial consequences for traders and customers, if distributors fail to populate ICP attributes correctly, it may prevent a trader from meeting its code obligations in respect of populating the registry and this should be highlighted. 5.90 – While market processes may cope with distributors not decommissioning an ICP when asked to, leaving ICP at 'INACTIVE' means traders (and ultimately consumers) may continue to incur costs (both network charges and otherwise). In addition, distributors not completing decommissioning ends up creating confusion in the future when the historical state of a site is uncertain, attracting further costs to resolve. 5.107 – This point needs an explicit statement that while certification can be carried out after electrical connection date, the electrical connection still needs to be recorded in the registry correctly (i.e. the actual electrical connection date, not the certification date).	Agree. Drafting amended Agree. Drafting amended Agree. Drafting amended by adding a new paragraph

Question #	Submitter	Submission	Authority's response
		5.116 – The statement '… paragraph (a) being the most preferred option' should be removed as it is incorrect. There are as many scenarios where this is not the case as there are where it is.	Agree. Drafting amended
Q4	Nova Energy	5.73 – Add Only a distributor or "network approved person" may connect an ICP to its own network 5.74b – Change obligated to "authorised" 5.78 – Change electrical connection to "connection" 5.90 – Disagree Distributor shouldn't change the status to Decommission until the MEP as removed metering from Registry 5.102 – disagree The Distributor shouldn't be able to authorise an electrical connection 5.103 – disagree Only the ATH contracted to install the metering should have the authority to authorise the electrical connection (via the MEP) with the following; - certified metering installed - copies of CoC and ROI - Trader has supplied written permission from the Network and themselves provided the above conditions are met. The ATH has the obligation to supply all certification documents to the Reconciliation Participant. In order for the ATH to ensure this clause is complied with it must supply the Trader via the MEP copies of certificates to prove compliance with these obligations. The Trader is obligated to hold copies of certificates. The Trader must not request an ATH to carry out the duties	Agree. Drafting amended Agree. Drafting amended Agree. Drafting amended Disagree. An EMP can still backdate the registry with metering records while the ICP is in the inactive state. Disagree. The distributor co-authorises an initial electrical connection only. This would require a Code amendment. The guideline follows the current Code process.

Question #	Submitter	Submission	Authority's response
		unless it has been appointed the Trader of the ICP 5.107 – disagree No ICP should be reconnected or energised without certified metering installed. The ATH should authorise the reconnection once certified metering is installed. 5.114 – disagree Only the appointed Trader should be allowed to disconnect. There are many instances where distributors disconnect to allow alterations i.e. meter box shifts without the traders or MEPs knowledge. The distributor should only be allowed to disconnect for safety or with written permission for the Trader responsible for the ICP 5.122 (d) – disagree 5.124 (g) – confusing and misleading No Distributor is allowed to electrical connect an ICP without permission from the trader and this document states no participant is allowed to electrically connect except the trader. Clause 10.33a (1c) should say in the case of an ICP that has not previously been electrically connected the owner of the network has ultimate approval for the ICP to be electrically connected. 5.124 (J) – disagree	Disagree. The Code currently permits this provided the metering is operable, or the electrical connection is for solely unmetered load. A Code amendment is currently being considered, if the Code amendment is successful the guidelines will be updated. Noted Noted Noted. Clause 10.33a(1)(c) states that except it does not use the word "ultimate", It uses the word "written". Noted
Q4	Nova Energy MEP & Michael Geddes ATH	5.73 – Add Only a distributor or "*network approved person"* may connect an ICP to its own network 5.74b – Change obligated to "*authorised"* 5.78 – Change electrical connection to "*connection"* 5.90 – disagree Distributor shouldn't change the status to Decommission until	As above As above As above

Question #	Submitter	Submission	Authority's response
		the MEP has removed metering from Registry	As above
		5.102 – disagree The Distributor shouldn't be able to authorise an electrical connection	As above
		5.103 – disagree Only the ATH contracted to install the metering should have the authority to authorise the electrical connection (via the MEP) with the following; - certified metering installed - copies of CoC and ROI - Trader has supplied written permission from the Network and themselves provided the above conditions are met. The ATH has the obligation to supply all certification documents to the Reconciliation Participant. In order for the ATH to ensure this clause is complied with it must supply the Trader via the MEP copies of certificates to prove compliance with these obligations. The Trader is obligated to hold copies of certificates. The Trader must not request an ATH to carry out the duties unless it has been appointed the Trader of the ICP	As above
		5.107 – disagree No ICP should be reconnected or energised without certified metering installed. The ATH should authorise the reconnection once certified metering is installed.	As above
		5.110 – disagree	
		5.114 – disagree Only the appointed Trader should be allowed to disconnect. There are many instances where distributors disconnect to allow alterations i.e. meter box shifts without the traders or	As above As above

Question #	Submitter	Submission	Authority's response
		MEPs knowledge. The distributor should only be allowed to disconnect for safety or with written permission for the Trader responsible for the ICP 5.122 (d) – disagree 5.124 (g) – confusing and misleading No Distributor is allowed to electrical connect an ICP without permission from the trader and this document states no participant is allowed to electrically connect except the trader. Clause 10.33a (1c) should say in the case of an ICP that has not previously been electrically connected the owner of the network has ultimate approval for the ICP to be electrically connected. 5.124 (J) – disagree 6.6 – seek further clarification	 As above As above As above Agree. Drafting amended
Q4	Orion NZ	**Is the section understandable?** Section 5.39(a) contains the statement "An interconnection point cannot exist within a network owner by an entity that is a distribution network owner/operator." This sentence is difficult to understand. A better wording could be, "An interconnection point can only exist between two networks and not between a network owner and another entity in the same network.' Section 5.6.3 (a) contains the statement "An interconnection NSP can be electrically connected only if (a) a distributor has not disconnected the interconnection NSP for safety reasons, and has not subsequently approved the electrical connection". We're not sure this sentence makes sense because it appears to say that 'an interconnection NSP can be electrically connected only if a distributor …..has not	Agree. Drafting amended Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		subsequently approved the electrical connection.' We suggest the word 'not' be removed.	
		Point 5.38 needs the word "provide" changed to "provided".	Agree. Drafting amended
		Point 5.97 needs to be reworded to say "Traders are responsible for ensuring that there is a metering installation at ~~an~~ electrically connected ICPs and that all electricity conveyed is quantified in accordance with the Code."	Agree. Drafting amended
		Point 5.102 needs to be reworded to say "The first time electrical connection of an ICP requires both the distributor and the reconciliation participant that is responsible for the ICP identifier in the registry to authorize an ICP to be electrically connect~~ion~~ed."	Agree. Drafting amended
		Point 5.119 (a) is missing the word 'meanings' at the end of the definition of electrical disconnection from the Code.	Agree. Drafting amended
		We suggest that the underlined bolded sentence in point 5.105 and 5.109 would be more appropriately worded as "As a rule, both service lines and conductors on the network side of the isolation device should be treated as live at all times."	Agree. Drafting amended
		Given that this document is not specifically a safety document perhaps an alternative to inserting the 'safety' message throughout the document could be to state this once at the start of Section 3.	Disagree, as sections may be read in isolation
		Is the level of detail sufficient? No- We recommend adding some commentary on the responsibilities of MEPs in the connection and electrical connection process. 5.122 (d) should be made clear that the electrical connection refers to the metering component rather than connection to the network. Refer to our response to section 2 above. MEPs need to be timely with their	Agree. Drafting amended

Question #	Submitter	Submission	Authority's response
		paperwork and make best endeavors to work in with livening agents. **Are any relevant issues left out?** It would be useful to point out in the section on 'provision of metering at an interconnection NSP' that there is an avenue by which a distributor can obtain an exemption from installing metering in the right circumstances. We refer to exemption 204 as an example.	Agree. Drafting amended
Q4	Trustpower	Ok	Noted
Q4	Unison Networks	**(b) Operational workflow and process diagrams (section 5)** Paragraph 5.2 states that *"The Code does not specify the operational work flow of the connection process for each participant, but instead states the required outcomes."* Unison agrees with this point; however, submit that guidelines should offer guidance regarding the operational implementation of work flow to achieve the outcomes required by the Code. As noted in our general comments above, the guidelines in their present form fall short in this regard with section 5.3 only identifying a handful of areas that might be taken to improve efficiency. In the context of the above comment, we believe there is merit in offering additional guidance on the operational implementation of the following steps set out in 5.86: *5.86 The registry is an historical record of events and attributes of an ICP, and is not a work flow tool. The Code does not preclude the following steps occurring on the same day, provided the registry is updated*	Noted. Process flow diagrams may be developed separately and included in the guideline at a future date

Question #	Submitter	Submission	Authority's response
		within the time periods specified in the Code, and the effective dates in the registry are appropriate and correct: *(a) trader arrangement with a consumer at an ICP* *(b) trader acceptance of responsibility for the ICP* *(c) trader arrangement with a person to become the MEP for the ICP* *(d) acceptance by the consumer, directly or indirectly, of the distributor's terms and conditions for connection* *(e) distributor creation of an ICP* *(f) distributor's approval for electrically connecting and subsequent electrical connection* *(g) running of service lines and connection to the distributor's network* *(h) inspection, testing, and certification of an installation under the Electricity (Safety) Regulations 2010* *(i) installation and certification of the metering installation by the ATH* *(j) distributor and trader authorisation, and subsequent electrical connection, of the ICP.*	
		The Guidelines should also provide further operational implementation guidance on temporary electrical connection (paragraphs 5.110-5.113) and first-time electrical connection (paragraphs 5.100-5.105).	Noted. This detail would be included in future process flow diagrams as above
		Unison strongly submits that process or flow charts are provided by the Authority to set out the events and responsibilities above. Additionally, we suggest that flow charts are provided for the electrical connection of an ICP that	Noted. As above

Question #	Submitter	Submission	Authority's response
		has been previously electrically connected, as well as for electrical disconnection and decommissioning. Flowcharts such as these have great value to the industry, particularly in the case of the connection of ICPs where there are multiple parties, responsibilities and processes to step through. It would be an efficient use of time and resource for the Authority to draft these for the industry. **(c) Clarification of 'Decommissioning' (section 5)** The definition of 'decommissioning' in the Guidelines requires further clarification. Paragraph 5.90 of the Guidelines currently state: 5.90 Only a distributor may decommission an ICP on its network. Decommissioning means that the connection has been permanently removed from the distributor's network. The process for decommissioning an ICP identifier in the registry is as follows; (a) the trader responsible for the ICP identifier in the registry must change the registry status of the ICP to "Inactive" with a status reason of "electrically disconnected, ready for decommissioning". This definition of 'decommissioning' could be interpreted in at least two ways: • **Either:** The distributor carries out the electrical disconnection, disconnection, and removal of the POS, notifies the trader, who then changes the ICP Status in the Registry to "Inactive" with a status reason of "electrically disconnected, ready for decommissioning".	Agee. Drafting amended

Question #	Submitter	Submission	Authority's response
		In practice, this is the most common approach to decommissioning an ICP. • **Or:** the trader electrically disconnects the ICP and then changes the ICP Status in the Registry to "Inactive" with a status reason of "electrically disconnected, ready for decommissioning", after which the distributor carries out the disconnection and removal of the POS and updates the ICP identifier in the Registry to decommissioned. While this seldom occurs in practice, the status reason ("electrically disconnected, ready for decommissioning") of the ICP suggests this is how the decommissioning process occurs. Potential confusion exists with the inconsistent use of the term "Decommission". The guidelines correctly point out that decommissioning is the disconnection of the installation and removal of the POS; however, the guidelines also refer to "decommissioning an ICP in the Registry" (5.90 (b), and 5.91). It is important that consistent terminology is used. I.e. "following decommissioning of the ICP, the distributor changes the ICP status in the Registry to Decommissioned". Although these suggested changes seem subtle, it is our experience that a lot of confusion exists at present regarding the process of decommissioning. Clear guidance and use of consistent terminology is needed to ensure all parties are clear on their responsibilities in this area to ensure both integrity of market information as well as safety.	Agree. Drafting amended
Q4	Wells Instruments & Electrical	**Yes, No, Yes** (see below) Whilst we agree with the majority of the guideline and its clarification of the code requirements, it has raised some	

Question #	Submitter	Submission	Authority's response
	Services	concerns around some possible ambiguities relating to the interface between the code and the ESRs, particularly regarding the order and prerequisites in the activities of connection, inspection, metering and electrical connection. In some cases the connection of the mains cable by the distributor to the network is claimed by them to be the connection function even though there is often a further connection required (the metering installation) to allow for the flow of electricity to the installation. It seems that the 'connection to the network' is when the distributor is often populating the relevant attributes information in the registry yet the actual connection might not take place for some time. There are also instances where it is claimed that the electrical connection has been undertaken by the distributor (and then a device operated to prevent electricity from flowing), claiming that the site has been initially electrically connected even though the metering installation has not been undertaken. It is quite difficulty to establish the most compliant order to undertake the individual activities to ensure that all of the requirements of the EIPC and the ESR's are fulfilled when there may be different parties involved in undertaking the different activities and the difference between the various requirements. 5.86 in the guideline lists the activities, but not a preferred or required order, and in working through this with some network companies we have found some grey areas in the requirements which we believe it would be of great value to provide further clarification on"	Disagree. The definition of connection refers to the connection of a point of connection to an electrical installation to the distributor's network. The installation of metering is normally within an electrical installation. In that instance the electrical installation is connected. By the same argument, the electrical installation can be electrically connected through the point of connection, but the electrical installation may be turned off by a device or a lack of metering within the installation.
Q5	Contact	No further comments.	Noted

Question #	Submitter	Submission	Authority's response
	Energy		
Q5	Genesis Energy	No comment.	Noted
Q5	Orion NZ	**Is the section understandable?** We suggest that point 6.3 comes before 6.2 to set the scene and then existing 6.2 becomes 6.3 and provides examples. If you adopt this suggestion then existing 6.3 should be begin with 'There' rather than 'These'. **Is the level of detail sufficient**? Yes **Are any relevant issues left out?** Yes	
Q5	Trustpower	Ok	Noted
Q5	Wellington Electricity	Clause 5.80 and 5.89 possibly need tightening to cover the situations where the Retailer has arranged for the electrical connection of a new ICP on a customer own switchboard and then seeks backdating of the status change from "new' to "ready".	Agree. Drafting amended
Q5	Wells Instruments & Electrical Services	Yes, Yes, No	Noted

1 Appendix – Figure 1 redrawn