

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

NORTHPOWER

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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.

The audit period was 01/03/2021 to 15/02/2022.

Northpower considers data integrity to be a high priority within the business. This is evident in the diligent endeavours the staff put into maintaining accurate internal and registry information. Exception monitoring of data is routine, for example. Despite these efforts a relatively small level of information discrepancy was identified during the audit.

The audit found 6 non-compliances with the impact on settlement outcomes being minor.

The level of compliance has improved in the following areas:

- The number of discrepancies in the registry has decreased. Initial Electrical Connection Date (IECD) is populated for all ICPs.
- Lower number of updates later than 3 business days
- Good process for updating price code changes requested by retailers; the process was changed to incorporate changes to the Code.
- There is a good regime in place to monitor compliance between audits. The Audit Compliance Report is checked every month and appropriate actions are taken to remedy any identified issues by additional training or “tweaking” of processes.
- The implementation of Axos Registry Manager stopped the uploading of incomplete or errored ICP information by data validation at the time of entry, and daily monitoring of rejected registry files.
- The new connection process works well for both types of traders (auto acceptance of new connection or individual acceptance)

The issues identified during this audit are:

- Material Change Audit was not conducted
- Registry information is affected by contractors engaged by parties other than Northpower either not supplying paperwork to Northpower or supplying the paperwork late therefore making it impossible to update the Registry within the time limits defined in the Code.
- The status of some new connections, 4 ICPs, was changed to “READY” before the trader’s acceptance was received (no blanket agreement with a trader). After discussion with the Authority, due to the trader electrically connecting the ICP without providing Northpower with their “acceptance of responsibility”.

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 Distributor audit provides some guidance on this matter. The Future Risk Rating score is 10 which results in an indicative audit frequency of 12 months. Our recommendation is 18 months because almost 50% of Future Risk Rating was assigned to the lack of Material Change Audit when Gentrack was replaced with Axos Registry Manager.

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

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
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	None	Low	5	Identified
Requirement to provide complete and accurate information	2.1	11.2(2)	Relatively low number of information inaccuracies identified during the audit	Strong	Low	1	Identified
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	Strong	Low	1	Identified
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	Strong	Low	1	Identified
Changes to registry information	4.1	8(1)(b)&(4) of Schedule 11.1	Registry event updates backdated greater than three days.	Moderate	Low	2	Identified
Future Risk Rating						10	
Indicative Audit Frequency						12 months	

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	

ISSUES

Subject	Section	Issue	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

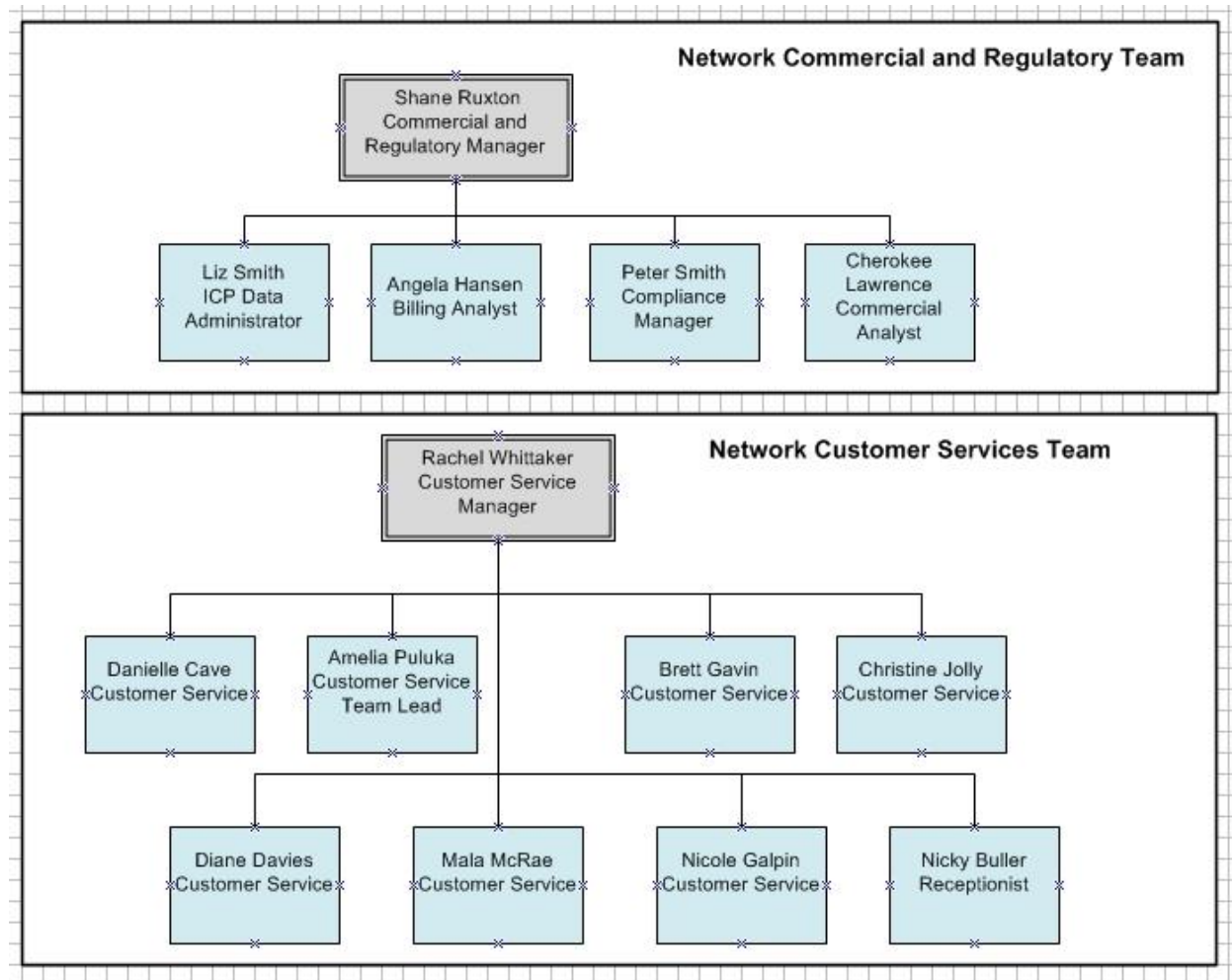
Audit observation

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	Title	Company
Peter Smith	Compliance Manager	Northpower Ltd
Elisabeth Smith	Administrator	Northpower Ltd
Rachel Whittaker	Customer Excellence Service Manager	Northpower Ltd
Liz Field	Senior Dispatcher	Northpower Ltd
Russell Watson	Principal Engineer	Northpower Ltd
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates 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 fulfilment 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.

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 Application	Purpose/Use
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

	<ul style="list-style-type: none"> 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.

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	5,721
NPOW	MPE1101	MAUNGATAPERE			ALLGXPSNPOWG	G	1/04/13	44,684
NPOW	MT00331	MAUNGATUROTO			ALLGXPSNPOWG	G	1/05/08	10,863

Status	Number of ICPs (01/03/2022)	Number of ICPs (2021)	Number of ICPs (2020)	Number of ICPs (2019)
New (999,0)	18	12	4	8
Ready (0,0)	128	131	109	146
Active (2,0)	61,268	60,319	59,519	58,704
Distributor (888,0)	7	9	9	9
Inactive – new connection in progress (1,12)	126	82	57	103
Inactive – electrically disconnected vacant property (1,4)	964	1,169	1,104	1,020
Inactive – electrically disconnected remotely by AMI meter (1,7)	148	137	138	114
Inactive – electrically disconnected at pole fuse (1,8)	14	18	21	9
Inactive – electrically disconnected due to meter disconnected (1,9)	20	21	19	8
Inactive – electrically disconnected at meter box fuse (1,10)	4	2	4	4
Inactive – electrically disconnected at meter box switch (1,11)	1	2	3	2
Inactive – electrically disconnected ready for decommissioning (1,6)	38	58	56	59
Inactive – reconciled elsewhere (1,5)	0	0	0	0

Decommissioned (3)	6,871	6,513	6,339	6,174
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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, on the 7/8 March 2022.

1.11. Audit required if participant makes material changes (clause 16A.11)

Code reference

If there is a material change to any of a participant's systems or processes that are the subject of regular audits under clause 10.17A, 11.8B, 11.10, 15.37A or 15.37B, the participant must arrange for an additional audit, which must be completed in accordance with this Part no later than 5 business days before the change is implemented.

For the purposes of subclause (1), a material change to a system or process is a change that is likely to affect the ability of the participant to comply with any relevant provision of this Code.

Audit observation

Northpower retired Gentrack on 1st April 2021, it was replaced by new software – Axos Registry Manager. A Material Change audit was not conducted.

Audit commentary

The introduction of the new software was a significant change to NPOW's systems and processes, which should be covered by the scope of this audit. A Material Change audit was not conducted.

Non-compliance is noted.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 1.11 With: 16A.11 From: 01-Apr-21 To: 15-Feb-22	On 01/04/2021 Gentrack was replaced by Axos Registry Manager which had a significant impact on processes covered by this audit. A Material Change Audit was not conducted. Potential impact: Medium Actual impact: Low Audit history: None Controls: None Breach risk rating: 5		
Audit risk rating	Rationale for audit risk rating		
Low	We recorded controls as none. No Material Change Audit was conducted. No impact on settlement outcomes therefore audit risk rating recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
Northpower did not consider this to be a material change as defined in the Code as it was unlikely that the change would affect the ability of the Northpower to comply with the Code because: <ol style="list-style-type: none"> 1) The new platform was thoroughly tested; and 2) We retained the ability to make data updates and changes in the Registry through the Electricity Authority's web based interface 3) The change in platform did not impact on the actual processes carried out, only the platform used to execute them on the Electricity Registry. 		31/3/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Significant testing was completed by Northpower and Axos prior to the 1 April 2021 go-live date as a control which mitigated risk		31/3/2022	

1.12. 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
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 Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	51 new ICP connections had the IECD uploaded to the registry more than 10 days after the event date. 2 ICPs had no IECD populated in the registry.	Still exists
Connection of ICP that is not an NSP	3.6	11.17	25% of new ICP connections sampled had no retailer acceptance of responsibility recorded by Northpower (retailer with "blanket" acceptance are excluded)	Cleared
Connection of ICP that is not an NSP	3.7	10.31	39% of new ICP connections sampled had no retailer acceptance of responsibility recorded by Northpower (retailer with "blanket" acceptance are excluded)	Cleared
Changes to registry information	4.1	8(1)(b)&(4) of Schedule 11.1	Registry event updates backdated greater than three days. Changes of NSP for 464 was not recorded in the registry.	Still exists
Distributors to provide ICP information to the registry manager	4.6	7(1)(p) of schedule 11.1	Missing information in the registry for Initial Electrical Connection Date (2 ICPs)	Cleared
Management of "ready" status	4.9	14 of Schedule 11.1	39% ICP registry status were made "Ready" prior to retailer acceptance or confirmation of responsibility being received by Northpower.	Cleared

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

We checked the Audit Compliance report and EDA file for the audit period and the LIS file dated 01/03/2022. We reviewed Axos and Salesforce CRM and where relevant checked against registry records.

We discussed with Northpower what processes were in place to ensure accurate information was provided to the registry.

Audit commentary

Northpower staff diligently verify the accuracy of the information recorded in the Axos Registry Manager. Despite the efforts to maintain accurate information Northpower are reliant on timely information from third parties and data entry is largely manual, so errors occur, understandably, from time to time. The comprehensive exception reporting processes are outlined in **section 2.2**.

The small number of information inaccuracies identified during the audit are noted below:

Section	Registry Discrepancy
3.5	<ul style="list-style-type: none">22 new ICP connections had the IECD (Initial Electrical Connection) uploaded to the registry more than 10 days after the event date.
3.4	<ul style="list-style-type: none">The status of some new connections, 4 ICPs, was changed to "READY" before the trader's acceptance was received (no blanket agreement with a trader). After discussion with the Authority, due to the trader electrically connecting the ICP without providing Northpower with their "acceptance of responsibility".
4.1	<ul style="list-style-type: none">Registry event updates backdated greater than three days.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: 11.2(1) From: 01-Mar-21 To: 15-Feb-22	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 was produced showing considerable steps taken to achieve accuracy, exception reporting in place and correction of any errors discovered. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Refer to Northpower's comments on the individual non-compliance areas in this report (Audit Ref: 3.4, 3.5, and 4.1)		31/3/2023	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Refer to Northpower's comments and corrective actions to be taken in the individual non-compliance areas in this report (Audit Ref: 3.4, 3.5, and 4.1)		31/3/2023	

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

We checked the Audit Compliance report and EDA file for the audit period and the LIS file dated 01/03/2022. We reviewed Axos and Salesforce CRM and where relevant checked against registry records.

We discussed with Northpower what processes were in place to identify information discrepancies in their systems and the registry, and what methods are used to correct that data as soon as practicable.

Audit commentary

Northpower aim to maintain accurate registry information.

A significant amount of effort was evident with routine exception reporting. Discrepancies were investigated and addressed quickly including those discovered during the audit.

Registry files are checked, and discrepancies addressed daily. For example, where a third party has not advised NPOW of the changes directly, the NMR files are checked to identify ICPs requiring price category code changes (e.g. builders supply to permanent or new DG installed), and 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 runs the Audit Compliance report monthly along with an analysis to address the report findings.

A few examples of queries, run daily, are listed below:

- ICP decommissioned 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

The implementation of Axos Registry Manager has made having correct information in the registry much easier to achieve. The issue which is left is the timing of the registry updates. The Axos Registry Manager does not change time based non-compliance, such as the 3 business days or 10 business days requirement to update the registry following an ICP parameter change. Late updates relate to the process of obtaining information from third parties, which can sometimes be problematic e.g. solar.

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 unbridged 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 during the audit. Northpower provided policy documents that show the procedures/measures followed with regards to this clause.

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:

- 1. Advise Dispatch (or NOC after hours) of the broken seal.*
- 2. If after hours, NOC to pass to Dispatch.*
- 3. 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.*

NPOW removes or breaks a seal and bridges ripple relay only when the safety or welfare of customer or animals is at risk e.g. lack of hot water. A retailer and MEP are notified the following day. The ripple relay replacement is organized by the retailer.

The sampling of two examples confirmed that the process is followed.

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 during the audit.

Audit commentary

We examined the NPOW website and confirmed that information about Utilities Disputes is present. The company also provided an example of an email signature which includes the Utilities Dispute reference.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower's staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

Northpower adopted the following processes to create new ICPs:

- If the new connection does not require any line or cable work, an ICP is created straight away. The trader, who is specified on the Customer Initiated Work Application by a customer is notified by the Customer Care team of the new ICP by email. A number of retailers (CTCT, GENE, GEOL, MERI) have a blanket ICP acceptance agreement (acceptance includes a request to connect the ICP) with NPOW. Those that do not have a blanket acceptance in place, accept ICPs on a discrete email basis (ECOT, TRUS, PUNZ, MEEN). NPOW provided a copy of an email which is sent to a retailer asking for acceptance. Retailers usually respond very quickly, the same day or following day. There are exceptions but it is not the norm.
- In a situation where some planning and line work is required or overhead line is converted to underground, an ICP will not be created until an agreement between a customer and Northpower is reached, and a deposit is paid. When the planning and construction work is completed the ICP is created by the Customer Care team, and the trader is notified via email as above.

1,128 new ICPs were created during the audit period. We verified that new ICP connection information is 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

The Audit Compliance Summary Reports, the LIS and EDA files were checked. The new connection process documents were reviewed and discussed with NPOW Staff.

Audit commentary

Customers or their agents apply directly to NPOW for a new ICP connection to the network. Participants do not apply for or request ICPs on the NPOW network.

NPOW 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

The Audit Compliance Report and the EDA file for the audit period and the LIS were checked.

The new connections process was discussed with Northpower's staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

The Axos Registry Manager generates 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.

The registry assigns the status of "New" because the file does not contain a price category. The next business day Northpower uploads a holding price category code of NEWICP which moves the status to "Ready" in those cases where a blanket retailer acceptance of new ICPs is held.

The EDA report and a sample of new ICP connections for the audit period was checked. We confirm that all information required is uploaded.

We sampled 26 new ICP connections and can confirm they were compliant with the above clause requirements.

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

The Audit Compliance Report and the EDA and the LIS files for the audit period and the LIS were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

There were 4 ICPs recorded in the Audit Compliance report that indicated that the Input date of the “Ready” status was after the Initial Electrical Connection Date (IECD). It was discussed during the audit, and was caused by the two traders electrically connecting the ICPs before they had provided their “acceptance of responsibility” to Northpower. The ICPs in question were:

ICP	Trader	Status “Ready Input” date	Status “Active” Effective Date
0000573258NR5C3	MEEN	27/09/21	21/09/21
0000573021NR4C8	MEEN	16/04/21	14/04/21
0000573255NRA98	PLTM	23/06/21	04/06/21
0000572721NRA6A	PLTM	16/04/21	09/03/21

The 2 ICPs recorded in the Audit Compliance report, which are the responsibility of Mercury Energy, were the exception from the norm. Mercury Energy has many customers on the Northpower network and usually the acceptance of new connections works well.

2 non-compliant ICPs are the responsibility of Platinum Power (PLTM). . Both these ICPs were the subject of a breach notice raised by Northpower as Platinum Power had breached the Electricity Code by electrically connecting the ICPs prior to accepting responsibility for the ICPs and also prior to Northpower approving the electrical connection.

The Electricity Authority advised Northpower to backdate the “Ready” status date in the registry to a date prior to the electrical connection date to enable the correct reconciliation of electricity used at the ICP. The Electricity Authority issued a warning letter to Platinum Power as a result of Northpower’s breach notice.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.4 With: 7(2) of Schedule 11.1 From: 23-Apr-21 To: 27-Sep-21	4 ICPs did not have the status "Ready" assigned prior to electricity being traded at the ICP. Potential impact: Low Actual impact: Low Audit history: None 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 was produced showing considerable steps taken to achieve accuracy, exception reporting in place and correction of any errors discovered. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><i>Northpower does not accept that this is a non-compliance on their part.</i></p> <p>For both the Platinum Power and Mercury Energy ICPs Northpower backdated the "Ready" status event in the Registry on advice from the Electricity Authority to prior to the electrical connection date (and prior to the date "acceptance of responsibility" was actually received by Northpower) so that the correct Active status date could be recorded in the Registry by each trader.</p> <p>The reconciliation of the electricity used at the ICPs was deemed to be of more importance than the correct date (after trader accepted was received) of Northpower's "Ready" status event.</p>		27/1/2022	Disputed
Preventative actions taken to ensure no further issues will occur		Completion date	
Northpower alleged a Code breach against Platinum Power with the outcome that the Electricity Authority issued a warning letter to Platinum Power as a result of their breach of the Code.		27/1/2022	

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

The Audit Compliance Report and the EDA and LIS files for the audit period were checked.

The new connections process was discussed with Northpower's staff. A randomly selected sample of 20 new ICP connections was reviewed.

Audit commentary

Several years ago, Northpower Contracting ceased to offer a service to initially electrically connect ICPs to the network or install metering. Warranted Persons (i.e. Northpower approved third party contractors) carry out new ICP connection work on the network. It is a condition of being a Warranted Person that contractors provide information for Northpower to update the Registry, on a timely basis. The contractors are engaged by traders to carry out initial electrical connections for new ICPs once Northpower has completed its new connection application process and approved and authorised the ICP for connection to the network. The Network Commercial Team is responsible for the population of the IECD in the registry.

In the audit period Northpower had 1,128 new connections made. 844 ICPs were electrically connected during the audit period.

The Audit Compliance report identified:

- 22 ICPs (2.6% of all new connections) had the IECD uploaded into the registry later than 10 days after the actual event date, which is recorded as non-compliance.
- There were no ICPs without IECD recorded.
- 26 ICPs had discrepancies between IECD, Metering Installation Certification Date and the "Active" status. Northpower provided evidence that IECD entered by them was correct.

Compliance has improved since the last audit. According to the process, the contractors are engaged by retailers to carry out the initial electrical connection for new ICPs once Northpower has completed its new connection application process and approved and authorised the ICP for connection to the network.

The Network Commercial Team is responsible for entering the Initial Electrical Connection Date into the Axos Registry Manager which updates the registry. Despite the requirements on Warranted Persons, there are still delays in receiving the required information from the third parties (Warranted Persons) to allow the population of the registry within the Code mandated time limits. To mitigate the late or non-receipt of information Northpower uses registry files, such as the NMR (Meter Notification File), to identify the date that metering was installed. It also developed a number of exception reports to query Northpower's information systems.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: 7(2A) of Schedule 11.1 From: 30-Mar-21 To: 08-Feb-22	22 ICP (2.6% of all new connections) had the IECD uploaded to the registry more than 10 days after the event date 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 because Northpower has well documented processes, information recording and exception reporting. The main issue appears to be receiving late data from third parties. No impact on settlement outcomes. Audit risk rating low.		
Actions taken to resolve the issue		Completion date	Remedial action status
A notice was sent to all Contractors living on the Northpower Network to remind them of their obligation to return information in a timely manner .		April 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing reporting is created by Northpower showing any breaches where information has been provided late. Where ongoing issues with provision of timely information are observed reminders are sent. Incremental improvement is being observed over time.		On-going	

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

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

Customers or their agents apply directly to Northpower for a new connection to the network. A network capacity/GIS check is performed. Network connection and application details are recorded in Salesforce.

Once the application is approved and the customer has paid the network capacity charge (if applicable) or deposit where works need to be completed by Northpower Contracting to enable the connection, Northpower will create the ICP in the Axos Registry Manager. The ICP is supplied to the customer and an email sent to notify the proposed retailer with the ICP details.

A number of retailers (CTCT, GENE, GEOL, MERI) have a blanket ICP acceptance agreement (acceptance includes a request to connect the ICP) with NPOW. Those that do not have a blanket acceptance in place accept ICPs on a discrete email basis (ECOT, TRUS, PUNZ, MEEN). NPOW provided a copy of an email which is sent to a retailer asking for acceptance.

The process adopted by Northpower is robust. We sampled 26 new ICP connections for which a customer specified trader does not have a “blanket” acceptance agreement with Northpower. We confirm that for all sampled ICPs Northpower received a confirmation of ICP acceptance.

The previous audit identified non-compliance with this clause. We are confident that the present process works well and is compliant.

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

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

Customers or their agents apply directly to Northpower for a new connection to the network. A network capacity/GIS check is performed. Network connection and application details are recorded in Salesforce.

Once the application is approved and the customer has paid the network capacity charge (if applicable) or deposit where works need to be completed by Northpower Contracting to enable the connection, Northpower will create the ICP in the Axos Registry Manager. The ICP is supplied to the customer and an email sent to notify the proposed retailer with the ICP details.

A number of retailers (CTCT, GENE, GEOL, MERI) have a blanket ICP acceptance agreement (acceptance includes a request to connect the ICP) with NPOW. Those that do not have a blanket acceptance in place accept ICPs on a discrete email basis (ECOT, TRUS, PUNZ, MEEN). NPOW provided a copy of an email which is sent to a retailer asking for acceptance.

We sampled 26 new ICP connections for which a customer specified trader does not have a “blanket” acceptance agreement with Northpower. We confirm that for all sampled ICPs Northpower received a confirmation of ICP acceptance/request for connection. Northpower’s Salesforce system captures the approval to connect provided to the traders and its contractor by Northpower, as well as the email from the traders accepting/authorising the ICP connection. Salesforce also has visibility of the initial electrical connection scheduling and workflow tracking of an ICP connection.

The previous audit identified non-compliance with this clause. We are confident that the current process works well and is compliant.

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 unmetred 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 during the audit.

Northpower does not electrically connect a point of connection (ICP). This is done by a Warranted Person accredited by Northpower to work on its network, upon instruction by the trader who is responsible for the ICP.

Audit commentary

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

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.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

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.

Audit commentary

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

All ICPs recorded in the registry have a single loss category code except ICPs with the status “Decommissioned”.

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

Customers, or their agents, apply directly to Northpower for a new connection to the network. A network capacity/GIS check is performed. Network connection and application details are recorded in SalesForce.

Once the application is approved and the customer has paid the network capacity charge (if applicable) or deposit, where works need to be completed by Northpower Contracting to enable the connection, the Customer Care Team will create the ICP in the Axos Registry Manager.

A file is generated by the Axos Registry Manager containing the ICP with supporting information such as address, NSP, installation type, proposed trader, and reconciliation type. The file is uploaded to the registry overnight. The registry assigns the status of “New” because the file does not contain a price category. The next business day Northpower uploads a holding price category code of NEWICP, which moves the status to “Ready” for those ICPs where a “blanket” retailer acceptance of new ICPs is held. The ICP is supplied to the customer and an email sent to notify the proposed retailer with the ICP details asking for its acceptance.

If NPOW does not have a blanket acceptance agreement with the trader nominated by a customer, an email is sent to ask for an acceptance. The Status “New” is changed to “Ready” after a confirmation from the trader is received.

A sample of 26 new ICP connections demonstrated they were compliant with the documented new connection process and the Code requirements.

Audit outcome

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

The Audit Compliance report for the audit period and the LIS files were checked.

Audit commentary

5 ICPs were identified with the registry status of “Ready” for greater than 24 months

ICP	Creation date	Status	NPOW comment
0000570268NR0DB	21/09/2018	Ready	Customer & retailer stills wants ICP kept
0000570265NRF80	21/09/2018	Ready	Customer & retailer stills wants ICP kept
0000570411NRDD1	01/11/2018	Ready	ICP now decommissioned
0000570638NR4D2	14/01/2019	Ready	Customer still to build. ICP to stay
0000571669NR13F	24/02/2020	Ready	Initial 24 month email(s) sent

Audit outcome

Compliant

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

We checked the LIS file dated 01/03/2022 and discussed this clause with NPOW Staff.

Audit commentary

NPOW has an embedded hydro generation station that has a capacity of 5MW (ICP: 0000100001NR87B) traded by Simply Energy. Manawa Energy Ltd (CNIR) has an embedded diesel “peaking plant” generator with 10 MW capacity situated at Bream Bay (ICP: 0000100002NR4BB). We examined the information and confirmed both ICPs have unique loss category codes assigned. ICP 0000100001NR87B has the loss category code G1 and ICP 0000100002NR4BB 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 during the audit.

Northpower does not electrically connect a point of connection (ICP). This is done by a Warranted Person accredited by Northpower to work on its network, upon instruction issued by the trader who is responsible for the ICP.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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 during the audit.

Northpower does not disconnect a point of connection (ICP). This is done by a Warranted Person accredited by Northpower to work on its network, upon an instruction issued by the trader who is responsible for the ICP.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

3.18. Meter bridging (Clause 10.33C(4))

Code reference

Clause 10.33C(4)

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 during the audit. Northpower provided policy documents that show the procedures/measures followed with regards to this clause.

Audit commentary

The process used by Northpower 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 meters, they are responsibility of MEPs. The company bridges meters only when the safety or welfare of customers or animals is at risk. It does not happened often, in fact Northpower identified only one job in last 12 months when the meter was bridged. A retailer and MEP were notified the following day. The meter replacement was organized by the retailer.

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

We examined the EDA file and the Audit Compliance report for the audit period to assess compliance. The findings were discussed with Northpower. The management of NSP changes was examined.

Audit commentary

The Audit Compliance reports were analysed to identify backdated event updates. The summary of late updates is below:

Address events

91.57% of all Northpower address updates were made on time with an average time to update the registry of 1.54 days. There were 265 late address updates. Compliance has improved.

30% of late address updates relate to distributed generation. The process used by NPOW is that as soon as a distributed generation installation date is entered into the registry, the address field is updated with words "Import-Export Metering". As already indicated the distributed generation information is mostly late therefore the address field is backdated ("domino effect").

Another reason for late updates are late notifications or backdated data requests from retailers and third party contractors (such as metering, new connections) resulting in late registry updates.

Networks events

The network events evaluated include those related to the population of the initial electrical connection dates (discussed in **section 3.5**), NSP changes (discussed below) and the initial network events relating to the creation of ICPs.

The overall compliance of Northpower's network updates was 92.39% with 110 late network update events with an average of 1.30 days to update. Compliance has improved.

NSP changes

The report recorded two late updates for 2 ICPs. These were data corrections made under Part 11 Clause 11.2.

Distributed generation

70.66% of all Northpower distributed generation network updates were made on time with an average time to update the registry of 4.42 days. There were 76 late network updates, driven by external installers, who have no contractual relationship with Northpower. Northpower developed the process to monitor the Registry Notification Files to flag that generation has been installed and this notification often arrives outside the timeframes Northpower is required to update the Registry. While an approval is required by the Network, the work occurs on and behind the meter and does not require a Warranted Person. As such the network has little leverage to ensure timely provision of data.

Compliance has improved.

Pricing events

The Audit Compliance reports found that 1,918 pricing updates were backdated. They were late updates requested by traders up to 31/12/2021, which were sent to Northpower by EIEP8 files. These price category code changes related to trader switches where the trader:-

- could, or could not, report consumption in the EIEP1 file under the mass market ToU price categories, or
- the trader requested the ICP switch between “low fixed charge” and “principal (standard) place of residence” price category codes as a result of the ICP switching in to the trader.

Northpower had raised an exemption application in mid-2021 for exemption to Part 11 Schedule 11.1 Clause 8(2)(b) to cover the above backdated price category code changes. This exemption application was withdrawn at the request of the Electricity Authority as they advised that a decision of the Board was pending regarding an amendment to this clause which would negate the need for the exemption application.

On 01/01/2022 a new clause 8(2)(aa) of Schedule 11.1 was introduced to the Code. It states that if the distributor gives notice of a change to price category code, where the change is backdated, the distributor must update the registry within 3 business days after the distributor and the trader responsible for the ICP agree on the change.

After 01/01/2022, NPOW uploaded price category code changes for 112 ICPs, which according to the Audit Compliance report were not compliant, which is incorrect. The algorithm previously used to identify non-compliance of price code changes is not valid anymore. The registry does not know when NPOW receives a request therefore compliance cannot be assessed using this algorithm.

We sampled 54 ICPs for where the price category code was updated after 01/01/2022. Northpower provided the original requests from the trader (EIEP8). The registry was updated the following day.

Each request from a retailer is evaluated to assure that the trader request is valid. The Code change means that retailers requesting backdates of a price code is not an issue anymore. Northpower has changed their process accordingly.

Decommissioning Status events

The Audit Compliance report recorded that 87.01% of all Northpower status updates to decommissioned were made on time with an average time to update the registry of 3.40 days.

In total there were 43 late updates. 23 late updates were related to decommissioning ICPs with the price code ND13. They are called the “long term de-energised” ICPs. These are ICPs that have been de-energised for a long period of time but Northpower cannot decommission them under the Electricity Act 2010 (section 105 to 108) as the owner will not give permission (say they may need the supply in the future) for a permanent disconnection from the network. The decommissioning was done in agreement with the last trader recorded in the Registry for the ICP.

The remaining 20 late updates were discussed with Northpower Staff. 16 late updates were not really late updates as they were caused by registry issues e.g. metering update or retailer update which had to be reversed (Registry event subsequent to the Decommission event date). Therefore only 4 ICPs had the decommission status updated to the Registry beyond the 3 business days allowed for under the Code.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: 8(1)(b)&(4) of Schedule 11.1 From: 01-Mar-21 To: 15-Feb-22	Registry event updates backdated greater than three days. 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	Controls are recorded as moderate as exception reporting and follow up is evident. Unfortunately, efforts made to correct and maintain registry information to be compliant with clause 11.2 can result in updates over 3 days and consequent non-compliance. The impact on settlement outcomes is minor therefore the audit risk rating is recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
Northpower will continue to review processes to enable us to meet the Code timeframes regarding Registry updates. However many of the Registry data updates mentioned in this non-compliance are based on Notification Files received from the Registry – the information from other participants in these files are the trigger for the Northpower Registry update.		31/3/2023	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The majority of non-compliances (Network and Address events) relate to the installation of Distributed Generation at existing ICPs. Northpower understands that other Distributors have the same issues relating to late Registry updates with this data due to there being a disconnect between the installation of distributed generation which does not require a Warranted Person, and the Distributor’s obligation to update the Registry. We will continue to look at options for improving the timeliness of Registry data updates within these constraints. Although we could create the Address Event related to generation installation or when an ICP moves from a BTS to permanent effective “today”, this would cause a disconnect between the actual date of the change and the Address Event effective date. We will investigate further whether this will cause issues for other participants or users of the Registry data.		31/3/2023	

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

We checked the Audit Compliance report for the audit period and the LIS file and discussed with Northpower staff.

Audit commentary

The Audit Compliance report identified 7 ICPs which had incorrect NSPs assigned. It was discussed and validated with Northpower. Further investigation with Northpower staff confirmed the NSP assignments were correct. These ICPs are always listed in the Audit Compliance report.

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

Customer service processes were discussed with Northpower.

Audit commentary

Any request from a customer for advice on an ICP for an existing connection is answered immediately, while the customer is on the phone. This is a common occurrence, generally due to a customer requiring their ICP when moving, so that they can sign up with a trader for the electricity supply. Calls from customers are answered by the Northpower Customer Care or Commercial Team members who have access to the Axos Registry Manager, Salesforce and GIS, which stores connection/customer information.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

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

Audit observation

The Audit Compliance report for the audit period and the LIS file were checked.

Audit commentary

The Audit Compliance Report did not identify any ICP 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

The Audit Compliance Reports, LIS and EDA files and the registry were checked. The new connection process documents were reviewed and discussed with NPOW Staff.

Audit commentary

The network connection application process is very robust and well documented. Network connection designs would not allow an ICP to be dependent on another ICP for it to be electrically disconnected.

NPOW 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

The Audit Compliance Reports, LIS and EDA files and the registry was checked. The new connection process documents were reviewed and discussed with Northpower Staff. A random sample of 26 new ICP connection records also checked.

Audit commentary

Distributed generation

The distributed generation process was examined. NPOW requires an application for all distributed generation. All applications have to be approved before allowing distributed generation to be connected to their network but NPOW is reliant on customers following the process.

NPOW's distributed generation process is similar to the new ICP connection process. The installers are required to inform NPOW once an installation is inspected and ROI signed so that NPOW can update the registry. NPOW does not hang meters on behalf of MEPs for existing installations therefore the company is fully dependent on information provided by other parties which is questionable.

NPOW decided to use the NRM files (registry metering files) to monitor the date that the I/E meter is installed. The date of installation of an I/E meter is used as the date of solar installation.

A review of the Audit Compliance Reports confirmed that information for 8 ICPs with embedded generation was not populated in the registry. The registry recorded that traders assigned the PV1 profile and export/import meters were installed.

Northpower's comments are below:

ICP	Profile	Installation Type	Status	TOPE Comment
0000513454NR283	RPS PV1	L	2	DG removed 3/12/2021
0000511471NR1D9	RPS PV1	L	2	No DG at this site. Settlement indicator 'N'
0000511470NRD9C	RPS PV1	L	2	No DG at this site. Settlement indicator 'N'
0000531428NRE4D	RPS PV1	L	2	No DG at this site. Settlement indicator 'N'
0000549623NRD27	RPS PV1	L	2	No import-export meter in Registry
0000551623NR8C6	RPS PV1	L	2	DG removed 13/1/2022
0000556950NRA34	RPS PV1	L	2	DG removed 31/7/2020 - reported last time not an error
0000565212NR8D6	RPS PV1	L	2	DG removed 4/9/2020 - reported last time not an error

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

The new connections process was reviewed and discussed with Northpower. The Audit Compliance report and the registry were checked along with the Axos Registry Manager.

26 randomly selected new connection ICPs from the audit period were checked.

Audit commentary

Northpower assigns the actual price category code to the ICP according to the installation metering configuration at the initial electrical connection date. The living contractors return ICP metering configuration information following the physical network connection.

Northpower staff validate the information and populate the Axos Registry Manager with all relevant information including the price category code. The information is automatically uploaded to the registry at night.

The original documentation is stored in the document management system.

The Audit Compliance report identified no discrepancies and the analysis of the sample of new ICP connections met code requirements.

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

The Audit Compliance Reports, LIS and EDA files and the registry were checked. The new connection process documents were reviewed and discussed with NPOW Staff. A small sample (10 ICPs) was checked.

Audit commentary

All ICPs with the status “Active” or “De-energised” have the GPS coordinated fields populated. ICPs with the status of “New” or “Ready” do not initially have GPS coordinates downloaded. We confirm that GPS coordinates meet the NZTM2000 standard as per registry specification.

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

The Audit Compliance Report and the EDA and the LIS files for the audit period were checked.

The new connections process was discussed with Northpower’s staff. A randomly selected sample of 26 new ICP connections was reviewed.

Audit commentary

Customers or their agents apply directly to Northpower for a new connection to the network. A network capacity/GIS check is performed. Network connection and application details are recorded in Salesforce.

Once the application is approved and the customer has paid the network capacity charge (if applicable) or deposit, where works need to be completed by Northpower Contracting to enable the connection, the Customer Care Team will create the ICP in the Axos Registry Manager.

A file is generated by the Axos Registry Manager containing the ICP with supporting information such as address, NSP, installation type, proposed trader, and reconciliation type. The file is uploaded to the registry overnight. The registry assigns the status of “New” because the file does not contain a price category. The next business day Northpower uploads a holding price category code of NEWICP which moves the status to “Ready” in those cases where a “blanket” retailer acceptance of new ICPs is held. The ICP is supplied to the customer and an email sent to notify the proposed retailer with the ICP details asking for its acceptance.

If NPOW does not have a blanket acceptance agreement with the trader nominated by a customer, an email is sent to ask for acceptance. The Status “New” is changed to “Ready” after a confirmation from the trader is received.

A sample of 26 new ICP connections demonstrated they were compliant with the documented new connection process and the Code requirements.

Overall compliance with this clause has improved since the last audit. The new process is handled well by the Customer Care team.

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

The LIS and EDA files were reviewed to identify shared unmetered load connected to the network. This was also discussed with Northpower staff.

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 load descriptions are:

Shared ICP	Load description	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

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

The Audit Compliance Report, the LIS, and EDA files for the audit period were reviewed. Data from the registry were checked. The decommissioning process was also checked with Northpower along with 23 decommissioned ICPs.

Audit commentary

Customers arrange ICP permanent disconnections (ICP decommissions) through their trader who will engage a Network Approved Contractor to carry out the physical work. The trader dispatches a Network Approved Contractor to disconnect the customer service cables/lines from the network and remove them from the installation point on the customer's buildings. Final meter readings are taken with all other information returned to the trader and Northpower, where the Axos Registry Manager is updated. Once the trader changes the registry status to "Inactive - ready for decommissioning (1,6)" Northpower updates the registry status of the ICP to "decommissioned". The Axos Registry Manager has a report which allows the monitoring of a status change quite easily. The report is checked every day and the registry is updated the next day.

If there is a delay on the traders' side, Northpower contacts them by email. According to clause 8(2)(ab) of Schedule 11.1 the distributor has to change the ICP status to "decommissioned" by no later than 3 business days after the registry manager has advised the distributor under clause 11.29 that the ICP is ready to be decommissioned.

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 23 ICPs we checked followed the established process with appropriate information recorded in the Axos Registry Manager/SalesForce, field reports scanned and stored in the Northpower "scanned documents" server.

We noted there were 37 ICPs with the status of "inactive – ready for decommissioning" recorded in the registry. It is a reduction from 58 ICPs in the last audit report. This reduction was made in a conjunction with traders. These ICPs have the price code ND13 assigned, which are called the "long term de-energised" ICPs. These are ICPs that have been de-energised for a long period of time but Northpower cannot decommission them under the Electricity Act 2010 (section 105 to 108) as the owner will not give permission (say they may need the supply in the future) for a permanent disconnection from the network.

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

The Price Category Codes table in the registry was checked and this was discussed with Northpower staff.

Audit commentary

The Price Category Code table in the registry was checked and 4 new price category codes were created in the registry during this audit period. The new Price Category Codes were notified to the registry on 14/01/2020, which means that the required compliance to give 2 months' notice was met.

Price Category Code	Description	Start Date
LC1	HHR - Low Voltage kWh Based	1/04/2021
LC2	HHR - Low Voltage Capacity Based	1/04/2021
LC3	HHR - Dedicated Transformer	1/04/2021
LC4	HHR - High Voltage Capacity Base	1/04/2021

The new pricing is published on the Northpower website.

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

The Loss Code table held by the registry was checked during this audit and discussed with Northpower Staff.

Audit commentary

Northpower has 9 Loss Factor Codes in the registry and no new entries were added in 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

The Loss Code table held by the registry was checked during this audit and discussed with Northpower Staff.

Audit commentary

Northpower updated 4 loss factors in the registry during the audit period. New loss factors are applicable from 01/9/2021. The registry was updated on 30/06/2021, which meets compliance with this clause.

Loss factors have a single value for all trading periods for a year. There are no seasonal loss factor codes for summer or winter.

Loss Category Code	Metering voltage	Description	Loss Factor as of 01/06/2020	New Loss Factor as of 01/09/2021
L0	33kV	Metered adjacent to NSP (GXP)	1.0000	1.0000
L1	33kV	ICP 0000546037NR9E6	1.0170	1.0170
L2	11kV	Metered at 11kV	1.0250	1.0484

L3	400V	150kVA and above, metered near the distribution transformer	1.0360	1.0606
L4	400V	Not used	1.0500	1.0764
L5	230/400V	Less than 150kVA, metered on the LV distribution network	1.0500	1.0764
L6	33kV	ICP 0000546038NR638	1.0050	1.0050
G1	33kV	Wairua generation	1.0250 Gen 1.0160 Cons	1.0250 Gen 1.0160 Cons
G2	11kV	Bream Bay generation	1.0040 Gen 1.0010 Cons	1.0040 Gen 1.0010 Cons

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

We examined the NSP mapping table in the registry. Since the last audit Northpower did not create a new, or decommission, an NSP.

Audit commentary

Based on examination of the NSP mapping table in the registry it was confirmed that no new NSP was created and no NSP was decommissioned since the last audit.

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

Northpower has not created a new NSP, as described in the previous section, therefore the reconciliation manager was not asked to create a unique NSP identifier.

Audit commentary

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

The LIS file and the NSP mapping table in the registry were examined and discussed with NPOW Staff.

Audit commentary

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

The LIS file and the NSP mapping table in the registry were examined and discussed with NPOW Staff.

Audit commentary

NPOW did not create an NSP during the audit period or transfer an ICP to a NSP.

NPOW Staff advise they are aware of the code requirements.

Audit outcome

Compliant

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

The LIS file and the NSP mapping table in the registry were examined and discussed with NPOW Staff.

Audit commentary

Northpower has one balancing area (ALLGXPSNPOWG) according to the NSP mapping table in the registry. Examination of the NSP mapping table in the registry showed that 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

The LIS file and the NSP mapping table in the registry were examined and discussed with NPOW Staff.

Audit commentary

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 NPOW Staff during the audit.

Audit commentary

NPOW stated that Top Energy Staff did not transfer any ICPs during the audit period.

NPOW advise that they are aware of the Code requirements.

Audit outcome

Compliant

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

The NSP mapping table in the registry was examined and this was discussed with NPOW Staff.

Audit commentary

NPOW does not have any NSPs that are not connections to the grid, for which they are responsible. 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

The NSP mapping table in the registry was examined and this was discussed with NPOW Staff. As described in the section above, NPOW does not have any NSPs that are not connections to the grid, for which they are responsible.

Audit commentary

This clause is not applicable to NPOW because they do not have responsibility for an NSP that is not a point of connection to the grid. 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

The NSP supply point table was reviewed. This was discussed with NPOW Staff.

Audit commentary

NPOW 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

Northpower does not have any, and is not responsible for any embedded networks.

Audit commentary

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

Northpower does not have any, and is not responsible for any embedded networks.

Audit commentary

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

Northpower does not have any, and is not responsible for any embedded networks.

Audit commentary

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

The LIS and EDA files were reviewed to identify shared unmetered load connected to the network. This was also discussed with Northpower staff.

Audit commentary

Northpower only maintains historic information of shared unmetered load. Requests for new shared unmetered load are not accepted.

Northpower has 7 historic ICPs with the status “distributor status” representing shared unmetered load (46 ICPs) on its network that it maintains information for. The load descriptions are:

Shared ICP	Load description	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

When the opportunity arises Northpower policy is to move the shared unmetered load ICPs to existing metered ICPs or create new ICPs as appropriate. Since the last audit NPOW decommissioned 0000557088NRDCB and 0000557089NR18E.

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

The LIS and EDA files were reviewed to identify shared unmetered load connected to the network. This was also discussed with Northpower staff.

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.

If Northpower becomes aware of a change to the capacity of a shared unmetered load, it will update the registry.

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

We reviewed Northpower's Commerce Commission Annual Regulatory Disclosure information, Loss Calculation methodology, and Management Plan and checked the Loss Factor tables in the registry. This was also discussed with Northpower staff.

Audit commentary

Northpower recalculated their loss factor last year. The review involved engaging a consultant (Jacobs), who recommended some improvements which were adopted. The main issue related to how Northpower calculated the losses on its 11kV network. The two improvements made were the selection of feeders that were used to undertake a detailed calculation of losses on, and the use of interval data from Northpower's SCADA, to calculate the rms current in each feeder i.e. (I^2R) where I = rms current. The losses on each selected feeder were calculated using the Northpower electrical modelling tool (SINCAL). The previous loss calculation just used typical load (current) values fed into the electrical modelling tool to calculate the losses in the selected feeders.

Northpower have written up their methodology into a documented procedure.

The brief overview of Northpower's methodology is below:

Sub-Transmission Network:

SINCAL is used to model the losses across the entire Sub-transmission network, starting from GXP and ending at the 33kV bus of each substation, this also takes into consideration Transpower owned assets. For customers metered on the 33kV network an individual loss factor is calculated for that customer.

11kV Distribution Network:

SINCAL is used to model the losses across the 11kV distribution network using a representative sample of 11kV feeders. This includes a mixture of Rural, Urban and Industrial feeders. These feeders were used to get an average loss factor across the 11kV network. This models from the 11kV zone substation bus transformers to the HV side of the Distribution transformer, with the losses on the zone substation 33/11 kV transformers calculated and added in separately.

400V LV Network:

SINCAL is used to model a handful of LV networks a mixture of rural and urban networks were chosen, an average distribution transformer loss was calculated from a pool of transformer test certificates. The average distribution transformer loss is added to each feeder. This models from the HV side of the Distribution transformer down to the ICP.

Distribution Transformer losses

When calculating an average distribution transformer loss a number of transformers test certificates were analysed, ranging from 30kVA – 500kVA. Using this data an average was then calculated.

Network Loading

Network loading has a direct correlation to loss load. A heavily loaded network will have a larger loss factor. For this reason Northpower have taken a network load that best represents their network.

As a result of loss factor recalculation undertaken by Northpower, new loss factors (L2, L3, L4, L5, and L6) were uploaded to the registry on 30/06/2021 (2 months in advance) to be used for volume calculations by the reconciliation manager.

Loss Category Code	Metering voltage	Description	Loss Factor 01/04/2020	Loss Factor 01/09/2021
L0	33kV	Metered adjacent at GXP	1.0000	1.0000
L1	33kV	ICP 0000546037NR9E6 (Kauri Dairy Factory)	1.0170	1.0170
L2	11kV	Metered at 11kV	1.0250	1.0484
L3	400V	150kVA and above, metered near the distribution transformer	1.0360	1.0606
L4	400V	Not currently used	1.0500	1.0764
L5	230/400V	Less than 150kVA, metered on the LV distribution network	1.0500	1.0764
L6	33kV	ICP 0000546038NR638	1.0050	1.0050
G1	33kV	Wairua generation	1.0250 Gen 1.0160 Cons	1.0250 Gen 1.0160 Cons
G2	11kV	Bream Bay generation	1.0040 Gen 1.0010 Cons	1.0040 Gen 1.0010 Cons

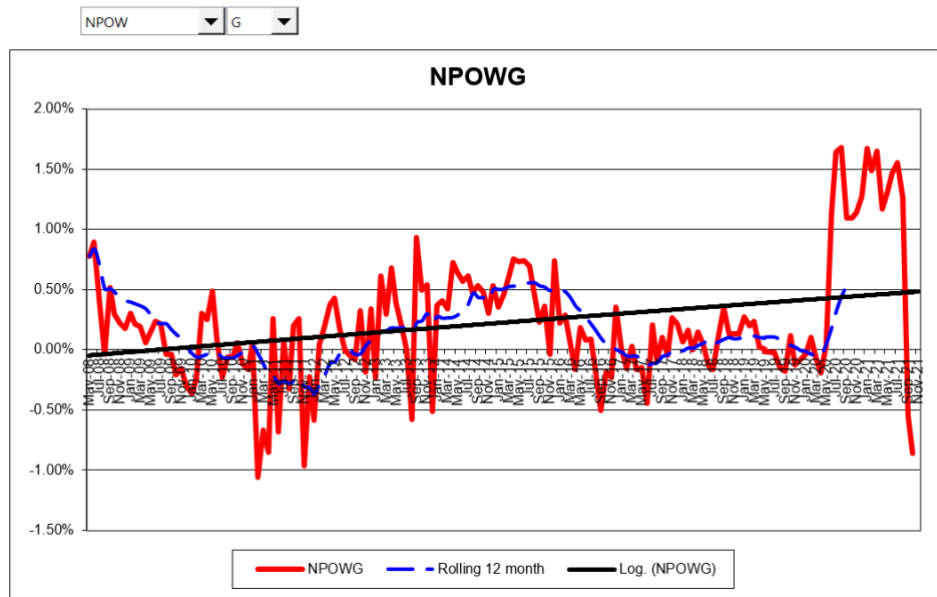
The Local Loss Factors are an approximation of the Technical Losses on the Network. Non- technical losses are derived by subtracting the total annual consumptions for all ICP's (with each multiplied by the appropriate Local Loss Factor) from the total annual inputs to the network (supplied from the grid and from embedded generation).

During the audit we reviewed UFE on the Northpower network. UFE is influenced by many factors, not all of them could be controlled by Northpower. UFE is defined in the Guidelines on the calculation and the use of loss factors for reconciliation purposes as

UFE is calculated from the difference between reported energy injected into a network and the reported energy extracted from the network after it has been adjusted for losses. Conceptually, it is the inevitable difference between distributors' predictions and reported reality (volumes as measured by meters). UFE accounts for the difference between actual and calculated technical losses, and actual and estimated non-technical losses.

Below is shown the UFE graph (rolling 12 month), provided by the Authority, on the Northpower network. According to the Guidelines, UFE is expected to be within $\pm 1\%$ over the course of any 12-month period. 14-month UFE is around 0.5%.

UFE% by Network calculator



Audit outcome

Compliant

CONCLUSION

PARTICIPANT RESPONSE

Northpower thanks TEG & Associates Limited for the completion of this audit. The reduction in the number of non-compliances between the 2021 and 2022 audits indicates that the process improvements we have implemented have been successful.

In reviewing the current audit report's non-compliances we believe that some further process improvements over the coming year will also result in improved audit outcomes.

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. However this may be difficult to achieve for those ICPs where generation changes have occurred due to the disconnect between the installation of distributed generation which 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.