

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

Aurora Energy Limited



Prepared by: Steve Woods

Date audit commenced: 7 August 2018

Date audit report completed: 7 September 2018

Audit report due date: 11-Sep-18

TABLE OF CONTENTS

Executive summary	4
Audit summary	4
Non-compliances	4
Recommendations	5
Issues	5
1. Administrative	6
1.1. Exemptions from Obligations to Comply with Code (Section 11)	6
1.2. Structure of Organisation	6
1.3. Persons involved in this audit	7
1.4. Use of contractors (Clause 11.2A)	7
1.5. Supplier list	7
1.6. Hardware and Software	8
1.7. Breaches or Breach Allegations	8
1.8. ICP and NSP Data	8
1.9. Authorisation Received	9
1.10. Scope of Audit	9
1.11. Summary of previous audit	10
Table of Non-Compliance	10
Table of Recommendations	11
2. Operational Infrastructure	12
2.1. Requirement to provide complete and accurate information (Clause 11.2(1))	12
2.2. Requirement to correct errors (Clause 11.2(2))	12
3. Creation of ICPs	13
3.1. Distributors must create ICPs (Clause 11.4)	13
3.2. Participants may request distributors to create ICPs (Clause 11.5(3))	13
3.3. Provision of ICP Information to the registry (Clause 11.7)	14
3.4. Timeliness of Provision of ICP Information to the registry (Clause 7(2) of Schedule 11.1)	14
3.5. Timeliness of Provision of Initial electrical connection Date (Clause 7(2A) of Schedule 11.1)	16
3.6. Connection of ICP that is not an NSP (Clause 11.17)	17
3.7. Connection of ICP that is not an NSP (Clause 10.31)	18
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)	18
3.9. Electrical connection of NSP that is not a point of connection to the grid (Clause 10.30(2))	19
3.10. Definition of ICP identifier (Clause 1(1) Schedule 11.1)	19
3.11. Loss category (Clause 6 Schedule 11.1)	20
3.12. Management of “new” status (Clause 13 Schedule 11.1)	20
3.13. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)	21
3.14. Embedded generation loss category (Clause 7(6) Schedule 11.1)	21
4. Maintenance of registry information	22
4.1. Changes to registry information (Clause 8 Schedule 11.1)	22
4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)	24
4.3. Customer queries about ICP (Clause 11.31)	25
4.4. ICP location address (Clause 2 Schedule 11.1)	25

4.5.	ICP de-energisation (Clause 3 Schedule 11.1)	26
4.6.	Distributors to Provide ICP Information to the Registry (Clause 7(1) Schedule 11.1)	26
4.7.	Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)	29
4.8.	GPS coordinates (Clause 7(8) and (9) Schedule 11.1)	30
4.9.	Management of “ready” status (Clause 14 Schedule 11.1)	31
4.10.	Management of “distributor” status (Clause 16 Schedule 11.1)	31
4.11.	Management of “decommissioned” status (Clause 20 Schedule 11.1)	32
4.12.	Maintenance of price category codes (Clause 23 Schedule 11.1).....	33
5.	Creation and maintenance of loss factors	34
5.1.	Updating table of loss category codes (Clause 21 Schedule 11.1)	34
5.2.	Updating loss factors (Clause 22 Schedule 11.1)	34
6.	Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs)35	
6.1.	Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)	35
6.2.	Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)	35
6.3.	Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)	36
6.4.	Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)36	
6.5.	Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)	37
6.6.	Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)	37
6.7.	Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)	38
6.8.	Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1)&(3))	38
6.9.	Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))	39
6.10.	Obligations concerning change in network owner (Clause 29 Schedule 11.1)	39
6.11.	Electrically connecting NSP that is not point of connection to grid (Clause 10.30(1))....	40
6.12.	Change of MEP for embedded network gate meter (Clause 10.22(1)(b))	40
6.13.	Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)	41
6.14.	Transfer of ICPs for embedded network (Clause 6 Schedule 11.2).....	41
7.	Maintenance of shared unmetered load	42
7.1.	Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))	42
7.2.	Changes to shared unmetered load (Clause 11.14(5)).....	42
8.	Calculation of loss factors	43
8.1.	Creation of loss factors (Clause 11.2)	43
Conclusion	44
Participant response	44

EXECUTIVE SUMMARY

This Distributor audit was performed at the request of Aurora Energy 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 Aurora's premises in Dunedin on August 7th 2018.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

Seven non-compliances are recorded, all with an audit risk rating of low. Aurora is continuing to refine reporting to minimise registry discrepancies. Some of the issues were caused by late or incorrect field notification.

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 11, which results in an indicative audit frequency of 12 months. The future risk rating has improved from 17 to 11 and I therefore recommend an audit frequency of 18 months.

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
Provision of registry information	3.4	7(2) of Schedule 11.1	Late update to Ready for 8 ICPs.	Moderate	Low	2	Identified
Population of IECD	3.5	7(2A) of Schedule 11.1	16 late initial electrical connection date updates.	Moderate	Low	2	Identified
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Moderate	Low	2	Identified
NSP accuracy	4.2	7(1)(b) of Schedule 11.1	Two ICPs with incorrect NSPs.	Strong	Low	1	Cleared
Registry accuracy	4.6	7(1)(k)&(p) of Schedule 11.1	18 ICPs with incorrect IECD or status.	Moderate	Low	2	Identified
Provision of price category codes	4.7	7(3) of Schedule 11.1	11 ICPs with price category codes updated later than 10 business days.	Strong	Low	1	Identified
Decommissioned status	4.11	20 of Schedule 11.1	5 ICPs not updated to decommissioned.	Strong	Low	1	Identified
Future Risk Rating						11	

Indicative Audit Frequency	12 months
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Future risk rating	0-1	2-5	6-8	9-20	21-29	30+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Description
Registry accuracy	4.6	Regarding clause 7(1)(o) of schedule 11.1	Check all ICPs with contractors and inspectors where the trader has a PV1 profile, but Aurora is unaware that solar generation is installed.

ISSUES

Subject	Section	Recommendation	Description

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

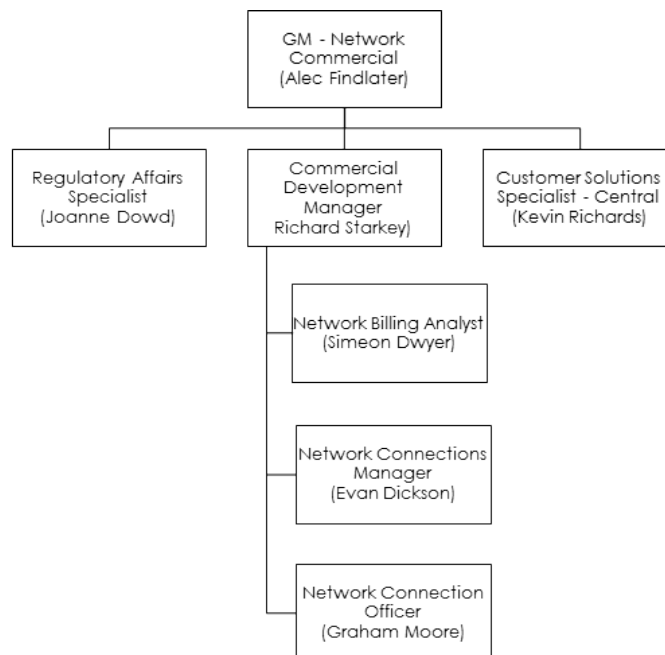
I checked the Authority's website to identify any exemptions in place.

Audit commentary

Aurora has no exemptions in place that are relevant to the scope of this audit.

1.2. Structure of Organisation

Aurora Organisation chart (Network Commercial division)



1.3. Persons involved in this audit

Auditor:

Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Aurora personnel assisting in this audit were:

Name	Title
Richard Starkey	Commercial Development Manager
Evan Dickson	Network Connections Manager
Simeon Dwyer	Network Billing Analyst
Graham Moore	Network Connection Officer

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 contractor's 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

Aurora subcontracts Delta and independent contractors to conduct field activities. The management and control areas covered by this audit are conducted by Aurora employees. This matter was discussed during the audit to ensure Aurora understands their responsibilities under this clause.

Audit commentary

Aurora has maintained responsibility for all of their obligations during the audit period. Compliance is confirmed.

1.5. Supplier list

Aurora engages Delta and other independent contractors to conduct field activities.

1.6. Hardware and Software

Aurora provided the following information detailing hardware and software used in the processes being audited:

- Aurora connection application database for tracking connection applications
- GTV for ICP creation, line charge billing and source for Registry updates.

Aurora's backup arrangement processes are documented under Aurora's Quality Management System – ISO9001:2008. All data is backed-up in accordance with standard industry protocols.

1.7. Breaches or Breach Allegations

Aurora has no breach allegations recorded by the Electricity Authority which are relevant to this audit.

1.8. ICP and NSP Data

Aurora has responsibility for balancing areas in the Otago and Central Otago regions, and the Heritage Estate embedded Network at Te Anau.

The table below lists the relevant NSPs and their associated balancing areas.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
DUNE	CML0331	CROMWELL			CROMWELDUNEG	G	01/05/08	13,246
DUNE	CYD0331	CLYDE			CLYDE00DUNEG	G	01/05/08	7,230
DUNE	FKN0331	FRANKTON			FRANKTODUNEG	G	01/05/08	13,655
DUNE	HWB0331	HALFWAY BUSH			DUNEDINDUNEG	G	01/05/08	26,973
DUNE	HWB0332	HALFWAY BUSH			DUNEDINDUNEG	G	01/05/08	11,161
DUNE	SDN0331	SOUTH DUNEDIN			DUNEDINDUNEG	G	01/05/08	17,1
DUNE	HER0111	HERITAGE ESTATE	NMA0331	TPCO	HERITGEDUNEE	E	01/05/08	123

Aurora provided a list of all ICPs as at July 2018 by way of a registry "list file". A summary of this data by "ICP status" is as follows.

Status	Number of ICPs (2018)	Number of ICPs (2017)	Number of ICPs (2016)
Active (2,0)	89,572	88,189	86,684
Inactive - new connection in progress (1,12)	154	112	91
Inactive – vacant (1,4)	1,022	1,083	1,299
Inactive – AMI remote disconnection (1,7)	190	205	
Inactive – de-energised due to meter disconnected (1,8)	7	7	
Inactive – at pole fuse (1,9)	3	4	
Inactive – de-energised at meter box switch (1,10)	1	0	
Inactive - at meter box switch (1,11)	0	0	
Inactive – ready for decommissioning (1,6)	8	15	26
Decommissioned (3)	7,701	7,382	7,121

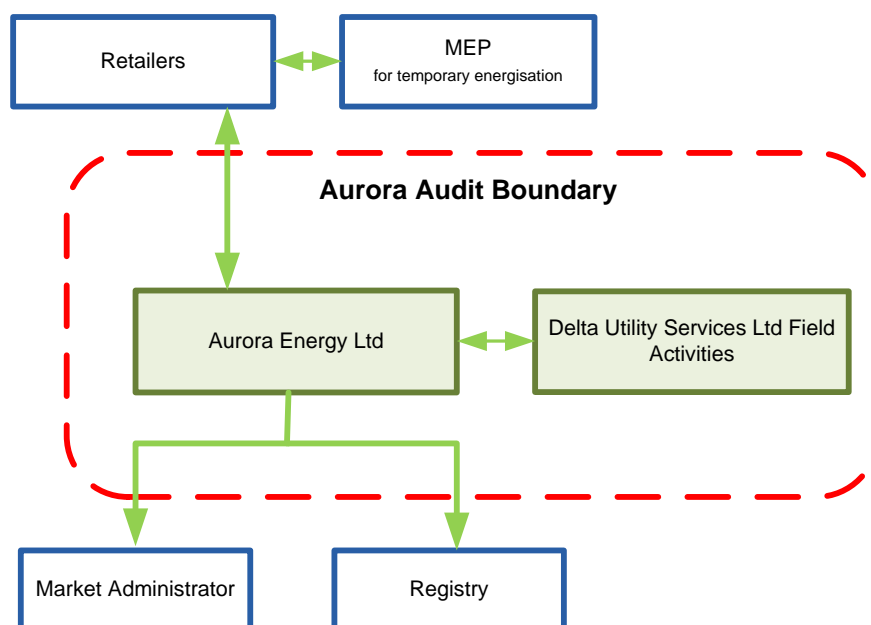
1.9. Authorisation Received

A letter of authorisation was not required or sought. Aurora was able to provide all necessary information.

1.10. Scope of Audit

This Distributor audit was performed at the request of Aurora Energy 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 Aurora's premises in Dunedin on August 7th 2018.

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



All activities covered by this audit are conducted at Aurora's head office in Dunedin.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

1.11. Summary of previous audit

Aurora provided a copy of their previous audit, conducted in August 2017 by Steve Woods of Veritek Ltd. The findings of the previous audit are shown in the tables below.

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Provision of registry information	3.4	7(2) of Schedule 11.1	Late update to Ready for one ICP.	Still existing
Population of IED	3.5	7(2A) of Schedule 11.1	10 late initial electrical connection date updates.	Still existing
Monitoring of new and ready ICPs	3.13	15 Schedule 11.1	Traders not notified of ICPs at new or ready for more than 24 months.	Cleared
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Still existing
NSP accuracy	4.2	7(1)(b) of Schedule 11.1	Four ICPs with incorrect NSPs.	Still existing
Registry accuracy	4.6	7(1)(k)&(p) of Schedule 11.1	Four ICPs with incorrect IED or status.	Still existing
Provision of price category codes	4.7	7(3) of Schedule 11.1	13 ICPs with price category codes updated later than 10 business days.	Still existing
Decommissioned status	4.11	20 of Schedule 11.1	One ICP not updated to decommissioned.	Still existing
Notify RM of certification expiry	6.8	10.25(3) of Part 10	RM not notified of certification date for Heritage Estate.	Cleared

Table of Recommendations

Subject	Section	Clause	Recommendation for Improvement	Status
			Nil	

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

Aurora's data management processes were examined. The list file as at July 2018 was examined to confirm compliance.

Audit commentary

Aurora 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. Aurora makes every effort to ensure data is complete and accurate. Compliance is confirmed.

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

Aurora's data management processes were examined. The list file as at July 2018 was examined to confirm compliance.

Audit commentary

Aurora 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 did not identify any examples where errors were not 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 1,474 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.

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 1,474 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

ICP requests are received directly from customers or their agents via the submission of an Aurora Connection Application (ACA). ICPs are created at "New" immediately, whether engineering work is required or not.

The records for 20 ICPs in the Dunedin and Central regions were examined and all 20 were created within three days of the application.

If a quotation is required, then it is considered that the application for an ICP is from the date the quote is accepted and consent is provided.

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

Aurora has a fully automated registry update process to ensure all information listed in this clause is provided to the registry. Aurora data is contained in GTV, which is validated against the registry on a regular basis, error logs are created if any fields are different, and these are then investigated.

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 December 2017 through to June 2018 was examined.

Audit commentary

Aurora requires contractors to provide prior notification of their intention to connect and energise an ICP. It is intended that ICP statuses be changed from “New” to “Ready” prior to energisation occurring.

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. 1,474 ICPs were created during the audit period.

The registry was populated later than the initial electrical connection date for eight ICPs. This does not achieve compliance with the requirement to ensure registry updates occur prior to electricity being traded. Late field notification was the cause for all eight ICPs. The ICPs are shown in the table below.

ICP	Initial electrical connection date	Registry input date	Days late
0000506934DEB01	17/01/2018	19/01/2018	2
0000506996DE39B	28/03/2018	29/03/2018	2
0000507079CE04D	13/02/2018	15/02/2018	3
0000507123CE3D0	21/02/2018	22/02/2018	2
0000507133CE97D	12/06/2018	19/06/2018	8
0000507247DE032	24/05/2018	25/05/2018	2
0000507414DE2FC	8/05/2018	9/05/2018	2
0000507770CE11E	26/06/2018	27/06/2018	2

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 3.4</p> <p>With: Clause 7(2) of Schedule 11.1</p> <p>From: 17-Jan-18</p> <p>To: 22-Jun-18</p>	<p>Late update to Ready for eight ICPs.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are recorded as Moderate because they mitigate risk most of the time.</p> <p>There is no impact on settlement. The impact is that the trader could not change their status to Active and there may have been an ICP days discrepancy. The audit risk rating is low.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
The issue identified relates to the late notification of historic events, so no further action is required.	N/A	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Aurora has a monthly reconciliation process to identify discrepancies between installation statuses in its billing and connection management system and the Registry. However as this is a monthly check, resolving the discrepancies will likely cause a late update to the Registry.</p> <p>Aurora is planning to review the way it gathers information from the field, and the contract mechanisms it has in place with field information providers, to ensure accurate information is provided in a timely fashion.</p>	June 2019	

3.5. Timeliness of Provision of Initial electrical connection 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 December 2017 through to June 2018 was examined.

Audit commentary

There is a requirement to populate the initial electrical connection date within 10 business days of physical energisation. There were 815 initial electrical connection date updates in the event detail report. Ten of these do not appear to be new connections and it appears the registry was populated incorrectly. This is recorded as non-compliance in **section 4.6**. Of the 805 that do appear to be new connections, 69 were updated later than 10 business days. A sample of ten showed that two examples were not initial electrical connection date updates, they were other fields being updated. The eight that were late updates were due to late reporting from the field. Initial electrical connection date updates are included in the "Network" event files, which also contain all other network fields, therefore it's sometimes difficult to identify the initial electrical connection date updates. I checked a further ten updates and found two that were not initial electrical connection date updates. I have recorded non-compliance for 16 late updates but there are likely to be more.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 01-Dec-17 To: 30-Jun-18	16 late initial electrical connection date updates. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Aurora has reporting in place to ensure initial electrical connection dates are provided by contractors in a timely manner; however, the effectiveness of the controls has reduced compared to the previous audit, therefore I’ve recorded them as moderate. There is no impact on settlement. The only potential impact is where a trader may wish to compare their Active date to the IECD, 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
The issue identified relates to the late notification of historic events, so no further action is required.		N/A	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Aurora is planning to review the way it gathers information from the field, and the contract mechanisms it has in place with field information providers, to ensure accurate information is provided in a timely fashion.		June 2019	

3.6. Connection of ICP that is not an NSP (Clause 11.17)

Code reference

Clause 11.17

Code related audit information

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

The distributor must not 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 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 December 2017 through to June 2018 was examined.

Audit commentary

The new connections process was examined, and the process includes a “trader responsibility” step.

For one trader the ACA is scanned and emailed; then an acceptance response is emailed back.

For most traders, the ACA is also scanned and emailed; then a service request is provided to Delta dispatch, which serves as the acceptance for connection and responsibility for the ICP.

Another trader is not provided with the ACA, they will send a service request to Delta dispatch following a customer registration call.

All ICPs that were electrically connected had a trader recorded in the registry as having accepted responsibility.

Audit outcome

Compliant

3.7. Connection of ICP that is not an NSP (Clause 10.31))

Code reference

Clause 10.31

Code related audit information

A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP.

Audit observation

The new connection process was examined. The event detail report for the period from December 2017 through to June 2018 was examined.

Audit commentary

Aurora 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. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)

Code reference

Clause 10.31A

Code related audit information

A distributor may only temporarily electrically connect an ICP that is not an NSP if requested by an MEP for a purpose set out in clause 10.31A(2), and the MEP:

- *has been authorised to make the request by the trader responsible for the ICP; and*
- *the MEP has an arrangement with that trader to provide metering services.*

Audit observation

The new connection process was examined. The event detail report for the period from December 2017 through to June 2018 was examined.

Audit commentary

Aurora's processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. No temporarily connected ICPs were identified.

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

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

Audit commentary

Aurora 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:

xxxxxxxxxxccc where:

- *xxxxxxxxxx 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 of 20 was checked.

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

Each ICP only has a single loss category, which clearly identifies the relevant loss factor. Each loss category code has a different loss factor for day and night, and summer and winter.

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 December 2017 to June 2018 were examined in relation to the use of the “New” status. I also checked for ICPs at the “New” status with an initial electrical connection date populated.

Audit commentary

The new connections process was examined during the audit and it was found that ICPs are created at “New” and the status is changed to “Ready” before livening occurs or on the same day as livening.

There were no ICPs at “New” with initial electrical connection dates populated. No discrepancies were identified during the new connections checks. Compliance is confirmed for the management of the “New” status.

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

There are 44 ICPs at “New” and 10 at “Ready” that have been there for longer than 24 months. Aurora has provided reporting to the relevant traders to determine if these ICPs are still required. The reporting and trader communications were demonstrated.

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:*
 - o *the unique loss category code assigned to the ICP*
 - o *the ICP identifier of the ICP*
 - o *the NSP identifier of the NSP to which the ICP is connected*
 - o *the plant name of the embedded generating station.*

Audit observation

This requirement was discussed, and the list file was examined.

Audit commentary

There are no embedded generators with a capacity greater than 10MW that require specific loss category codes. There has been no new embedded generation greater than 10MW created during the audit period. Aurora is aware of this requirement.

Audit outcome

Compliant

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, with the event detail report for the period from December 2017 through to June 2018. 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	2,083	1,858	225	89%	6.1
Address	1,947	1,943	4	99.8%	0.24
Status (decom)	160	74	86	46%	23
Network	889	799	90	90%	9.2

To evaluate network events, I excluded all new connections to ensure the initial electrical connection date changes were not included.

Eight of ten status updates were due to late registry population of the “ready for decommissioning” event.

On some occasions, traders will request that price category code changes be backdated to match their tariff requirements or the physical characteristics of the installation, for example an upgrade or downgrade of fuse size. Aurora will sometimes backdate, and in all cases the change is made within three days of the date of notification by the trader. Aurora may continue with the current practice, particularly in situations where a refusal to backdate the change will result in customers being financially disadvantaged, or where the price category must match the on-site configuration.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.1</p> <p>With: Clause 8 Schedule 11.1</p> <p>From: 01-Aug-16</p> <p>To: 31-Jul-17</p>	<p>Updates to registry backdated greater than 3 business days of the event.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Many of the late updates were as a result of late information from other parties, however two of a sample of 10 backdated price category codes and one of a sample of 10 network events were due to data entry errors, therefore I have recorded the controls as moderate.</p> <p>There is a minor impact on line charge billing where errors were in place. There would be a negative impact on traders and customers if Aurora did not backdate pricing events. The Audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Aurora backdates network pricing events where information that leads to a change in price category or pricing attribute has not been provided, or has not been provided on time by a contractor. It would be disadvantageous to consumers to comply with this requirement in circumstances where Aurora has not applied altered pricing information in error, or where contractors have not provided Aurora information in a timely fashion.</p> <p>Aurora is mindful of this Code requirement and limits any backdating to corrections of pricing information.</p>		No change	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Aurora is mindful of this Code requirement and limits any backdating to corrections of pricing information.</p>		No change	

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 three examples and it was confirmed that two of these had the incorrect NSP recorded. These are both historic issues. 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 both in Dunedin. Validation is in place to ensure NSP accuracy and Aurora is now checking GXP vs feeder to ensure GXP accuracy.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.2 With: Clause 7(1)(b) of Schedule 11.1 From: 16-Jul-13 To: 31-Jul-18	Two ICPs with incorrect NSPs. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are in place to ensure ICPs are allocated to the correct NSP for new connections. There is a 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
The two ICPs with incorrect NSPs have been corrected as part of the audit.		Completed	Cleared

Preventative actions taken to ensure no further issues will occur	Completion date	
As stated in the audit commentary, <i>"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"</i>	No change	

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 Aurora provides this information if the requesting party has authorisation.

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 Aurora's address records on the registry are unique. All ICPs have sufficient information to enable ICPs to be readily located. I checked 20 examples during the audit by using "google earth" and its "streetview" functionality which confirmed compliance.

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 Aurora's policy and documentation in relation to this clause.

Audit commentary

For new connections this clause is well understood, and the policy is to allow shared service mains, but individual fusing is required. A section in the "network connection inspection form" requires that fusing information be notified.

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 electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).*

Audit observation

Aurora has a fully automated registry update process to ensure all information listed in this clause is provided to the registry. Aurora data is contained in GTV, which is validated against the registry on a regular basis, error logs are created if any fields are different, and these are then investigated. I checked all registry fields for obvious discrepancies using a set of standard queries.

Audit commentary

The analysis found the following points:

- eight ICPs at the Ready status with the IECD populated; the IECD is correct for all eight
- 11 Active ICPs with blank IECD; no "livening reports" were received for eight examples and reporting issues caused the other three errors
- ten ICPs with the IECD incorrectly populated
- 81 ICPs have solar installed but the trader has not updated the profile to PV1; a check of 12 confirmed that Aurora's data is correct
- 21 ICPs have a PV1 profile but Aurora does not have generation recorded. Aurora also has reporting of these ICPs and they actively follow up with retailers and contractors. Two of the ICPs were on the list due to timing issues and had been updated by the time of the audit. There

are two where it appears solar generation is installed and electrically connected but Aurora has not approved the electrical connection. All of the rest have been approved but livening reports have not been received. Aurora also monitors unexpected generation kWh appearing in the EIEP files. I recommend Aurora contacts the contractors and the inspectors for all ICPs where the trader has a PV1 profile but where livening notification has not been received.

Recommendation	Description	Audited party comment	Remedial action
Regarding clause 7(1)(o) of schedule 11.1	Check all ICPs with contractors and inspectors where the trader has a PV1 profile, but Aurora is unaware that solar generation is installed.	Aurora will commence the checks of PV1 profile ICPs with Authorised Network Inspectors and Retailers.	Identified

- 26 ICPs had an IECD different to the Active date or the certification date; eight of these were examined confirming the IECD was incorrect for two, due to data entry errors.
- five ICPs at status “Ready for Decommissioning” which should have been “Decommissioned”.

Two unmetered ICPs were checked where the trader did not have unmetered load recorded. One had “13” populated which appeared to be an error and it was removed. The other ICP has correct details but the trader has incorrect details.

In summary, the incorrect information found was Active ICPs without an IECD or with incorrect IECDs, and five incorrect statuses.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: Clause 7(1)(k)&(p) of Schedule 11.1 From: 01-Jul-17 To: 30-Jun-17	18 ICPs with incorrect IECD or status. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Reporting is in place to identify errors, but changes may be required to identify the issues mentioned above. There is potentially a minor impact on other participants. The audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
The ICPs with incorrect IED or statuses were identified during the audit and have been corrected.	Completed	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Aurora will review the monthly reconciliation process to ensure that ICPs without IEDs and an Active status, and ICPs with inconsistent statuses between Aurora's billing and connection management system are identified and resolved.</p> <p>Aurora is planning to review the way it gathers information from the field, and the contract mechanisms it has in place with field information providers, to ensure accurate information is provided in a timely fashion.</p>	June 2019	

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 11 ICPs with changes backdated more than 10 business days. They were all due to late notification by contractors.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.7 With: Clause 7(3) of Schedule 11.1 From: 01-Dec-17 To: 30-Jun-18	11 ICPs with price category codes updated later than 10 business days. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Price category codes are based on information provided by traders or their agents. Changes are only made if notification is received that the data is incorrect. Controls are recorded as strong. There is potentially a minor impact on traders because line charge invoicing and customer invoicing will need to be corrected for some ICPs. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The issue identified relates to the late notification of historic events, so no further action is required.		N/A	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Aurora will continue to perform the monthly reconciliation process to identify missing or inconsistent information. Aurora is planning to review the way it gathers information from the field, and the contract mechanisms it has in place with field information providers, to ensure accurate information is provided in a timely fashion.		No change	

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 co-ordinates (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 co-ordinates recorded.

Audit commentary

GPS co-ordinates are not recorded.

Audit outcome

Not applicable

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 nine embedded network (LE) 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

ICP decommissioning processes are well documented. Requests are made either directly to approved contractors or to dispatch. Notification is then made to the relevant retailer. Aurora monitors ICPs that have been physically decommissioned to ensure the retailer changes the status to “ready for decommissioning” so that Aurora can change the status to “decommissioned”. There are often delays in the Trader updating their status and this can lead to physically decommissioned ICPs being on the registry as “Active” or “de-energised – vacant” because Aurora is unable to decommission until the Trader has updated their status.

There were eight ICPs with a status of “ready for decommissioning” during the audit. Five of these ICPs should have been decommissioned but weren’t due to a reporting error, which is now resolved. These are all now decommissioned. Two of the remaining three ICPs have not been reported to Aurora as having been decommissioned; Aurora is investigating these. One ICP is not ready for decommissioning and the trader has the incorrect status recorded.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.11 With: Clause 20 of Schedule 11.1 From: 05-Jul-18 To: 20-Aug-18	Five ICPs not updated to decommissioned. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating

Low	<p>Controls are in place to manage the decommissioning process and the five ICPs not updated have now been resolved, therefore the controls are rated as strong.</p> <p>There is no impact on settlement or other parties, therefore the audit risk rating is minor.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
The ICPs that had not been decommissioned were identified during the audit and have been corrected.		Completed	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Staff will be reminded of the importance of processing information from the field information providers.		September 2018	

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. Aurora understands the requirement to provide notification of new price category codes.

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 codes during the audit period.

Audit commentary

There were no additional codes created 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 changed factors during the audit period.

Audit commentary

Each ICP only has a single loss category, which clearly identifies the relevant loss factor. Each loss category code has a different loss factor for day and night, and summer and winter. There were many loss factor changes during the audit period. The notification date was January 2018 for start dates of 1st May and 1st October 2018, which achieves compliance with the requirement to provide two months' notice.

Changes to Aurora's loss factors are always effective on the first of any month and all trading periods only have one loss factor.

Audit outcome

Compliant

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 1 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

Aurora have not created any embedded networks; therefore this was not assessed as part of this audit.

Audit commentary

Aurora have 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

One embedded network was connected to Aurora's network during the audit period, but Aurora has not become an embedded network owner. The embedded network owner is responsible for this clause.

Audit commentary

One embedded network was connected to Aurora's network during the audit period, but Aurora 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

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

Audit commentary

Aurora 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)&(3))

Code reference

Clause 10.25(1)&(3)

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

Aurora is responsible for the metering installation at the point of connection between Heritage Estate and The Power Company. I checked the NSP table to confirm if the metering installation had current certification.

Audit commentary

Aurora is responsible for the metering installation at the point of connection between Heritage Estate and The Power Company. The NSP table shows that the certification expiry date is correctly updated.

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 1 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

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

Audit commentary

Aurora 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 participant 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

Aurora has not requested the connection of any NSPs.

Audit commentary

Aurora 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

The MEP has not changed for Heritage Estate.

Audit commentary

The MEP has not changed for Heritage Estate.

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

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

Audit commentary

Aurora 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

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

Audit commentary

Aurora 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

Aurora does not have any shared unmetered load.

Audit commentary

Aurora does not have any shared unmetered load.

Audit outcome

Not applicable

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

Aurora does not have any shared unmetered load.

Audit commentary

Aurora does not have any shared unmetered load.

Audit outcome

Not applicable

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.*

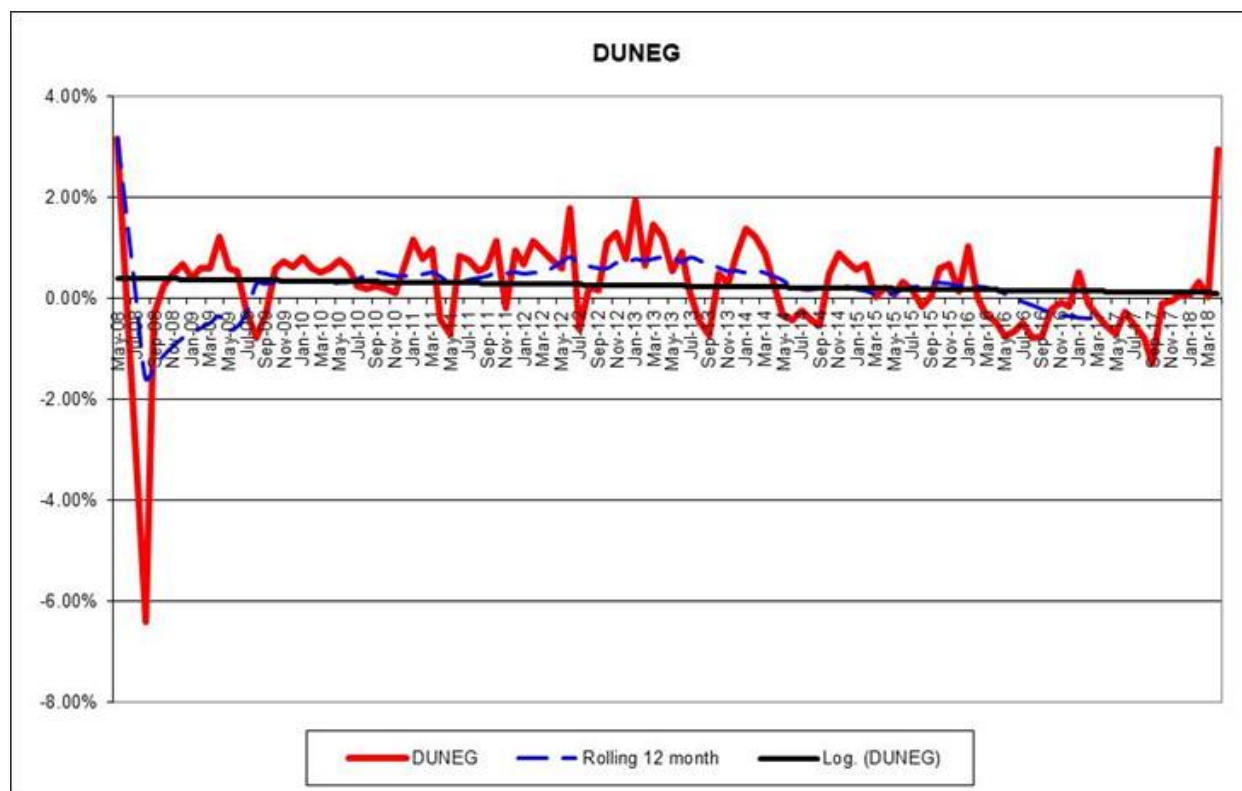
Audit observation

Aurora publishes reconciliation losses, which include technical losses and non-technical losses. I reviewed the process and supporting documentation in relation to the calculation of loss factors.

Audit commentary

There are different loss factors for summer/winter and day/night. These are revised annually based on historic data over several years. The process achieves compliance with clause 11.2.

The table below shows that UFE is tracking downwards. The large proportion of AMI installed on Aurora's network may be a contributing factor and may result in a loss factor adjustment in the future.



Audit outcome

Compliant

CONCLUSION

Seven non-compliances are recorded, all with an audit risk rating of low. Aurora is continuing to refine reporting to minimise registry discrepancies. Some of the issues were caused by late or incorrect field notification.

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 in the audit summary provides some guidance on this matter and contains a future risk rating score of 11, which results in an indicative audit frequency of 12 months. The future risk rating has improved from 17 to 11 and I therefore recommend an audit frequency of 18 months.

PARTICIPANT RESPONSE

We acknowledge the areas of non-compliance identified in the audit report. In response to each non-compliance raised, we have stated the method (whether it be a change in process or a reminder to staff of the correct process) by which these non-compliances will be mitigated in the future.

Over the next year, we will review which party is best placed to provide information from the field and review the contractual obligations to ensure that we receive accurate and timely information. This audit report highlights instances where information from the field has either not been provided, or has been provided incorrectly. This causes issues around a lack of notification of information to the registry, or late notifications. Whilst it is not realistic to consider all information to be provided accurately, all of the time, we are concerned about the amount of incorrect information currently being supplied to us.