ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTOR AUDIT REPORT



For

NELSON ELECTRICITY

Prepared by: Rebecca Elliot, Veritek Limited Date audit commenced: 31 May 2018 Date audit report completed: 22 June 2018 Audit report due date: 30-Jun-18

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EXECUTIVE SUMMARY

This Distributor audit was performed at the request of **Nelson Electricity (NELS)**, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at the Nelson Electricity's premises in Nelson, on June 8th, 2018.

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

NELS run a small network in Nelson city. The network has a small number of new connections each year. They effectively use the registry as their database but also have an access database to manage ICP changes. Due to the small nature of the network NELS have a good understanding and visibility of the activity on the network. All processes are documented and whilst largely manual these processes work.

This audit found eight non-compliances and makes five recommendations. I note that half of the noncompliances found relate to one ICP that was recorded as the "new" status on the registry but was electrically connected. If NELS adopts the recommendations in this audit I am confident that such situations will be unlikely to occur in the future. The next audit frequency table indicates that the next audit be due in 12 months. I have considered this result in conjunction with the response from NELS and I recommend that the next audit be due in 18 months.

The matters raised are shown in the tables below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non- Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1) and 10.6(1)	Registry information not complete and accurate in all instances.	Moderate	Low	2	Identified
Requirement to correct errors	2.2	11.2(2)	Errors not corrected as soon as practicable.	Moderate	Low	2	Identified
Provision of ICP Information to the registry manager	3.3	11.7	Nominated trader information missed being populated for 1 ICP.	Moderate	Low	2	Identified
Timeliness of Provision of ICP Information to the registry manager	3.4	7(2) of Schedule 11.1	Nominated trader not supplied for 1 ICP.	Moderate	Low	2	Identified
Connection of ICP that is not an NSP	3.6	11.17	1 ICP connected without a trader being recorded as accepting responsibility for the ICP.	Moderate	Low	2	Identified
Management of "New" status	3.13	15 Schedule 11.1	1 ICP incorrectly recorded at the "new" status.	Moderate	Low	2	Identified
Changes to registry information	4.1	8 Schedule 11.1	Some price, network, status, and address changes were backdated.	Moderate	Low	2	Identified
Provide ICP Information to the Registry manager	4.6	7(1)(m) & (p) Schedule 11.1	6 ICPs with the initial electrical connection date missing. 44 ICPs with an	Moderate	Low	2	Identified
			incorrect initial				

Subject	Section	Clause	Non- Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			electrical connection date populated.				
Future Risk Rating	16						

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
Provide complete and		Carry out data validation between access database and the registry monthly.	Identified
accurate information	2.1	Compare the PR255 monthly with the registry information to identify potential distributed generation.	Identified
Provision of ICP information	3.3	Update the new connection form to capture the unmetered load details in the recommended format.	Identified
Provide ICP Information to the Registry manager	4.6	Update registry for ICP 0000200190CTC63 to indicate this is a DUML ICP.	Cleared
Creation of loss factors	8.1	Liaise with the Electricity Authority to compare their loss factor calculations vs NELS own analysis to confirm if losses are set correctly.	Identified

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

The Authority website was checked to determine whether there are code exemptions in place.

Audit commentary

NELS have exemption no.228. This exempts NELS from having a metering installation for the network supply point FND0112. This exemption expires on 3/7/2020.

1.2. Structure of Organisation

NELS provided their organisation structure:



Network Tasman and Marlborough Lines are as at October 2013 contracted to provide professional support services to NELS through the General Manager. These services primarily relate to the financial management of NELS and technical and engineering services. The General Manager will utilise these services to the maximum practical extent but may also seek independent advice in consultation with the Board. The General Manager of Network Tasman and the Chief Financial Officer of Marlborough Lines are the designated supervisory managers for the provision of these services and have a staff management relationship to the NELS General Manager. They provide advice and services with the objective of maximising the efficiency of NELS whilst maintaining NELS as an independent company.

1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

NELS personnel assisting in this audit were:

Name	Title
Phil Goodall	General Manager
Katie Homan	Business Systems Manager

1.4. Use of contractors (Clause 11.2A)

Code reference

Clause 11.2A

Code related audit information

A participant who uses a contractor

- remains responsible for the contractor's 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

Vircom EMS are the only approved contractor to work on the NELS network.

1.5. Supplier list

As detailed in **section 1.4**, Vircom EMS are the only approved contractor.

1.6. Hardware and Software

NELS use the registry as their ultimate data source. For the day to day management of ICPs they use an Access database which links to their GIS system and a Microsoft spreadsheet is used for the tracking of distributed generation applications.

All data is backed up to industry standards. There is a robust disaster recovery process in place.

1.7. Breaches or Breach Allegations

The Electricity Authority confirmed that there have been no alleged breaches related to this audit scope for NELS for the audit period.

1.8. ICP and NSP Data

NELS has responsibility for the Nelson city area, which has one NSP and two interconnecting NSPs and one balancing area. There have been no changes during the audit period. The table below sets out the details.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
NELS	FND0112	Founders	STK0331	NELS	STK0331NELSG	1	1/02/2014	-
NELS	HVN0331	HAVEN RD	STK0331	NELS	STK0331NELSG	1	1/02/2014	-
NELS	STK0331	STOKE	STK0331	NELS	STK0331NELSG	G	1/09/2013	9,134

There are no embedded networks connected to the NELS network.

A list file detailing the ICP statuses was provided as at 15/05/18:

Status	Number of ICPs (2018)	Number of ICPs (2017)
New (999,0)	1	-
Ready (0,0)	0	-
Active (2,0)	9,134	9,120
Distributor (888,0)	0	-
Inactive – new connection in progress (1,12)	1	4
Inactive – electrically disconnected vacant property (1,4)	64	63
Inactive – electrically disconnected remotely by AMI meter (1,7)	5	11
Inactive – electrically disconnected at pole fuse (1,8)	0	0
Inactive – electrically disconnected due to meter disconnected (1,9)	0	0
Inactive – electrically disconnected at meter box fuse (1,10)	1	0
Inactive – electrically disconnected at meter box switch (1,11)	1	0
Inactive – electrically disconnected ready for decommissioning (1,6)	4	4
Inactive – reconciled elsewhere (1,5)	0	-
Decommissioned (3)	1,082	1,053

1.9. Authorisation Received

An authorisation email was provided.

1.10. Scope of Audit

This Distributor audit was performed at the request of NELS, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

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

The table below shows the tasks under clause 11.10(4) of Part 11, which NELS is responsible for. There are no other contractors who assist with these tasks:

Functions Requiring Audit Under Clause 11.10(4) of Part 11	Contractors Involved in Performance of Tasks
The creation of ICP identifiers for ICPs.	
The provision of ICP information to the registry and the maintenance of that information.	Nil
The creation and maintenance of loss factors.	

The scope of the audit below is shown in the diagram below:



1.11. Summary of previous audit

NELS provided a copy of their previous audit, conducted in July 2017 by Paul Troon. The audit found four non-compliances and made one recommendation. The current status of these are detailed in the table below:

Table of non-compliance

Subject	Section	Clause	Non-compliance	Status
Timeliness of the Population if Initial Energisation Date	3.5	7(2A) of Schedule 11.1	Initial energisation date not provided in required time for 5 ICPs	Cleared
Changes to Registry	4.1	8 of schedule 11.1	ICP information not updated within 3 business days.	Still existing
ICP Address	4.4	2 of schedule 11.1	Address information provided for 3 ICPs would not allow ready location of the ICP.	Cleared
Provision of ICP Information to the Registry	4.6	7 (1) of schedule 11.1	Incorrect ICP information details.	Still existing

Recommendations

Subject	Section	Recommendation	Status
Provision of ICP Information to the Registry	4.6	Investigate ICPs trading with generation profiles.	Cleared for profiles but I have raised a recommendation in section 2.1 to use PR 255 report for metering configurations.

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

I walked through the process to ensure that registry information is complete, accurate and not misleading or deceptive, including viewing reports used to resolve discrepancies.

The registry list file as at 15/05/18 was examined to confirm compliance.

Audit commentary

The registry is effectively NELS database for their ICPs and this is used for billing. The ICP management access database is used to track new connections and changes to ICPs. The registry is updated directly for any changes as there is no automated interface between the database and the registry. The volume of change is small, and this manual process generally works well. All processes are documented. Overall, I found a high level of accuracy.

There is a periodic check done between the two data sources to confirm they align. As detailed in **section 3.3**, one ICP was found at the incorrect status of "New" due to the nominated trader details being missed. This was electrically connected on 28/11/17 but not corrected until 5/6/18. I recommend that this check is run monthly to identify any data discrepancies more frequently.

Description	Recommendation	Audited party comment	Remedial action
Provide complete and accurate information	Carry out data validation between access database and the registry monthly.	Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle.	Identified

I recommend that in addition to the profile checks that are already carried out in relation to distributed generation that the PR255 is run to identify any ICPs with potential distributed generation installed where an application has not been received by NELS. This process is discussed in **section 4.6**.

Description	Recommendation	Audited party comment	Remedial action
Provide complete and accurate information	Compare the PR255 monthly with the registry information to identify potential distributed generation.	Comparing the PR255 will be part of the Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle.	Identified

As detailed in **sections 3.5** and **4.1**, analysis of the updating of the registry found the incorrect event date being applied in some instances. The data dictionary in the registry defines the event date as follows:

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

The event date should always be updated to indicate the effective date the change applies from. NELS now understand this requirement. This is recorded as non-compliance.

As discussed in **section 4.6**, 50 historic electrically connected ICPs have a missing (6) or an incorrect initial electrical connection date recorded (44). These were not previously updated due to a misunderstanding that these events should not be backdated more than three days. Whilst there is a requirement to update the registry within three days of an event, if a correction to meet the requirements of this clause is identified then the event should be backdated. NELS now have a good understanding of this and have since corrected these ICPs.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 2.1	Registry information not complete and accurate in all instances.		
With: Clauses 11.2(1)	Potential impact: Low		
and 10.6(1)	Actual impact: Low		
	Audit history: None		
From: 07-Jul-00	Controls: Moderate		
To: 05-Jun-18	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they v is room for errors to occur.	will mitigate risk m	nost of the time but there
	The risk rating is low as the discrepancie reconciliation.	s found have no d	irect impact on
Actions ta	ken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	b	13/06/2018	Identified
All issues with ICP's ident	ified have been remedied.		
The non-compliances revolved around not appreciating the usage of the Event Date field. Now this has been clarified, there is no reason that this type of non-compliance will reoccur.			
Nelson Electricity also recognises the requirement to update the registry within three days of an event but if a correction to meet the requirements of this clause is identified then the event should be backdated			
Preventative actions taken to ensure no further issues will occur		Completion date	
Nelson Electricity staff reminded of the importance of the Event Date field and importance of the three days to update. Staff also reminded that if a correction to meet the requirements of this clause is identified then the event should be backdated		13/06/2018	
Supporting information w backdated events.	ill continue to be retained for any		

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

NELS's data management processes were examined. The registry list file as at 15/05/18 was examined to confirm compliance.

Audit commentary

As detailed in **section 2.1**, NELS have good controls in place to provide correct and accurate information but were under a misunderstanding that these events should not be backdated greater than three days, therefore they have not corrected or updated missing information in some instances. NELS now have a good understanding that whilst the backdating of events is a non-compliance the requirement to provide complete and accurate information is more important if corrections are identified. They have since made the corrections identified in this audit.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 2.2	Errors not corrected as soon as practicable.		
With: Clauses 11.2(2)	Potential impact: Low		
and 10.6(2)	Actual impact: Low		
	Audit history: None		
From: 21-Oct-13	Controls: Moderate		
To: 15-May-18	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they v is room for errors to occur.	will mitigate risk n	nost of the time but there
	The risk rating is low as the corrections not actioned have no direct impact on reconciliation.		no direct impact on
Actions ta	aken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	d	13/06/2018	Identified
All issues with ICP's ident	ified have been remedied.		
Nelson Electricity also recognises the requirement to correct errors identified in the Registry. Nelson Electricity also recognises that the backdating of events beyond three days is a non- compliance, the requirement to provide complete and accurate information is more important if corrections are identified.			
Preventative actions taken to ensure no further issues will occur		Completion date	
Nelson Electricity staff reminded of the importance of the accuracy of information on the Registry. Staff also reminded that if a correction to meet the requirements of this clause is identified then the event should be backdated Supporting information will continue to be retained for any backdated events.		13/06/2018	

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The new connection process was examined in detail and is described in **section 3.2**. A diverse characteristics sample of ten new connection applications of the 30 created since 1/08/17 were checked from the point of application through to when the ICPs were created. The sample included any ICPs with distributed generation. There were no new connections with unmetered load recorded but the process of capturing of this was discussed.

Audit commentary

NELS creates ICPs as required by clause 1 of schedule 11.1.

The process in place is robust and has good controls in place. The sample checked in **section 3.2** below confirms this.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

The new connection process was examined in detail. A diverse characteristics sample of 10 new connection applications of the 30 created since 1/08/17 were checked to determine whether the ICPs had been created within three business days of a request by a trader. The sample included any ICPs with distributed generation. There were no new connections with unmetered load recorded but the process of capturing of this was discussed.

Audit commentary

Applications for ICPs are received from the electrician or the property owner. The ICP is created once all the required information is provided. If an ICP cannot be created within three days of the request this is communicated to the applicant. Of the ten examples examined, six required work to be carried out on the network. This was communicated in all instances. The ICP is sent to the nominated trader and the ICP is created at the "Ready" status as soon as acceptance is received from the trader.

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 new connection process was examined in detail and is described in **section 3.2**. The list file was checked and a diverse characteristics sample of ten new connection applications of the 30 created since 1/8/17 were checked from the point of application through to when the ICPs were created to confirm the process and controls worked in practice. The sample included any ICPs with distributed generation. There were no new connections with unmetered load recorded but the process of capturing of this was discussed.

Audit commentary

The process for updating the registry is manual. All ICPs created during the audit period had the correct information populated as required by this clause with the exception of ICP 0000201737CTE10. This was incorrectly recorded on the registry at the "New" status due to the nominated trader details being missed but was electrically connected on 28/11/17. This was corrected on 5/6/18. This is recorded as non-compliance.

Review of the sample of new connections confirmed that the ICP information provided to the registry by NELS was correct.

As noted above, there were no new connections with unmetered load processed during the audit period, but I examined the new connection form in relation to this. Currently these details are noted in a free text field. I recommend that the form be updated to capture the unmetered load details in the Electricity's recommended format of watts; hours and load description:

The field definitions are:

Information	Format
Connected load	Watts, 4 digits, zero decimal places.
	Eg 1565
Semi colon separator	· · · · · · · · · · · · · · · · · · ·
Running hours per day	Hours to 2 digits, and decimal hours to 1 decimal place
	Eg 02.5 (ie two and one half hours)
Semi colon separator	· · · · · · · · · · · · · · · · · · ·
Other text	Free form as required

Example strings:

• 0110;10.5; Street light corner Rons Rd and Beatty St

Description	Recommendation	Audited party comment	Remedial action
Provision of ICP information	Update the new connection form to capture the unmetered load details in the recommended format.	The Nelson Electricity – New Connection Application Form is being altered to include specific fields relating to unmetered load. The fields will include the necessary details:	Identified
		 Watts Hours of use Load description Application Form is complete and ready for use.	

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 3.3	Nominated trader information missed being populated for 1 ICP.		
With: Clause 11.7	Potential impact: Low		
	Actual impact: Low		
From: 28-Nov-17	Audit history: None		
To: 05-Jun-18	Controls: Moderate		
	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they will mitigate risk most of the time but there is room for errors to occur.		nost of the time but there
	The risk rating is low as this affected one	e ICP.	
Actions ta	aken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	d	05/06/2018	Identified
A review of ICP identified that the Proposed Retailer on the Registry field was left blank in error. This error has been corrected on the Registry and the Retailer has now picked up the ICP.		00,00,2010	
Preventative actions taken to ensure no further issues will occur		Completion date	
Nelson Electricity staff reminded of the importance of the Proposed Retailer field for New ICP's and to ensure the field is populated.		30/06/2018	
populated. Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle. This validation process will identify any New ICP's with errors including Nominated Retailer.			

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 list file as at 15/5/18 and event detail report was examined for the period from 1/8/17 to 15/5/18 to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

The process is described in **section 3.3**. The event detail report identified 36 new ICPs that were electrically connected during the audit period and all were created as soon as practicable. NELS provided the required information for all ICPs prior to electricity being traded at the ICP with the exception of ICP 0000201737CTE10. This was incorrectly recorded on the registry at the "New" status due to the nominated trader details being missed but was electrically connected on 28/11/17. This was corrected on 5/6/18. This is recorded as non-compliance.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 3.4	Nominated trader not supplied for 1 ICP.		
With: Clause 7(2) of	Potential impact: Low		
schedule 11.1	Actual impact: Low		
	Audit history: None		
From: 28-Nov-17	Controls: Moderate		
To: 05-Jun-18	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they will mitigate risk most of the time but there is room for errors to occur.		nost of the time but there
	The risk rating is low this affected one IC	ĴΡ.	
Actions taken to resolve the issue		Completion date	Remedial action status
Non-Compliance accepted	d	05/06/2018	Identified
A review of ICP identified that the Proposed Retailer on the Registry field was left blank in error. This error has been corrected on the Registry and the Retailer has now picked up the ICP.			
Preventative actions taken to ensure no further issues will occur		Completion date	
Nelson Electricity staff reminded of the importance of the Proposed Retailer field for New ICP's and to ensure the field is populated.		30/06/2018	
Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle. This validation process will identify any New ICP's with errors including Nominated Retailer.			

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The event detail report and the registry list were examined to determine the timeliness and accuracy of initial electrical connection dates for the 36 completed new connections identified. Any ICPs with an initial electrical connection populated where the trader has not recorded active status were checked and found one at the status of "new".

Audit commentary

The event detail report was examined, and I found that all 36 ICPs were updated within ten business days of the initial electrical connection date but all had the incorrect event date recorded in the registry. The data dictionary in the registry defines the event date as follows:

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

Therefore, the event date or effective date should be the same date as the initial electrical connection date. This is recorded as non-compliance in **section 2.1**.

As discussed in **sections 3.3** and **3.4**, ICP 0000201737CTE10 was at the "New" status but was electrically connected on 28/11/17. This was updated within ten days of the event but as described above it has the incorrect event date recorded.

Audit outcome

Compliant

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

Code reference

Clause 11.17

Code related audit information

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

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

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

Audit observation

The new connection process was examined in section 3.2.

The event detail file and registry list were examined to determine compliance.

Audit commentary

NELS does not conduct electrical connection; however, the design of the new connections process includes a step where the trader accepts responsibility in accordance with this clause. NELS creates all ICPs at "Ready" with a proposed trader. As discussed in **sections 3.2** and **3.3** above all ICPs were recorded in the registry with a trader prior to electrical connection with the exception of ICP 0000201737CTE10.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 3.6 With: Clause 11.17	1 ICP connected without a trader being recorded as accepting responsibility for the ICP.		
	Potential impact: Low		
	Actual impact: Low		
From: 28-Nov-17	Audit history: None		
To: 05-Jun-18	Controls: Moderate		
	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they will mitigate risk most of the time but there is room for errors to occur.		nost of the time but there
	The risk rating is low this affected one ICP.		
Actions ta	aken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	d	05/06/2018	Identified
A review of ICP identified that the Proposed Retailer on the Registry field was left blank in error. This error has been corrected on the Registry and the Retailer has now picked up the ICP.			
Preventative actions take	en to ensure no further issues will occur	Completion date	
Nelson Electricity staff reminded of the importance of the Proposed Retailer field for New ICP's and to ensure the field is populated.		30/06/2018	
populated. Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle. This validation process will identify any New ICP's with errors including Nominated Retailer.			

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

Code reference

Clause 10.31

Code related audit information

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

Audit observation

The new connection process was examined in **section 3.2**. A diverse characteristics sample of ten new connection applications of the 30 created since 1/08/17 were checked to determine if the ICPs were connected at the request of the trader.

Audit commentary

NELS creates all ICPs at "Ready" with a proposed trader. The sample checked confirmed that ICPs were connected at the request of the trader. This includes ICP 0000201737CTE10 which was incorrectly recorded at "New" on the registry but for which NELS had received acceptance from the trader for.

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

Audit observation

The new connection process was examined in **section 3.2**. The event detail file and registry list were examined to determine compliance.

Audit commentary

The NELS process ensures that an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. No temporarily connected ICPs were identified.

Audit outcome

Compliant

3.9. 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 reconciliation participant responsible for ensuring there is a metering installation for the point of connection.

The distributor must, within five 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

The NSP table was reviewed.

Audit commentary

No new NSPs were created by NELS during the audit period.

Audit outcome

Compliant

3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))

Code reference

Clause 10.30(A)

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.

Audit observation

The NSP table was reviewed.

Audit commentary

No new NSPs were created by NELS during the audit period.

Audit outcome

Compliant

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:

yyyyyyyyyxxccc where:

- *ууууууууу 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 process for the creation of ICPs was examined.

Audit commentary

ICP numbers are created in the ICP access management database. The process for the creation of ICPs was examined, and all ICPs are created in the appropriate format.

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

Audit commentary

Each active ICP has a single loss category, which clearly identifies the relevant loss factor.

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 ICP creation process was reviewed. The event detail file and registry list were examined to determine compliance.

Audit commentary

NELS creates all ICPs at the "Ready" status.

As discussed in **section 3.3**, ICP 0000201737CTE10 was recorded on the registry at the "New" status due to the nominated trader details being missed on the registry but was electrically connected on 28/11/17.

Monitoring of ICPs with the "New" and "Ready" status is discussed in section 3.14.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 3.13	1 ICP incorrectly recorded at the "new" status.		
With: Clause 13	Potential impact: Low		
Schedule 11.1	Actual impact: Low		
	Audit history: None		
From: 28-Nov-17	Controls: Moderate		
To: 05-Jun-18	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they will mitigate risk most of the time but there is room for errors to occur. The risk rating is low this affected one ICP.		nost of the time but there
Actions ta	aken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	t t	05/06/2018	Identified
A review of ICP identified that the Proposed Retailer on the Registry field was left blank in error. This error has been corrected on the Registry and the Retailer has now picked up the ICP.			
Preventative actions taken to ensure no further issues will occur		Completion date	
Nelson Electricity staff reminded of the importance of the Proposed Retailer field for New ICP's and to ensure the field is populated.		30/06/2018	
Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle. This validation process will identify any New ICP's with errors including Nominated Retailer.			

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 process to monitor ICPs at new and ready status was reviewed. The event detail file and registry list were examined to determine compliance.

Audit commentary

All new connections are managed via work files. The volume of these (30 new connections on average annually) is such that the business has good visibility and management of new connections.

Examination of the list file found no ICPs at the "New" or "Ready" statuses for more than 24 months.

Audit outcome

Compliant

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

Audit observation

The list file as at 15/5/2018 was examined.

Audit commentary

NELS does not supply any embedded generation stations with a capacity of 10 MW or more.

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

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

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

Audit observation

The management of registry updates was reviewed.

The event detail file from 1/8/17 to 15/5/18 was reviewed to determine compliance. An extreme case sample of 10 backdated events (or less if there were no more than ten) by type were reviewed to determine the reasons for the late updates. This included address, network (excluding the updating of the initial electrical connection date which is discussed in **section 3.5**), pricing, and status events. No NSP changes were made as NELS has only one NSP for the ICPs it is responsible for.

Audit commentary

NELS updates the registry directly for any changes to an ICP. They were unaware in relation to changes that the event date indicates the date the change is effective from. As a result of this, the effective date for some changes were defaulting to the last event date and therefore appear to be backdated. As discussed in **section 3.4**, the data dictionary in the registry defines the event date as follows:

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

Therefore, the event date should be the date from which the change takes effect.

Address events

256 address updates were identified. 250 (97.6%) were updated within three business days. 11 ICPs were updated late and this was due to the issue identified above, where the event date wasn't changed in the registry and therefore defaulted to the last event date and these appear to be backdated. This is recorded as non-compliance.

Network events

24 network events not relating to population of initial electrical connection dates or ICP creation were identified. The timeliness of the initial electrical connection updates is discussed in **section 3.5**.

19 of these updates relate to the updating of distributed generation. This process is discussed in **section 4.6**. 14 (74%) of these were updated within three business days of the event. The remaining five updates were made greater than three days. These were examined and found these were due to the same issue identified above, where the event date wasn't changed in the registry and therefore defaulted to the last event date. This is recorded as non-compliance. The remaining five updates related to unmetered load detail updates. This process is discussed in **section 4.6**. Four of these were updated greater than three days from the effective date. These were examined and found that these were backdated to provide correct and accurate information and therefore whilst technically non-compliant for backdating, NELS have complied with the requirement to provide complete and accurate information to assist the trader with ensuring that the unmetered load details are recorded in the registry in the recommended format.

Pricing events

NELS will backdate pricing events, but only if it is found that the customer has been billed incorrectly. This meets the requirement to provide correct and accurate information but does cause a technical non-compliance for the late updating of the registry in these instances.

772 pricing updates were identified. 649 (84%) were updated within three business days of the event date. 123 (16%) of these were updated more than three business days after the event. 84 of these were correction from the last audit and relate to the removal of the winter demand details from the chargeable capacity field. This information is now populated in the "Distributor Installation details" field on the registry. A further 39 of these were backdated 253 days or more. These were due to the same issue identified above where the event date wasn't changed in the registry and therefore they defaulted to the last event date. The ten latest updates were checked to confirm this finding. These changes all related to the correction of the chargeable capacity identified in the last audit. This is recorded as non-compliance.

Status events

The process is discussed in **section 4.11.** 21 status updates to decommissioned were identified. 18 (85.7%) of these were updated more than three business days after the event. Only four of these were updated more than 30 business days after the event. The ten latest updates were reviewed and found that these were updated late as NELS was unaware that the three day rule to update the registry applied to decommissioning updates as well. NELS has updated their process to ensure that these updates are carried out where possible within three days of the event. I note that NELS updates can be delayed due to the trader updating their status event which in turn causes NELS to breach.

The backdating of events to the registry is recorded as non-compliance.

Audit outcome

Non-compliance	Des	cription	
Audit Ref: 4.1	Some price, network, status, and address changes were backdated		
With: Clause 8 Schedule	Potential impact: Low		
11.1	Actual impact: Low		
	Audit history: Twice		
From: 07-Jul-00	Controls: Moderate		
To: 05-Jun-18	Breach risk rating: 2		
Audit risk rating	Rationale for	audit risk rating	
Low	Controls are rated as moderate as they v is room for errors to occur.	will mitigate risk n	nost of the time but there
	The risk rating is low as the volume of late changes that directly affect reconciliation are small.		
Actions ta	aken to resolve the issue	Completion date	Remedial action status
Non-Compliance accepted	t	13/06/2018	Identified
Nelson Electricity now ful the date from which the d	ly recognises the Event Date should be change takes effect.		
The non-compliances revolved around not appreciating the usage of the Event Date field. Now this has been clarified, there is no reason that this type of non-compliance will reoccur.			
Nelson Electricity also recognises the requirement to update the registry within three days of an event but if a correction to meet the requirements of this clause is identified then the event should be backdated			
Preventative actions taken to ensure no further issues will occur		Completion date	
Date field and importance reminded that if a correct	minded of the importance of the Event of the three days to update. Staff also ion to meet the requirements of this he event should be backdated	30/06/2018	
Supporting information w backdated events.	ill continue to be retained for any		

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

The process to determine the correct NSP was examined. The registry list and event detail report were reviewed to determine compliance.

Audit commentary

There is no uncertainty regarding NSP and ICP relationships on the NELS network, as there is only one NSP on which the ICPs are connected and one balancing area. The NSP for each ICP is notified to the registry as part of the new connections process.

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 three business days after receiving a request for that information.

Audit observation

The management of customer queries was examined.

Audit commentary

NELS seldom receives direct requests for ICP identifiers. ICP identifiers can be provided immediately on request once the address has been confirmed.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

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

Audit observation

The process to determine correct and unique addresses was examined. The registry list was reviewed to determine compliance for all active and inactive ICPs.

Audit commentary

Analysis of the list file found all addresses were readily locatable

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 management of this process was discussed.

Audit commentary

For new connections, this clause is well understood, and their new connection process requires that each ICP has one set of fuses.

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 from metering information
 - c) the actual chargeable capacity of the ICP in any other case
- the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is unable to assign the actual distributor installation details because the capacity or volume information required to assign the actual distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)
- the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)
- the status of the ICP (Clause 7(1)(k) of Schedule 11.1)
- designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)

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

Audit observation

The management of registry information was reviewed. The registry list and event detail reports were reviewed to confirm that all the ICP information is populated as required by this clause.

A typical sample of ten ICPs, or the whole population of data discrepancies found were checked and are detailed below.

Audit commentary

All ICP information was checked and confirmed compliant unless discussed below:

Chargeable capacity

In the last audit 31 ICPs with the price category code 0-UM and no chargeable capacity value on the registry were identified. These have all since been corrected.

The 107 HHR ICPs identified in the last audit where the winter demand details were recorded in the chargeable capacity field has been corrected. As detailed in **section 4.1**, these details are now recorded in the "Distributor Installation details". Compliance is confirmed.

Distributed generation

NELS require all customers who wish to install distributed generation to complete an online application form for all installations under 10kW. Any applications over 10kW need to make contact directly with NELS in addition to completing the online application to get these connected. Once these have been approved by NELS the customer is advised and told to get in touch with their retailer. Once the installation has been completed the customer is required to sign a declaration of the installation and provide this back to NELS. Vircom EMS, on behalf of NELS, then carry out a final inspection and the metering is changed at the same time (this is done on behalf of the trader). NELS update the registry once they have the completed paperwork returned from the field. The timeliness of this is discussed in **section 4.1**.

Examination of the list file found 117 ICPs recorded with generation capacity. All have generation capacity and fuel type recorded correctly in the registry.

The list file contained two ICPs with an HHR profile and injection channels recorded on the meter, but the distributed generation fields were not populated. NELS have received no application from these sites and it is not confirmed that distributed generation is installed. NELS are investigating these sites to confirm if there is any distributed generation installed therefore I have not recorded non-compliance. I recommend in **section 2.1**, additional checks be carried out to identify such installations.

Unmetered load

Part 11 states the distributors must provide unmetered load type and capacity of the unmetered load to the registry "if known".

NELS has an unmetered load recorded for all active ICPs with the UML flag set to Y with the exception of two ICPs. I compared the load values against the traders recorded values and found that all matched.

ICP 0000200190CTC63 is indicated by the trader as a DUML ICP therefore the load is reconciled using a database and the unmetered load value is not required to be recorded in the registry. I recommend that NELS add this detail to the Distributor UML load field.

Recommendation	Description	Audited party comment	Remedial action
Distributors to provide ICP information	Update registry for ICP 0000200190CTC63 to indicate this is a DUML ICP.	Nelson Electricity has updated ICP on Registry to include "DUML" in the "Unmetered Load Details – Distributor" field.	Cleared

ICP 0000181817CTFDB was examined and found that this is historic and NELS do not know the values associated with this unmetered load therefore the details are not loaded to the registry.

Initial electrical connection date

36 ICPs were electrically connected during the audit period and all had an initial electrical connection date recorded.

Analysis of the list file found six historic ICPs with no initial electrical connection dates. Five of these have never been populated. ICP 0000201345CT7C9 did have a date populated but this as stripped from the registry with a subsequent network event.

Analysis of the list file found 44 ICPs that were electrically connected prior to October 2013 and therefore are not expected to have an initial electrical connection date recorded but do. A sample of ten of these were checked and found that the date of the distributed generation installation has been incorrectly recorded on the registry. This was done due to a misunderstanding.

NELS have corrected the 50 ICPs above, they hadn't previously been corrected due to a misunderstanding that these events shouldn't be backdated greater than three days.

ICP 0000201737CTE10 is at the "new" status with an initial electrical connection date populated. This is discussed in **section 3.5**. The initial electrical connection date has been populated correctly.

Audit outcome

Non-compliance	Description			
Audit Ref: 4.6	6 ICPs with the initial electrical connection date missing.			
With: Clause 7(1)	44 ICPs with an incorrect initial electrical connection date populated.			
Schedule 11.1	Potential impact: Low			
	Actual impact: Low			
From: 16-Nov-11	Audit history: Twice			
To: 05-Jun-18	Controls: Moderate			
	Breach risk rating: 2			
Audit risk rating	Rationale for audit risk rating			
Low	Controls are rated as moderate as they will mitigate risk most of the time but there is room for errors to occur.			
	The risk rating is low as this has no direct impact on reconciliation.			
Actions taken to resolve the issue		Completion date	Remedial action status	
Non-Compliance accepted		13/06/2018	Identified	
All issues with ICP's identified have been remedied.				
The non-compliances revolved around not appreciating the usage of the Initial Energisation Date field. Now this has been clarified, there is no reason that this type of non-compliance will reoccur.				
Preventative actions take	en to ensure no further issues will occur	Completion date		
Nelson Electricity staff reminded of the importance of the Initial Energisation Date field and to ensure the field is only populated for Initial Energisation and not for any subsequent change like connection of distributed generation.		30/06/2018		
Registry data validation and validation between the Nelson Electricity ICP database and the Registry will now be undertaken monthly. This process will be undertaken as part of the monthly retailer billing cycle. This validation process will identify any New ICP's with errors including issues with Initial Energisation Date.				
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 management of registry information was reviewed. The event detail report and registry list were reviewed to determine compliance.

Audit commentary

NELS is able to confirm these details prior to electrical connection of the ICP. 36 new connections were completed and made active during the period reviewed. The backdated price category changes were checked and confirmed that none were related to new connections.

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 registry list was reviewed to determine compliance.

Audit commentary

NELS do not populate GPS co-ordinates but all ICPs are plotted in NELS GIS system and therefore the GPS co-ordinates are known.

Audit outcome

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

Processes to manage the ready status were reviewed.

The event detail report and registry list were reviewed to identify and check ICPs at the "Ready" status. And none were found.

Audit commentary

NELS creates all ICPs at the "Ready" status with a proposed trader recorded, and only one price category code exists. One ICP was incorrectly recorded on the registry at the "New" status due to the nominated trader details being missed on the registry but was electrically connected on 28/11/17. This is recorded as non-compliance in **section 3.13**.

The records of 10 recently created ICPs were examined and compliance is confirmed.

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 event detail report and registry list were reviewed to identify ICPs at distributor status.

Audit commentary

NELS does not have any embedded networks or shared unmetered load; therefore, there are no ICPs with a "Distributor" status. This was confirmed by checking the list file.

Audit outcome

Compliant

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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 process for decommissioning ICPs was examined. The event detail report and registry list were reviewed to identify ICPs at the decommissioned status and ICPs that are at the "Ready for decommissioning" status.

Audit commentary

NELS receives requests for decommissioning from traders, local contractors or customers. They have a well-documented process in place for the management of decommissioning. Customers are advised to contact their retailer to arrange the removal of meters etc before a decommissioning can be completed. All decommissions require a signed decommissioning form confirming that the NELS contractor has completed the required checks before a site is deemed to be decommissioned. A sample of ten decommissioned ICPs were checked to confirm that the process was followed.

There were four ICPs at "Ready for decommissioning" status when the list file was provided. One has since been returned to active and switched to a different retailer. The remaining three have been ready to decommission since 2009, 2015 & 2016 respectively. These were checked during the site audit and found that NELS has a good understanding of each site. No request for decommissioning have been received by NELS and it is expected that these sites will require supply again in the future therefore they have not been decommissioned.

Late updates to decommissioned status are recorded as non-compliance in section 4.1.

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 two 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 code table on the registry was examined.

Audit commentary

No new pricing codes have been entered since 1/04/2010.

Audit outcome

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 category code table on the registry was examined.

Audit commentary

No new loss factors have been created during the audit period.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

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

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

Audit observation

The loss category code table on the registry was examined.

Audit commentary

No loss factors were changed during the audit period.

Audit outcome

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

If the distributor is creating or decommissioning an NSP that is an interconnection point between two local networks, the distributor must 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 two 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.

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

The NSP table was reviewed.

Audit commentary

NELS has not created or decommissioned any NSPs during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

No NSPs have been created or decommissioned during the audit period.

Audit outcome

Compliant

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 NSP table was reviewed.

Audit commentary

No balancing area changes have occurred during the audit period.

Audit outcome

Compliant

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 one 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 NSP table was reviewed.

Audit commentary

NELS has not created any new embedded networks during the audit period.

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 three business days after the change takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

No balancing area changes have occurred 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 one month before the transfer.

Audit observation

The NSP table was reviewed.

Audit commentary

No existing ICPs became NSPs during the audit period.

Audit outcome

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 three business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

NELS has not initiated the transfer of any ICPs during the audit period.

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

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 supply point table was examined and evidence of all updates made to the Reconciliation Manager via the portal.

Audit commentary

NELS have responsibility for two interconnection points. The NSP table supply point table was reviewed:

Distributor	NSP POC	Description	МЕР	Certification Expiry
NELS	FND0112	Founders		Exemption in place
NELS	HVN0331	HAVEN RD	FCLM	2/06/2019

As detailed in **section 1.1**, NELS have an exemption to not have the FND0112 NSP metered.

Audit outcome

Compliant

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

NELS have not connected any new NSPs during the audit period.

Audit outcome

Compliant

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 one months 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.

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Audit commentary

NELS have not initiated any changes of network owner.

Audit outcome

Compliant

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

The NSP supply point table was reviewed.

Audit commentary

There have been no MEP changes to the NELS interconnection points.

Audit outcome

Compliant

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

The NSP supply point table was reviewed.

Audit commentary

NELS has not initiated the transfer of any ICPs during the audit period.

Audit outcome

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

The NSP supply point table was reviewed.

Audit commentary

NELS has not initiated the transfer of any ICPs during the audit period.

Audit outcome

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 registry list was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

NELS does not have any shared unmetered load connections. The Nelson City Council DUML audit stated that 19 private lights had been passed to the networks (Network Tasman and NELS) but NELS has received no notification and therefore no action has been taken.

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 registry list was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

As detailed in **section 7.1**, NELS have no shared unmetered load connections on their network.

Audit outcome

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

The process of reviewing loss factors was reviewed.

Audit commentary

NELS's monitor their losses on a rolling 12 month basis and will invoke a formal review if they fall more or less than their published loss factors (overall expectations of losses between 3.5%-3.8%). The last formal review was undertaken in December 2015 when they lowered their loss factors by 1%.

I was provided by the Electricity Authority the reconciliation losses which indicate that losses are potentially too low by 1%. This is detailed in the graph below. I note that it tracks losses from the time NELS moved from being an embedded network to a grid connected network. I recommend that NELS liaise with the Electricity Authority as to the data used to construct this graph as this indicates a different finding to that of NELS' own analysis.



Recommendation	Description	Audited party comment	Remedial action
Creation of loss factors	Liaise with the Electricity Authority to compare their loss factor calculations vs NELS own analysis to confirm if losses are set correctly.	Nelson Electricity will engage with the Electricity Authority to get an understanding of their Loss Factor calculations. If any issue is identified, then a review of Nelson Electricity's loss factors will be undertaken.	Identified

Audit outcome

CONCLUSION

This audit found eight non-compliances and makes five recommendations. I note that four of the noncompliances found relate to one ICP that was recorded as the "New" status on the registry but was electrically connected. If NELS adopts the recommendations in this audit I am confident that such situations will be unlikely to occur in the future. The next audit frequency table indicates that the next audit be due in 12 months. I have considered this result in conjunction with the response from NELS and I recommend that the next audit be due in 18 months.

PARTICIPANT RESPONSE

NELS have reviewed this report and their comments are recorded within the report. No further comments were provided.