ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT

For

Orion New Zealand Limited

Prepared by: Steve Woods

Date audit commenced: 18 July 2017

Date audit report completed: 7 August 2017

Audit report due date: 22-Aug-17

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EXECUTIVE SUMMARY

This Distributor audit was performed at the request of Orion New Zealand Limited (Orion), to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

This is Orion's first audit under the new audit regime and whilst there are some minor issues identified, the overall operation is of a high standard with strong controls in place.

Four non-compliances are recorded and they all have a low risk rating. They relate to the timeliness of registry updates and some minor data corrections required.

I've made two recommendations which will assist traders with their processes and compliance. One is to monitor energised ICPs where the trader is yet to update the status to active, and the other is to investigate ICPs at ready for decommissioning status to see if they can be decommissioned.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of five, which results in an indicative audit frequency of 24 months. Considering this result along with the proposed solutions to the matters raised, I believe 24 months is an appropriate recommendation.

The matters raised are shown in the table below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
IED update	3.5	7(2A) of Schedule 11.1	20 initial energisation dates updated late to the registry. 18 incorrect event dates.	Strong	Low	1	Identified
Registry updates	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Strong	Low	1	Cleared
NSP accuracy	4.2	7(1)(b) of Schedule 11.1	Six ICPs with incorrect NSPs.	Strong	Low	1	Cleared
Registry accuracy	4.6	7(1) Schedule 11.1	Six initial energisation dates incorrect. One incorrect unmetered wattage.	Moderate	Low	2	Investigating
					Future Risk Rating	**5**	

RECOMMENDATIONS

Subject	Section	Recommendation	Description
ICP statuses	4.6	7(1)(p) of schedule 11.1	Monitor energized ICPs at status “inactive, new connection in progress”.
Decommissioning	4.11	Clause 20 Schedule 11.1	Check 195 ICPs at ready for decommissioning to confirm whether they can be decommissioned.

ISSUES

Subject	Section	Recommendation	Description
		Nil	

1. ADMINISTRATIVE

1.1. Exemptions from Obligations to Comply With Code (Section 11)

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

Audit observation

Orion has one exemption in place (204), which allows for an interconnection point to be unmetered.

This exemption expires when one of the following occurs:

a. "the close of 1 September 2022

b. the number of installation control points ("ICPs") on Orion's local network (BRY0661) that can be backfed by MainPower's local network (KAI0111) exceeding 500

c. the number of ICPs on MainPower's local network (KAI0111) that can be backfed by Orion's local network (BRY0661) exceeding 500

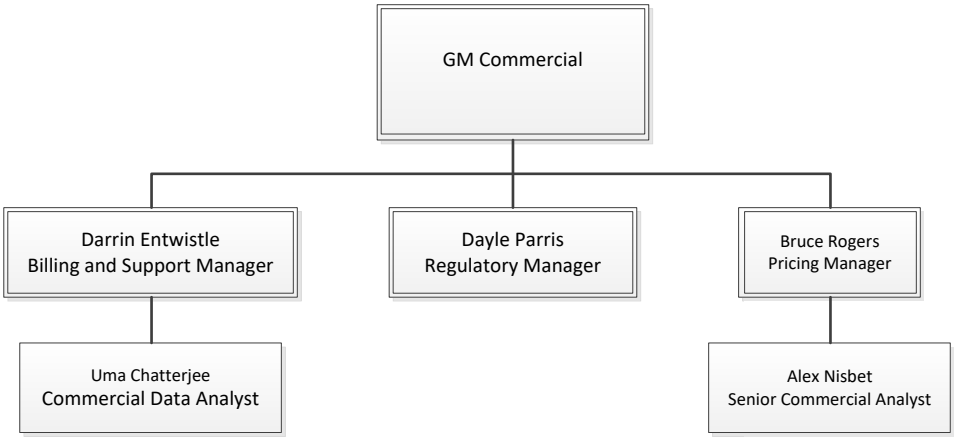
d. there having been more than six outages on the existing interconnection point between Orion's local network (BRY0661) and MainPower's local network (KAI0111) in the period starting on the commencement of this amendment and ending on 31 August 2018, and for every subsequent year, the period of 12 months starting on 1 September and ending on 31 August of the following year."

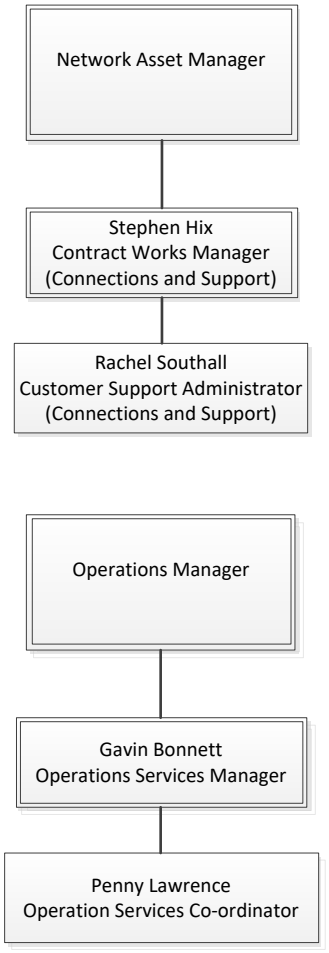
Audit commentary

This exemption is still current because the date of 01/09/22 has not been met, the number of ICPs is not over 500; there are 34 Orion ICPs that can potentially be fed from the Mainpower network and 204 Mainpower ICPs that can potentially be fed from the Orion network. The interconnection point has not been operated since 06/07/17 and its last operation was 19/12/16.

1.2. Structure of Organisation

Orion provided an organisation chart and the relevant parts are shown below.




Network Asset Manager
Stephen Hix
Contract Works Manager
(Connections and Support)
Rachel Southall
Customer Support Administrator
(Connections and Support)
Operations Manager
Gavin Bonnett
Operations Services Manager
Penny Lawrence
Operation Services Co-ordinator

1.3. Persons involved in this audit

Auditor:

Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Orion personnel assisting in this audit were:

Name	Title
Dayle Parris	Regulatory Manager
Steve Hix	Contract Works Manager
Rachel Southall	Customer support Administrator
Penny Lawrence	Operation Services Coordinator
Gavin Bonnett	Operations Services Manager
Darrin Entwistle	Billing and Support Manager
Uma Chatterjee	Commercial Data Analyst
Bruce Rogers	Pricing Manager
Alex Nisbet	Senior Commercial Analyst

1.4. Use of contractors (Clause 11.2A)

Code reference

Clause 11.2A

Code related audit information

A participant who uses a contractor

- *remains responsible for the contractors fulfillment of the participants Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to the action of a contractor*
- *must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the participant would be required to have if it were performing the obligation itself.*

Audit observation

Orion approves field contractors to conduct connection related activities. I checked Orion's approach to the management of contractors.

Audit commentary

Only a small number of contractors are engaged and they are all deemed competent by Orion. The contractors are:

- Delta
- SafePower
- Telpower
- Southern Network Services.

1.5. Supplier list

As mentioned above, the field contractors are as follows:

- Delta
- SafePower
- Telpower
- Southern Network Services.

1.6. Hardware and Software

Orion uses the following systems:

- PowerOn Fusion / GE - Real time high voltage network connectivity model
- Microsoft tools - Connection management and registry interface.

Orion's backup and security measures are in accordance with standard industry protocols.

1.7. Breaches or Breach Allegations

Orion confirms there are no breach allegations relevant to the scope of the audit.

1.8. ICP and NSP Data

Orion has responsibility for the Orion local network. There have been no changes during the audit period. The table below sets out the details.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network Type	Start Date	No of ICPs
ORON	APS0111	ARTHURS PASS			RNBAL03ORONG	G	01-05-08	159
ORON	BRY0661	BROMLEY			RNBAL01ORONG	G	01-05-14	41,992
ORON	CLH0111	CASTLE HILL			RNBAL05ORONG	G	01-05-08	196
ORON	COL0111	COLERIDGE			RNBAL06ORONG	G	01-05-08	115

ORON	HOR0331	HORORATA			RNBAL01ORONG	G	14-04-14	3,387
ORON	HOR0661	HORORATA			RNBAL01ORONG	G	14-04-14	944
ORON	ISL0331	ISLINGTON			RNBAL01ORONG	G	01-05-08	14,636
ORON	ISL0661	ISLINGTON			RNBAL01ORONG	G	01-05-14	132,751
ORON	KBY0661	KIMBERLEY			RNBAL01ORONG	G	14-04-14	869
ORON	KBY0662	KIMBERLEY			RNBAL01ORONG	G	14-04-14	0

There are 20 embedded networks connected to the Orion network. The details are shown in the table below. Three were created during the audit period. Orion's only responsibility is to create LE ICPs for these points of connection.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network Type	Start Date
AJML	DSH0011	DRESS-SMART HORNBY	ISL0331	ORON	DSH0011AJMLE	E	01-10-13
AMPC	TPS0011	THE PALMS	BRY0661	ORON	TPS0011AMPCE	E	24-10-14
CIAL	CIA0041	CHRISTCHURCH INTL AIRPORT	ISL0661	ORON	CIA0041CIALE	E	01-02-16
CIAL	CIA0111	CHRISTCHURCH INTL AIRPORT	ISL0661	ORON	CIA0111CIALE	E	01-02-16
CIAL	CIA0112	CHRISTCHURCH INTL AIRPORT	ISL0661	ORON	CIA0112CIALE	E	01-02-16
EASH	URK0111	UPPER RAKAIA	COL0111	ORON	UPPERAKEASHE	E	01-05-08
KIPT	NTL0011	Northland Shopping Mall	ISL0661	ORON	NTL0011KIPTE	E	01-11-12
SABL	SAC0011	ANZ CNR COLOMBO & CASHEL ST CHC	ISL0661	ORON	SAC0011SABLE	E	01-10-16
SCHL	MXS0011	South City Centre	ISL0661	ORON	MXS0011SCHLE	E	01-04-15
TENC	CLN0011	351 LINCOLN ROAD ADDINGTON	ISL0661	ORON	CLN0011TENCE	E	01-01-16
TENC	TBC0011	BNZ CENTRE CHRISTCHUR	ISL0661	ORON	TBC0011TENCE	E	01-04-16

		CH					
TENC	TDS0011	AWLY BUILDING 80 ARMAGH ST CHCH	ISL0661	ORON	TDS0011TENCE	E	01-11-16
TENC	TGR0011	141 CASHEL ST CHRISTCHURCH 8011	ISL0661	ORON	TGR0011TENCE	E	21-09-16
TENC	THS0011	THE HSBC TOWER	ISL0661	ORON	THS0011TENCE	E	01-04-15
TENC	TTH0011	THE HUB 398 MAIN SOUTH ROAD	ISL0331	ORON	TTH0011TENCE	E	01-08-14
TNPT	ASC0011	AVONHEAD	ISL0661	ORON	ASC0011TNPTE	E	01-05-08
TNPT	ESC0011	EASTGATE	BRY0661	ORON	ESC0011TNPTE	E	01-04-14
WFNZ	WRN0011	WESTFIELD RICCARTON	ISL0661	ORON	WRN0011WFNZE	E	01-04-15
WFNZ	WRN0012	Westfield Riccarton	ISL0661	ORON	WRN0012WFNZE	E	01-04-15
WFNZ	WRN0111	WESTFIELD RICCARTON	ISL0661	ORON	WRN0111WFNZE	E	01-04-15

Orion provided a list of all ICPs as at June 2017 by way of a registry "list file". A summary of this data by "ICP status" is as follows:

Status	Number of ICPs (2017)
Distributor	136
New	10
Ready	198
Active	195,049
Inactive- new connection in progress (1,12)	345
Inactive – vacant (1,4)	2,764
Inactive – AMI remote disconnection (1,7)	701
Inactive – -de-energised due to meter disconnected (1,8)	3

Inactive – - at pole fuse(1,9)	6
Inactive – de-energised at meter box switch (1,10)	1
Inactive- at meter box switch (1,11)	0
Inactive – ready for decommissioning (1,6)	195
Decommissioned (3)	44,379

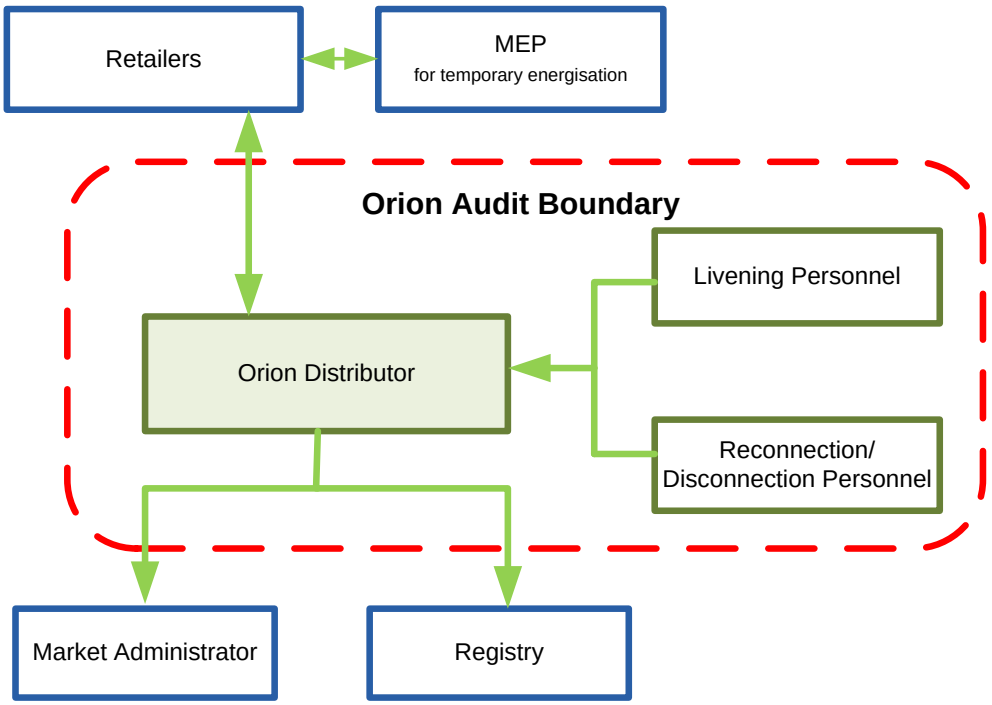
1.9. Authorisation Received

A letter of authorisation was not required or sought.

1.10. Scope of Audit

This Distributor audit was performed at the request of Orion, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Orion's premises in Christchurch, on July 18th 2017.

The scope of the audit is shown in the diagram below, with the Orion audit boundary shown for clarity.



The audit was conducted in accordance with the Guideline for Distributor Audits V7.1, which was produced by the Electricity Authority.

1.11. Summary of previous audit

Orion provided a copy of their previous audit, conducted in July 2016 by Paul Troon. The 2016 audit found compliance with all relevant clauses of the Code.

2. OPERATIONAL INFRASTRUCTURE

2.1. Requirement to provide complete and accurate information (Clause 11.2(1))

Code reference

Clause 11.2(1)

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 11 is:

- *a) complete and accurate*
- *b) not misleading or deceptive*
- *c) not likely to mislead or deceive.*

Audit observation

Orion's data management processes were examined. The list file as at July 2017 was examined to confirm compliance.

Audit commentary

Orion has processes in place to ensure that information is complete and accurate and is not misleading or deceptive. Examination of the list file found no examples of misleading or deceptive information. Orion makes every effort to ensure data is complete and accurate.

Audit outcome

Compliant

2.2. Requirement to correct errors (Clause 11.2(2))

Code reference

Clause 11.2(2)

Code related audit information

If the participant becomes aware that in providing information under this Part, the participant has not complied with that obligation, the participant must, as soon as practicable, provide such further information as is necessary to ensure that the participant does comply.

Audit observation

Orion's data management processes were examined. The list file as at July 2017 was examined to confirm compliance.

Audit commentary

Orion has a comprehensive suite of discrepancy reports in place. These are managed on a daily basis to ensure that information is complete and accurate and is not misleading or deceptive. Any incorrect data is corrected upon discovery. I consider that any discrepancies are corrected as soon as practicable.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

The distributor must create an ICP identifier in accordance with Clause 1 of Schedule 11.1 for each ICP on the distributor's network. This includes an ICP identifier for the point of connection at which an embedded network connects to the distributor's network.

Audit observation

The new connection process was examined in detail and is described in Section 3.2 below. 20 new connection applications of the 4,767 created were checked from the point of application through to when the ICP was created.

Audit commentary

The process in place is robust and has good controls in place. The sample checked in Section 3.2 below confirms this. Compliance is confirmed.

Audit outcome

Compliant

3.2. Participants may request distributors to create ICPs (Clause 11.5(3))

Code reference

Clause 11.5(3)

Code related audit information

The distributor, within three business days of receiving a request for the creation of an ICP identifier for an ICP, must either create a new ICP identifier or advise the participant of the reasons it is unable to comply with the request.

Audit observation

The new connection process was examined in detail. 20 new connection applications of the 4,767 created during the audit period were checked from the point of application through to when the ICP was created. These were selected using the typical characteristic methodology to confirm the process and controls worked in practice.

Audit commentary

The new connections process contains the following broad steps:

1. An application for a connection is made in Orion's portal. Most applications are made by contractors acting as agents to retailers. The contractor is expected to nominate the retailer.
2. Orion has an engineering approval process at this point.
3. An application or an ICP is made closer to the time of livening. This application includes a proposed livening date and nomination of a livening agent.

4. The ICP is created and sent to the nominated retailer with a list of questions, including that they agree to be responsible for the ICP and that they agree to the electrical connection of the ICP.

The process above achieves compliance with the Code. 18 of the 20 ICPs checked were created within three business days. There were sound reasons for not creating the other two within two business days and appropriate notification was provided for these.

Audit outcome

Compliant

3.3. Provision of ICP Information to the registry (Clause 11.7)

Code reference

Clause 11.7

Code related audit information

The distributor must provide information about ICPs on its network in accordance with Schedule 11.1.

Audit observation

The new connection process for populating all required registry fields was examined. The list file was examined for all ICPs created during the audit period.

Audit commentary

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. 4,767 ICPs were created during the audit period. All ICPs had the required information populated as required by this clause; however some initial energisation dates appeared to be incorrect, as noted in Section 4.6. Compliance is confirmed for clause 11.7 because the information is populated in the registry.

Audit outcome

Compliant

3.4. Timeliness of Provision of ICP Information to the registry (Clause 7(2) of Schedule 11.1)

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

The distributor must provide information specified in Clauses 7(1)(a) to 7(1)(o) of Schedule 11.1 as soon as practicable and prior to electricity being traded at the ICP.

Audit observation

The new connection process was examined. The event detail report for the period from August 2016 through to May 2017 was examined.

Audit commentary

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. 4,767 ICPs were created during the audit period. All registry updates occurred prior to trading.

This was confirmed by checking that all ICPs had a ready date prior to the active date. Compliance is confirmed.

Audit outcome

Compliant

3.5. Timeliness of Provision of Initial Energisation Date (Clause 7(2A) of Schedule 11.1)

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

The distributor must provide the information specified in sub-clause (1)(p) to the registry no later than 10 business days after the date on which the ICP is initially energised.

Audit observation

The new connection process for populating all required registry fields was examined. The event detail report for the period from August 2016 through to May 2017 was examined.

Audit commentary

The event detail report was examined and I found that 20 ICPs were updated later than 10 business days after the initial energisation date. 18 of the 20 examples had an incorrect event date recorded; mostly this was the same date the registry was updated. The data dictionary in the registry defines the event date as follows:

The Event Date defines the date from which the attribute values of the event should apply.

Therefore the event date should be the same date as the initial energisation date. The late updating of the registry is recorded as non-compliant.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 01-Aug-16 To: 31-May-17	20 initial energisation dates updated late to the registry. 18 incorrect event dates. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**

Low	Orion has reporting in place to ensure initial energisation dates are provided by contractors in a timely manner. I consider the controls are strong and the late updates reflect a small percentage of the total (0.4%) There is no impact on settlement. The only potential impact is where a trader may wish to compare their Active date to the IED, so the impact is considered minor, leading to an audit risk rating of low.

Actions taken to resolve the issue	**Completion date**	**Remedial action status**
We update the registry and populate the correct IED date however we often have to wait for third parties to provide the paperwork and this creates delays in updating the registry (i.e. event date). Consequently we don't intend altering the event date for the 18 ICPs identified.	18/7/17	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
We intend refreshing communication with livening agents to reinforce the need for timeliness of paperwork	30/9/17	

3.6. Connection of ICPs (Clause 11.17)

Code reference

Clause 11.17

Code related audit information

A distributor must, when electrically connecting an ICP that is not also an NSP, follow the electrical connection process set out in Clause 10.31.

The distributor must not electrically connect an ICP (except for an ICP across which unmetered load is shared) unless a trader is recorded in the registry as accepting responsibility for the ICP.

In respect of ICPs across which unmetered load is shared, the distributor must not electrically connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load.

Audit observation

The new connection process was examined. The event detail report for the period from August 2016 through to May 2017 was examined.

Audit commentary

As discussed in Section 3.2, Orion has a step in the new connections process to ensure a trader accepts responsibility and is recorded in the registry. There are no ICPs without a proposed trader recorded in the registry.

Audit outcome

Compliant

3.7. Electrical connection of ICPs (Clause 10.28(7))

Code reference

Clause 10.28(7)

Code related audit information

A network owner must not electrically connect a new point of connection that is to be quantified by metering unless requested to do so by the:

- *MEP (for a temporary energisation); or*
- *reconciliation participant responsible for ensuring there is a metering installation.*

Audit observation

The new connection process was examined. The event detail report for the period from August 2016 through to May 2017 was examined.

Audit commentary

As discussed in Section 3.2, Orion has a step in the new connections process to ensure a trader accepts responsibility and is recorded in the registry. There are no ICPs without a proposed trader recorded in the registry.

Audit outcome

Compliant

3.8. Electrical connection of ICP that is not an NSP (Clause 10.31)

Code reference

Clause 10.31

Code related audit information

A distributor must not electrically connect an ICP that is not also an NSP unless:

- *the trader trading at the ICP has requested the electrical connection; or*
- *the MEP who has an arrangement with the trader trading at the ICP has requested temporary energisation of the ICP.*

Audit observation

The new connection process was examined. The event detail report for the period from August 2016 through to May 2017 was examined.

Audit commentary

As discussed in Section 3.2, Orion has a step in the new connections process to ensure a trader accepts responsibility and is recorded in the registry. There are no ICPs without a proposed trader recorded in the registry.

Audit outcome

Compliant

3.9. Electrical connection of NSP that is not a point of connection to the grid (Clause 10.30(2))

Code reference

Clause 10.30(2)

Code related audit information

A distributor must, within five business days of electrically connecting an NSP that is not also a point of connection to the grid, notify the reconciliation manager of the following in the prescribed form:

- *the NSP electrically connected*
- *the date of the electrical connection*
- *the participant identifier of each MEP*
- *the certification expiry date for each metering installation.*

Audit observation

Orion has not created any new NSPs during the audit period.

Audit commentary

Orion has not created any new NSPs during the audit period.

Audit outcome

Not applicable

3.10. Definition of ICP identifier (Clause 1(1) Schedule 11.1)

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

Each ICP created by the distributor in accordance with Clause 11.4 must have a unique identifier, called the "ICP identifier", determined in accordance with the following format:

yyyyyyyyyyxxccc where:

- *yyyyyyyyyy is a numerical sequence provided by the distributor*
- *xx is a code that ensures the ICP is unique (assigned by the Authority to the issuing distributor)*
- *ccc is a checksum generated according to the algorithm provided by the market administrator.*

Audit observation

The new connection process was examined and a sample checked. This is detailed in Section 3.2 above.

Audit commentary

All ICPs are created in the appropriate format. The sample checked confirmed compliance.

Audit outcome

Compliant

3.11. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

Each ICP must have a single loss category that is referenced to identify the associated loss factors.

Audit observation

The list file was examined to confirm all active ICPs have a single loss category code.

Audit commentary

Orion has four loss category codes assigned to ICPs. Each active ICP only has one loss category, which clearly identifies the relevant loss factor.

Audit outcome

Compliant

3.12. Management of "new" status (Clause 13 Schedule 11.1)

Code reference

Clause 13 Schedule 11.1

Code related audit information

The ICP status of "New" must be managed by the distributor to indicate:

- *the associated electrical installations are in the construction phase (Clause 13(a) of Schedule 11.1)*
- *the ICP is not ready for activation (Clause 13(b) of Schedule 11.1).*

Audit observation

The management of ICPs in relation to the use of the "new" status was examined. The list file and event detail report for the period August 2016 to May 2017 were examined in relation to the use of the "new" status. I also checked for ICPs at the new status with an initial energisation date populated.

Audit commentary

All ICPs are created at the New status and they are changed to Ready once they are ready for activation. Checks of the sample of 20 ICPs recorded in Section 3.2 confirmed compliance. There are no ICPs at the New status with an initial energisation date.

Audit outcome

Compliant

3.13. Monitoring of "new" & "ready" statuses (Clause 15 Schedule 11.1)

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of "New" or has had the status of "Ready" for 24 calendar months or more:

- *the distributor must ask the trader who intends to trade at the ICP whether the ICP should continue to have that status (Clause 15(2)(a) of Schedule 11.1)*
- *the distributor must decommission the ICP if the trader advises that the ICP should not continue to have that status (Clause 15(2)(b) of Schedule 11.1).*

Audit observation

I checked the list file for ICPs at New or Ready for longer than 24 months to confirm that traders had been notified.

Audit commentary

The process for notifying traders is automated and commences at 30 days. There is one relevant ICP and the trader has been notified.

Audit outcome

Compliant

3.14. Embedded generation loss category (Clause 7(6) Schedule 11.1)

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

If the ICP connects the distributor's network to an embedded generating station that has a capacity of 10 MW or more (clause 7(1)(f) of Schedule 11.1):

- *The loss category code must be unique; and*
- *The distributor must provide the following to the reconciliation manager:*
  - *the unique loss category code assigned to the ICP*
  - *the ICP identifier of the ICP*
  - *the NSP identifier of the NSP to which the ICP is connected*
  - *the plant name of the embedded generating station.*

Audit observation

This requirement was discussed and the list file was examined.

Audit commentary

Orion Network has a good understanding of this requirement. Examination of the list file confirmed that they do not have any embedded generation stations with a capacity of 10MW or more that require an individual loss category code.

Audit outcome

Not applicable

4. MAINTENANCE OF REGISTRY INFORMATION

4.1. Changes to registry information (Clause 8 Schedule 11.1)

Code reference

Clause 8 Schedule 11.1

Code related audit information

If information held by the registry that relates to an ICP for which the distributor is responsible changes, the distributor must provide notice to the registry of that change.

Notification must be given by the distributor within three business days after the change takes effect, unless the change is to the NSP identifier of the NSP to which the ICP is usually connected (other than a change that is the result of the commissioning or decommissioning of an NSP).

In those cases, notification must be given no later than eight business days after the change takes effect.

If the change to the NSP identifier is for more than 14 days, the time within which notification must be effected in accordance with Clause 8(3) of Schedule 11.1 begins on the 15th day after the change.

Audit observation

The process to manage ICP changes were examined. The event detail report for the period from August 2016 through to May 2017. I used the typical case methodology examining a sample of ten late updates for any change where the initial analysis could not determine the cause.

Audit commentary

The table below details the quantity and compliance of registry updates. The price code analysis excludes new connections, which have a different allowable duration.

Update	Total	Compliant	Late	% Compliant	Average days
Price codes	1,279	1,242	37	97%	4.3
Address	8,280	7,892	388	95%	2.7
Status (decom)	1,778	734	1,044	41%	14.8

To evaluate network events, I excluded all new connections to ensure the initial energisation date changes were not included and I looked at anything greater than eight business days, to ensure NSP changes were excluded. There were 45 late updates for network events and most appear to be the addition of distributed generation information.

All of the late price category code changes were as a result of requests by traders to backdate the codes for the benefit of customers. This was confirmed by checking a sample of 10 and by discussing Orion's policy in relation to these changes.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Aug-16 To: 31-May-17	Updates to registry backdated greater than 3 business days of the event. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	Nearly all of the late updates were as a result of late information from other parties. Controls are strong and processes are well designed, but there will always be requests from other parties to backdate certain events. There is no impact on settlement. There would be a negative impact on traders and customers if Orion did not backdate pricing events. The Audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
We agree with the findings and support the auditor's explanation that backdated changes in these cases are to the benefit of customers. We spend significant administrative time monitoring, following up and working in with other parties to ensure information is correct.	18/7/17	Cleared
Preventative actions taken to ensure no further issues will occur	**Completion date**	
We don't intend introducing any further preventative actions in this case.	18/7/17	

4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)

Code reference

Clauses 7(1),(4) and (5) Schedule 11.1

Code related audit information

The distributor must notify the registry of the NSP identifier of the NSP to which the ICP is usually connected under Clause 7(1)(b) of Schedule 11.1.

If the distributor cannot identify the NSP that an ICP is connected to, the distributor must nominate the NSP that the distributor thinks is most likely to be connected to the ICP, taking into account the flow of electricity within its network, and the ICP is deemed to be connected to the nominated NSP.

Audit observation

The accuracy of NSP information was checked by identifying ICPs with a particular NSP where all other ICPs on the same road had a different NSP.

Audit commentary

I analysed the list file to identify examples where one ICP on a street had a different NSP to all other ICPs on the same street. There were 31 examples and Orion confirmed that six of these had the incorrect NSP recorded. The controls in place to ensure new ICPs have the correct NSP are robust, with the NSP being assigned at the time the ICP is plotted in the GIS. The examples found were all historic and have now been corrected.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: Clause 7(1)(b) of Schedule 11.1 From: 01-Aug-16 To: 23-Jun-17	Six ICPs with incorrect NSPs. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	Strong controls are in place to ensure ICPs are allocated to the correct NSP for new connections. There is a very minor impact on settlement. The NSPs in question are in the same balancing area. The audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
We investigated each of the six issues identified and made corrections including decommissioning, confirming correct addresses with customers and following up with retailers.	27/7/17	Cleared
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Orion will run an additional report quarterly to identify ICP NSP changes without connectivity in the GIS	30/9/17	

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

The distributor must advise a customer (or any person authorised by the customer) or embedded generator of the customer or embedded generator's ICP identifier within three business days after receiving a request for that information.

Audit observation

The management of customer queries was discussed to confirm policy.

Audit commentary

Requests for ICP identifiers are not a common occurrence, however Orion provides this information if the requesting party has authorisation. This information is also provided on their website.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

Each ICP identifier must have a location address that allows the ICP to be readily located.

Audit observation

The process to manage address accuracy was examined and the list file was analysed.

Audit commentary

All of Orion's address records on the registry are unique and the rigorous process in place ensures only meaningful information is populated into the "property name" field when addresses are similar.

Audit outcome

Compliant

4.5. ICP de-energisation (Clause 3 Schedule 11.1)

Code reference

Clause 3 Schedule 11.1

Code related audit information

Each ICP created after 7 October 2002 must be able to be de-energised without de-energisation of another ICP, except for ICPs that are the point of connection between a network and an embedded network, or ICPs that represent the consumption calculated by difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit observation

I checked the "Network Code" published on Orion's website to confirm the policy in relation to this clause.

Audit commentary

The Network Code is clear that each ICP must have its own isolation point. Electrical connection is conducted by a small number of approved contractors which assists with the application of this and other policies. No examples were identified where this policy had not been complied with.

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry (Clause 7(1) Schedule 11.1)

Code reference

Clause 7(1) Schedule 11.1

Code related audit information

For each ICP on the distributor's network, the distributor must provide the following information to the registry:

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
  - *a) the unique loss category code assigned to the ICP*
  - *b) the ICP identifier of the ICP*
  - *c) the NSP identifier of the NSP to which the ICP is connected*
  - *d) the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
  - *a) a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
  - *b) a blank chargeable capacity if the capacity value can be determined from metering information*
  - *c) the actual chargeable capacity of the ICP in any other case*
- *the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is unable to assign the actual distributor installation details because the capacity or volume information required to assign the actual distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)*
- *the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)*
- *the status of the ICP (Clause 7(1)(k) of Schedule 11.1)*
- *designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)*

- *if unmetered load, other than distributed unmetered load, is associated with the ICP, the type and capacity in kW of unmetered load (Clause 7(1)(m) of Schedule 11.1)*
- *if shared unmetered load is associated with the ICP, a list of the ICP identifiers of the ICPs that are associated with the unmetered load (Clause 7(1)(n) of Schedule 11.1)*
- *if the ICP is capable of generating into the distributors network (Clause 7(1)(o) of Schedule 11.1):*
  a) the nameplate capacity of the generator; and
  b) the fuel type
  c) the initial energisation date of the ICP (Clause 7(1)(p) of Schedule 11.1).

Audit observation

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. Orion has a fully automated registry update process, which ensures all information listed in this clause is provided to the registry. I checked all registry fields for obvious discrepancies using a set of standard queries.

Audit commentary

The analysis found the following points:

- 18 ICPs at the Ready status with the IED populated. The IED is correct for all 18.
- Five ICPs at the status of "new connection in progress" with the IED populated. The IED is correct for all five.
- Two Active ICPs with blank IED. This was a timing issue due to late notification by the contractor.
- 27 ICPs have a PV1 profile but Orion does not have generation recorded. Orion also has reporting of these ICPs and they actively follow up with retailers and contractors. Some of the ICPs were on the list due to timing issues and had been updated by the time of the audit. There were three out of a sample of eight where it appears the retailer's profile is incorrect.
- 1,167 ICPs where the retailer indicates unmetered load is present and Orion has no information in their field. I checked 83 recently created ICPs (during the audit period) and found they were all ICPs where the unmetered builder's temporary supply had been removed but the retailer had not updated their field.
- 38 ICPs had an IED different to the Active date or the certification date. 12 of these were examined confirming the IED was incorrect for six. In all cases this was due to Orion populating the "connected" date where there was a central supply connected. This is where there is a shared service main to a separate distribution point (central supply point) which is not owned by Orion and where energisation can occur at a later date without Orion's knowledge.
- One shared unmetered load child ICP has zero watts recorded but this should be 90 watts, as recorded against the parent ICP.

In summary, the only incorrect information found were six incorrect initial energisation dates and one incorrect wattage for one ICP. Whilst there is good monitoring and reporting in place, I recommend the addition of one more report. Orion monitors ICPs at Ready where the initial energisation date is populated, but they could also monitor ICPs at "new connection in progress" with an initial energisation date populated as well.

Recommendation	Description	Audited party comment	Remedial action
7(1)(p) of schedule 11.1	Monitor energized ICPs at status "inactive, new connection in progress".	We will implement this recommendation.	Identified

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: Clause 7(1) Schedule 11.1 From: 01-Sep-16 To: 06-Oct-16	Six initial energisation dates incorrect. One incorrect unmetered wattage. Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Strong controls are in place where an ICP connects directly to Orion's network. Knowledge of initial energisation dates is more difficult to determine when the ICP is not connected directly to the network and this is where some additional controls may be required. Controls are strong for the management of other fields. There is no impact on settlement in relation to incorrect initial energisation dates. The initial energisation date is used a comparison for other dates but should not be relied on or copied by other participants. The trader is using the correct wattage for the one unmetered ICP. The impact on other participants is minor and the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
As the auditor indicates in the case of initial energisation dates it is difficult for us to confirm the IED for central supply customers. We will correct the unmetered load wattage issue identified.	3/8/17	Investigating
Preventative actions taken to ensure no further issues will occur	**Completion date**	
We are reviewing our online connection process and will consider potential ways to work with customers/electricians to obtain the initial energisation date where a central supply exits. This could include providing prompts around central supply as part of the application process. We will also talk with retailers about whether they can take ICPs in an inactive state.	31/3/18	

4.7. Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

The distributor must provide the following information to the registry no later than 10 business days after the trading of electricity at the ICP commences:

- *the actual price category code assigned to the ICP (Clause 7(3)(a) of Schedule 11.1)*
- *the actual chargeable capacity of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(b) of Schedule 11.1)*
- *the actual distributor installation details of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(c) of Schedule 11.1).*

Audit observation

The new connection process was examined in detail. The pricing changes were checked against the newly connected ICPs identified through the list file.

Audit commentary

There were no pricing changes backdate by more than 10 business days apart from genuine pricing changes, which are discussed in Section 4.1.

Audit outcome

Compliant

4.8. GPS coordinates (Clause 7(8) and (9) Schedule 11.1)

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

If a distributor populates the GPS coordinates (optional), it must meet the NZTM2000 standard in a format specified by the Authority.

Audit observation

I checked the list file for ICPs with GPS coordinates and entered them into the "Mobile Roads" application to confirm they were in NZTM format.

Audit commentary

There are 237 ICPs with GPS coordinates and they are in NZTM format.

Audit outcome

Compliant

4.9. Management of “ready” status (Clause 14 Schedule 11.1)

Code reference

Clause 14 Schedule 11.1

Code related audit information

The ICP status of “Ready” must be managed by the distributor and indicates that:

- *the associated electrical installations are ready for connecting to the electricity supply (Clause 14(1)(a) of Schedule 11.1); or*
- *the ICP is ready for activation by a trader (Clause 14(1)(b) of Schedule 11.1).*

Before an ICP is given the "Ready" status in accordance with Clause 14(1) of Schedule 11.1, the distributor must:

- *identify the trader that has taken responsibility for the ICP (Clause 14(2)(a) of Schedule 11.1)*
- *ensure the ICP has a single price category (Clause 14(2)(b) of Schedule 11.1).*

Audit observation

I examined the new connections process and the list file to determine compliance.

Audit commentary

The status of Ready is used once the ICP is ready for connection. The new connection process has a step to confirm the trader has taken responsibility. All ICPs only have one price category code.

Audit outcome

Compliant

4.10. Management of “distributor” status (Clause 16 Schedule 11.1)

Code reference

Clause 16 Schedule 11.1

Code related audit information

The ICP status of “distributor” must be managed by the distributor and indicates that the ICP record represents a shared unmetered load installation or the point of connection between an embedded network and its parent network.

Audit observation

I checked the list file to confirm compliance.

Audit commentary

The list file contained 35 embedded network (LE) ICPs and 101 shared unmetered load (SI) ICPs. The details are recorded correctly on the registry.

Audit outcome

Compliant

4.11. Management of "decommissioned" status (Clause 20 Schedule 11.1)

Code reference

Clause 20 Schedule 11.1

Code related audit information

The ICP status of "decommissioned" must be managed by the distributor and indicates that the ICP is permanently removed from future switching and reconciliation processes (Clause 20(1) of Schedule 11.1).

Decommissioning only occurs when:

- *electrical installations associated with the ICP are physically removed (Clause 20(2)(a) of Schedule 11.1); or*
- *there is a change in the allocation of electrical loads between ICPs with the effect of making the ICP obsolete (Clause 20(2)(b) of Schedule 11.1); or*
- *in the case of a distributor-only ICP for an embedded network, the embedded network no longer exists (Clause 20(2)(c) of Schedule 11.1).*

Audit observation

I examined the physical process for decommissioning ICPs along with the timeliness and accuracy of registry updates.

Audit commentary

The decommissioning process normally starts with a service request from a retailer. The retailer is expected to have made arrangements for meter removal. Once the service request has been received, a job is booked with a contractor to physically remove the connection to the network. On completion of this work, the status is changed within the connection management system, which then updates the registry overnight. The decommissioned status is only used once there is confirmation from a field visit that the ICP is definitely physically removed. In situations where the ICP is not physically connected to the network, Orion may be notified through various methods that the ICP is gone. They will then conduct an inspection before decommissioning the ICP.

There are 195 ICPs with a status of ready for decommissioning. Orion has not received a service request for these ICPs, but I recommend they investigate them to see if they can be decommissioned. Nine of them are phone boxes, which may be part of a distributed unmetered load ICP now.

Audit outcome

Compliant

Recommendation	Description	Audited party comment	Remedial action
Clause 20 Schedule 11.1	Check 195 ICPs at ready for decommissioning to confirm whether they can be decommissioned.	Many of these ready for decommissioning ICPs are related to the red zoned area of Christchurch post quake. We will allocate resource to carry out field investigation to confirm the status of these ICPs and initiate final decommissioning where this is appropriate.	Identified

4.12. Maintenance of price category codes (Clause 23 Schedule 11.1)

Code reference

Clause 23 Schedule 11.1

Code related audit information

The distributor must keep up to date the table in the registry of the price category codes that may be assigned to ICPs on each distributor's network by entering in the table any new price category codes.

Each entry must specify the date on which each price category code takes effect, which must not be earlier than two months after the date the code is entered in the table.

A price category code takes effect on the specified date.

Audit observation

I checked the price category code table for any new or changed codes during the audit period.

Audit commentary

There were no changes during the audit period.

Audit outcome

Not applicable

5. CREATION AND MAINTENANCE OF LOSS FACTORS

5.1. Updating table of loss category codes (Clause 21 Schedule 11.1)

Code reference

Clause 21 Schedule 11.1

Code related audit information

The distributor must keep the registry up to date with the loss category codes that may be assigned to ICPs on the distributor's network.

The distributor must specify the date on which each loss category code takes effect.

A loss category code takes effect on the specified date.

Audit observation

I checked the loss category code table for any new or changed codes during the audit period.

Audit commentary

There were no changes during the audit period.

Audit outcome

Not applicable

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

Each loss category code must have a maximum of two loss factors per calendar month. Each loss factor must cover a range of trading periods within that month so that all trading periods have a single applicable loss factor.

If the distributor wishes to replace an existing loss factor on the table on the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

I checked the loss category code table for any new or changed factors during the audit period.

Audit commentary

There were no changes during the audit period.

Audit outcome

Not applicable

6. CREATION AND MAINTENANCE OF NSPS (INCLUDING DECOMMISSIONING OF NSPS AND TRANSFER OF ICPS)

6.1. Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

If the distributor is creating or decommissioning an NSP that is an interconnection point between two local networks, the distributor must notify the reconciliation manager of the creation or decommissioning.

If the embedded network owner is creating or decommissioning an NSP that is an interconnection point between two embedded networks, the embedded network owner must notify the reconciliation manager of the creation or decommissioning.

If the distributor is creating or decommissioning an NSP that is a point of connection between an embedded network and another network, the distributor must notify the reconciliation manager of the creation or decommissioning.

If the distributor wishes to change the record in the registry of an ICP that is not recorded as being usually connected to an NSP in the distributor's network, so that the ICP is recorded as being usually connected to an NSP in the distributor's network (a "transfer"), the distributor must:

- *notify the reconciliation manager*
- *notify the market administrator*
- *notify each affected reconciliation participant*
- *comply with Schedule 11.2.*

Audit observation

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period; therefore this was not assessed as part of this audit.

Audit commentary

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.2. Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

If the distributor wishes to create an NSP or transfer an ICP as described above, the distributor must request that the reconciliation manager create a unique NSP identifier for the relevant NSP.

The request must be made at least 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between two local networks. In all other cases, the request must be made at least one calendar month before the NSP is electrically connected or the ICP is transferred.

Audit observation

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period; therefore this was not assessed as part of this audit.

Audit commentary

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.3. Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)

Code reference

Clause 24(1) and Clause 26(3) Schedule 11.1

Code related audit information

If a participant has notified the creation of an NSP on the distributor's network, the distributor must notify the reconciliation manager of the following:

- *if the NSP is to be located in a new balancing area, all relevant details necessary for the new balancing area to be created and notification that the NSP to be created is to be assigned to the new balancing area*
- *in all other cases, notification of the balancing area in which the NSP is located.*

Audit observation

The NSP table on the registry was examined. No new balancing areas were created during the audit period; therefore this was not assessed as part of this audit.

Audit commentary

The NSP table on the registry was examined. No new balancing areas were created during the audit period; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.4. Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

If a participant notifies the creation of an NSP, or the transfer of an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor, the distributor must notify the reconciliation manager at least one calendar month before the creation or transfer of:

- *the network on which the NSP will be located after the creation or transfer (Clause 26(4)(a))*
- *the ICP identifier for the ICP that connects the network and the embedded network (Clause 26(4)(b))*
- *the date on which the creation or transfer will take effect (Clause 26(4)(c)).*

Audit observation

Orion has not created any embedded networks; therefore this was not assessed as part of this audit.

Audit commentary

Orion has not created any embedded networks; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.5. Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

The distributor must notify the reconciliation manager of any change to balancing areas associated with an NSP supplying the distributor's network. The notification must specify the date and trading period from which the change takes effect, and be given no later than three business days after the change takes effect.

Audit observation

The NSP table on the registry was examined. No balancing areas were changed during the audit period; therefore this was not assessed as part of this audit.

Audit commentary

The NSP table on the registry was examined. No balancing areas were changed during the audit period; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.6. Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)

Code reference

Clause 27 Schedule 11.1

Code related audit information

If a transfer of an ICP results in an ICP becoming an NSP at which an embedded network connects to a network, or in an ICP becoming an NSP that is an interconnection point, in respect of the distributor's network, the distributor must notify any trader trading at the ICP of the transfer at least one calendar month before the transfer.

Audit observation

Three embedded networks were connected to Orion's network during the audit period but Orion has not become an embedded network owner. The embedded network owner is responsible for this clause.

Audit commentary

Three embedded networks were connected to Orion's network during the audit period but Orion has not become an embedded network owner. The embedded network owner is responsible for this clause.

Audit outcome

Not applicable

6.7. Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)

Code reference

Clause 1 to 4 Schedule 11.2

Code related audit information

If the distributor wishes to transfer an ICP, the distributor must notify the market administrator in the prescribed form, no later than three business days before the transfer takes effect.

Audit observation

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit commentary

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.8. Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1))

Code reference

Clause 10.25(1)

Code related audit information

A network owner must, for each NSP that is not a point of connection to the grid for which it is responsible, ensure that:

- *there is one or more metering installations (Clause 10.25(1)(a)); and*
- *the electricity is conveyed and quantified in accordance with the Code (Clause 10.25(1)(b)).*

Audit observation

There is one interconnection point relevant to this clause and an exemption has been granted to allow for no metering to be installed.

Audit commentary

There is one interconnection point relevant to this clause and an exemption has been granted to allow for no metering to be installed.

Audit outcome

Compliant

6.9. Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))

Code reference

Clause 10.25(2)

Code related audit information

If the network owner proposes the creation of a new NSP which is not a point of connection to the grid it must:

- *assume responsibility for being the metering equipment provider (Clause 10.25(2)(a)(i)); or*
- *contract with a metering equipment provider to be the MEP (Clause 10.25(2)(a)(ii)); and*
- *no later than 20 business days after identifying the MEP advise the reconciliation manager in the prescribed form of:*
  - *a) the reconciliation participant for the NSP (Clause 10.25(2)(b)(i)); and*
  - *b) the MEP for the NSP (Clause 10.25(2)(b)(ii)); and*
  - *c) no later than 20 business days after the data of certification of each metering installation, advise the reconciliation participant for the NSP of the certification expiry date (Clause 10.25(2)(c)).*

Audit observation

The NSP table on the registry was examined. No NSPs were created during the audit period; therefore this was not assessed as part of this audit.

Audit commentary

The NSP table on the registry was examined. No NSPs were created during the audit period; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.10. Obligations concerning change in network owner (Clause 29 Schedule 11.1)

Code reference

Clause 29 Schedule 11.1

Code related audit information

If a network owner acquires all or part of a network, the network owner must notify:

- *the previous network owner (Clause 29(1)(a) of Schedule 11.1)*
- *the reconciliation manager (Clause 29(1)(b) of Schedule 11.1)*
- *the market administrator (Clause 29(1)(c) of Schedule 11.1)*
- *every reconciliation participant who trades at an ICP connected to the acquired network or part of the network acquired (Clause 29(1)(d) of Schedule 11.1).*

At least one calendar month notification is required before the acquisition (Clause 29(2) of Schedule 11.1).

The notification must specify the ICPs to be amended to reflect the acquisition and the effective date of the acquisition (Clause 29(3) of Schedule 11.1).

Audit observation

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit commentary

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.11. Electrically connecting NSP that is not point of connection to grid (Clause 10.30(1))

Code reference

Clause 10.30(1)

Code related audit information

A distributor must not electrically connect an NSP that is not a point of connection to the grid unless:

- *a reconciliation participation has requested the electrical connection (Clause 10.30(1)(a)); or*
- *a metering equipment provider (authorised by the trader) has requested the electrical connection for a temporary energisation of the ICP (Clause 10.30(1)(b)).*

Audit observation

Orion is not an embedded network owner and has not requested the connection of any NSPs.

Audit commentary

Orion is not an embedded network owner and has not requested the connection of any NSPs.

Audit outcome

Not applicable

6.12. Change of MEP for embedded network gate meter (Clause 10.22(1)(b))

Code reference

Clause 10.22(1)(b)

Code related audit information

If the MEP for an ICP which is also an NSP changes the participant responsible for the provision of the metering installation under Clause 10.25, the participant must notify the reconciliation manager and the gaining MEP.

Audit observation

Orion is not an embedded network owner and has not requested the connection of any NSPs.

Audit commentary

Orion is not an embedded network owner and has not requested the connection of any NSPs.

Audit outcome

Not applicable

6.13. Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)

Code reference

Clauses 5 and 8 Schedule 11.2

Code related audit information

The distributor must give the market administrator confirmation that it has received written consent to the proposed transfer from:

- *the distributor whose network is associated with the NSP to which the ICP is recorded as being connected immediately before the notification (unless the notification relates to the creation of an embedded network) (Clause 5(a) of Schedule 11.2)*
- *every trader trading at an ICP being supplied from the NSP to which the notification relates (Clause 5(b) of Schedule 11.2).*

The notification must include any information requested by the Authority (Clause 8 of Schedule 11.2).

Audit observation

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit commentary

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

6.14. Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)

Code reference

Clause 6 Schedule 11.2

Code related audit information

If the notification relates to an embedded network, it must relate to every ICP on the embedded network.

Audit observation

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit commentary

Orion has not acquired any networks; therefore this was not assessed as part of this audit.

Audit outcome

Not applicable

7. MAINTENANCE OF SHARED UNMETERED LOAD

7.1. Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))

Code reference

Clause 11.14(2) and (4)

Code related audit information

The distributor must notify the registry and each trader responsible for the ICPs across which the unmetered load is shared of the ICP identifiers of those ICPs.

A distributor who receives notification from a trader relating to a change under Clause 11.14(3) must notify the registry and each trader responsible for any of the ICPs across which the unmetered load is shared of the addition or omission of the ICP.

Audit observation

I checked the list file and the event detail report to confirm the accuracy and compliance of shared unmetered load information.

Audit commentary

There are 443 ICPs with shared unmetered load, related to 101 parent ICPs. One of the 443 ICPs is the only "child" ICP and I think this should probably be standard unmetered load, not shared unmetered load. The other issue with this ICP is that the wattage figure is zero on the registry and should be 90. This is recorded as non-compliance in Section 4.6.

One retailer had requested that their child ICP be removed from the list of ICPs, which the Code appears to allow, so Orion removed the ICP and notified relevant parties of the change. Orion has a separate communication format for shared unmetered load, which achieves compliance with this clause.

Audit outcome

Compliant

7.2. Changes to shared unmetered load (Clause 11.14(5))

Code reference

Clause 11.14(5)

Code related audit information

If the distributor becomes aware of a change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must notify all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit observation

I checked the list file for decommissioned shared unmetered load ICPs and I checked Orion's notification processes.

Audit commentary

As mentioned in Section 7.1, Orion has a separate communication format for shared unmetered load, which was used for all of the examples examined and which achieves compliance with this clause.

Audit outcome

Compliant

8. CALCULATION OF LOSS FACTORS

8.1. Creation of loss factors (Clause 11.2)

Code reference

Clause 11.2

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 11 is:

a) complete and accurate
b) not misleading or deceptive
c) not likely to mislead or deceive.

Audit observation

There does not appear to be a final, mandated version of loss factor guidelines supported by clauses in the Code, therefore I have examined Orion's process for calculating loss factors and I examined UFE for the previous 12 months.

Audit commentary

Orion has a low voltage and a high voltage loss factor plus two specific factors. The factors are reviewed each year and have not changed for some time. UFE on a 12 month rolling basis is at approx. -0.5%.

Audit outcome

Compliant

CONCLUSION

Four non-compliances are recorded and they all have a low risk rating. They relate to the timeliness of registry updates and some minor data corrections required.

I've made two recommendations which will assist traders with their processes and compliance. One is to monitor energised ICPs where the trader is yet to update the status to active, and the other is to investigate ICPs at ready for decommissioning status to see if they can be decommissioned.

PARTICIPANT RESPONSE

We found the audit process and the auditor conduct was structured and organised. This allowed us to ensure availability of staff and to use the auditor and staff time in a constructive way. The findings will assist us to refine our processes further.

We are pleased with the audit outcome and the recommendation for an audit frequency of 24 months. We believe this is reflective of the time and effort we have put into improving software/online application processes, automated updating to the registry, and in administrative monitoring, verification and control. This audit result and recommended audit frequency demonstrates the strong controls we have in place.

APPENDIX A - TEMPLATE FOR NON-COMPLIANCE, ISSUES AND RECOMMENDATIONS.

NON-COMPLIANCE

Non-compliance	Description
Audit Ref: With: From: Click here to enter a date. To: Click here to enter a date.	Potential impact: Choose an item. Actual impact: Choose an item. Audit history: Controls: Choose an item. Breach risk rating:
Audit risk rating	**Rationale for audit risk rating**
Choose an item.	

Actions taken to resolve the issue	Completion date	Remedial action status
		Choose an item.
Preventative actions taken to ensure no further issues will occur	**Completion date**	

RECOMMENDATION

Recommendation	Description	Audited party comment	Remedial action

ISSUE

Issue	Description	Remedial action