

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

NORTHPOWER

Prepared by: Allan Borcoski Borcoski Energy Services Ltd

Date audit commenced: 17 May 2023

Date audit report completed: 22 July 2023

Audit report due date: 28-Jul-23

TABLE OF CONTENTS

Executive summary.....	5
Audit summary	6
Non-compliances.....	6
Recommendations	7
Issues.....	7
1. Administrative	8
1.1. Exemptions from Obligations to Comply With Code (Section 11)	8
1.2. Structure of Organisation	8
1.3. Persons involved in this audit.....	9
1.4. Use of contractors (Clause 11.2A)	9
1.5. Supplier list.....	9
1.6. Hardware and Software.....	10
1.7. Breaches or Breach Allegations.....	10
1.8. ICP and NSP Data	10
1.9. Authorisation Received.....	11
1.10. Scope of Audit.....	11
1.11. Summary of previous audit	11
2. Operational Infrastructure	13
2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1))	13
Non-compliance.....	14
2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2)).....	14
2.3. Removal or breakage of seals (Clause 48(1A) and 48(1B) of Schedule 10.7)	15
2.4. Provision of information on dispute resolution scheme (Clause 11.30A).....	16
3. Creation of ICPs	17
3.1. Distributors must create ICPs (Clause 11.4).....	17
3.2. Participants may request distributors to create ICPs (Clause 11.5(3)).....	17
3.3. Provision of ICP Information to the registry manager (Clause 11.7).....	18
3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1)	19
Non-compliance.....	20
3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)	21
3.6. Connection of ICP that is not an NSP (Clause 11.17).....	23
3.7. Connection of ICP that is not an NSP (Clause 10.31).....	24
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)	25
3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)	25
3.10. Electrical connection of NSP that is not point of connection to grid (Clause 10.30A and 10.30B)	26
3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)	27
3.12. Loss category (Clause 6 Schedule 11.1).....	27
3.13. Management of “new” status (Clause 13 Schedule 11.1).....	27
3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)	28
Non-compliance.....	29
3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1).....	30

3.16. Electrical connection of a point of connection (Clause 10.33A).....	31
3.17. Electrical disconnection of a point of connection (Clause 10.30C and 10.31C)	31
3.18. Meter bridging (Clause 10.33C).....	32
4. Maintenance of registry information	34
4.1. Changes to registry information (Clause 8 Schedule 11.1)	34
Non-compliance.....	36
4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)	36
4.3. Customer queries about ICP (Clause 11.31).....	37
4.4. ICP location address (Clause 2 Schedule 11.1).....	37
4.5. Electrically disconnecting an ICP (Clause 3 Schedule 11.1)	37
4.6. Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1)	38
4.7. Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)	41
4.8. GPS coordinates (Clause 7(8) and (9) Schedule 11.1).....	42
4.9. Management of “ready” status (Clause 14 Schedule 11.1).....	42
4.10. Management of “distributor” status (Clause 16 Schedule 11.1)	43
4.11. Management of “decommissioned” status (Clause 20 Schedule 11.1).....	44
4.12. Maintenance of price category codes (Clause 23 Schedule 11.1).....	45
5. Creation and maintenance of loss factors.....	47
5.1. Updating table of loss category codes (Clause 21 Schedule 11.1).....	47
5.2. Updating loss factors (Clause 22 Schedule 11.1).....	47
6. Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs)	48
6.1. Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)	48
6.2. Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)	48
6.3. Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)	49
6.4. Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1).....	49
6.5. Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1) ..	50
6.6. Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1).....	50
6.7. Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2).....	51
6.8. Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))	51
6.9. Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2)).....	52
6.10. Obligations concerning change in network owner (Clause 29 Schedule 11.1).....	52
6.11. Change of MEP for embedded network gate meter (Clause 10.22(1)(b))	53
6.12. Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)	53
6.13. Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)	54
7. Maintenance of shared unmetered load.....	55
7.1. Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))	55
7.2. Changes to shared unmetered load (Clause 11.14(5)).....	55
8. Calculation of loss factors.....	57
8.1. Creation of loss factors (Clause 11.2).....	57
Conclusion	59

Participant response..... 59

EXECUTIVE SUMMARY

This distributor audit was performed at the request of Northpower (NPOW) as required by clause 11.10 of Part 11, to assure compliance with the Electricity Industry Participation Code 2010. The relevant rules audited are as required by the Guidelines for Distributor Audits V7.0 issued by the Electricity Authority.

Northpower aims to achieve a high level of information integrity and compliance. This was observed during the audit with the diligence demonstrated by Staff in maintaining accurate ICP information in the Registry and Northpower information systems. Salesforce and Axos hold comprehensive records of an ICP's life cycle from network connection application through to initial electrical livening and eventual Decommission. Northpower have been progressively working towards paperless and electronic information capture, for example a mobile application (called Mahi) was implemented in October 2022 to capture work completion information from the field. Exception monitoring of data is routine, thorough and effective to support information capture and ongoing compliance maintenance. This practice is also wisely used to verify compliance when new systems and process are being rolled out.

The general level of compliance has improved during this audit period. The main issues observed in this audit were:

- Late or non supply of work completion information to Northpower by contractors engaged by other parties. Particularly Distributed Generation installers and this makes it almost impossible to update the Registry within the time limits defined in the Code. This is an ongoing industry level issue.
- The status of some new connections ICPs, was changed to "READY" before Retailer acceptance was received (where no blanket agreement with a Retailer exists). A potential remedy for this was discussed with Northpower Staff during the audit.

The audit recorded 5 non compliances, all with low audit risk.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Distribution Participant audit provides some guidance on this matter.

The Future Risk Rating score for this audit is 8 which results in an indicative audit frequency of 18 months. We concur with this result.

We thank Northpower for its full and complete cooperation in this audit

The audit period was 29 April 2022 to 30 April 2023.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(2)	Relatively low number of information inaccuracies identified during the audit	Moderate	Low	1	Identified
Timeliness of Provision of ICP Information to the Registry manager	3.4	7(2) of Schedule 11.1	12 x ICPs did not have READY status in the Registry prior to electricity being traded at the ICPs	Moderate	Low	2	Identified
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	16 x ICP (1.7%) had the IECD uploaded to the Registry more than 10 days after the event date. 1 x discrepancy between IECD & Metering/Active event dates.	Strong	Low	1	Identified
Monitoring of "new" & "ready" statuses	3.14	15 Schedule 11.1	8 x ICPs did not have READY validated after 24 months.	Moderate	Low	2	Identified
Changes to Registry information	4.1	8(1)(b)&(4) of Schedule 11.1	Relatively low number of Registry updates greater than 3 days from the event date	Moderate	Low	2	Identified
Future Risk Rating						8	

Future risk rating	1-2	3-6	7-9	10-19	20-24	25+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Description
Nil	Nil	Nil	Nil

ISSUES

Subject	Section	Issue	Description
Nil	Nil	Nil	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.

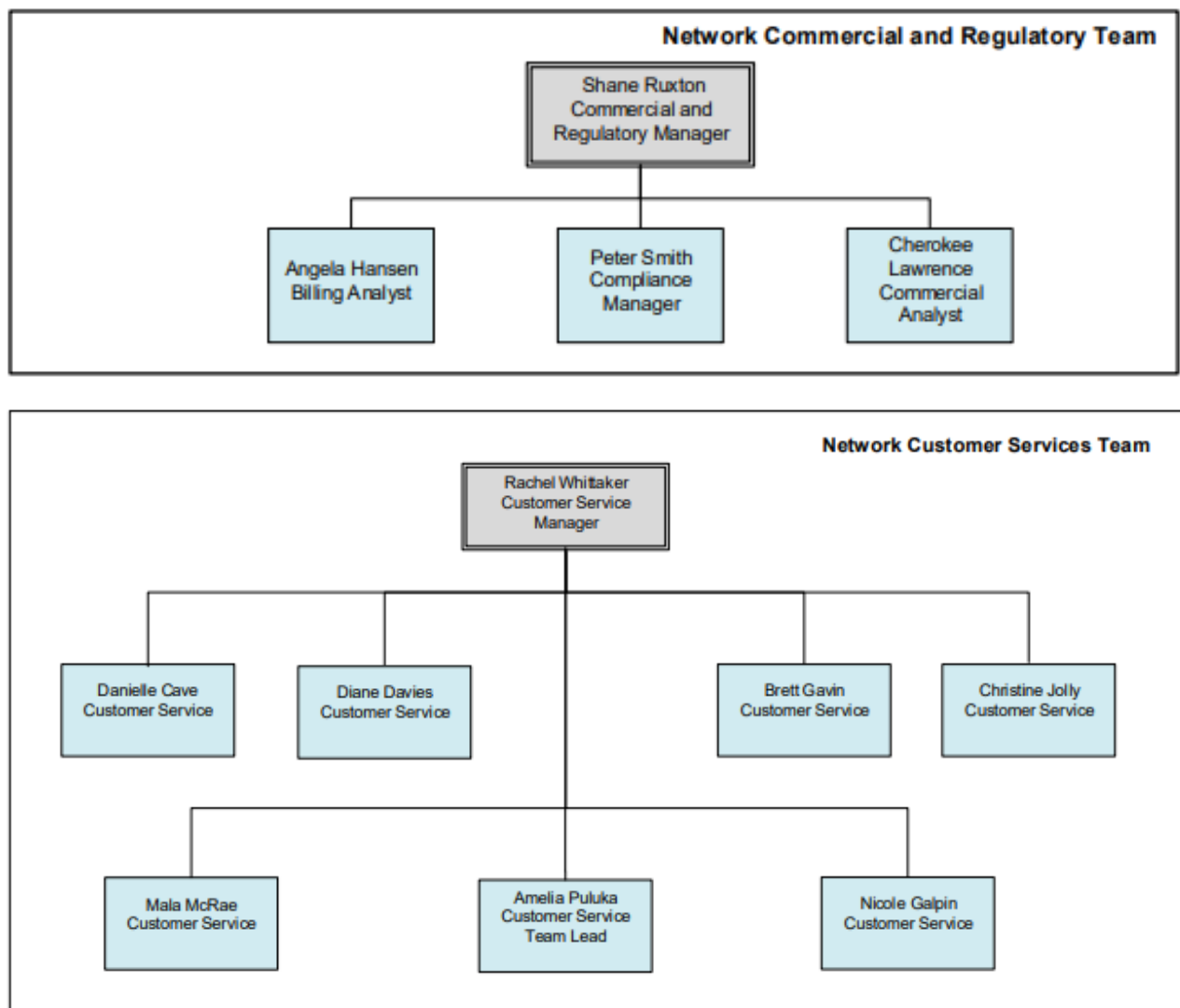
Audit observation

Northpower confirms that there are no exemptions in place which are relevant to the scope of this audit.

Audit commentary

We checked the Electricity Authority website and confirm that there are no exemptions in place.

1.2. Structure of Organisation



1.3. Persons involved in this audit

Name	Role	Company
Peter Smith	Compliance Manager	Northpower
Rachel Whittaker	Customer Excellence Service Manager	Northpower
Mick Buckley	Senior Software Engineer	Northpower
Allan Borcoski	Electricity Authority Approved Auditor	Borcoski Energy Services Ltd

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

There are no contractors who assist with, or are used in, the Northpower operations that were audited.

Audit commentary

During the audit, we did not identify any contractors who assist Northpower to meet their obligations relevant to the scope of this audit.

1.5. Supplier list

There were no suppliers who assisted Northpower during the audit period with the operations audited.

1.6. Hardware and Software

Software	Purpose
Axos Registry Manager	<ul style="list-style-type: none"> Key database to support EIPC compliance ICP creation and management Automated Registry interface (all updates to the Registry and notifications from the Registry)
SalesForce	<ul style="list-style-type: none"> CRM platform to support customer experience and service. Manages customer contact. Workflow of new network connection applications and alterations to existing connections Interface between retailers, customers, and Warranted Persons for the above tasks.
MS Access	<ul style="list-style-type: none"> Registry exception reporting Exception and discrepancy reporting from other Northpower information systems

1.7. Breaches or Breach Allegations

Northpower has stated it has no breaches of the Electricity Industry Participation Code related to this audit

A check of the Electricity Authority website found no breaches or alleged breaches were recorded in the period covered by this audit.

1.8. ICP and NSP Data

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
NPOW	BRB0331	BREAM BAY			ALLGXPSNPOWG	G	1/05/08	6,031
NPOW	MPE1101	MAUNGATAPERE			ALLGXPSNPOWG	G	1/04/13	45,588
NPOW	MTO0331	MAUNGATUROTO			ALLGXPSNPOWG	G	1/05/08	11,954

Status	Number of ICPs (22/04/2023)	Number of ICPs (2022)	Number of ICPs (2021)
New (999,0)	4	18	12
Ready (0,0)	109	128	131
Active (2,0)	59,519	61,268	60,319
Distributor (888,0)	9	7	9
Inactive – new connection in progress (1,12)	57	126	82
Inactive – electrically disconnected vacant property (1,4)	1,104	964	1,169

Inactive – electrically disconnected remotely by AMI meter (1,7)	138	148	137
Inactive – electrically disconnected at pole fuse (1,8)	21	14	18
Inactive – electrically disconnected due to meter disconnected (1,9)	19	20	21
Inactive – electrically disconnected at meter box fuse (1,10)	4	4	2
Inactive – electrically disconnected at meter box switch (1,11)	3	1	2
Inactive – electrically disconnected ready for decommissioning (1,6)	56	38	58
Inactive – reconciled elsewhere (1,5)	0	0	0
Decommissioned (3)	6339	6,871	6,513

1.9. Authorisation Received

Northpower provided a letter of authorisation to the auditor permitting the collection of data from other parties for matters directly related to the audit.

1.10. Scope of Audit

This audit was performed at the request of Northpower, as required by clause 11.10 of Schedule 11, to assure compliance with the Electricity Industry Participation Code 2010. The audit covers the following processes, under clause 11.10(4) of Part 11, performed by Northpower: a) The creation of ICP identifiers for ICPs b) The provision of ICP information to the Registry and the maintenance of that information c) The creation and maintenance of loss factors.

The audit was carried out on the Northpower premises at 28 Mount Pleasant Road in Whangarei 17 to 18 May 2023.

1.11. Summary of previous audit

The previous audit was carried out in March 2021 by Ewa Glowacka of TEG & Associates Ltd. The findings of the audit are shown below:

Subject	Section	Clause	Non Compliance	Comment
Audit required if participant makes material changes	1.11	16A.11	On 01/04/2021 Gentrack was replaced by Axos Registry Manager which had a significant impact on processes covered by this audit. The Material Change Audit was not conducted.	Cleared
Requirement to provide complete and accurate information	2.1	11.2(2)	Relatively low number of information inaccuracies identified during the audit.	Still Exists

Timeliness of Provision of ICP Information to the Registry manager	3.4	7(2) of Schedule 11.1	4 ICPs did not have the status "Ready" assigned prior to electricity being traded at the ICP.	Still Exists
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	22 ICP (2.6% of all new connections) had the IECD uploaded to the registry more than 10 days after the event date.	Still Exists
Changes to Registry information	4.1	8(1)(b)&(4) of Schedule 11.1	Registry event updates backdated greater than three days.	Still Exists

2. OPERATIONAL INFRASTRUCTURE

2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1))

Code reference

Clause 11.2(1) and 10.6(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 Parts 10 or 11 is:

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

Audit observation

This was discussed with Northpower staff what processes were in place to ensure accurate information was provided to the registry. The Audit Compliance Report, LIS and EDA files were checked for the audit period. Connections process documentation and a random sample of 25 new ICP connection, 25 Distributed Generation connection and 25 ICP Decommission records were reviewed along with the Registry.

Audit commentary

Northpower staff diligently verify the accuracy of the information recorded in Axos and Salesforce and that it matched the Registry information. Despite the efforts to maintain accurate information Northpower are reliant on timely information from third parties. Northpower are transitioning to electronic data entry. For example Mahi is a mobile application provided to the approved living contractors to return completed new connection information. This was implemented in October 2022. However some errors are inevitable understandable and as the new systems and processes bed in. The extensive exception reporting processes are outlined in section 2.2 and ensure errors are kept to a minimum. The relatively small number of information inaccuracies identified during the audit are noted below:

Section	Registry Discrepancy
3.4	<ul style="list-style-type: none">12 x ICPs did not have READY status in the Registry prior to electricity being traded at the ICPs
3.5	<ul style="list-style-type: none">22 x ICP (2.6%) had the IECD uploaded to the Registry more than 10 days after the event date.1 x discrepancy between IECD & Metering/Active event dates.
3.14	<ul style="list-style-type: none">8 x ICPs did not have READY validated after 24 months.
4.1	<ul style="list-style-type: none">Relatively low number of Registry updates greater than 3 days from the event date

Audit outcome

Non-compliant

NON-COMPLIANCE

Non-compliance	Description		
Audit Ref: 2.1 With:11.2(2) From: 29-Apr-22 To: 30-Apr-23	Relatively low number of information inaccuracies identified during the audit. 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	The controls are recorded as strong. During the audit evidence demonstrated the significant efforts to achieve accuracy with exception reporting in place and correction of errors discovered. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Refer to the response in each of the individual non-compliance sections			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Refer to the response in each of the individual non-compliance sections			

2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))

Code reference

Clause 11.2(2) and 10.6(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

A check of the Audit Compliance Summary Report, the LIS file for the audit period. Axos and Sales Force CRM were checked as necessary during the audit. We discussed with Northpower Staff what processes were in place to identify information discrepancies in their systems and the Registry, and the methods to correct that data as soon as practicable.

Audit commentary

Northpower Staff aim to maintain accurate Registry information, and this was demonstrated by the high levels of monitoring and exception reporting occurring routinely.

Registry files are checked, and discrepancies addressed daily. For example, where a third party approved contractor has not advised Northpower of changes on the Network directly, the NMR files are checked to identify events such as newly livened ICPs. This allows for the correct price category code, address details and IECD data to be entered into the Axos Registry Manager. Northpower Staff also runs the Audit Compliance report monthly along with an analysis to address the report findings.

Examples of monitoring and exception reports run daily are:

- ICP moved to the Inactive – Ready for Decommission status in the Registry by trader
- Live ICP with NSP which does not exist
 - BTS – incorrect price code
 - GPS coordinates – blank field
- Identify new/ready status greater than 24 months
- IECD but not active
- IECD date vs meter install date
- IECD missing
- Active ICP with incorrect NSP
- Incorrect price codes
- IECD recorded for ICP with the status “New connection in progress” longer than 30 days
- IECD recorded for ICP with the status “Ready” longer than 30 days
- NEWICP over 12 months

Whilst the implementation of Axos Registry Manager provides assurance that Registry information is correct, it does not assist with the time based compliance issues such as the requirement to update the Registry with ICP information changes within 3 business days or 10 Business days. Information required from third party contractors (contracted by retailers and not managed directly by Northpower) is often received late resulting in late and non-compliant Registry updates. Distributed Generation (solar) installation, new connections and ICP Decommissions are typical examples of this problem. The monitoring outlined above ensures the correct information is uploaded to the Registry, but it can't always address the timeframe.

Audit outcome

Compliant

2.3. Removal or breakage of seals (Clause 48(1A) and 48(1B) of Schedule 10.7)

Code reference

Clause 48(1A) and 48(1B) of Schedule 10.7

Code related audit information

If the distributor provides a load control signal to a load control switch in the metering installation, the distributor can remove or break a seal without authorisation from the MEP to bridge or unbridge the load control device or load control switch – as long as the load control switch does not control a time block meter channel.

If the distributor removes or breaks a seal in this way it must:

- ensure personal are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code
- replace the seal with its own seal
- have a process for tracing the new seal to the personnel
- notify the metering equipment provider and trader

Audit observation

This was discussed with Northpower Staff.

Audit commentary

The process used by Northpower is as follows:

If a Field Service Provider is engaged by Northpower Network to carry out work on the network, and becomes aware of a broken or missing seal during completion of this work, the Contractor shall:

- Advise Dispatch (or NOC after hours) of the broken seal.
- If after hours, NOC to pass to Dispatch.
- Dispatch to email MEP and Retailer within 1 Business Day and advise that a broken or missing seal has been discovered, and that it is not known who broke the seal or why it was broken.

Northpower may remove or break a seal and/or bridge a ripple relay for health and safety or customer welfare reasons for example lack of hot water. A retailer and MEP are notified the following day. The ripple relay replacement is organised by the retailer.

Audit outcome

Compliant

2.4. Provision of information on dispute resolution scheme (Clause 11.30A)

Code reference

Clause 11.30A

Code related audit information

A distributor must provide clear and prominent information about Utilities Disputes:

- *on their website*
- *when responding to queries from consumers*
- *in directed outbound communications to consumers about electricity services and bills.*

If there are a series of related communications between the distributor and consumer, the distributor needs to provide this information in at least one communication in that series.

Audit observation

This was discussed with Northpower staff. The Northpower website was reviewed.

Audit commentary

The Northpower website does contain prominent information about Utilities Disputes. It can be found in the complaints section.

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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Customers or their agents apply for a new connection to the network directly to Northpower using the Customer Initiated Work Application form on the Northpower website. Application details and connection attributes are recorded in Salesforce, a case number allocated and a workflow initiated for the new connection in Salesforce to track the new connection activity. If the new connection meets Northpower requirements, does not require any additional construction work to enable the new connection and the customer/electrician confirms the site is ready to connect and liven, the ICP may be approved immediately and the ICP created. If however the connection needs additional work then the case will be sent to the customers chosen Northpower approved contractor to carry out the work. The workflow will hold until the work is complete and customer/electrician confirms the site is ready to connect and liven, the new connection will then be approved and the ICP created. ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording to be accepted. The verified emails are stored in Salesforce. A number of Retailers provide Northpower with a blanket acceptance/request to connect and liven. The Salesforce workflow is updated appropriately.

In October 2022 a mobile application called Mahi was rolled out to the approved new connections contractors that enabled work completion information from the field to update the Northpower back office at the completion of the work.

Checks confirmed that new ICP connection information is appropriately captured in the Salesforce/Axos Registry Manager.

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 3 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

This was discussed with Northpower staff. The new connections process using Salesforce and Axos Registry Manager was demonstrated.

Audit commentary

Customers or their agents apply directly to Northpower for a new ICP connection to the network. Participants do not apply for or request ICPs on the Northpower Network. Northpower Staff are aware of this code requirement.

Audit outcome

Compliant

3.3. Provision of ICP Information to the registry manager (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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

The Axos Registry Manager creates new ICPs based on information provided by a customer in the Customer Initiated Work Application form. Once all new ICP connection requirements are met Axos Registry Manager uploads a file to the Registry to populate the ICP information.

At this stage Northpower does not designate a price category and the Registry update file does not contain a price category code. The Registry assigns the ICP status of NEW. Northpower uploads a holding price category code of NEWICP once Retailer acceptance has been received, which moves the status to READY, this will occur the next business day in those cases where a blanket retailer acceptance of new ICPs is held.

Checks confirmed code compliance.

Audit outcome

Compliant

3.4. Timeliness of Provision of ICP Information to the registry manager (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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

12 ICPs identified in the Audit Compliance report indicated that the Input date of the READY status in the Registry was after the Initial Electrical Connection Date (IECD). This was investigated during the audit and the results were as follows:

ICP	Retailer	READY	IECD	Findings	Compliance
0000575219NREE3	MERX	17/04/2023	14/04/2023	Auto system failed to record Retailer acceptance	No
0000575209NR44E	GENE	17/04/2023	14/04/2023	Auto system failed to record Retailer acceptance	No
0000575070NR545	PUNZ	29/03/2023	28/03/2023	Pulse initially declined ICP but sent a metering request to livening contractor following pressure from customer	No See reason below
0000575073NR985	CTCT	07/02/2023	02/02/2023	Auto system failed to record Retailer acceptance	No
0000574895NR31D	Nova/ GENE	22/12/2022	08/12/2022	Cust initially nominated Nova but never accepted. Cust changed Retailer to GENE but Cust did not inform NPOW of Retailer change nor did GENE. GENE livened anyway. GENE have a blanket acceptance.	No See reason below
0000574983NR13B	CTCT	21/12/2022	18/12/2022	Auto system failed to record Retailer acceptance	No
0000574986NRC74	GENE	20/12/2022	19/12/2022	Auto system failed to record Retailer acceptance	No
0000574984NRCF1	GENE	08/12/2022	07/12/2022	Auto system failed to record Retailer acceptance	No
0000574716NR598	TRUS	06/10/2022	04/10/2022	No acceptance received by NPOW. Appears TRUS livened without READY status.	No See reason below
0000574668NRA5A	TRUS	23/09/2022	22/09/2022	No acceptance received by NPOW. Appears TRUS livened without READY status.	No See reason below
0000574527NR422	TRUS	22/08/2022	17/08/2022	Acceptance sent to wrong NPOW email	No
0000574585NRCB8	TRUS	15/08/2022	12/08/2022	Acceptance sent to wrong NPOW email	No

					See reason below
--	--	--	--	--	------------------

It was discovered during this investigation that the Northpower new connections process sends the livening contractor a works authority/approval to connect based on the customer/electrician notification they are ready to connect, not the Registry status of READY following Retailer acceptance and request to liven. This allows the livening contractor to initially electrically connect a new ICP if they also have Retailer approval and a MEP metering work instruction. It appears this has been happening.

It was suggested that Northpower send a works authority/approval to connect to the livening contractor only after Northpower receives the Retailer acceptance and request to liven.

Audit outcome

Non-compliant

NON-COMPLIANCE

Non-compliance	Description		
Audit Ref: 3.4 With: Clause 7(2) of Schedule 11.1 From: 29-Apr-22 To: 30-Apr-23	12 x ICPs did not have READY status in the Registry prior to electricity being traded at the ICPs Potential impact: Low Actual impact: Low Audit history: once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate. During the audit evidence was produced showing effort to achieve accuracy with exception reporting in place and correction of errors discovered. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The use of emails to request retailer acceptance of new ICPs has been identified as a weak point in the New Connections process. We are investigating processes that may remove the requirement for a retailer to email their reply to the "new ICP notification" email back to Northpower but will need to discuss the proposal with retailers. A daily report has been implemented, which will remain after any other process changes, to highlight any ICPs which have not moved to the READY status due to the retailer acceptance not being received. Staff will follow up with the proposed retailer to get their response to the request for acceptance of the new ICP			Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Northpower will send a works authority/approval to connect to the livening contractor only after Northpower receives the Retailer acceptance and request to liven.</p> <p>We are also investigating a digital solution for retailers to provide their acceptance and request to liven, rather than current email-based process.</p>	31 October 2023	

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 subclause (1)(p) to the registry manager no later than 10 business days after the date on which the ICP is initially electrically connected.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Once the new connection application meets Northpower requirements, the customer/electrician confirms the site is ready to connect and liven, the application will be approved and the ICP created. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email (from October 2022 loaded into Mahi) containing the ICP and a work authority to permit the contractor to make the connection to the network. The retailer will accept the ICP and request livening of the new connection ICP by return email or blanket acceptance. This acceptance and request to liven is captured in Salesforce.

Northpower approved livening contractors are authorised on a job by job basis to carry out minor connections work on the network. The approved livening contractors are engaged and managed by the Retailers to complete the initial electrical connection to the network, inspect and liven the ICP. Approved livening contractors are required to return work completion information including the Initial Electrical Connection Date (IECD) to Northpower's Network Commercial team as part of the approval (Warrant) agreement. Once the Network Commercial team receive the IECD they populate the data into AXOS Registry Manager and subsequent upload to the Registry.

Despite the requirement for approved livening contractors to provide Northpower with work completion information/IECD there are still delays in receiving the information and in some cases, it is not provided at all. This negatively impacts on the ability of Northpower to meet the code requirement for Registry updates of IECD. It should be noted that Northpower does not

directly control the approved contractors, the Retailers do. Northpower only provides approval and authorisation to work on the network.

To mitigate the late or non-received information Northpower uses Registry files, such as the NMR (Meter Notification File), to identify the date that metering was installed and uses that date as the IECD if required.

926 ICPs had IECD populated in the Registry during this audit period.

Checks identified the following:

Number of ICPs	Issue	Reasons	Comments
16	Registry populated with IECD more than 10 days after event date	<ul style="list-style-type: none"> 5 x late/no information returned 3 x automated process (Mahi) problems 5 x Northpower process error 3 x Contractor/Retailer issues 	<ul style="list-style-type: none"> 1.7% of IECD. An improvement on last audit (2.6%) Mahi implemented Oct 2022 No longer a Northpower approved contractor
1	Discrepancy between ACTIVE, METERING and IECD	<ul style="list-style-type: none"> No identifiable reason 	<ul style="list-style-type: none"> 1 day difference between IECD Metering/Active event dates 29 ICPs identified in Audit Compliance report were mitigated following investigation

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 29-Apr-22 To: 30-Apr-23	16 x ICP (1.7% of all new connections) had the IECD uploaded to the Registry more than 10 days after the event date. 1 x discrepancy between IECD and Metering/Active event dates. Potential impact: Low Actual impact: Low Audit history: once previously Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating

Low	The controls are recorded as Strong. During the audit evidence demonstrated considerable endeavours to achieve accuracy, with exception reporting in place and correction of errors discovered. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Where we become aware, the livening agent is contacted to request that the missing information be provided. Where the required information has not been provided within the timeframes in the Code the livening agent is reminded of their obligations and informed that their actions have resulted in a breach for Northpower.		As soon as breach identified	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing education of Livening agents as part of normal communication processes.		Ongoing	

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, and all traders that are responsible for an ICP on the shared unmetered load have been advised.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Northpower does not allow shared unmetered load to be connected on its network.

Customers or their agents apply for a new connection to the network directly to Northpower using the Customer Initiated Work Application form on the Northpower website. Application details and connection attributes are recorded in Salesforce, a case number allocated and a workflow initiated for the new connection in Salesforce to track the new connection activity. If the new connection meets Northpower requirements, any required construction work to enable

the new connection has been completed and the customer/electrician confirms the site is ready to connect and liven, the application will be approved and the ICP created.

The ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes; proposed Retailer, Point of Connection, Reconciliation type, and installation type. The Registry assigns the status of NEW.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to be accepted. The verified emails are stored in Salesforce. A number Retailers provide Northpower with a blanket acceptance/request to connect and liven.

The commercial and Regulatory team updates Salesforce workflow appropriately and the Registry is populated with the price category code NEWICP which triggers the Registry to assign the READY status.

Checks of the random sample confirmed code compliance.

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, or if there is only shared unmetered load at the ICP and each trader has been advised.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes proposed Retailer, Point of Connection, Reconciliation type, and installation type. The Registry assigns the status of NEW.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to

be accepted. The verified emails are stored in Salesforce. A number Retailers provide Northpower with a blanket acceptance/request to connect and live.

The commercial and Regulatory team updates Salesforce workflow appropriately and the Registry is populated with the price category code NEWICP which triggers the Registry to assign the READY status.

Checks of the random sample confirmed code compliance.

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.*

If the ICP is only shared unmetered load, the distributor must advise the traders of the intention to temporarily connect the ICP unless:

*advising all traders would impose a material cost on the distributor, and
in the distributor's reasonable opinion the advice would not result in any material benefit to any of the traders.*

Audit observation

This was discussed with Northpower staff.

Audit commentary

Northpower does not allow shared unmetered load to be connected on its network.

Northpower has not been asked to temporarily electrically connect any installation.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)

Code reference

Clause 10.30

Code related audit information

A distributor must not connect an NSP on its network that is not a point of connection to the grid unless requested to do so by the trader responsible for ensuring there is a metering installation for the point of connection.

The distributor that initiates the connection under Part 11 and connects the NSP must, within 5 business days of connecting the NSP that is not a point of connection to the grid, advise the reconciliation manager of the following in the prescribed form:

- *the NSP that has been connected*
- *the date of the connection*
- *the participant identifier of the MEP for each metering installation for the NSP*
- *the certification expiry date of each metering installation for the NSP.*

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

A check of the NSP table in the Registry showed that Northpower does not have any NSP on its network that is not a point of connection to the grid.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Compliant

3.10. Electrical connection of NSP that is not point of connection to grid (Clause 10.30A and 10.30B)

Code reference

Clause 10.30A and 10.30B

Code related audit information

A distributor may only temporarily electrically connect an NSP that is not a point of connection to the grid if requested by an MEP for a purpose set out in clause 10.30A(3), and the MEP:

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

A distributor may only electrically connect an NSP if:

- *each distributor connected to the NSP agrees*
- *the trader responsible for delivery of submission information has requested the electrical connection*
- *the metering installations for the NSP are certified and operational metering*

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

A check of the NSP table in the Registry showed that Northpower does not have any NSP on its network that is not a point of connection to the grid.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

3.11. 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 Authority.*

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Axos Registry Manager creates ICPs based on a sequential number, unique distributor code and checksum, which is generated according to the algorithm. The check sum is generated by the Electricity Authority approved algorithm.

Audit outcome

Compliant

3.12. 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

This was discussed with Northpower staff. The Audit Compliance and LIS reports were checked for the audit period. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

All ICPs recorded in the Registry have a single loss category code except Decommissioned ICPs. The loss category code is assigned to an ICP when it is first uploaded to the Registry.

Audit outcome

Compliant

3.13. 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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit Commentary

ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes proposed Retailer, Point of Connection, Reconciliation type, and installation type. The Registry assigns the status of NEW.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to be accepted. The verified emails are stored in Salesforce. A number Retailers provide Northpower with a blanket acceptance/request to connect and liven.

The commercial and Regulatory team updates Salesforce workflow appropriately and the Registry is populated with the price category code NEWICP which triggers the Registry to assign the READY status.

Checks of the random sample confirmed code compliance.

Audit outcome

Compliant

3.14. 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 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

This was discussed with Northpower staff. The Audit Compliance and LIS reports were checked for the audit period.

Audit commentary

The Audit Compliance report identified 13 x ICPs in READY status for more than 24 months. 5 x ICPs were validated ok, 8 x had not been yet validated with the retailer. The table below outlines a summary:

ICP	Creation Event Date	Northpower Comment
0000570268NR0DB	21/09/2018	Retailer queried 04/03/22. ICP still needed
0000570265NRF80	21/09/2018	Retailer queried 04/03/22. ICP still needed
0000571809NR8C4	19/05/2020	Retailer queried 06/05/22. ICP still needed
0000571950NR799	10/07/2020	Retailer queried 12/07/22 and 12/09/22. ICP now Decommissioned
0000572047NRB17	14/08/2020	Retailer queried 04/08/22. ICP still needed
0000572437NR24B	20/11/2020	Retailer hasn't been queried
0000572493NRB5E	08/12/2020	Retailer hasn't been queried
0000572598NRC8E	25/01/2021	Retailer hasn't been queried
0000572606NR3F1	26/01/2021	Retailer hasn't been queried
0000572716NR058	24/02/2021	Retailer hasn't been queried
0000572755NRE3D	08/03/2021	Retailer hasn't been queried
0000572808NR661	29/03/2021	Retailer hasn't been queried
0000573064NRB22	16/04/2021	Retailer hasn't been queried

Audit outcome

Non-compliant

NON-COMPLIANCE

Non-compliance	Description
Audit Ref: 3.14 With: Clause 15 Schedule 11.1 From: 29-Apr-22 To: 30-Apr-23	8 x ICPs did not have READY validated after 24 months. Potential impact: Low Actual impact: Low Audit history: none previously Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating

Low	The controls are recorded as moderate. During the audit evidence demonstrated efforts made to validate the READY status although this appears inconsistent. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We have emailed the retailer noted in the Registry as the “proposed retailer” for all affected ICPs and requested that they respond as to whether the ICP should be kept or be decommissioned. To date we have had a response from only two of the five affected retailers so the other retailers will be followed up a month after the initial email.		2/6/2023	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
A report has been created that is run each day to capture the ICPs that have remained at either the New, Ready or Inactive New Connection In Progress status for 22 month or more. The retailer is then emailed to request whether the ICP should be kept or be decommissioned. To date two additional ICPs have appeared on the new report and the affected retailers have been emailed.		On-going	

3.15. 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 was discussed with Northpower staff. The LIS report was checked for the audit period.

Audit commentary

Northpower has 2 large, embedded generation stations connected into their network. ICP 0000100001NR87B is a 5MW hydro station and is assigned a loss category code of G1. ICP 0000100002NR4BB is a 10 MW diesel “peaking plant” generator and has a loss category code of G2.

Audit outcome

Compliant

3.16. Electrical connection of a point of connection (Clause 10.33A)

Code reference

Clause 10.33A(4)

Code related audit information

No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant.

Audit observation

This was discussed with Northpower staff. The new connections process using Salesforce and Axos Registry Manager was demonstrated.

Audit commentary

Northpower does not directly control the approved contractors, the Retailers do. Northpower only provides approval and authorisation to work on the network.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to be accepted. The verified emails are stored in Salesforce. A number Retailers provide Northpower with a blanket acceptance/request to connect and liven.

Northpower approved livening contractors are authorised on a job by job basis to carry out minor connections work on the network. The approved livening contractors are engaged and managed by the Retailers to complete the initial electrical connection to the network, inspect and liven the ICP. Hence Retailers inherently authorise the electrical of a point of connection.

Approved livening contractors are required to return work completion information including the Initial Electrical Connection Date (IECD) to Northpower’s Network Commercial team as part of the approval (Warrant) agreement. Once the Network Commercial team receive the IECD they populate the data into AXOS Registry Manager and subsequent upload to the Registry.

Checks of the new connections process confirmed code compliance.

Audit outcome

Compliant

3.17. Electrical disconnection of a point of connection (Clause 10.30C and 10.31C)

Code reference

Clause 10.30C and 10.31C

Code related audit information

A distributor can only disconnect, or electrically disconnect an ICP on its network:

- *if empowered to do so by legislation (including the Code)*
- *under its contract with the trader for that ICP or NSP*
- *under its contract with the consumer for that ICP*

Audit observation

This was discussed with Northpower staff.

Audit commentary

Since 1 April 2019 Northpower (via Northpower Contracting) ceased to offer a service to initially electrically connect ICPs to the network, install metering or carry out ICP electrical disconnection/reconnection work.

Northpower approved contractors are authorised to access the network to carry out disconnection/reconnection and work for Retailers. The approved contractors are engaged and managed by the Retailers to carry out disconnection/reconnection work.

Northpower does not directly control the approved contractors, the Retailers do. Northpower only provides approval and authorisation to work on the network.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

An distributor may only electrically connect an ICP in a way that bypasses a meter that is in place ("bridging") if the distributor has been authorised by the responsible trader.

The distributor can then only proceed with bridging the meter if, despite best endeavours:

- *the MEP is unable to remotely electrically connect the ICP*
- *the MEP cannot repair a fault with the meter due to safety concerns*
- *the consumer will likely be without electricity for a period which would cause significant disadvantage to the consumer*

If the distributor bridges a meter, the distributor must notify the responsible trader within 1 business day, and include the date of bridging in its advice.

Audit observation

This was discussed with Northpower staff.

Audit commentary

A summary of the Northpower procedure for removing metering seals or bridging a meter is as follows:

In the event that the seals are cut, or the meter is bypassed, the fault person should:

1. Fault person to confirm to dispatch (or NOC after hours) that they have broken/removed the seals and/or bypassed the meter.

2. If after hours, NOC to pass the details to Dispatch, including date and reason for the meter being bypassed or seals broken/removed.

3. Dispatch to email Retailer within 1 business day and advise that the seals have been cut or the meter is bypassed and the reason why.

4. Dispatch to email MEP within 1 Business Day and advise that the seals have been cut or the meter is bypassed and the reason why.

5. Retailer or MEP to organise for the meter to be resealed and the metering installation to be recertified.

Northpower does not own any metering. Northpower would only bridge metering if the safety or welfare of customers or animals was at risk or when requested to do so by the retailer responsible for the ICP.

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 give written notice to the registry manager of that change.

Notification must be given by the distributor within 3 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 8 business days after the change takes effect.

If the change to the NSP identifier is for more than 10 business days, the notification must be provided no later than the 13th business day and be backdated to the date the change took effect.

In the case of decommissioning an ICP, notification must be given by the later of 3 business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or 3 business days after the distributor has decommissioned the ICP.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report and EDA reports were checked for the audit period along with the Registry.

Audit commentary

The analysis is summarised in the following:

Activity	Total Updates	No of Updates greater than 3 days	Range in days
Address (not new Connection)	2158	25 (1.2%)	4-209
Network Other (excluding IECD)	976	5 (0.5%)	7-333
Distributed Generation	411	218 (53%)	4-207
Pricing	11251	114 (1%)	11-289
Decommission Status 3,2	140	0	0

The relatively low number of late address updates to the Registry occurred when the ICP transitioned from builders temporary supply to permanent supply. Some were due to late information from the field and others were due to internal processing issues.

Network events identified in the Audit compliance report were predominantly late solar information updates, these are dealt with separately below. The remaining were 2 x ICPs where Northpower was asked by Retailers to reverse valid Registry entries in order to correct Retailer issues. 1x ICP direct billed status was missed initially but updated when found in October 2022. 1 x ICP was a new ICP connection where a living contractor (since removed) and associated Retailer failed to return information to Northpower post liveness. 3 x ICPs were internal information processing issues.

Distributed Generation (solar mainly) has become an on-going issue (as for most Networks) as the installation work occurs behind the meter. Northpower receives an application and approves the connection of the Distributed Generation to the network but has no oversight of the installation or its completion directly or via approved contractors. Despite Northpower requiring the solar installation contractors to return completion information to them as part of the approval process, this does not happen in a timely manner and rarely to meet the 3 business day Registry update window. Northpower have no contractual relationship with the Distributed Generation installers hence no real influence over their activities. To mitigate this problem the Northpower compliance team monitor Registry NMR files to identify the apparent installation of Distributed Generation (the associated metering update) and take appropriate action as they are identified. Unfortunately, the information acquired from these files is often beyond the 3 business day window from the event date as the MEP has 10 business days to update the Registry following changes (including installation) of meter information. As a consequence, 53% of Distributed Generation Registry updates fall outside the 3 business day Registry update window.

The Audit Compliance report for the audit period identified over 3000 discrepancies however analysis showed most of these were agreed Price Category changes between Northpower and the Retailer and no non-compliance resulting. Further analysis identified 114 late pricing updates due to receiving connection information late when moving the ICP from builders temporary supply to permanent supply. These were made up of: late information from the field x 91, internal information processing issue x 6 and system (Axos or Mahi) issues x17.

The Decommissioning events had 8 discrepancies identified in the Audit Compliance report however Northpower records showed valid reasons for the apparent delays. 7 x ICPs where Registry transactions needed reversal to allow decommissioning transactions to occur. 1 x ICP where the customer held up the process. The historical “long term de-energised ICPs” issue has been resolved so these should not appear on the Audit Compliance report in future.

Audit outcome

Non-compliant

NON-COMPLIANCE

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 29-Apr-22 To: 30-Apr-23	Relatively low number of Registry updates greater than 3 days from the event date Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate. During the audit clear evidence was demonstrated of efforts made to meet code requirements using available Registry reports and exception reporting. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
As noted in the Audit commentary, the majority of late Registry updates (in the Audit Compliance Report) are due to either generation being installed at an existing ICP (for which there is no easy solution under current Code settings) or price category changes that have been agreed with the retailer and therefore are not non-compliant.			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing education of Network Approved Contractors and Solar installers as part of normal communication processes.		On-going	

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

Code reference

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

Code related audit information

Under Clause 7(1)(b) of Schedule 11.1, the distributor must provide to the registry manager the NSP identifier of the NSP to which the ICP is usually connected.

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

This was discussed with Northpower staff. The Audit Compliance Report and LIS reports were checked for the audit period.

Audit commentary

No incorrect NSP assignments to ICPs in the Registry were identified by checks carried out.

Audit outcome

Compliant

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 3 business days after receiving a request for that information.

Audit observation

This was discussed with Northpower staff.

Audit commentary

Queries are received typically by phone or email service request. Phone queries about ICPs are usually dealt with immediately. Emails are usually responded to on the same day. Customer Care and Commercial team staff have access to Northpower information systems such as Axos, Salesforce and GIS so they are able to answer most queries before needing to escalate.

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

This was discussed with Northpower staff. The Audit Compliance Report and LIS reports were checked for the audit period.

Audit commentary

Checks did not identify any ICPs which do not have a location address that allows the ICP to be readily located

Audit outcome

Compliant

4.5. Electrically disconnecting an ICP (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 electrically disconnected without electrically disconnecting 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 the difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report and LIS reports were checked for the audit period.

Audit commentary

The network connection application process is very robust, and the GIS checked as part of the network connection approval. Network connection designs would not allow an ICP to be dependent on another ICP for it to be electrically disconnected.

Northpower Staff state that there are no known ICPs that could not be electrically disconnected without electrically disconnecting another ICP.

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry manager (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 manager:

- *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 for a billing period from metering information collected for that billing period
 - c) if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-
 - (i) no capacity value recorded in the registry field for the chargeable capacity; and
 - (ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded
 - d) if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-
 - (i) the annual capacity value recorded in the registry field for the chargeable capacity; and
 - (ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded
 - e) 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
 - the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. along with the Registry.

Audit commentary

ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes proposed Retailer, Point of Connection, Reconciliation type, and installation type. The Registry assigns the status of NEW.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved living contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to be accepted. The verified emails are stored in Salesforce. A number of Retailers provide Northpower with a blanket acceptance/request to connect and liven.

The commercial and Regulatory team updates Salesforce workflow appropriately and the Registry is populated with the price category code NEWICP which triggers the Registry to assign the READY status.

Approved living contractors are required to return work completion information including the Initial Electrical Connection Date (IECD) to Northpower's Network Commercial team as part of the approval (Warrant) agreement. Once the Network Commercial team receive the IECD they populate the data into AXOS Registry Manager and subsequent upload to the Registry.

The tables below outline the LIS files and Audit compliance reports analysis: and identified no discrepancies for this clause for the audit period:

No IECD in Registry But Active Status

ICP	Comment
0000523870NR3FC	ICP Decommissioned 2017
0000565092NR79B	ICP 2013 connection
0000565132NR680	ICP 2013 connection
0000574793NRD9D	IECD updated 08/05/23 missing outside audit period and report run
0000574797NRC97	IECD updated 08/05/23 missing outside audit period and report run

Missing Distributed Generation Information in Registry

ICP	Comment
0000513454NR283	DG removed 3/12/2021
0000506054NR143	DG removed 20/11/2022
0000530489NRBB7	DG removed 3/12/2021
0000549091NR916	No DG at this site. Settlement indicator 'N'

0000551623NR8C6	DG removed 13/01/2022
0000556950NRA34	DG removed 31/7/2020
0000560711NR633	DG removed 23/9/2022
0000565212NR8D6	DG removed 4/9/2020
0000565322NR62A	DG removed 25/03/2022
0000568708NRFCF	Registry meter data does not have an EG register. Northpower have had no notification of DG installation RPS PV1 only updated 19/04/23.

Checks identified no discrepancies for this clause for the audit period.

Audit outcome

Compliant

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 manager 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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes proposed Retailer, Point of Connection, Reconciliation type, and installation type. Once the Retailer accepts the ICP and requests liveness the Registry is updated with a placeholder Price Category code NEWICP.

When the approved contractor has completed the initial electrical connection, they are required to return work completion information including the Initial Electrical Connection Date (IECD) to Northpower's Network Commercial team as part of the approval (Warrant) agreement. Once the Network Commercial team receive the information it is validated, the IECD and the actual price

category code is populated into AXOS Registry Manager and subsequently this uploads to the Registry.

Checks confirmed code requirements were met.

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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Northpower recorded GPS coordinates meet the NZTM2000 standard. GPS coordinates are populated from information recorded at IECD and made active, so ICPs new or ready status do not have GPS information recorded. Exception reporting is in place to check the ICPs are in the Northpower area and to confirm GPS coordinates have been recorded.

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

This was discussed with Northpower staff. The Audit Compliance Report, LIS and EDA reports were checked for the audit period. The new connections process using Salesforce and Axos

Registry Manager was demonstrated. A random sample of 25 new ICP connection records were reviewed along with the Registry.

Audit commentary

Customers or their agents apply for a new connection to the network directly to Northpower using the Customer Initiated Work Application form on the Northpower website. Application details and connection attributes are recorded in Salesforce, a case number allocated, and a workflow initiated for the new connection in Salesforce to track the new connection activity. If the new connection meets Northpower requirements, any required construction work to enable the new connection has been completed and the customer/electrician confirms the site is ready to connect and liven, the application will be approved and the ICP created.

The ICPs are created in Axos Registry Manager based on application details and connection attributes from the Customer Initiated Work Application form. The Initial information uploaded includes proposed Retailer, Point of Connection, Reconciliation type, and installation type. The Registry assigns the status of NEW.

The customer/electrician is sent an email containing the ICP to enable them to make arrangements with their nominated Retailer. The customer nominated Retailer is sent an email containing the ICP and also the customer nominated Northpower approved livening contractor is also sent an email containing the ICP and a work authority to permit the contractor to make the connection to the network.

Retailers respond by email to Northpower accepting responsibility for the ICP and requesting the ICP to be connected and livened. The emails received must contain specific wording and to be accepted. The verified emails are stored in Salesforce. A number Retailers provide Northpower with a blanket acceptance/request to connect and liven.

The commercial and Regulatory team updates Salesforce workflow appropriately and the Registry is populated with the price category code NEWICP which triggers the Registry to assign the READY status.

It was discovered during this investigation that the Northpower new connections process sends the livening contractor a works authority/approval to connect based on the customer/electrician notification they are ready to connect, not the Registry status of READY following Retailer acceptance and request to liven. This allows the livening contractor to initially electrically connect a new ICP if they also have Retailer approval and a MEP metering work instruction. It appears this has been happening.

It was suggested that Northpower send a works authority/approval to connect to the livening contractor only after Northpower receives the Retailer acceptance and request to liven.

Checks confirmed code requirements were met.

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

This was discussed with Northpower staff. The Audit Compliance Report, EDA and LIS reports were checked for the audit period.

Audit commentary

Northpower does not allow any new shared unmetered load to be connected on the network.

Northpower maintains information for 7 historic Distributor status ICPs representing shared unmetered load on its network. The details are as follows:

Shared ICP	Load	Number of connected ICPs
0000557079NR199	Private Streetlights	7
0000557078NRDDC	Private Lighting	6
0000557077NR202	Private Streetlights	7
0000557076NRE47	Private Streetlights	6
0000557086NRE50	Private Streetlights	6
0000557087NR215	Private Streetlights	7
0000557075NR287	Private Lighting	7

Checks confirmed code requirements were met.

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

This was discussed with Northpower staff. The Audit Compliance Report, the LIS, and EDA files for the audit period were reviewed. Salesforce and the Registry was checked along with 25 decommissioned ICPs.

Audit commentary

Customers arrange ICP permanent disconnections/ICP decommissions directly through their Retailers who will engage a Northpower Approved Contractor to carry out the field work. The Retailer will dispatch a Northpower Approved Contractor to disconnect the customer service cables/lines from the network and remove them from the installation point on the customer's installation. Final meter readings and other relevant information is returned to the Retailer and Northpower. Northpower monitor the Registry daily via an Axos report (also Registry ICP List and EDA files using an ACCESS database) to detect the Registry status change by the Retailer to "Inactive - ready for decommissioning (1,6)". Northpower then updates the Registry status of the ICP to "decommissioned" normally the next day. If the status change to "1,6" is delayed, Northpower will follow up with the Retailer by email.

As a general rule Northpower no longer offers decommissioning services, and these are completed by external contractors contracted by Retailers. As such, we do not routinely receive decommissioning information directly from network approved contractors and rely on information supplied by Retailers via the Registry i.e., status change by the Retailer to "1,6". Detailed decommissioning (permanent disconnection from the network) information is still required to be sent to Northpower within 5 working days by the Northpower Approved Contractor, according to the approved contractor arrangements. This is to meet other electricity network obligations for example operational requirements, health and safety and to update the GIS. Northpower staff were not confident this information was still being received by Northpower however during the audit examples of this occurring were unable to be demonstrated.

There is one exception from this process where ICPs need to be permanently disconnected for safety reasons such as a building fire or storm damage. In these situations, authorisation to decommission will be retrospectively requested from traders having followed a similar procedure to the trader requested process.

The group of long term de energised ICPs with the status of "inactive – ready for decommissioning" recorded in the Registry with price code ND13 assigned noted in the last audit have been addressed.

A small number of non-compliant ICPs identified in the audit compliance report were investigated and were found to be due to a series of reversed/replaced Registry transactions required to address removed metering prior to de-commissioning the ICPs.

A further 25 ICPs were sampled, and checks demonstrated they met code requirements.

Audit outcome

Compliant

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 2 months after the date the code is entered in the table.

A price category code takes effect on the specified date.

Audit observation

This was discussed with Northpower staff. The Price Category Code table in the Registry was checked.

Audit commentary

A check of the Price Category Code table in the Registry identified ~~2~~ 3 new Price Category Codes created during the audit period. These were notified to the Registry to meet the 2-month notice period. The new pricing was published on the Northpower website.

New Price Category Codes Created During the Audit Period

Price Category Code	Description	Start Date	Registry Notified
EG3	Mass Market Generation < 1MW	1/04/2023	27/01/2023
EG4	TOU Generation < 1MW	1/04/2023	27/01/2023
ND14	Unmetered 24 Hr Distributed Load	1/04/2023	27/01/2023

Audit outcome

Compliant

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

This was discussed with Northpower Staff. The Loss Category Code table in the Registry was checked.

Audit commentary

Northpower did not create any new Loss Category Codes to the Registry during the audit period.

Audit outcome

Compliant

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 2 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 in the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

This was discussed with Northpower Staff. The Loss Category Code table in the Registry was checked.

Audit commentary

Loss factors have a single value for all trading periods for a year. There are no seasonal loss factor codes for summer or winter. Northpower has not changed any loss factor codes since 2021. However the loss factors were reviewed in mid 2022 and it was determined that there was no need to change the loss factors. The loss factors are available on the Northpower web site.

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 2 local networks, the distributor must give written notice to 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 2 embedded networks, the embedded network owner must give written notice to 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 give written notice to the reconciliation manager of the creation or decommissioning.

The notice provided to the reconciliation manager must be provided no later than 30 days prior to the intended date of creation or decommissioning.

If the intended date of creation or decommissioning changes the distributor must provide an updated notice as soon as possible.

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:

- *give written notice to the reconciliation manager*
- *give written notice to the Authority*
- *give written notice to each affected reconciliation participant*
- *comply with Schedule 11.2.*

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Checks confirmed that no new NSPs were created and no NSPs were decommissioned during the audit period.

Audit outcome

Compliant

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 2 local networks. In all other cases, the request must be made at least 1 month before the NSP is electrically connected or the ICP is transferred.

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower did not create any new NSPs during the audit period therefore the Reconciliation Manager was not asked to create any unique NSP identifiers.

This clause is not applicable. Compliance was not assessed.

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 give written notice to 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

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower did not create any new NSPs during the audit period This clause is not applicable. Compliance was not assessed.

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 give notice to the reconciliation manager at least 1 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

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

During the audit period Northpower did not create any new NSPs or transfer an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor.

This clause is not applicable. Compliance was not assessed.

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 give written notice to 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 3 business days after the change takes effect.

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

The NSP mapping table in the Registry shows Northpower has one balancing area (ALLGXPSNPOWG). Checks of the NSP mapping table in the Registry confirmed there were no changes to the balancing area during the audit period.

Audit outcome

Compliant

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 give written notice to any trader trading at the ICP of the transfer at least 1 month before the transfer.

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that during this audit period Northpower did not transfer any ICPs that became an NSP for an embedded network.

This clause is not applicable. Compliance was not assessed.

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 give written notice to the Authority in the prescribed form, no later than 3 business days before the transfer takes effect.

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that during this audit period Northpower did not transfer any ICPs.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.8. Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))

Code reference

Clause 10.25(1) and 10.25(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 1 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))*

For each NSP covered in 10.25(1) the network owner must, no later than 20 business days after a metering installation at the NSP is recertified advise the reconciliation manager of:

- *the reconciliation participant for the NSP*
- *the participant identifier of the metering equipment provider for the metering installation*
- *the certification expiry date of the metering installation*

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that during this audit period Northpower did not have any NSPs it was responsible for that are not connections to the grid.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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 the reconciliation participant for the NSP (Clause 10.25(2)(b)); and*
- *no later than 5 business days after the date of certification of each metering installation, advise the reconciliation manager of*
 - a) *the MEP for the NSP (Clause 10.25(2)(c)(i)); and*
 - b) *the NSP of the certification expiry date (Clause 10.25(2)(c)(ii)).*

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that during this audit period Northpower did not have any NSPs it was responsible for that are not connections to the grid.

This clause is not applicable. Compliance was not assessed.

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 give written notice to:

- *the previous network owner (Clause 29(1)(a) of Schedule 11.1)*
- *the reconciliation manager (Clause 29(1)(b) of Schedule 11.1)*
- *the Authority (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 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

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff stated that the company did not acquire all or part of any network during the audit period. This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.11. 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 advise the reconciliation manager and the gaining MEP.

Audit observation

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that Northpower does not own any embedded networks or responsible for any embedded networks. Northpower did not establish any embedded networks during the audit period.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.12. 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 Authority 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

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that Northpower does not own any embedded networks or responsible for any embedded networks. Northpower did not establish any embedded networks during the audit period.

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.13. 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

This was discussed with Northpower staff. The NSP table in the Registry was checked.

Audit commentary

Northpower Staff confirmed that Northpower does not own any embedded networks or responsible for any embedded networks. Northpower did not establish any embedded networks during the audit period.

This clause is not applicable. Compliance was not assessed.

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 give written notice to the registry manager 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 give written notice to the registry manager 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

This was discussed with Northpower staff. The Audit Compliance Report, EDA and LIS reports were checked for the audit period.

Audit commentary

Northpower does not allow any new shared unmetered load to be connected on the network.

Northpower maintains information for 7 historic Distributor status ICPs representing shared unmetered load on its network. The details are as follows:

Shared ICP	Load	Number of connected ICPs
0000557079NR199	Private Streetlights	7
0000557078NRDDC	Private Lighting	6
0000557077NR202	Private Streetlights	7
0000557076NRE47	Private Streetlights	6
0000557086NRE50	Private Streetlights	6
0000557087NR215	Private Streetlights	7
0000557075NR287	Private Lighting	7

Northpower takes the opportunity as it arises to move the shared unmetered load ICPs to existing metered ICPs or create new ICPs as appropriate.

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 give written notice to all traders

affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit observation

This was discussed with Northpower staff. The Audit Compliance Report, EDA and LIS reports were checked for the audit period.

Audit commentary

There was no new shared unmetered load connected during the audit period and no changes made to the existing shared unmetered load information in the registry.

Northpower is aware of the code obligations of this section and will update the Registry as it becomes aware of any changes of load capacity to these shared unmetered ICPs.

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

This was discussed with Northpower Staff. Asset management Plans, Information Disclosure documents, Loss Factor tables in the Registry and UFE data on the EMI website was reviewed. Loss Factor calculation methodology and review information was also provided by Northpower.

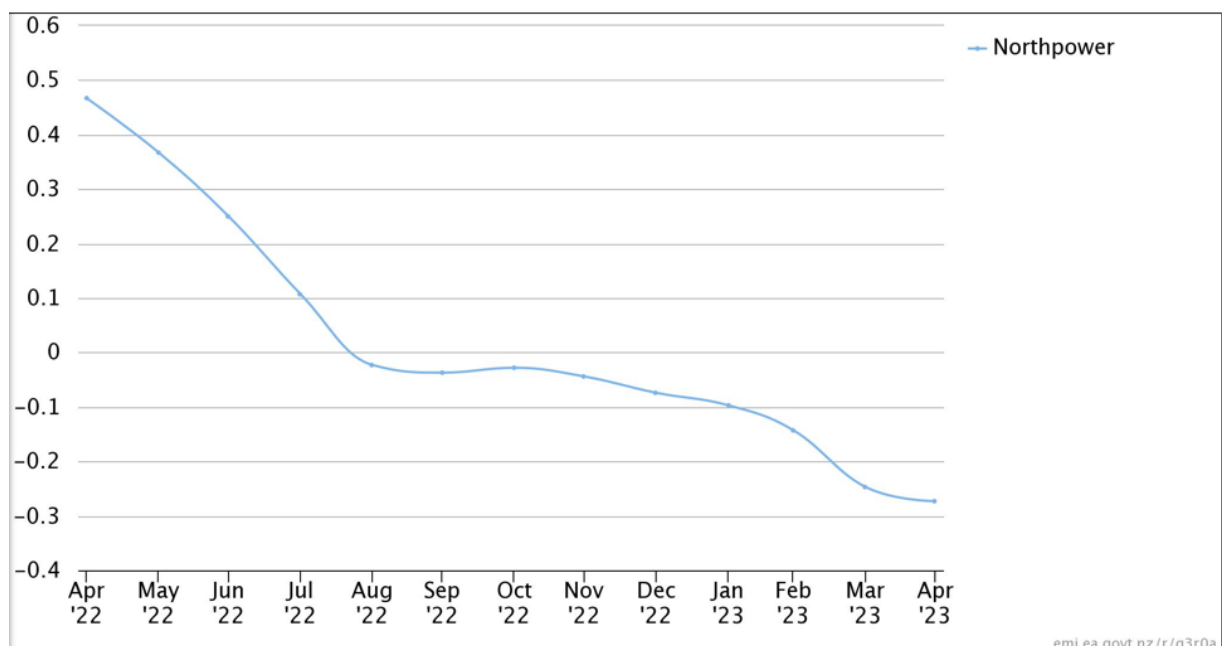
Audit commentary

Northpower last recalculated their Loss Factors in 2021 and several were updated from 1 September 2021. Northpowers average network losses reported in disclosure information are 4.5%.

The Compliance Manager network monitors losses monthly using energy consumption data to confirm losses and UFE are stable and in line with forecasts. Examples of the monitoring calculations and graphs were provided for review.

Below is shown the UFE graph (rolling 12 month) on the Northpower network, sourced from the EMI website. According to the Guidelines, UFE is expected to be within $\pm 1\%$ over the course of any 12- month period the Northpower UFE is within these guidelines.

Northpower Network UFE Rolling 12 Month Average



Audit outcome

Compliant

CONCLUSION

See Executive Summary.

PARTICIPANT RESPONSE

Northpower thanks Borcoski Energy Services Limited for the completion of this audit.

In reviewing the current audit report's non-compliance table we believe that some further process improvements over the coming year will also result in improved audit outcomes. Our first area of focus being the new connections process relating to management of trader acceptance and the livening of ICPs. This focus will also include how best to engage with the third party livening contractors (warranted persons) who contract with the trader/MEP for the livening task but who need to provide Northpower with data to enable us to update the Registry.

We will continue to review the monthly Audit Compliance Reports from the Registry to help identify areas where a reduction in the number of non-compliances relating to backdating of events into the Registry can be achieved. Management and education of the warranted livening contractors will be a priority to help achieve this.

Unfortunately, this may be difficult to achieve for those ICPs where only generation changes have occurred due to the disconnect between the installation of distributed generation, which normally does not require a Warranted Person, and the Distributor's obligation to update the Registry. Any industry solution will probably require a review of the Code regarding the obligations of the participants involved.