ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT

For

WEL NETWORKS LIMITED

Prepared by: Rebecca Elliot

Date audit commenced: 10 July 2023

Date audit report completed: 9 October 2023

Audit report due date: 15-Nov-23

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EXECUTIVE SUMMARY

This distributor audit was performed at the request of **WEL Networks Ltd (WEL)** to encompass the Electricity Industry Participation Code requirement for an audit as required by clause 11.10 of part 11. The audit was carried out at WEL's premises in Hamilton on October 26th, 2023.

The audit was conducted in accordance with the Guideline for Distributor Audits version 7.2, which was produced by the Electricity Authority.

WEL continue to have mostly well managed and robust processes in place. The team has grown over the audit period as the network continues to grow.

Overall, the level of compliance was high, and the team have a good understanding of the compliance requirements. I have made some recommendations that, if adopted, will further improve this. Specifically,

- review the process to follow up where the expected installation date of distributed generation has passed, and no documentation has been received,
- that the Well's livening report is improved, and that the discrepancy process includes where the initial electrical connection date is different to the active date or the meter certification date especially if it is earlier; this reporting is available in the audit compliance reporting, and
- recommend that WEL review the loss factor table for all parent networks it has embedded networks on and confirm that the loss factors applied are correct.

This audit found ten non-compliances and makes eight recommendations. The non-compliances relate mainly to minor errors in and late updates of registry information.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of 16, which results in an indicative audit frequency of 12 months. I have considered this in conjunction with WEL's responses and agree with this recommendation.

I thank Steven and the team for their cooperation during the audit.

The matters raised are detailed in the table 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 and loss factor information not complete and accurate in all instances.	Moderate	Low	2	Identified
Timeliness of Provision of ICP Information to the registry manager	3.4	7(2) of Schedule 11.1	One ICP made ready after trading had commenced at the ICP.	Strong	Low	1	Identified
Timeliness of provision of initial electrical connection	3.5	7(2A) of Schedule 11.1	Five out of a sample of ten (of a possible 89 ICPs) had the initial electrical connection dates updated greater than ten days from the event date.	Strong	Low	1	Identified
Changes to registry information	4.1	8 of Schedule 11.1	Four late address updates. Six late decommissioning status updates. 282 late distributed generation updates.	Moderate	Low	2	Identified
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	One ICP with the incorrect NSP assigned.	Strong	Low	1	Identified
ICP location address	4.4	2 Schedule 11.1	13 ICPs with insufficient address details to make them readily locatable.	Strong	Low	1	Identified
Provide information to the registry	4.6	7 (1) (m)&(p) of Schedule 11.1	Distributed generation details missing for three of a sample of ten ICPs checked of a possible 74 ICPs. Distributed generation event dates not reflective of connection date.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			All ten sampled of a possible 65 ICPs where the IECD ≠ and active date = MCD recorded with the incorrect initial electrical connection date. Of the remaining 17 ICPs with date mismatches two had the incorrect initial electrical connection date dates recorded. ICP 0000011088WECB8 had the incorrect unmetered load details recorded. Unmetered load (shared or standard) ICPs not created to record the load for 14 private lights resulting in an estimated under submission of 4,130 kWh per annum. Two LE ICPs incorrectly recorded with reconciliation type "non-dedicated".				
Management of "decommissioned" status	4.11	Clause 20 Schedule 11.1	Decommission event dates incorrect for one of ten ICPs sampled.	Strong	Low	1	Identified
Responsibility for metering information for NSP that is not a POC to the grid	6.8	10.25(1) and 10.25(3)	Incorrect meter expiry date recorded for HMB0111.	Moderate	Low	2	Identified
Creation of loss factors	8.1	11.2	Calculation of embedded network loss factors has not been undertaken to ensure that loss factors are accurate.	Weak	Low	3	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Future Risk Rating						16	
Indicative Next Audit Frequency						12 months	

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
Temporary electrical connection	3.8	Confirm the initial electrical connection dates for ICPs: • 0000052096WECFB, • 0000052098WEF60, • 0000054430WECAA, and • 0000052725WED8B.
Management of ICPs at new and ready.	3.14	I recommend that WEL contact the traders with the most ICPs in these statuses that have not responded to arrange a meeting to get these progressed.
ICP location address	4.4	Populate the GPS coordinates or street number for the 13 ICPs with insufficient details to make them readily locatable.
Distributed generation process improvements	4.6	I recommend WEL review the follow up process where the expected installation date of distributed generation has passed, and no documentation has been received. Check the high-risk gas and electricity database and EIEP1 reports to identify ICPs where distributed generation is present that WEL Networks have no record of.
Accuracy of initial electrical connection dates	4.6	I recommend: • that the initial electrical connection date be provided in the Wells livening report rather than "outcome" which could mean the date paperwork is processed, and • the discrepancy process includes where the initial electrical connection date is different to the active date or the meter certification date especially if it is earlier; this reporting is available in the audit compliance reporting.
Unmetered load	4.6	Work with the traders to confirm the unmetered load operational hours and connected load values.
Review embedded loss factor codes	8.1	I recommend that WEL review the loss factor table for all parent networks it has embedded networks on and confirm that the loss factors applied are correct.

ISSUES

Subject	Section	Issue	Description

Determining the date of the meter update in the RM portal	6.8	The code requires the certificate to be provided no later than ten days after certification, but the RM portal has no audit trail.	Provide an audit trail to indicate when these uploads are made as required by the code.

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

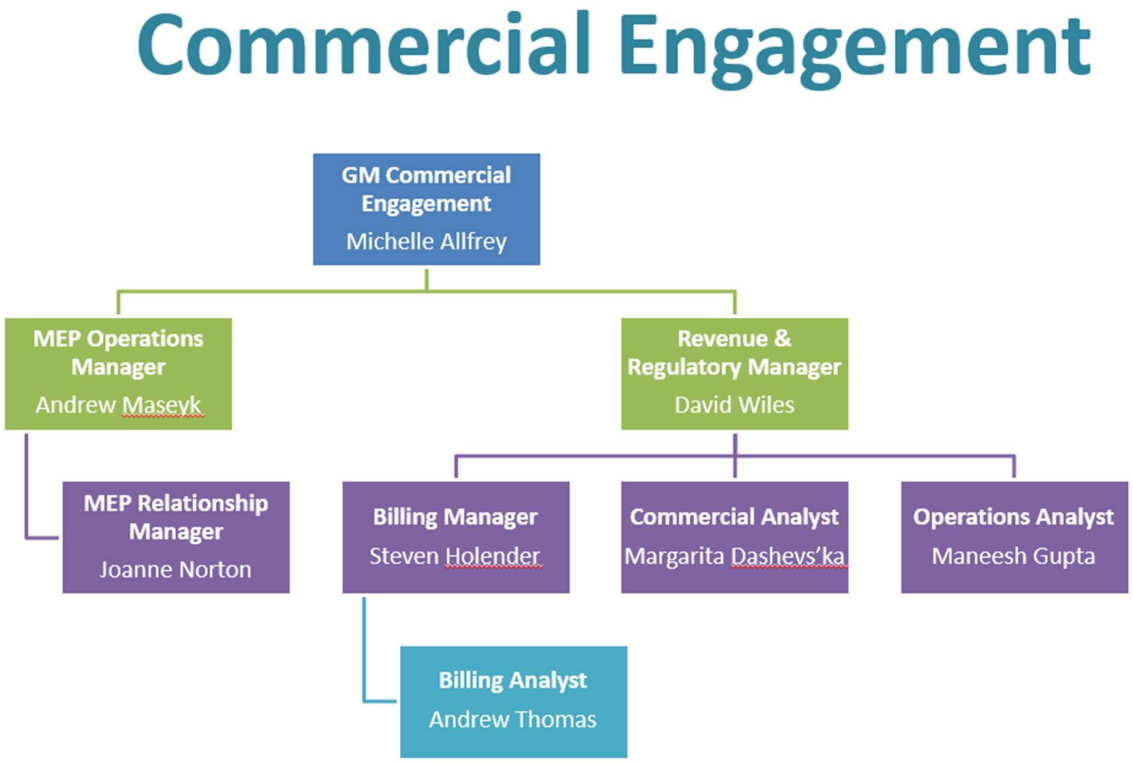
The Authority website was checked to determine whether there are code exemptions in place.

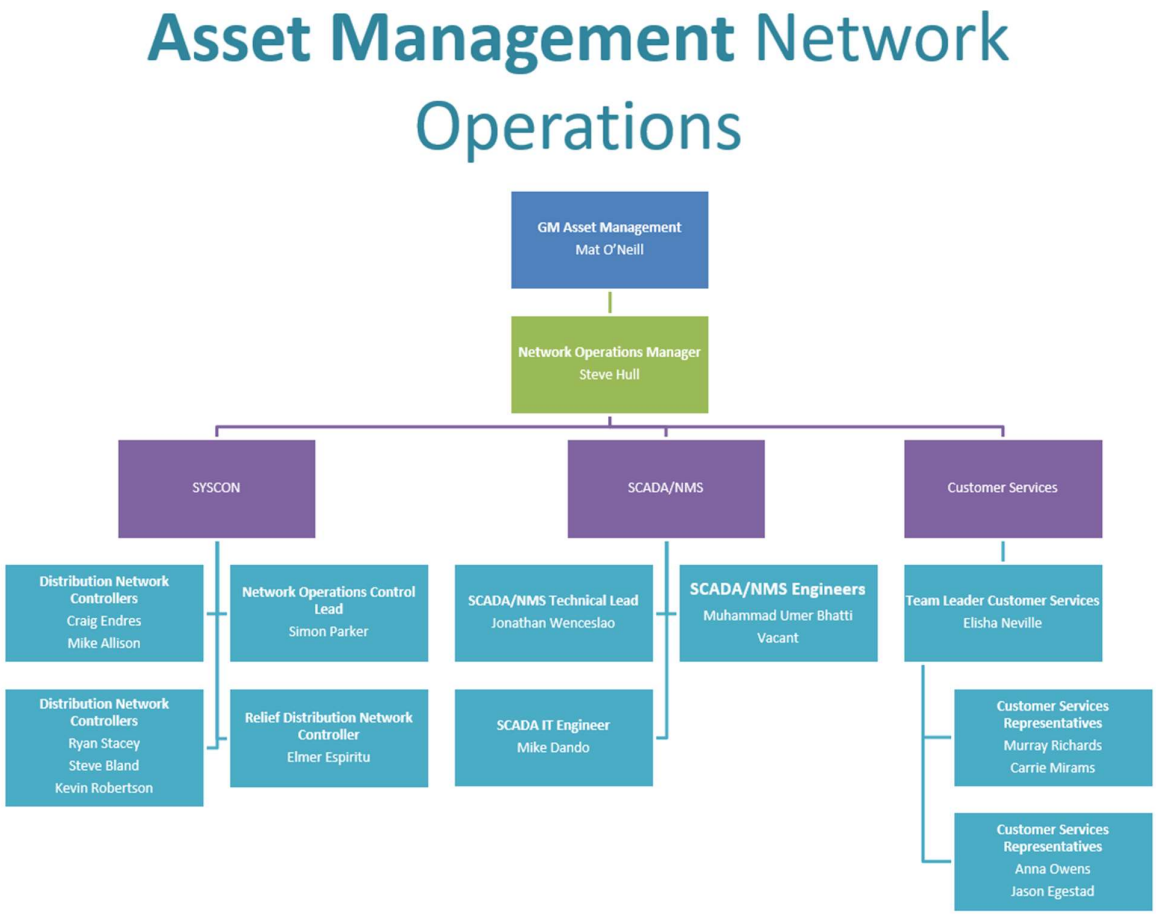
Audit commentary

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

1.2. Structure of Organisation

WEL provided a copy of the relevant part of the organisation chart:





1.3. Persons involved in this audit

Auditors:

Name	Company	Role
Rebecca Elliot	Veritek Limited	Auditor

WEL personnel assisting in this audit were:

Name	Title / Role
Andrew Thomas	Billing Analyst
Steven Holender	Billing Manager
Maeesh Gupta	Operations Analyst

1.4. Use of contractors (Clause 11.2A)

Code reference

Clause 11.2A

Code related audit information

A participant who uses a contractor

- *remains responsible for the 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

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

Audit commentary

WEL has provided the list below of sub-contractors authorised to perform livening activities on their network.

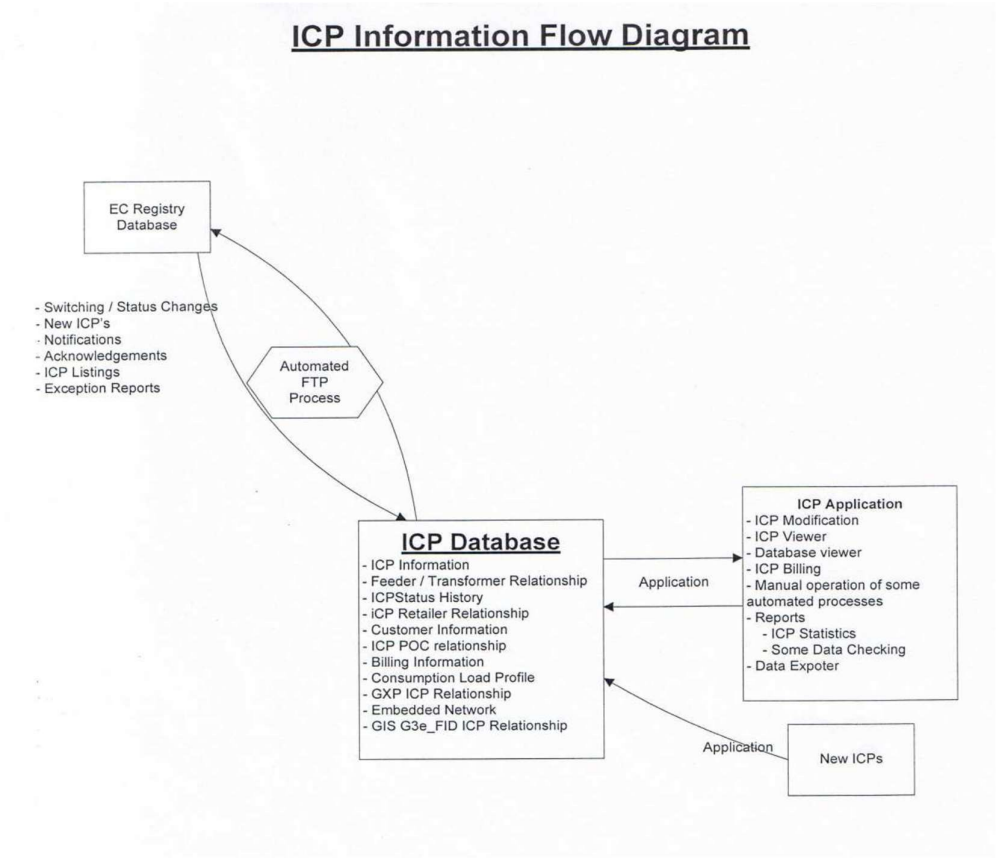
Region	Contractor
Hamilton	Wells Instrument and Electrical Ltd (Also DUML livening agent) - Brian Hobern
Auckland	Sels Electrical Ltd - Pat Carmody

1.5. Supplier list

WEL has provided the list in **section 1.4** of sub-contractors authorised to perform livening activities on their network.

1.6. Hardware and Software

WEL provided the following diagram that details hardware and software used in the processes to be audited. There have been no changes made during the audit period.



1.7. Breaches or Breach Allegations

WEL had no breaches recorded in relation to the scope of this audit.

1.8. ICP and NSP Data

The NSP mapping table was examined and there have been no NSPs commissioned or decommissioned during the audit period:

Dist	NSP POC	Description	Parent POC	Parent Net work	Balancing Area	Net work type	Start date	No of active ICPs
WAIK	BRI0111	Brick St	HEP0331	UNET	BRI0111WAIKE	E	1/05/2008	17
WAIK	FLG0111	FLAGSHIP	WIR0331	VECT	FLG0111WAIKE	E	1/05/2008	3
WAIK	HAM0111	HAMILTON			WAIKATOWAIKG	G	1/05/2008	10,889
WAIK	HAM0331	HAMILTON			WAIKATOWAIKG	G	1/05/2008	56,873
WAIK	HLY0331	Huntly			WAIKATOWAIKG	G	10/10/2008	9,650
WAIK	HMB0111	Half Moon Bay	PAK0331	VECT	HMB0111WAIKE	E	1/05/2008	60
WAIK	HUL0111	Hulme Pl	HEP0331	UNET	HUL0111WAIKE	E	1/05/2008	38
WAIK	JEF0111	JEFFS ROAD	OTA0221	VECT	JEF0111WAIKE	E	1/05/2008	884
WAIK	KIR0111	KIRKDALE	TAK0331	VECT	KIR0111WAIKE	E	1/05/2008	267
WAIK	MTG0111	Mangatangi	HLY0331	WAIK	WAIKATOWAIKG	I	1/08/2017	-
WAIK	OAK0111	OAKLANDS	CBG0111	WAIP	OAK0111WAIKE	E	1/05/2008	178
WAIK	POR0111	Porchester Rd	TAK0331	VECT	POR0111WAIKE	E	10/07/2009	267
WAIK	RYN0111	RYAN PLACE	WIR0331	VECT	RYN0111WAIKE	E	1/05/2008	71
WAIK	STG0111	SOUTHGATE	WEL0331	UNET	STG0111WAIKE	E	1/05/2008	109
WAIK	TPH0111	Te Pahu	HAM0331	WAIK	WAIKATOWAIKG	I	2/11/2019	-
WAIK	TWH0331	TE KOWHAI			WAIKATOWAIKG	G	1/05/2008	20,800
							Total	**100,025**

There are 11 embedded networks connected to the WEL network. TRS0011 was recorded as a new embedded network in the last audit but the livening date falls in this audit period, hence the creation of the LE ICPs is detailed in **sections 3.2** and 4.10. Four embedded networks have a start date within in the audit period, but these are due to a change of reconciliation participant agent and are not new networks. The details for these are shown in the table below:

Distributor	NSP POC	Description	Parent POC	Balancing Area	Network Type	Start Date
KIPT	KCH0011	KIWI CENTREPLACE WEST	HAM0331	KCH0011KIPTE	E	**1/11/2022**
KIPT	KCH0012	KIWI CENTREPLACE EAST	HAM0331	KCH0012KIPTE	E	**1/11/2022**
KIPT	KCH0014	KIWI CENTREPLACE TOWER	HAM0331	KCH0014KIPTE	E	**1/11/2022**
TENC	KDH0011	10 WORLEY PLACE	HAM0331	KDH0011TENCE	E	1/06/2022
NZAL	NAT0011	500 Victoria Street Hamilton	HAM0331	NAT0011NZALE	E	1/02/2018
NZAL	NWH0011	WEL House	HAM0331	NWH0011NZALE	E	1/04/2010
TENC	TAW0011	TE AWA SHOPPING CENTRE	TWH0331	TAW0011TENCE	E	1/11/2014
TENC	THH0011	21 Home Straight Te Rapa	TWH0331	THH0011TENCE	E	**1/11/2022**
TENC	TRS0111	Ruakura Superhub	HAM0111	TRS0111TENCE	E	**26/07/2022**

Distributor	NSP POC	Description	Parent POC	Balancing Area	Network Type	Start Date
DMFL	WCW0011	WESTFEILD CHARTWELL	HAM0331	WCW0011DMFLE	E	1/09/2016
DMFL	WCW0111	WESTFEILD CHARTWELL	HAM0331	WCW0111DMFLE	E	1/09/2016

The list file as of 30 June 2023 was examined and found:

Status	Number of ICPs 2023	Number of ICPs 2022	Number of ICPs 2020	Number of ICPs 2019	Number of ICPs 2017
New (999,0)	0	2	0	0	0
Ready (0,0)	138	138	76	127	115
Active (2,0)	100,025	98,133	95,767	92,913	90,205
Distributor (888,0)	30	19	19	23	21
Inactive – new connection in progress (1,12)	269	470	222	182	176
Inactive – electrically disconnected vacant property (1,4)	1,204	1,196	1,130	1,113	1,158
Inactive – electrically disconnected remotely by AMI meter (1,7)	496	523	376	381	355
Inactive – electrically disconnected at pole fuse (1,8)	32	21	12	13	7
Inactive – electrically disconnected due to meter disconnected (1,9)	36	39	37	33	11
Inactive – electrically disconnected at meter box fuse (1,10)	4	3	6	3	1
Inactive – electrically disconnected at meter box switch (1,11)	3	2	4	1	-
Inactive – electrically disconnected ready for decommissioning (1,6)	0	2	0	16	28
Inactive – reconciled elsewhere (1,5)	3	3	2	2	2
Decommissioned (3)	9,876	9,411	8,709	7,963	7,149
Total	**112,116**	**109,962**	**106,360**	**102,770**	**99,228**

1.9. Authorisation Received

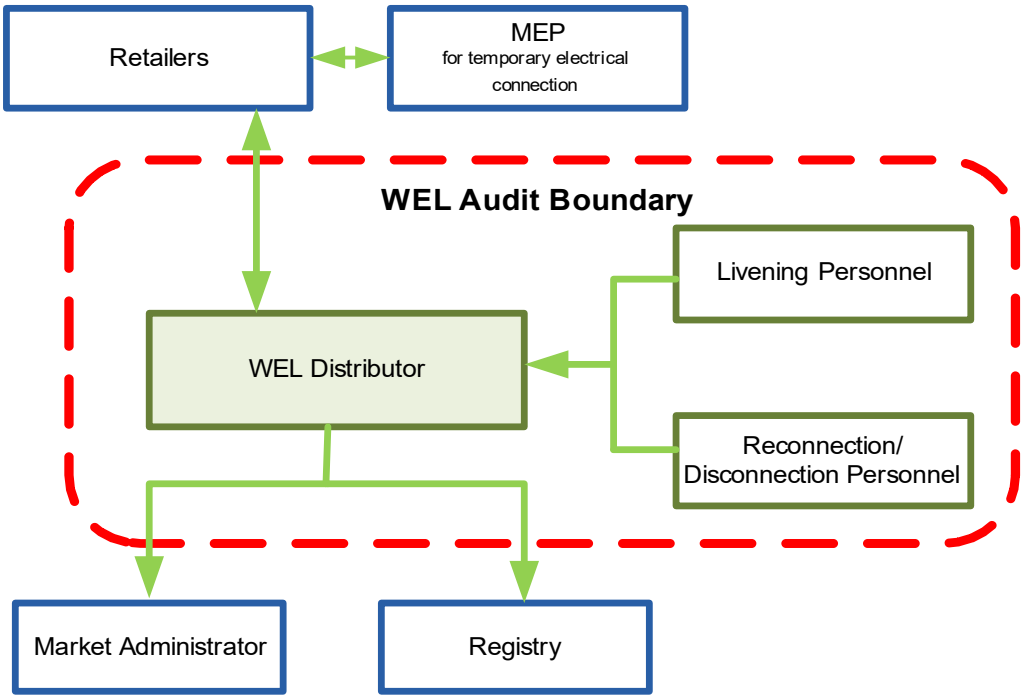
WEL provided a letter of authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit.

1.10. Scope of Audit

This distributor audit was performed at the request of **WEL Networks Ltd (WEL)** to encompass the Electricity Industry Participation Code requirement for an audit as required by clause 11.10 of part 11. The audit was carried out at WEL's premises in Hamilton on October 26th, 2023.

The audit was conducted in accordance with the Guideline for Distributor Audits version 7.2, which was produced by the Electricity Authority.

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



WEL owns and manages the traditional WEL network as well as a number of embedded networks. All activities covered by this audit are conducted at WEL's head office in Hamilton.

1.11. Summary of previous audit

I reviewed a copy of the previous audit report, conducted by Rebecca Elliot of Veritek Limited in August 2022. This audit found nine non-compliances and made nine recommendations. The current compliance status against the relevant clause and the status of the recommendations is detailed below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
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.	Still existing
Timeliness of provision of initial electrical connection	3.5	7(2A) of Schedule 11.1	Four ICPs out of a sample of ten ICPs initial electrical connection dates updated greater than ten days from the event date.	Still existing
Changes to registry information	4.1	8 of Schedule 11.1	A small number of registry event updates backdated greater than three days.	Still existing
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	Seven ICPs with incorrect NSP.	Still existing
Provide information to the registry	4.6	7 (1) (m)&(p) of Schedule 11.1	Distributed generation details missing. Distributed generation event dates not reflective of connection date. Two ICPs with an incorrect initial electrical connection date populated. Two ICPs with unmetered load discrepancies. Two ICPs with incorrect loss codes. 14 unmetered pay phones with incorrect hours of operation recorded with an annual load impact of 710 kWh of under submission if the distributor's load description was applied. Unmetered load (shared or standard) ICPs not created to record the load for 40 private lights resulting in an estimated under submission of 17,193 kWh per annum.	Still existing
Management of "decommissioned" status	4.11	Clause 20 Schedule 11.1	Decommission event dates incorrect for four ICPs (0076162158WE6E3, 0000473641WEBA7, 0000690634WE4F0, and 0079162425WE516).	Still existing

Subject	Section	Clause	Non-compliance	Status
Responsibility for metering information for NSP that is not a POC to the grid	6.8	10.25(1) and 10.25(3)	Certification for NSP KIR0111 not notified to RM within 20 business days of recertification.	Still existing
Notification of shared unmetered load ICP list	7.1	Clause 11.14(2) and (4)	Written notice not provided to affected parties for 40 private lights identified.	Cleared

Table of Recommendations

Subject	Section	Recommendation	Status
Review process for notification of IECD from livening agents to improve timeliness.	3.5	WEL works with its authorised livening agents to improve the timeliness and quality of the information being transferred between these parties.	Adopted
Include ICPs with registry status 1,12 to the monitoring of "new" and "ready" status process.	3.14	That WEL incorporates active monitoring of registry status 1,12 "new connection in progress" into their regular monitoring and escalation process to traders where these have not been made active within 12/24 months.	Adopted
Review process for monitoring distributed generation applications to improve timeframes for return of completion paperwork.	4.1	I recommend that WEL initiates follow ups with the installers for completion paperwork from the proposed installation date rather than the current 90-day application validity period.	Repeated in **section 4.6.**
Develop process to verify and validate unmetered load operational hours and connected load values.	4.6	Work with the traders to determine the correct values for the ICPs with unmetered load discrepancies.	Repeated
Review the DUML new connection process to ensure that once they are electrically connected, they can be accounted for in the settlement process.	4.6	That WEL works with both the respective DUML owners and their traders to develop and implement a DUML new connection process to ensure this additional load is captured and included in the settlement process in a timely manner.	Cleared
Completeness and accuracy of DUML load.	4.6	That WEL Networks works with the relevant traders and DUML owners to ensure all lights are being accounted for and these lights are being correctly assigned to the relevant NSP.	Adopted

Subject	Section	Recommendation	Status
Distributor to provide ICP information to the registry.	4.6	Investigate the 40 private lights identified from the Hamilton City Council RAMM database to determine how these lights will be reconciled.	In progress
Implement process to monitor UFE reports provided by the RM each month.	8.1	That WEL implements a process to actively monitor UFE trends on all their networks using the files provided by the Reconciliation Manager each month and escalate any unusual UFE results with traders to ensure submission volumes are sufficiently accurate for when loss factors are reviewed/revised.	Not adopted
Review embedded network loss factors to ensure running UFE sits with +/- 1%.	8.1	That WEL reviews the methodology used for calculating embedded network loss factors to ensure that running UFE sits with +/- 1%.	Repeated

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

WEL's data management processes were examined. The registry list file as of 30 June 2023 and the audit compliance reports for the period 1 July 2022 to 30 June 2023 were examined to confirm compliance.

Audit commentary

Information is validated between WEL's database and the registry on a daily basis, and error logs are created if any fields are different. These are reviewed daily and are investigated. I recommend some additional discrepancy checks are added in **section 4.6** which will further improve accuracy.

Analysis of the list file and audit compliance report found information that was not complete and accurate. This is detailed in **sections 4.2, 4.6, 4.11** and **8.1**. Specific examples are:

- incorrect NSP for one ICP,
- distributed generation details missing,
- incorrect event dates applied for distributed generation details,
- all ten sampled of a possible 65 ICPs where the IECD $\neq$ and active date = MCD recorded with the incorrect initial electrical connection date,
- two LE ICPs incorrectly recorded with a non-dedicated reconciliation type, and
- calculation of embedded network loss factors has not been undertaken to ensure that loss factors are accurate.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: 11.2(1) & 10.6(1) From: 01-Jul-22 To: 30-Jun-23	Registry and loss factor information not complete and accurate in all instances. Potential impact: Low Actual impact: Low Audit history: Multiple 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 improvement. The audit risk rating is assessed to be low as the overall number of ICPs affected and the calculated impact of data inaccuracies on reconciliation is minor.

Actions taken to resolve the issue	Completion date	Remedial action status
WEL notes that that the number of registry updates and actions completed is great in number, but the number of variances or perceived inaccuracies is extremely low and has minimal or no impact. WEL reviews discrepancies on a daily basis but are reliant often on other parties such as retailers and livening agents in giving us correct information in a timely manner. We have evidence where we have pushed parties for information or to recheck information provided and will continue to do so.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
WEL will continue to work with necessary parties to remind them of their obligations to provide information required for registry updates in a timely manner. Any recommendations provided in the audit will be taken onboard in the manner that they were intended and implemented where practical and meaningful.	October 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

WEL's data management processes were examined. The registry list file as of 30 June 2023 and the audit compliance reports for the period 1 July 2022 to 30 June 2023 were examined to confirm compliance.

Audit commentary

WEL has a fully automated registry update process, which ensures all information listed in this clause is provided to the registry. This process applies the date of the update as the event date in all cases resulting in the need to perform manual registry updates where the event date occurs in the past.

A snapshot of the registry information is downloaded daily, and a comparison is made with the WEL's database. Any discrepancies identified are investigated and corrected when found. Evidence of corrections being made as required was shown when examining examples as discussed in **section 3.5, 4.1**.and **4.6.**

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 un-bridge 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

The WELs process for bridging control devices was examined.

Audit commentary

The processes to manage this has not changed during the audit period. WEL is also an MEP and a number of field technicians are trained and authorised as metering technicians. Where WEL is also the MEP the field technician is able to replace the seals as MEP. Where WEL is not also the MEP then WEL notifies the relevant MEP to enable this resealing task to be undertaken. WEL provided three examples where they were not the MEP and correct notification was provided.

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

I checked all relevant communication methods to ensure compliance is achieved.

Audit commentary

The website contains a page with the Utilities Disputes contact details. This page is accessed from a link on the home page.

Outbound email and addressed communications to consumers were checked and contained appropriate details.

The IVR messages contains reference to Utilities Disputes as expected for all incoming calls.

Facebook and chat are not used for one to one customer interactions. These are directed to email and the Utilities Disputes service is promoted at that point.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The new connection process was examined in detail and is described in **section 3.2**.

A diverse characteristics sample of 30 new connection applications of the 2,158 created since 1 June 2022 were checked from the point of application through to when the ICPs were created. The sample included ICPs with:

- various meter categories (including category 3 and above),
- various proposed traders,
- various price categories,
- connection to different NSPs
- with and without distributed generation,
- distributed unmetered load ICPs, and
- distributor only LE ICPs.

Audit commentary

WEL creates ICPs as required by clause 1 of schedule 11.1. The sample checked confirmed that they were created compliantly.

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 31 new connection applications of the 2,158 created since 1 June 2022 were checked to determine whether the ICPs had been created within three business days of a request by a trader.

Audit commentary

All requests for new connections are received from the customer's agent and are generally lodged via the online portal. Some are received via email and these are entered into WEL's system. New connection applications are split into two groups:

- standard applications relating to metered single-phase supplies without distributed generation and a requested supply of less than 63 amps; these can be reviewed and approved by the new connections team, and
- non-standard applications relating to all other scenarios; these require review and approval by the Engineering team to ensure the proposed new connection does not impact the network performance and whether any network reconfiguration will be required before this new connection can be undertaken.

Upon receipt of a completed application the portal automatically sends on the application to the nominated trader to accept the nomination. If any applications are not able to be created within three business days due to the application review and approval process still being in progress, then a notification is sent to the applicant advising of the reason for delay. All applications pending are checked on a daily basis to ensure these are attended to in the required timeframe. The sample checked confirmed compliance.

Three LE ICPs were requested for the connection of the TRS0111 embedded network which was electrically connected on 26/07/2022. All were created within three days of the request.

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

A diverse characteristics sample of 30 new connection applications of the 3,515 created since 1 January 2021 were checked from the point of application through to when the ICP was created, to confirm the process and controls worked in practice.

Audit commentary

The process for updating the registry is automated for all fields. 2,158 ICPs were created during the audit period. A sample of 30 new connection applications were reviewed and all had the correct information populated as required by this clause.

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 new connection process was examined. The audit compliance report for the period from 1 July 2022 to 30 June 2023 was examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

The WEL system updates occur on a nightly basis. 2,158 ICPs were created since 1 July 2022. Of those, 1,837 have been completed and connected. I reviewed these completed new connections to identify ICPs where information was provided late. The audit compliance report identified one ICP where the status change to "ready" occurred later than the electrical connection date:

ICP	Ready input date	Electrical connection date	Comments
0000052486WEA57	4 September 2022	4 April 2022	The ICP was created at on 4 April 2022 but was then set to decommissioned "set up in error" as advised by the trader. This was in error and was then moved back to "ready" on 4 September 2022 causing this to be made "ready" after electricity was being traded at the ICP.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.4 With: 7(2) of Schedule 11.1 From: 04-Apr-22 To: 04-Sep-22	One ICP made ready after trading had commenced 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 rated as strong as WEL have robust processes in place to manage this process. The trader's error and the livening agent failing to report this electrical connection to WEL has caused this non-compliance. The audit risk rating is assessed to be low as the volume associated with this ICP missing from submission was minor and was corrected prior to the 14-month revision.

Actions taken to resolve the issue	Completion date	Remedial action status
As noted, it was the error of other parties which has caused WEL to be non-compliant in 1 instance here out of 1837. We moved to correct the errors as soon as we were able. As noted in past audits, it is unfortunate that the audit rules dictate that we are penalized for things not directly caused by our own actions.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
WEL cannot control other parties, but we will review any recommendations that may assist in this area.	October 2023	

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The process for populating of the initial electrical connection date was examined. The audit compliance report for the period from 1 July 2022 to 30 June 2023 was checked to determine the timeliness of the provision of ICP information for WEL's new connections.

Audit commentary

WEL's authorised livening agents are all required to notify WEL of ICPs made "active".

A daily report is run to confirm that all ICPs made "active" have an initial electrical connection date recorded and if found to be missing these are investigated to ensure they are updated as soon as possible. I recommend that checks are added to review where the date between the trader's "active" and the MEP's meter certification dates (especially if this date is earlier) do not align in **section 4.6**.

The audit compliance report found 95.8% of the 1,837 ICPs connected during the audit period were updated on time. 89 (4.8%) ICPs were updated more than ten days after the initial electrical connection date. Analysis of an extreme sample of five and a typical sample of five of the 89 late updates found that:

- five were due to late notification from the livening agent, and
- five were corrections to the original initial electrical connection date and the initial date was populated within ten days of the original electrical connection date.

The accuracy of the information provided to WEL is discussed in **section 4.6**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: 7(2A) of Schedule 11.1 From: 01-Jul-22 To: 30-Jun-23	Five out of a sample of ten (of a possible 89 ICPs) had the initial electrical connection dates updated greater than ten days from 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 rated as strong as WEL has robust processes in place to manage the timeliness of initial electrical connection updates to the registry. The audit risk rating is low this has no direct impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
As noted in the audit notes, the samples looked at shows that non-compliance comes as a result of late notification of livening by other parties. We have examples where we have chased livening date reports when not received weekly, and Livening agents have been strongly reminded of their obligations to provide timely livening details. As noted in past audits, it is unfortunate that the audit rules dictate that we are penalized for things not within our control.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Since the site audit WEL Networks has spoken directly to WELLs I&E in regard to the reporting provided and accuracy of it. This was specifically in regard to inaccurate Initial Energization dates provided to us. They have investigated and advised us that they have taken responsibility and made internal changes. They note in their written response: *"After investigating I believe that it was a report that was just generated and passed to yourselves without any due diligence from our side.* *We have changed the process, and a Wells Team Member will go through each job individually to ensure that we have the correct details in the report moving forward."* We have also now have an escalation point for WELLs I&E to address future concerns. This should help minimize inaccuracies going forward.	October 2023	

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 new connection process was examined in **section 3.2**.

The registry list for 30 June 2023 and event detail report for 1 July 2022 to 30 June 2023 were examined to determine compliance. WEL has created eight new shared unmetered load ICPs during the audit period.

Audit commentary

Contractors are engaged by traders, who are also approved by WEL, to conduct connection and electrical connection. The new connections process includes a "trader responsibility" step.

Traders then provide instructions to liven via work requests to a WEL approved livening agent to complete the electrical connection.

For all ICPs examined electrical connection occurred after acceptance by a trader.

Eight distributor-only shared unmetered load ICPs have been created to address the private lights previously recorded in the Hamilton City Council RAMM database that were no longer being reconciled as part of that DUML database load. These are all historical. Notification was provided to the relevant traders and acceptance of the shared unmetered load was provided prior to the parent ICP and shared unmetered load being added to the affected ICPs. This is discussed further in **sections 4.6** and **7.1.**

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 new connection process was examined in **section 3.2**.

A diverse characteristics sample of 30 new connection applications of 3,515 created since 1 July 2022 were checked to determine if the ICPs were connected at the request of the trader.

The registry list as of 30 June 2023 was reviewed to confirm that all "active" ICPs had a trader recorded.

Audit commentary

The WEL processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. The list file confirmed that all ICPs at the "ready" status had a trader nominated.

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

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

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

Audit observation

The new connection process was examined in **section 3.2**. The event detail file, registry list and the audit compliance reporting for 1 July 2022 to 30 June 2023 were examined to determine compliance.

Audit commentary

An ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. Any ICPs that are temporarily electrically connected follow the same process as all other new connections. The date of temporarily electrical connection should be recorded as the initial electrical connection date on the registry. The WEL process does not permit temporary electrical connection of ICPs, however the audit compliance report identified six ICPs where the meter certification date was earlier than the initial electrical connection date suggesting temporary electrical connection had occurred. These were examined and found:

- the authorising test house was the same as the livening agent for ICPs 0000052096WECFB and 0000052098WEF60; I recommend below that the livening paperwork is requested for these ICPs to confirm the date of electrical connection,
- the initial electrical connection date for ICP 0000054103WE297 was confirmed as correct; this is a C&I site, and this was the date consumption commenced - the earlier meter certificate could be due to the use of a load bank to test and certify the meter,
- the trader's first active date was used for ICPs 0000054430WECAA and 0000052900WEB9A and no information was provided by the livening agent; I recommend below that the livening paperwork is requested for ICP 0000054430WECAA to confirm the date of electrical connection (the initial electrical connection date for ICP 0000052900WEB9A was corrected during the audit and is recorded as non-compliance in **section 4.6)**, and

- ICP 0000052725WED8B is a C&I site and has a different date for all three fields; I recommend below that the livening paperwork is requested to confirm the date of electrical connection.

Recommendation	Description	Audited party comment	Remedial action
Temporary electrical connection	Confirm the initial electrical connection dates for ICPs: • 0000052096WECFB, • 0000052098WEF60, • 0000054430WECAA, and • 0000052725WED8B	Sent via email to Veritek. 0000054430WECAA – Retailer advise they used the incorrect date of 10/03/23. See email attached. We did not get information from livening agent that was used so went off retailer living date. 0000052096WECFB – WELLs provided incorrect date of 08/07/23 on their livening report. Attached PDF shows job completed 07/07/23. IED in Electricity Registry has been corrected to this date. 0000052098WEF60 - WELLs provided incorrect date of 08/07/23 on their livening report. Attached PDF shows job completed 07/07/23. IED in Electricity Registry was corrected to this date last year. 0000052725WED8B – No paperwork received from MERX but the attached installation report for the ICP. Has 08/11/22 which matches our IED inputted. We did not get information from livening agent that was used so went off retailer living date. Adding a new piece to cross check active status dates and meter add dates to monthly reconciliation, as well as the change in process from WELLs I&E (noted on page 27) should help minimize future discrepancies.	Adopted

As detailed in **section 4.6**, I have recommended that this process is reviewed as date discrepancies are not being reviewed and some of the livening information provided by Wells was not accurate.

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 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

The NSP table was reviewed.

Audit commentary

No new NSPs were created by WEL Networks during the audit period.

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

The NSP table was reviewed.

Audit commentary

No new NSPs were created by Wel Networks during the audit period.

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 process for the creation of ICPs was examined.

Audit commentary

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 as of 30 June 2023 was examined to confirm all active ICPs have a single loss category code.

Audit commentary

Each active ICP only 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 registry list for 30 June 2023 and event detail report for 1 July 2022 to 30 June 2023 were examined to determine compliance.

Audit commentary

WEL's new connections process is not designed to use the "new" status. All ICPs are created at the "ready" status. There were no ICPs at the "new" status at the time of the audit.

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 process to monitor ICPs at "new" and "ready" status was reviewed. The registry list for 30 June 2023 and the audit compliance reports for 1 July 2022 to 30 June 2023 were examined.

Audit commentary

WEL creates all ICPs at "ready" and monitors a report of ICPs at the "ready" status. Any record on this report that is older than approximately six months is investigated with the trader. These are sent every three months to the traders via email. Responses from the traders varies with some never responding to these requests.

There are 13 ICPs that have been at the "ready" status for more than 24 months. A request to the trader to confirm if these were still required was sent in July 2023.

WEL Networks adopted the last audit's recommendation to notify traders of any ICPs on the registry status 1,12 "new connection in progress" that have been at this status for more than 24 months. As noted above responses from traders are patchy. Examination of the LIS file identified 53 ICPs. I checked for ICPs at the same address for a typical sample of five ICPs in the LIS file and identified "active" ICPs at the same street number but with different unit or with different property names e.g., lot 3 vs lot 33. These are likely not to be required but as noted above responses from the traders varies with some never responding to these requests. I recommend that the traders with the most ICPs in these statuses, that have not responded, be contacted to arrange a meeting to get these progressed.

Recommendation	Description	Audited party comment	Remedial action
Management of ICPs at new and ready.	I recommend that WEL contact the traders with the most ICPs in these statuses that have not responded to arrange a meeting to get these progressed.	WEL complies with what is required by us, and as noted, has implemented recommendation from the previous audit. We will consider meetings with traders to discuss their inactions, however an escalation path within the trader's organisation may be more suitable instead.	Investigating

The last audit noted that ICP 0000047706WE3DF had been livened 6 July 2020 but was not made "active" by the trader. This was updated and backdated to "active" on 30 September 2022 for 6 July 2020.

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:

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

Audit observation

This requirement was discussed and the registry list as of 30 June 2023 was examined to determine compliance.

Audit commentary

The list file identified two ICPs with an embedded generator capacity greater than 10MW. Both ICPs have unique loss category codes in accordance with this clause.

Audit outcome

Compliant

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

Code reference

Clause 10.30C and10.31C

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

The electrical connection of streetlight circuits which are a point of connection was examined.

Audit commentary

Upon receipt, the new connection application is checked for completeness and accuracy and any issues are followed up with the streetlighting contractor. The new connection application includes the expected livening date.

The authorised livening agent then performs the livening task once the respective retailer has acknowledged and accepted the new connection application for these additional lights.

The connection of streetlight circuits was discussed. WEL Networks requires the new connection process to be used for newly electrically connected streetlight circuits. The process identifies the relevant ICP and includes approval from the trader. I checked a recent example to confirm the process was robust and was used correctly. The trader engages the livening agent directly so notification of electrical connection is expected to be provided by that agent to the trader.

Audit outcome

Compliant

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

Code reference

Clause 10.30C and 10.31C

Code related audit information

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

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

Audit observation

The disconnection process was examined.

Audit commentary

WEL will only undertake an electrical disconnection when a request is received from a trader, or for safety. In both instances WEL will liaise with the relevant trader.

Audit outcome

Compliant

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

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

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

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

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

Audit observation

Processes for meter bridging were reviewed. Two recent examples were checked.

Audit commentary

WEL is also an MEP and a number of field technicians are trained and authorised as metering technicians.

Where WEL is not also the MEP then WEL notifies the relevant Trader. I examined three examples and confirmed all were notified within 24 hours of WEL being made aware.

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 ten 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 three business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or three business days after the distributor has decommissioned the ICP.

Audit observation

The management of registry updates was reviewed.

The audit compliance reports and event detail report for the period from 1 July 2022 to 30 June 2023 were examined. The management of NSP changes was examined.

Audit commentary

The audit compliance report and event detail reports were examined to identify backdated event updates. I have added a table below that details the quantity and compliance of the registry updates:

Update	Date	Late	% Compliant	Average days
Address	2022	4	99.91%	-
	2023	**4**	**99.93%**	**0.07**
Price codes	2022	148	-	-
	2023	**154**	**-**	**-**
Status	2022	8	97.34%	-
	2023	**8**	**97.85%**	**1.18**
Network (excl. new connection & Distributed Generation)	2022	2	N/A	-
	2023	**2**	**N/A**	**-**

Update	Date	Late	% Compliant	Average days
Distributed Generation	2022	7	99.03%	0.18
	2023	**282**	**44.92%**	**16.74**
NSP changes	2022	1	-	-
	2023	**6**	**-**	**-**

Address events

All four were checked and found to be corrections where either the event date was not updated to the current date of update and therefore, they appear to be backdated, or the original address event was reversed in error and replaced with identical details.

Pricing events

A sample of 15 ICPs were examined and found:

- five were an extreme sample of the longest backdated pricing events which found all were corrections to loss category codes as part of BAU and were agreed with the trader,
- 103 of the 154 ICPs were backdated on 20/21 April 2023, a unique characteristic sample of five ICPs were examined and found that these were all to adjust the nominated capacity to begin at the start of the month as agreed with the trader, and
- a typical sample of a further five ICPs and found that these too were all to adjust the nominated capacity to begin at the start of the month as agreed with the trader.

None of the sample checked were found to be non-compliant so I have recorded compliance for the backdated pricing events.

Decommissioning Status events

The decommissioning process is detailed in **section 4.11**.

There were eight ICPs that were updated late. These were examined and found:

- four were delayed due to WEL Network Christmas shutdown,
- ICPs 0004572701WE721 and 0000222712WE5D8 were updated within four business days, just missing the required three days to update,
- ICP 0000052387WE910 was a correction to the decommission date; the initial update was completed within the required period, and
- ICP 0000043747WEBBF was incorrectly recorded as late.

Network events

The network events evaluated excluded those relating 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 audit compliance report was examined and recorded two late network updates which related to updates to the same ICP, these were backdated to correct the unmetered load to align with the relevant NSP changes.

Network events (Distributed Generation only)

The distributed generation process is described in **section 4.6**.

There has been a large increase in the number of late distributed generation updates. I checked an extreme sample of ten ICPs and a further sample of a typical sample of ten ICPs and found all were due to the late notification from the solar installation providers. I recommend in **section 4.6**, that applicants are followed up once the proposed electrical connection date is passed and nothing has been received.

Change of NSP

The process of NSP changes was examined. NSP changes are updated to the registry after nine days when it is determined that the change will remain in place for ten or more days. The audit compliance report identified six NSP updates that were updated after nine days. These were examined and found none were genuine and all related to the updating of distributed generation details or address details.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: clause 8 schedule 11.1 From: 01-Jul-22 To: 30-Jun-23	Four late address updates. Six late decommissioning status updates. 282 late distributed generation updates. 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 rated as moderate as there is room for improvement with the updating of distributed generation updates. The audit risk rating is assessed to be low as this has no direct impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
Outside of the Distributed Generation area, as noted in the audit comments, the number of genuinely late updates is extremely low when looking at the number of updates done in the audit period. Each year WEL gives all retailers advance notice in November, and again in December of our Xmas shutdown period (always just the two short 3 day weeks), and that requests may be delayed in this time. We believe it is unfortunate and unreasonable that the EA has expectations of Networks that all operations should be continued without impact over this period.	October 2023	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
In the Distributed Generation, WEL acknowledges room for improvement. We look to follow up with installers 1 month after the planned install date and we have been exploring more efficient methods to manage and track paperwork-related delays. To address these challenges, we implemented from 9/08/2023, a system to automatically capture applications details, and give us visual indicators of days past the expected connection date. We will be improving the initial correspondence to DG applicants, stating, and emphasizing the obligations to return paperwork within the given timeframe. We are also looking at how we can Improve the DG team's internal database to better track overdue paperwork and will look to monitor solar companies and create profiles based on their responses to this matter. These steps are expected to provide greater visibility, allowing us to identify and try rectify these issues more efficiently in the future. WEL does however note that we are still heavily reliant on installer responses in a timely manner.	October 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

The process to determine the correct NSP was examined. The accuracy of NSP information was checked using the audit compliance reports for the period 1 July 2022 to 30 June 2023.

Audit commentary

The process for allocating new ICPs to the correct transformer, and therefore the correct NSP, was examined and is robust. The transformer for each new connection is determined based on the ICP database and this is checked as part of the ICP creation process manually. The planning team will advise the correct transformer if work on the network is required. GPS co-ordinates are recorded for all new connections.

The audit compliance reports identified 77 ICPs where 10% or fewer ICPs on a street have a different ICP to other ICPs and where the number of ICPs with a different NSP was less than three. All 77 ICPs were checked and 76 were confirmed to have the correct NSP assigned. ICP 0000601578WE02C has the incorrect NSP assigned due to being placed incorrectly in GIS and is being corrected. The correct NSP is part of the same balancing therefore the impact to the reconciliation process was minor.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: Clauses 7(1),(4) and (5) Schedule 11.1 From: 27-Nov-22 To: 30-Jun-23	One ICP with the incorrect NSP assigned. Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on settlement and participants is minor as the affected ICP's NSP is within the same balancing area; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
NSP corrected for ICP in question. Result of human error.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
This came as a result of human error and we cannot put in actions to 100% safeguard against this.	October 2023	

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

The management of customer queries was examined.

Audit commentary

WEL does receive direct requests for ICP identifiers, and these are provided immediately.

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 for 30 June 2023 was reviewed to determine compliance.

Audit commentary

WEL's ICP database does not allow duplicate addresses to be created and all new connections have GPS co-ordinates recorded in the GIS system. Analysis of the list file found no duplicate addresses. All but 535 addresses now have the GPS co-ordinates recorded and all are readily locatable.

I examined the LIS file and found 13 ICPs with no GPS co-ordinates and only a lot number recorded. 11 of these were created in 2023. The remaining two ICPs are pumpstations and the address details are insufficient to make them readily locatable. I recommend that either the GPS co-ordinates are populated or the street number is sought from the council.

Recommendation	Description	Audited party comment	Remedial action
ICP location address	Populate the GPS coordinates or street number for the 13 ICPs with insufficient details to make them readily locatable.	WEL approached traders of the 13 ICPs in question prior to audit site visit to seek additional location details and received no trader responses. WEL notes that the number of ICPs in this situation is minimal when looking at total ICPs. Pieces have been put in place to address this situation in future (see actions taken/preventative actions taken table)	Identified

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.4 With: Clause 2 Schedule 11.1 From: 01-Jul-22 To: 30-Jun-23	13 ICPs with insufficient address details to make them readily locatable. 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 because they mitigate risk to an acceptable level. The audit risk rating is assessed to be low as the number of ICPs not readily locatable is very small.

Actions taken to resolve the issue	Completion date	Remedial action status
Since the site audit WEL has been able to obtain GPS co-ordinates and/or address updates for all of the 13 ICPs in question so all should now be compliant. WEL approached traders of the 13 ICPs in question to seek additional address details but got no responses. A challenge faced with connections that do not have a council number yet is that while we may be able to obtain GPS co-ordinates in a Latitude/Longitude format, the Electricity Registry uses a Northing/Easting Format.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
WEL has updated an existing process to populate GPS co-ordinates for addresses that are just lot numbers with no recognised council numbering. These co-ordinates will be entered into our system in a Latitude/Longitude format. In conjunction with the above, we have also made an update to our systems that will convert these Latitude/Longitude co-ordinates into Easting/Northing co-ordinates and send through an update to the Electricity registry so the registry has the required format of co-ordinates.. We are also exploring the possibility to have all existing ICPs in our system with Latitude/Longitude co-ordinates converted to Northing/Easting, and then updated in the Electricity Registry. This though will not be to improve compliancy as almost all will already have compliant addresses to ensure they are locatable. This is more for consistency of information we have.	October 2023	

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

WEL has required that all ICPs created since 7 October 2002 will comply with this clause. WEL's process documentation addresses this issue. There are two existing ICPs that do not meet this requirement, but these were created prior to 7 October 2002 so are exempt from this requirement.

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 one 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. I checked all registry fields for obvious discrepancies using the audit compliance report for the period from 1 July 2022 to 30 June 2023.

Audit commentary

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

Distributed Generation

The distributed generation process was examined.

The process requires customers or their agents to submit an application using a form obtained from the WEL website. WEL processes applications and advises of approvals within five days in most cases. Following installation installers are advised to provide WEL Networks with copies of the Certificate of Compliance (CoC), Electrical Safety Certificate (ESC), Record of Inspection (RoI) and WEL Networks' test form. WEL updates their records and the registry once these documents are received. Delays in the provision of these documents result in late updates of WELs records and the registry.

WEL Networks current process is that a distributed generation application is valid for 90 days. The application includes an expected installation date. Reporting has been put in place to monitor those that are outstanding post the expected installation date, but I recommend below that the process to follow up with the applicant be reviewed to ensure they are being followed up in a timely manner. This is resulting in an increase in late updates to the registry of distributed generation as detailed in **section 4.1**.

Recommendation	Description	Audited party comment	Remedial action
Distributed generation process improvements	I recommend WEL review the follow up process where the expected installation date of distributed generation has passed, and no documentation has been received.	We look to follow up with installers 1 month after the planned install date and we have been exploring more efficient methods to manage and track paperwork-related delays. To address these challenges, we implemented from 9/08/2023, a system to automatically capture applications details, and give us visual indicators of days past the expected connection date. We will be improving the initial correspondence to DG applicants, stating, and emphasizing the obligations to return paperwork within the given timeframe. We are also looking at how we can Improve the DG team's internal database to better track overdue paperwork and will look to monitor solar companies and create profiles based on their responses to this matter. These steps are expected to provide greater visibility, allowing us to identify and try rectify these issues more efficiently in the future. WEL does however note that we are still heavily reliant on installer responses in a timely manner.	Identified

Examination of the list file found ICPs with generation capacity have continued to grow as detailed in the table below:

Year	ICPs with distributed generation
2017	698
2019	1,102
2020	1,354
2022	1,887
2023	2,391

All had fuel type recorded and the correct installation type of B.

The audit compliance report identified 74 ICPs where the trader's profile indicates that distributed generation is present, but WEL has none recorded. A typical sample of ten ICPs were reviewed and found:

- six have an application received and approved by WEL Network but no paperwork has been returned to confirm installation has been completed; I checked the high-risk database and found three ICPs (0077130773WE5E9, 0026177845WED7A and 0004572857WE1A9) have records of distributed generation being certified and the remaining three had no record, and
- no applications have been received for the remaining four ICPs and a check of the high-risk database found no record of distributed generation being installed.

The list file was analysed and identified 135 ICPs where WEL Network has distributed generation recorded, but the trader's profile does not indicate that distributed generation is present. 109 of these ICPs are with Mercury Energy. It was identified in the last Mercury Energy reconciliation participant audit for those with the MEEN participant code that the profile is incorrectly recorded as RPS. A sample of the most recent eight ICPs of the remaining 26 ICPs were examined and found WEL Networks had paperwork confirming installation for all of them. The trader has since updated the profile to RPS PV1 for three ICPs, and the remaining four may be being gifted hence the profile will not be changed from RPS.

As reported in the last audit, WEL Networks also uses the date the completion paperwork was processed as the event date for population of distributed generation attributes on the registry rather than the actual connection date as their automated registry management system currently has no mechanism to manage event dates that are not also the update date. To avoid this occurring these updates would need to be made manually in the registry.

WEL Networks use the audit compliance reporting to identify where the trader's profile indicates distributed generation is present and they have none indicated. I recommend that the high-risk gas and electricity database and EIEP1 reports are also checked to identify ICPs where distributed generation is present and WEL Networks have no record, to investigate these.

Recommendation	Description	Audited party comment	Remedial action
Distributed generation process improvements	Check the high-risk gas and electricity database and EIEP1 reports to identify ICPs where distributed generation is present that WEL Networks have no record of.	WEL wishes to have noted that following the previous audit, WEL des not use the paperwork completion date as the registry event date. We go into the registry and the event date is manually entered which is the date of DG commissioning as provided to us by the installer. This was noted in the previous audit responses. WEL will take onboard the recommendation provided in the audit and implement where found to be meaningful and practical.	Identified

Initial Electrical Connection Date

WEL run a weekly report that identifies where the trader and MEP have dates populated but WEL has none. Where missing dates are identified, confirmation is sought from the livening agents to ensure the correct data is supplied.

The audit compliance report identified 82 ICPs with discrepancies between the initial electrical connection date and trader active date or metering certification. These were examined and found:

Exception	Qty	Qty incorrect	Comment
IECD ≠ and active date = MCD	65	All ten sampled	I checked an extreme sample of ten and found that the livening agent had provided the incorrect electrical connection dates. I recommend below: • that improvements be made to the report being provided by Wells, and • the discrepancy process includes the checking where date's do not align; this reporting is available in the audit compliance reporting.

Exception	Qty	Qty incorrect	Comment
IECD = active date and IECD ≠ MCD	8	0	Five of these ICPs are potentially temporarily electrically connected as the meter certification is earlier than the first "active" and initial electrical connection date. These were examined and found as detailed in **section 3.8**: • four be investigated to confirm the first initial electrical connection date, and • the initial electrical connection date for ICP 0000054103WE297 was confirmed as correct. The remaining three were examined and found the initial electrical connection date was correct and the metering was certified later.
IECD ≠ active date and IECD = MCD	6	0	I checked all six ICPs and found the livening paperwork provided to WEL confirmed the date was correct and the trader's first "active" date is incorrect.
All dates are different	2	1	These were examined and found: • ICP 0000053675WED27 had the incorrect initial electrical connection date; this was corrected during the audit, and • ICP 0000052725WED8B is a C&I site and has a different date for all three fields and I recommend in **section 3.8** that it be investigated to confirm the first initial electrical connection date.
IECD = active date and no MCD recorded	1	1	ICP 0000053741WE2D1 is a Waka Kotahi Waikato ICP created as a paperwork exercise to correct the ICP load. I recommend below that the initial electrical connection date be aligned with trader's first "active" date.
Total	**82**	**12**	

The audit compliance reports identified 15 ICPs at the status of 1,12 "new connection in progress" that have an initial electrical connection date populated. Two ICPs have since been updated to "active" by the retailer as part of BAU. The remaining 13 ICPs were examined and found:

- Wells had provided the incorrect initial electrical connection date for 11 of these; I recommend below that this reporting is improved, and that the discrepancy process include checking for date misalignment, and
- two have since been made "active" for the same date by the trader.

Recommendation	Description	Audited party comment	Remedial action
Accuracy of initial electrical connection dates	I recommend: • that an "initial electrical connection date" column be provided in the Wells livening report rather than the current "outcome" column which could mean the date paperwork is processed, and • the discrepancy process includes where the initial electrical connection date is different to the "active" date or the meter certification date especially if it is earlier; this reporting is available in the audit compliance reporting.	Since the site audit WEL Networks has spoken directly to WELLs I&E in regard to the reporting provided and accuracy of it. This was specifically in regard to inaccurate Initial Energization dates provided to us. They have investigated and advised us that they have taken responsibility and made internal changes. They note in their written response: *"After investigating I believe that it was a report that was just generated and passed to yourselves without any due diligence from our side.* *We have changed the process, and a Wells Team Member will go through each job individually to ensure that we have the correct details in the report moving forward."* We have also now have an escalation point for WELLs I&E to address future concerns. This should help minimize inaccuracies going forward. WEL does note that we are still heavily dependent on the livening agents and cannot control any errors that they make. WEL will continue to question information provided as soon as we are made aware it may not be correct. WEL will look at incorporating additional pieces of the audit compliance reporting tool into our checks to assist in this area.	Identified

The timeliness of provision of information on initial electrical connection date is discussed in **section 3.5**.

Unmetered Load

WEL does not encourage new unmetered loads on their network. They have a well-documented policy and process for the ongoing management and notification of altered unmetered load connections.

Eight unmetered load ICPs added during the audit period:

- seven shared unmetered load distributor ICPs were created during the audit period; all associated ICPs are detailed, and these are discussed below and in **sections 4.10** and **7**.
- ICP 0000053741WE2D1 is a DUML load ICP for Waka Kotahi Waikato; the load is correctly detailed as DUML streetlights.

Review of the registry list identified five active ICPs with unmetered load recorded by the trader and no unmetered load recorded by WEL, these was examined and found:

- shared unmetered load has been removed from four of the ICPs but the trader still has these details incorrectly recorded, and
- ICP 0000042468WEB97 was approved as a metered connection but has been electrically connected as an unmetered load; WEL is liaising with the trader to request a meter is installed.

WEL uses the recommended format for updating the registry where possible with the standard unmetered load recorded in the recommended format. I compared the daily kWh figures based on WEL's data to the traders' daily unmetered kWh figures and found that all but two of 308 ICPs matched. These were checked and found:

- the load details for ICP 0000011088WECB8 have been corrected and the calculated figure now matches the traders; this is recorded as non-compliance below, and
- the trader is missing the unmetered load details for ICP 0025111413WE4A2.

The last audit found potential errors with the operational hours used by both the trader and the distributor:

- 14 pay phones with operation hours of 12 hours rather than 24 hours,
- 44 communications cabinets with operation hours of 12 hours rather than 24 hours where the available information does not confirm whether these cabinets are operating with a battery/battery charger set up (therefore 12 hours of operation is appropriate) or connected solely to mains power (therefore 24 hours of operation would be expected), and
- 84 smart spot carpark sensors where the provided literature and consumption test reports do not align with the load details provided on the registry and do not correctly reflect the inclusion of a battery charger as part of each connection.

WEL have emailed the traders requesting they confirm the operational hours. No responses have been received. I have repeated the recommendation to maintain visibility.

Recommendation	Description	Audited party comment	Remedial action
Unmetered load	Work with the traders to confirm the unmetered load operational hours and connected load values.	WEL will continue to work with traders to get the unmetered load hours and connected values accurate and in place. We will use escalation paths where no responses. It is our intent to have these last pieces for payphones/parking spots/communications cabinets completed before the end of this calendar year.	Identified

DUML and shared unmetered load

DUML audits for streetlight databases on the WEL were reviewed to determine whether there were any issues relating to distributor unmetered load records and these are detailed below:

Database	Comment
Waikato DC	Recommendation made to review the new connection process as lights are being electrically connected before these are vested to council resulting in consumption not being reconciled for the intervening period.
Hamilton CC	Recommendation made to review the new connection process as lights are being electrically connected before these are vested to council resulting in consumption not being reconciled for the intervening period.
Waka Kotahi Waikato	Recommendation made to review the new connection process as lights are being electrically connected before these are vested to council resulting in consumption not being reconciled for the intervening period.
Auckland Transport	Streetlight load for the STG0111 EN is being reconciled to Vector instead of WEL Networks resulting an estimated 20,586.22 kWh per annum. This has been incorrect since the network was livened in 2008.
Waipa DC	Connection of new streetlights indicates that the date these are added to the Waipa DC DUML database is different to the electrical connection date.

The new connection process requires the trader to accept this load. Livening is undertaken by the trader's nominated agent therefore the agent should be providing the trader and customer with the electrical connection dates.

WEL have been working with Waka Kotahi and the relevant trader to ensure that there is an ICP per NSP for this load and that the load is correctly assigned. The transfer of these items of load has largely been completed. The process of State Highways being retired and moved to the local council is examined as part of the DUML audits undertaken by the relevant traders.

WEL have been investigating the list of 47 private lights recorded in the Hamilton City Council but excluded from submission from this database and found:

- 15 lights have been passed back to Hamilton City Council and these are expected to be added back into the database; this will be checked during the HCC streetlight audit due for completion in February 2024,
- for 14 lights, seven shared unmetered load distributor ICPs have been created during the audit period; all associated ICPs are detailed, and these are discussed below and in **sections 4.10** and **7**,
- three lights have been added as standard unmetered load, and
- WEL advised that the remaining 15 lights do not exist; I reviewed these using mobile roads (in which lights can be plotted and located and viewed via Google street view) and I believe that all but one light does exist and have passed my findings back to WEL to investigate further (these are missing from submission to the market and are estimated to be resulting in 4,130 kWh of under submission per annum).

LE ICPs

All LE ICPs must be recorded have a reconciliation type of "dedicated" on the registry as detailed in clause 7(1)(l)(ii). Examination of the LIS file found ICPs 0000053429WEC36 and 0000053430WE8CA were created during the audit period and were not recorded with as "dedicated". This was corrected during the audit.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: Clause 7(1) Schedule 11.1 From: 01-Jul-22 To: 30-Jun-23	Distributed generation details missing for three of a sample of ten ICPs checked of a possible 74 ICPs. Distributed generation event dates not reflective of connection date. All ten sampled of a possible 65 ICPs where the IECD ≠ and active date = MCD recorded with the incorrect initial electrical connection date. Of the remaining 17 ICPs with date mismatches two had the incorrect initial electrical connection date dates recorded. ICP 0000011088WECB8 had the incorrect unmetered load details recorded. Unmetered load (shared or standard) ICPs not created to record the load for 14 private lights resulting in an estimated under submission of 4,130 kWh per annum. Two LE ICPs incorrectly recorded with reconciliation type “non-dedicated”. Potential impact: Low Actual impact: Low Audit history: Multiple 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 improvement. The audit risk rating is assessed to be low as the overall number of ICPs affected and the calculated impact of data inaccuracies on reconciliation is minor.

Actions taken to resolve the issue	Completion date	Remedial action status
WEL will continue to work on this area to clear outstanding issues. WEL is in the process of creating a specific internal policy regarding Unmetered Load.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Recommendations made will be considered.	October 2023	

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 audit compliance report for the period 1 July 2022 to 30 June 2023 was checked to determine if any price codes were assigned later than ten business days after trading commenced.

Audit commentary

There were no ICPs with price changes backdated more than ten business days.

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 as of 30 June 2023 was reviewed to determine compliance. WEL Network have populated GPS co-ordinates against all but 535 of their active ICPs created during the audit period. I checked that the GPS coordinates used meet the NZTM2000 standard.

Audit commentary

WEL have used the NZTM2000 standard to record the GPS co-ordinates. This was confirmed by reviewing the format of the GPS co-ordinates used and plotting a sample of 70 ICPs.

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

WEL's current process is to create all ICPs at the "ready" status.

The registry list showed 138 ICPs currently at "ready" status, 13 of which have been at "ready" status for more than two years.

All ICPs at "ready" status had a single price category assigned and proposed trader identified.

Audit commentary

As noted in **section 3.2**, ICP requests come directly from customers or their agents and are generally lodged via the online portal. Some are received via email and these are entered into WEL's system. Upon receipt of a completed application the portal automatically sends on the application to the nominated trader to accept the nomination.

The price category field in WEL's ICP database contains a "drop down" list, which ensures each ICP can only have a single price category. Examination of the list file confirmed that all ICPs at "ready" status had a single price category assigned and proposed trader identified.

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

Processes to manage the "distributor" status were reviewed.

The registry list and event detail report for 1 July 2022 to 30 June 2023 were reviewed to identify ICPs at the "distributor" status and check compliance.

Audit commentary

WEL has 30 ICPs that have an ICP status of "distributor." 20 of these are points of connection between embedded networks and the WEL network. The remaining ten ICPs are parent ICPs for shared unmetered load. Seven shared unmetered load ICPs and three LE ICPs were created during the audit period. The accuracy of these ICPs details is discussed in **section 4.6**.

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 management of ICPs in relation to the use of the "decommissioned" status was examined. The list file and event detail report for the period from for 1 July 2022 to 30 June 2023 were examined in relation to the use of the "decommissioned" status.

Audit commentary

ICP decommissioning is managed by WEL and the process is documented. Retailers notify WEL when ICPs are "ready for decommissioning" but they do not change the registry to this status until advised by WEL that the fieldwork has been completed. WEL manages the fieldwork to ensure the electrical installations are physically removed and advise the retailer when this work has been completed. The retailer then updates the registry to the status "ready for decommissioning" and backdate the effective date to the actual date of the decommission. If the retailer incorrectly updates the "ready for decommissioning" date WEL advises them to correct the date to ensure that they are able to correctly populate the decommissioning date. I checked a sample of typical sample of ten ICPS and found that the decommissioning dates were correctly recorded for all but ICP 0000142351WE950 which was input incorrectly due to human error.

The timeliness of these updates is discussed in **section 4.1**.

WEL's list file shows that there were no ICPs at "ready for decommissioning" status at the time of the audit analysis.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.11 With: Clause 20 Schedule 11.1 From: 01-Jul-22 To: 30-Jun-23	Decommission event dates incorrect for one of ten ICPs sampled. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as strong as WEL has a robust process in place that mitigates errors to an acceptable level. The audit risk rating is low this has no material impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
One issue due to human error that was resolved.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Controls and processes are strong. Cannot guarantee that human errors will not occur.	October 2023	

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

WEL keeps the price category table up to date and has not created any new price category codes since 1 April 2018.

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 category code table on the registry was examined.

Audit commentary

One new loss category code was created during the audit period. Notice was provided more than two months from the effective date.

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 have been updated during the audit period.

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

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

The NSP table was examined.

Audit commentary

WEL Network has not created or decommissioned any NSPs during the audit period; compliance was not assessed

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 examined.

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; compliance was not assessed.

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

WEL 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 3 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 for WEL's NSPs, compliance was not assessed.

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

Compliant

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

The NSP table was reviewed.

Audit commentary

WEL 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 along with evidence of all updates made to the Reconciliation Manager via the portal.

Audit commentary

The NSP supply point table was reviewed:

Distributor	NSP POC	Network Type	Description	MEP	Certification Expiry
WAIK	BRI0111	EN	BRICK STREET	AMCI	17 March 2027
WAIK	FLG0111	EN	FLAGSHIP	AMCI	24 March 2033
WAIK	HMB0111	EN	HALF MOON BAY	AMCI	3 December 2027
WAIK	HUL0111	EN	HULME PLACE	AMCI	13 September 2025
WAIK	JEF0111	EN	JEFFS ROAD	AMCI	10 February 2025
WAIK	KIR0111	EN	KIRKDALE	AMCI	16 August 2026
WAIK	MTG0111	NP	MANGATANGI	COUP	16 April 2028
WAIK	OAK0111	EN	OAKLANDS	AMCI	29 September 2026
WAIK	POR0111	EN	Porchester Road	AMCI	14 May 2024
WAIK	RYN0111	EN	RYAN PLACE	AMCI	27 April 2026
WAIK	STG0111	EN	SOUTHGATE	AMCI	1 May 2027
WAIK	TPH0111	NP	Te Pahu	AMCI	2 November 2029

Certification expiry dates were updated for FLG0111 and HMB0111. I confirmed the expiry date was correct for FLG0111 but was different for HMB0111. This was due to the date being provided incorrectly in an email and the metering paperwork wasn't provided until this audit. This has now been corrected but is recorded as non-compliance below.

The meter update in the RM portal does not have an audit trail so I am unable determine the date of the uploads. The lack of an audit trail has been present for some years and I raise it as an issue for the Electricity Authority to progress.

Description	Issue	Remedial action
Determining the date of the meter update in the RM portal	The code requires the certificate to be provided no later than ten days after certification, but the RM portal has no audit trail.	Provide an audit trail to indicate when these uploads are made as required by the code.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.8 With: Clause 10.25(1) and 10.25(3) From: 01-Jul-22 To: 30-Jun-23	Incorrect meter expiry date recorded for HMB0111. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as moderate for the updating of GXPs meter recertifications as WEL are reliant on the MEP to provide this information. The audit risk rating is low as the meters were certified at all times and there was no impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
Date provided to WEL Networks was incorrect as noted and rectified.	October 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Date provided to WEL Networks was incorrect as noted and rectified. WEL Networks feels that the Breach risk rating of 2 seems too high for once instance, where incorrect information was given to us, and where impact is low. If the higher breach risk rating is due to controls being noted as moderate, WEL Networks would like to know what would be required and within our control to make controls strong.	October 2023	

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 five 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 supply point table was reviewed.

Audit commentary

No new NSPs were created by WEL 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 month's 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.

Audit commentary

WEL 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 examined.

Audit commentary

WEL has not changed the MEP for any embedded network gate meters for which they are responsible for during the audit period.

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

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

Audit outcome

Compliant

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

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

Audit outcome

Compliant

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 for 1 July 2022 to 30 June 2023 was reviewed to identify any ICPs with shared unmetered load connected. The streetlight audits of the network were assessed. Written notice was provided to all parties as required by this clause for the current shared UML ICPs.

Audit commentary

WEL has ten shared unmetered load "distributor only" ICPs. Eight of these were created during the audit period.

As detailed in **section 4.6**, WEL have been investigating the list of 47 private lights recorded in the Hamilton City Council DUML database but excluded from submission and found:

- 15 lights have been passed back to Hamilton City Council and these are expected to be added back into the database; this will be checked during the HCC streetlight audit due for completion in February 2024,
- for 14 lights, notification has been provided with the creation of seven shared unmetered load distributor ICPs have been created during the audit period; all associated ICPs are detailed. These are discussed in **sections 4.6** and **4.10**,
- three lights have been added as standard unmetered load, and
- WEL advised that the remaining 15 lights do not exist. I reviewed these using mobile roads (in which lights can be plotted and located and viewed via Google street view) and I believe that all but one light does exist and have passed my findings back to WEL to investigate further. These are missing from submission to the market and are estimated to be resulting in 4,130 kWh of under submission per annum. This is recorded as non-compliance in **section 4.6**. but not below as these have not been confirmed as shared unmetered load.

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 for 1 July 2022 to 30 June 2023 was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

There have been no changes to the capacity of shared unmetered load ICPs during the audit period. I checked and confirmed that all ICPs had the correct load and this load matched to the retailers recorded load.

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

The "Guidelines on the calculation and the use of loss factors for reconciliation purposes" was published on 26 June 2018. I have assessed WEL's process and compliance against the guidelines recommended thresholds. I assessed the loss factor accuracy looking for any rolling UFE that was greater than +/- 1% (as indicated in the guideline).

Audit commentary

The loss factor table was examined. There have been no changes to loss factors since 16 January 2019.

WEL's management of loss factors has not changed during the audit period. WEL provided information on their methodology to calculate loss factors. The loss factor review is currently underway and any changes will be made to the network loss factors as required.

The UFE graph for WEL Networks was downloaded from the Electricity Authority EMI website. This indicate losses are tracking within the +/- 1% threshold indicated in the guideline:

The last audit noted that the embedded network loss factors applied were not being compared to an equivalent ICP at the parent network and therefore if the parent network adjusts their loss factor these changes are not reflected in the embedded loss factors resulting in UFE being incorrectly reported. Examination of loss factors on the WEL embedded networks found that this has not been undertaken during the audit period and I recommend that this is undertaken by using the following calculation:

Embedded loss factor code x loss factor code at the NSP gate = the loss factor at an equivalent ICP on the parent network.

Recommendation	Description	Audited party comment	Remedial action
Review embedded loss factor codes	I recommend that WEL review the loss factor table for all parent networks it has embedded networks on and confirm that the loss factors applied are correct.	Review has been done and results of Embedded network ICP vs equivalent ICP on parent network passed to Veritek.	Reviewed and recommend that the loss factors are corrected ASAP.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 8.1 With: Clause 11.2 From: 01-Jul-22 To: 30-Jun-23	Calculation of embedded network loss factors has not been undertaken to ensure that loss factors are accurate. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as weak as the embedded network loss factors review process does not mitigate errors to an acceptable level. The audit risk rating is assessed to be low as the number of ICPs affected is small as these are on embedded networks.

Actions taken to resolve the issue	Completion date	Remedial action status
Updating the Embedded Network Loss figures is currently being looked at and are planned to be updated with pricing to be released to retailers late December.	December 2023	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Appropriate parties within WEL Networks have been asked to maintain these appropriately going forward.	December 2023	

CONCLUSION

WEL continue to have mostly well managed and robust processes in place. The team has grown over the audit period as the network continues to grow.

Overall, the level of compliance was high, and the team have a good understanding of the compliance requirements. I have made some recommendations that, if adopted, will further improve this. Specifically,

- review the process to follow up where the expected installation date of distributed generation has passed, and no documentation has been received,
- that the Well's livening report is improved, and that the discrepancy process includes where the initial electrical connection date is different to the active date or the meter certification date especially if it is earlier; this reporting is available in the audit compliance reporting, and
- recommend that WEL review the loss factor table for all parent networks it has embedded networks on and confirm that the loss factors applied are correct.

This audit found ten non-compliances and makes eight recommendations. The non-compliances relate mainly to minor errors in and late updates of registry information.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The future risk rating table provides some guidance on this matter and contains a future risk rating score of 16, which results in an indicative audit frequency of 12 months. I have considered this in conjunction with WEL's responses and agree with this recommendation.

PARTICIPANT RESPONSE

WEL acknowledges the non-compliances and agree that the majority non-compliances relate mainly to minor errors in and late updates of registry information. In almost all these cases the impacts are very minimal (if there is impact at all), and a number of these are from action or inactions of third parties rather than as a result of WEL Network's doing.

Since the on-site audit, WEL has already instigated a number of recommendations and improvements not only for audit, but for things that are not audited here but may assist us generally.

We thank you for the recommendations contained in this report and work is currently underway on a number of these.