

**ELECTRICITY INDUSTRY PARTICIPATION CODE
METERING EQUIPMENT PROVIDER AUDIT REPORT**

For

CONTACT ENERGY
NZBN:9429038549977

Prepared by: Brett Piskulic – Veritek Limited

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Audit report due date: 03-Jun-22

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EXECUTIVE SUMMARY

Contact Energy Limited (Contact) is a Metering Equipment Provider (MEP) and is required to undergo an audit by 3 June 2022, in accordance with clause 16A.17(b).

Contact is the MEP for 17,450 ICPs with non-AMI metering installations, this is a reduction from 21,008 recorded in the previous audit.

The audit found nine non-compliances, the main issues causing noncompliance are as follows:

- the sample was not representative of the group of meters recertified by the Delta ATH using the statistical recertification method,
- 848 ICPs with expired certification,
- sample inspection not conducted for 5,068 Category 1 ICPs; the certification of these metering installations is therefore cancelled,
- inspections not conducted for four Category 2 metering installations due for inspection during the audit period; the certification of these metering installations is therefore cancelled,
- certification not cancelled on the registry for the 5,072 ICPs with missed inspections,
- registry validation not conducted for every month of the audit period, and
- the monitoring and correction of time keeping devices not completed as required.

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 recommends an audit frequency of six months. After considering Contact's responses to the areas of non-compliance I agree with this recommendation.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Changes to registry records	4.10	Clause 3 of Schedule 11.4	Three records updated on the registry later than 10 business days.	Strong	Low	1	Cleared
Provision of Registry Information	6.2	Clause 7 (1), (2) and (3) of Schedule 11.4	Some registry records incomplete or incorrect.	Strong	Low	1	Identified
Registry validation	6.3	6 of schedule 11.4	Registry validation not conducted for every month of the audit period.	Weak	Low	3	Identified
Cancellation of certification	6.4	Clause 20 of Schedule 10.7	Certification cancelled, and registry not updated for 5,068 Category 1 ICPs due inspection by statistical sample not being conducted in 2020. Certification cancelled, and registry not updated	Weak	Low	3	Identified

			for four Category 2 ICPs with overdue inspections.				
Certification of metering installations	7.1	Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7	Certification expired for 848 ICPs and certification cancelled for 5,072 ICPs.	Weak	Low	3	Identified
Timekeeping Requirements	7.10	Clause 23 of Schedule 10.7	Seven ICPs with time switches not checked within 12 months. Five ICPs with time errors exceeding an average of two seconds per day over a period of 12 months. 79 ICPs where time errors were not corrected.	Moderate	Low	2	Investigating for 7 ICPs not checked and 5 ICPs with errors exceeding 2 seconds per day. Disputed for 79 ICPs where time errors were not corrected.
Statistical sampling	7.13	Clause 16(1) of Schedule 10.7	Sample not representative of the group of meters certified using the statistical recertification method.	Weak	Medium	6	Investigating
Category 1 Inspections	8.1	Clause 45 of Schedule 10.7	Inspection by statistical sampling not conducted in 2020. Inspection report not provided to the Authority for inspections conducted in 2021.	Moderate	Low	2	Identified
Category 2 to 5 Inspections	8.2	Clause 46(1) of Schedule 10.7	Inspections not conducted for five Category 2 metering installations.	Moderate	Low	2	Identified
Future Risk Rating						23	
Indicative Audit Frequency						6 months	

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Recommendation	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

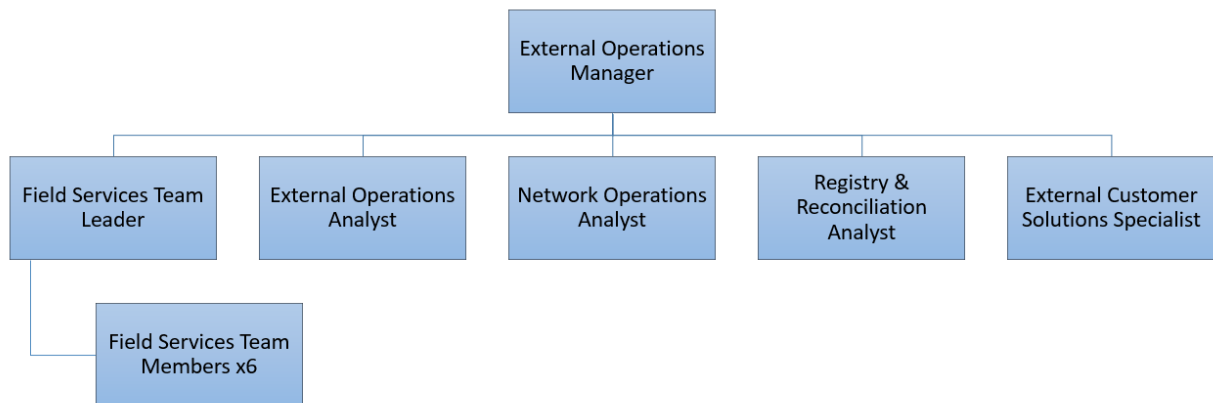
I checked the Electricity Authority website and I confirm there are no exemptions in place.

Audit commentary

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

1.2. Structure of Organisation

Metering Services Structure – Effective 01st January 2022



1.3. Persons involved in this audit

Auditor: Brett Piskulic

Veritek Limited

Electricity Authority Approved Auditor

Contact personnel assisting in this audit were.

Name	Title
Nagham Anayi	External Customer Solutions Specialist
Campbell Wilson	External Operations Manager

1.4. Use of Agents (Clause 10.3)

Code reference

Clause 10.3

Code related audit information

A participant who uses a contractor

- *remains responsible for the contractor's fulfillment of the participants Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to the action of a contractor*
- *must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the participant would be required to have if it were performing the obligation itself.*

Audit observation

Contact does not use contractors to perform any of its MEP functions.

Audit commentary

Contact does not use contractors to perform any of its MEP functions.

1.5. Hardware and Software

Contact MEP data is held in SAP. SAP is "cloud hosted" so if any single data centre failed the business can still operate. Specific SAP back up procedures are shown below.

Backup	SAP System	Full Backup	Differential Backup	Transaction Log backup
SAP Database Backups	ECC	Weekly (Sunday)	Daily	Every 30 minutes
	CRM			
	Gateway			
	Portal			
	PO			

The default location for these backups are to local Disk, and Contact is also moving these backups to S3 bucket.

1.6. Breaches or Breach Allegations

Contact confirmed there are no breach allegations related to the scope of this audit.

1.7. ICP Data

Metering Category	Number of ICPs
1	17,060
2	289
3	0
4	0
5	0
9	101
Total	17,450

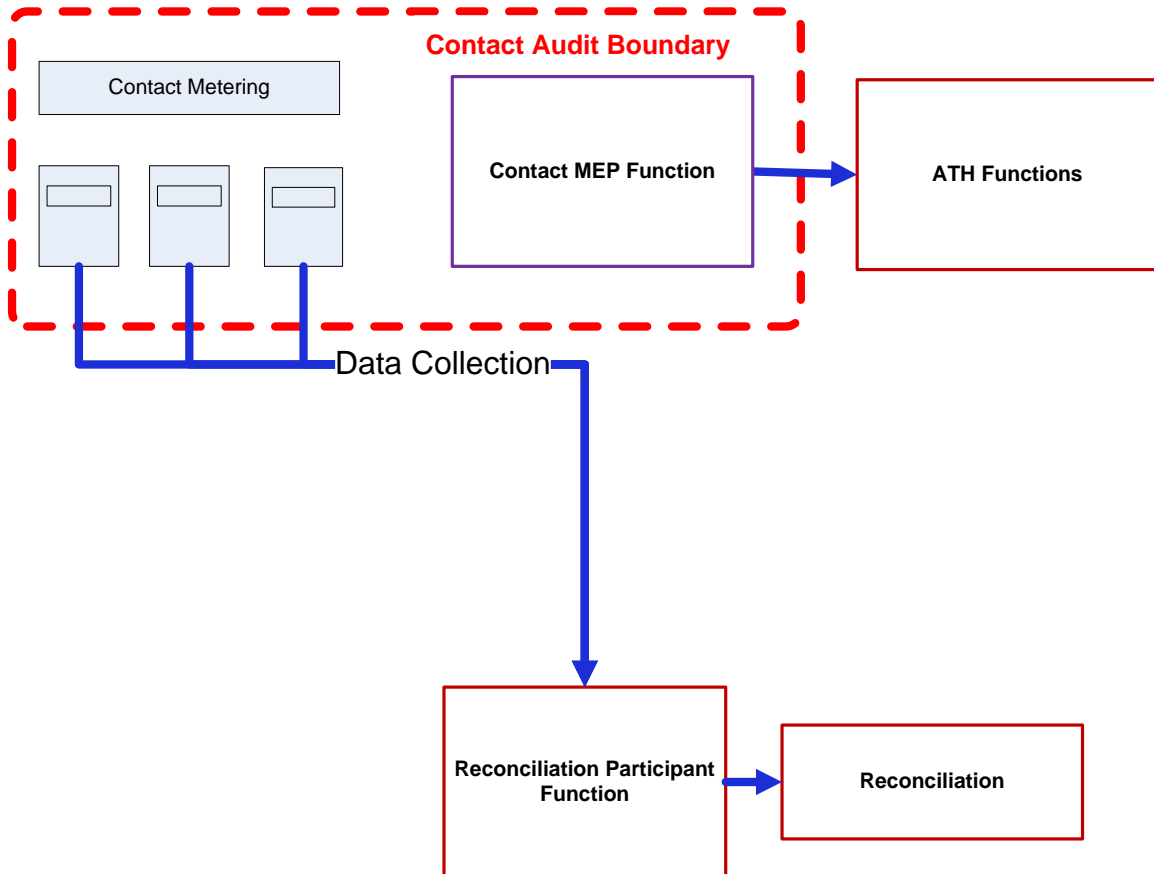
1.8. Authorisation Received

A letter of authorisation was not required or requested.

1.9. Scope of Audit

This audit was conducted in accordance with the Guideline for Metering Equipment Provider Audits V2.2, which was published by the Electricity Authority.

The boundaries of this audit are shown below for greater clarity.



1.10. Summary of previous audit

The previous audit was conducted in December 2020 by Brett Piskulic of Veritek Limited. The table below shows the status of the issues which were raised.

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Changes to registry records	4.10	Clause 3 of Schedule 11.4	Some records updated on the registry later than 10 business days.	Still existing
Provision of Registry Information	6.2	Clause 7 (1), (2) and (3) of Schedule 11.4	Some registry records incomplete or incorrect.	Still existing
Cancellation of certification	6.4	Clause 20 of Schedule 10.7	Certification cancelled, and registry not updated for 28 Category 2 installations with overdue inspection.	Still existing
Certification of metering installations	7.1	Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7	Certification expired for 1081 Category 1 ICPs and certification cancelled for 28 Category 2 ICPs.	Still existing
Timekeeping Requirements	7.10	Clause 23 of Schedule 10.7	31 ICPs with time switches not checked within 12 months. 4 ICPs with time errors exceeding an average of two seconds per day over a period of 12 months. 130 ICPs where time errors were not corrected.	Still existing
Category 2 to 5 Inspections	8.2	Clause 46(1) of Schedule 10.7	Inspections not conducted for 28 Category 2 metering installations.	Still existing
Defective metering	9.1	Clause 10.43(4) and (5)	6 potentially defective installations not investigated within 20 business days.	Cleared

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
			Nil	

2. OPERATIONAL INFRASTRUCTURE

2.1. MEP responsibility for services access interface (Clause 10.9(2))

Code reference

Clause 10.9(2)

Code related audit information

The MEP is responsible for providing and maintaining the services access interface.

Audit observation

Contact does not have AMI or data collection facilities; therefore, the services access interface is at the meter in all cases.

There were no new certifications completed during the audit period so there were no certification reports to check.

Audit commentary

Contact does not have AMI or data collection facilities; therefore, the services access interface is at the meter in all cases.

There were no new certifications completed during the audit period so there were no certification reports to check.

Audit outcome

Compliant

2.2. Dispute Resolution (Clause 10.50(1) to (3))

Code reference

Clause 10.50(1) to (3)

Code related audit information

Participants must in good faith use its best endeavours to resolve any disputes related to Part 10 of the Code.

Disputes that are unable to be resolved may be referred to the Authority for determination.

Complaints that are not resolved by the parties or the Authority may be referred to the Rulings Panel by the Authority or participant.

Audit observation

I checked whether any disputes had been dealt with during the audit period.

Audit commentary

Contact has not been required to resolve any disputes in accordance with this clause.

Audit outcome

Compliant

2.3. MEP Identifier (Clause 7(1) of Schedule 10.6)

Code reference

Clause 7(1) of Schedule 10.6

Code related audit information

The MEP must ensure it has a unique participant identifier and must use this participant identifier (if required) to correctly identify its information.

Audit observation

I checked the registry data to ensure the correct MEP identifier was used.

Audit commentary

Contact uses the CTCT identifier in all cases.

Audit outcome

Compliant

2.4. Communication Equipment Compatibility (Clause 40 Schedule 10.7)

Code reference

Clause 40 Schedule 10.7

Code related audit information

The MEP must ensure that the use of its communication equipment complies with the compatibility and connection requirements of any communication network operator the MEP has equipment connected to.

Audit observation

Contact is not the MEP for AMI metering installations where communication equipment is present.

Audit commentary

Contact is not the MEP for AMI metering installations where communication equipment is present.

Audit outcome

Compliant

2.5. Participants to Provide Accurate Information (Clause 11.2 and Clause 10.6)

Code reference

Clause 11.2 and Clause 10.6

Code related audit information

The MEP must take all practicable steps to ensure that information that the MEP is required to provide to any person under Parts 10 and 11 is complete and accurate, not misleading or deceptive and not likely to mislead or deceive.

If the MEP becomes aware that in providing information under Parts 10 and 11, the MEP has not complied with that obligation, the MEP must, as soon as practicable, provide such further information as is necessary to ensure that the MEP does comply.

Audit observation

The content of this audit report was reviewed to determine whether all practicable steps had been taken to provide accurate information.

Audit commentary

The content of this audit report indicates that Contact has taken all practicable steps to ensure that information is complete and accurate.

Audit outcome

Compliant

3. PROCESS FOR A CHANGE OF MEP

3.1. Change of metering equipment provider (Clause 10.22)

Code reference

Clause 10.22

Code related audit information

The MEP for a metering installation may change only if the responsible participant enters into an arrangement with another person to become the MEP for the metering installation, and if certain requirements are met in relation to updating the registry and advising the reconciliation manager.

The losing MEP must notify the gaining MEP of the proportion of the costs within 40 business days of the gaining MEP assuming responsibility. The gaining MEP must pay the losing MEP within 20 business days of receiving notification from the losing MEP.

The costs are those directly and solely attributable to the certification and calibration tests of the metering installation or its components from the date of switch until the end of the current certification period.

The gaining MEP is not required to pay costs if:

- *the losing MEP has agreed in writing that the gaining MEP is not required to pay costs, or the losing MEP has failed to provide notice within 40 business days.*
- *within three business days, the gaining MEP replaces, removes or recertifies the metering component or metering installation*
- *the losing MEP has failed to provide notice of the costs to the gaining MEP within 40 business days.*

Audit observation

Contact has not sent or received any invoices in relation to this clause.

Audit commentary

Contact has not sent or received any invoices in relation to this clause.

Audit outcome

Compliant

3.2. Registry Notification of Metering Records (Clause 2 of Schedule 11.4)

Code reference

Clause 2 of Schedule 11.4

Code related audit information

The gaining MEP must advise the registry of the registry metering records for the metering installation within 15 days of becoming the MEP for the metering installation.

Audit observation

I checked the audit compliance reports for the period 1 December 2020 to 28 February 2022 for all records where Contact became the MEP to evaluate the timeliness of updates.

Audit commentary

Contact did not become the MEP for any ICPs during the audit period.

Audit outcome

Compliant

3.3. Provision of Metering Records to Gaining MEP (Clause 5 of Schedule 10.6)

Code reference

Clause 5 of Schedule 10.6

Code related audit information

During an MEP switch, a gaining MEP may request access to the losing MEP's metering records. On receipt of a request from the gaining MEP, the losing MEP has 10 business days to provide the gaining MEP with the metering records or the facilities to enable the gaining MEP to access the metering records.

The losing MEP must ensure that the metering records are only received by the gaining MEP or its contractor, the security of the metering records is maintained, and only the specific metering records required for the purposes of the gaining MEP exercising its rights and performing its obligations are provided.

Audit observation

I checked with Contact to confirm whether there had been any requests from other MEPs.

Audit commentary

There were no requests during the audit period.

Audit outcome

Compliant

3.4. Termination of MEP Responsibility (Clause 10.23)

Code reference

Clause 10.23

Code related audit information

Even if the MEP ceases to be responsible for an installation, the MEP must either comply with its continuing obligations; or before its continuing obligations terminate, enter into an arrangement with a participant to assume those obligations.

The MEP is responsible if it:

- is identified in the registry as the primary metering contact or*
- is the participant who owns the meter for the POC or to the grid or*
- has accepted responsibility under clause 1(1)(a)(ii) of schedule 11.4 or*
- has contracted with a participant responsible for providing the metering installation.*

MEPs obligations come into effect on the date recorded in the registry as being the date on which the metering installation equipment is installed or, for an NSP the effective date set out in the NSP table on the Authority's website.

An MEP's obligations terminate only when;

- the ICP changes under clause 10.22(1)(a),*
- the NSP changes under clause 10.22(1)(b), in which case the MEPs obligations terminate from the date on which the gaining MEP assumes responsibility,*
- the metering installation is no longer required for the purposes of Part 15; or*

- *the load associated with an ICP is converted to be used solely for unmetered load.*

Audit observation

I confirmed that Contact has ceased to be responsible for some metering installations by checking the event detail report.

Audit commentary

Contact continues with their responsibilities, mainly in relation to the storage of records, which are kept indefinitely. I checked the records for two decommissioned ICPs where the meters had been removed, and the records were still available.

Audit outcome

Compliant

4. INSTALLATION AND MODIFICATION OF METERING INSTALLATIONS

4.1. Design Reports for Metering Installations (Clause 2 of Schedule 10.7)

Code reference

Clause 2 of Schedule 10.7

Code related audit information

The MEP must obtain a design report for each proposed new metering installation or a modification to an existing metering installation, before it installs the new metering installation or before the modification commences.

Clause 2(2) and (3)—The design report must be prepared by a person with the appropriate level of skills, expertise, experience and qualifications and must include a schematic drawing, details of the configuration scheme that programmable metering components are to include, confirmation that the configuration scheme has been approved by an approved test laboratory, maximum interrogation cycle for each services access interface, any compensation factor arrangements, method of certification required, and name and signature of the person who prepared the report and the date it was signed.

Clause 2(4)—The MEP must provide the design report to the certifying ATH before the ATH installs or modifies the metering installation (or a metering component in the metering installation).

Audit observation

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work and Delta has previously provided design reports for certification work which I have checked.

Audit commentary

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work and Delta has previously provided design reports for certification work which I have checked.

Audit outcome

Compliant

4.2. Contracting with ATH (Clause 9 of Schedule 10.6)

Code reference

Clause 9 of Schedule 10.6

Code related audit information

The MEP must, when contracting with an ATH in relation to the certification of a metering installation, ensure that the ATH has the appropriate scope of approval for the required certification activities.

Audit observation

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work. I checked the Authority's website for scope of approval.

Audit commentary

I have checked the Authority's website and confirm that the Delta ATH has current and appropriate scope of approval.

Audit outcome

Compliant

4.3. Metering Installation Design & Accuracy (Clause 4(1) of Schedule 10.7)

Code reference

Clause 4(1) of Schedule 10.7

Code related audit information

The MEP must ensure:

- *that the sum of the measured error and uncertainty does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the metering installation*
- *the design of the metering installation (including data storage device and interrogation system) will ensure the sum of the measured error and the smallest possible increment of the energy value of the raw meter data does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of installation*
- *the metering installation complies with the design report and the requirements of Part 10.*

Audit observation

I checked the processes used by Contact to ensure compliance with the design and error thresholds stipulated in Table 1.

Audit commentary

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work and Delta has previously provided design reports for certification work which I have checked.

There have been no changes to the Contact processes which ensure metering installations comply with the design report and the requirements of Part 10 by requiring ATH's to confirm the installations match the design, or by requiring updates to be provided if the installation does not match the design.

Audit outcome

Compliant

4.4. Net Metering and Subtractive Metering (Clause 10.13A and 4(2)(a) of Schedule 10.7)

Code reference

Clause 10.13A and Clause 4(2)(a) of Schedule 10.7

Code related audit information

MEPs must ensure that the metering installation records imported electricity separately from exported electricity. For category 1 and 2 installations the MEP must ensure the metering installation records imported and exported electricity separately for each phase.

For metering installations for ICPs that are not also NSPs, the MEP must ensure that the metering installation does not use subtraction to determine submission information used for the purposes of Part 15.

Audit observation

I asked Contact to confirm whether subtraction was used for any metering installations where they were the MEP.

Audit commentary

Contact does not have any metering installations where subtractive metering is used.

Audit outcome

Compliant

4.5. HHR Metering (Clause 4(2)(b) of Schedule 10.7)

Code reference

Clause 4(2)(b) of Schedule 10.7

Code related audit information

For metering installations for ICPS that are not also NSPs, the MEP must ensure that all category 3 or higher metering installations must be half-hour metering installations.

Audit observation

Contact is not the MEP for any metering installations above Category 2.

Audit commentary

Contact is not the MEP for any metering installations above Category 2.

Audit outcome

Compliant

4.6. NSP Metering (Clause 4(3) of Schedule 10.7)

Code reference

Clause 4(3) of Schedule 10.7

Code related audit information

The MEP must ensure that the metering installation for each NSP that is not connected to the grid does not use subtraction to determine submission information used for the purposes of Part 15 and is a half-hour metering installation.

Audit observation

Contact is not the MEP for any NSP metering installations.

Audit commentary

Contact is not responsible for any NSP metering.

Audit outcome

Compliant

4.7. Responsibility for Metering Installations (Clause 10.26(10))

Code reference

Clause 10.26(10)

Code related audit information

The MEP must ensure that each point of connection to the grid for which there is a metering installation that it is responsible for has a half hour metering installation.

Audit observation

Contact is not responsible for any grid metering.

Audit commentary

Contact is not responsible for any grid metering.

Audit outcome

Compliant

4.8. Suitability of Metering Installations (Clause 4(4) of Schedule 10.7)

Code reference

Clause 4(4) of Schedule 10.7

Code related audit information

The MEP must, for each metering installation for which it is responsible, ensure that it is appropriate having regard to the physical and electrical characteristics of the POC.

Audit observation

I checked the Delta ATH audit report to confirm compliance.

Audit commentary

I have checked the DELTA process and confirmed that the quality manual/operating instructions ensure compliance with relevant electrical legislation, specifically the electricity regulations with regard to safety practices in relation to supply polarity testing and safety practices.

Audit outcome

Compliant

4.9. Installation & Modification of Metering Installations (Clauses 10.34(2), (2A), (2D) and (3))

Code reference

Clauses 10.34(2), (2A), (2D) and (3)

Code related audit information

If a metering installation is proposed to be installed or modified at a POC, other than a POC to the grid, the MEP must consult with and use its best endeavours, to agree with the distributor and the trader for that POC, before the design is finalised, on the metering installation's:

- *required functionality*
- *terms of use*
- *required interface format*
- *integration of the ripple receiver and the meter*

- *functionality for controllable load.*

This includes where the MEP is proposing to replace a metering component or metering installations with the same or similar design and functionality but excludes where the MEP has already consulted on the design with the distributor and trader.

Each participant involved in the consultations must use its best endeavours to reach agreement and act reasonably and in good faith.

Audit observation

I checked previous communication regarding metering designs, and I checked whether there were any new or modified designs during the audit period.

Audit commentary

Contact has written agreements in place with traders, and these refer to “existing metering arrangements” and “compliance with the Code”. Contact has also consulted with distributors as required by this clause. There were no new or modified designs during the audit period.

Audit outcome

Compliant

4.10. Changes to Registry Records (Clause 3 of Schedule 11.4)

Code reference

Clause 3 of Schedule 11.4

Code related audit information

If the MEP has an arrangement with the trader the MEP must advise the registry manager of the registry metering records, or any change to the registry metering records, for each metering installation for which it is responsible at the ICP, no later than 10 business days following:

- a) the electrical connection of the metering installation at the ICP*
- b) any subsequent change to the metering installation’s metering records*

If the MEP is update the registry in accordance with 8(11)(b) of Schedule 10.6, 10 business days after the most recent unsuccessful interrogation.

If update the registry in accordance with clause 8(13) of Schedule 10.6, 3 business days following the expiry of the time period or date from which the MEP determines it cannot restore communications.

Audit observation

I checked the audit compliance reports for the period 1 December 2020 to 28 February 2022 to evaluate the timeliness of registry updates.

Audit commentary

There were no new connections during the audit period, but one backdated update was identified by the audit compliance report as shown in the table below.

Recertification by statistical sampling was conducted by Contact during the audit period. The audit compliance report identified that all 1,427 ICPs recertified were updated within 10 business days. There were two corrections of meter numbers backdated to the original certification date which are recorded as late.

Event	Year	Total ICPs	ICPs Notified Within 10 Days	ICPs Notified Greater Than 10 Days	Average Notification Days	Percentage Compliant
New Connection	2017	2	1	1	29	50%
	2018	0	-	-	-	-
	2019	0	-	-	-	-
	2020	0	-	-	-	-
	2022	1	0	1	-	0%
Updates	2017	17542	15516	2026	54	88%
	2018	830	81	749	591	10%
	2019	532	52	480	516	10%
	2020	67	1	66	474	1.5%
	2022	1,429	1,427	2	-	99.86%

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.10 With: Clause 3 of Schedule 11.4 From: 01-Jul-19 To: 30-Sep-20	Three records updated on the registry later than 10 business days. 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	I have recorded the controls as strong as there were only three late updates which related to corrections. Updates occur as soon as errors are found. The impact on participants, customers or settlement is minor, therefore the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
All records have been corrected in the registry	Completed	Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	
Contact has further refined our current process by increasing the frequency of the reports to run fortnightly which will reduce the timeframes associated with correcting any errors. The 3 records that have been identified as non-compliant were remedied very soon after these were identified in our reconciliation process.	Ongoing	

4.11. Metering Infrastructure (Clause 10.39(1))

Code reference

Clause 10.39(1)

Code related audit information

The MEP must ensure that for each metering installation:

- an appropriately designed metering infrastructure is in place
- each metering component is compatible with, and will not interfere with any other component in the installation
- collectively, all metering components integrate to provide a functioning system
- each metering installation is correctly and accurately integrated within the associated metering infrastructure.

Audit observation

Contact does not have any AMI metering.

Audit commentary

Contact does not have any AMI metering.

Audit outcome

Compliant

4.12. Decommissioning of an ICP (Clause 10.23A)

Code reference

Clause 10.23A

Code related audit information

If a metering installation at an ICP is to be decommissioned, but the ICP is not being decommissioned, the MEP that is responsible for decommissioning the metering installation must:

- if the MEP is responsible for interrogating the metering installation, arrange for a final interrogation to take place before the metering installation is decommissioned, and provide the raw meter data from the interrogation to the responsible trader

- *if another participant is responsible for interrogating the metering installation, advise the other participant not less than three business days before the decommissioning of the time and date of the decommissioning, and that the participant must carry out a final interrogation.*

To avoid doubt, if a metering installation at an ICP is to be decommissioned because the ICP is being decommissioned:

- *the trader, not the MEP, is responsible for arranging a final interrogation of the metering installation*
- *the responsible trader must arrange for a final interrogation of the metering installation*

Audit observation

I checked whether Contact was the MEP at any decommissioned metering installations and whether notification had been provided to relevant traders.

Audit commentary

There were no examples of decommissioned metering installations where the ICP was not also decommissioned.

Audit outcome

Compliant

4.13. Measuring Transformer Burden and Compensation Requirements (Clause 31(4) and (5) of Schedule 10.7)

Code reference

Clause 31(4) and (5) of Schedule 10.7

Code related audit information

The MEP must, before approving the addition of, or change to, the burden or compensation factor of a measuring transformer in a metering installation, consult with the ATH who certified the metering installation.

If the MEP approves the addition of, or change to, the burden or compensation factor, it must ensure the metering installation is recertified by an ATH before the addition or change becomes effective.

Audit observation

I asked Contact whether they had approved any burden changes during the audit period.

Audit commentary

There have been no burden changes during the audit period. Contact's processes show that any action leading to a change in burden results in recertification.

Audit outcome

Compliant

4.14. Changes to Software ROM or Firmware (Clause 39(1) and 39(2) of Schedule 10.7)

Code reference

Clause 39(1) and 39(2) of Schedule 10.7

Code related audit information

The MEP must, if it proposes to change the software, ROM or firmware of a data storage device installed in a metering installation, ensure that, before the change is carried out, an approved test laboratory:

- *tests and confirms that the integrity of the measurement and logging of the data storage device would be unaffected*
- *documents the methodology and conditions necessary to implement the change*
- *advises the ATH that certified the metering installation of any change that might affect the accuracy of the data storage device.*

The MEP must, when implementing a change to the software, ROM or firmware of a data storage device installed in a metering installation:

- *carry out the change in accordance with the methodology and conditions identified by the approved test laboratory under clause 39(1)(b)*
- *keep a list of the data storage devices that were changed*
- *update the metering records for each installation affected with the details of the change and the methodology used.*

Audit observation

Contact is not the MEP for any installations where changes to ROM, software or firmware have occurred.

Audit commentary

Contact is not the MEP for any installations where changes to ROM, software or firmware have occurred.

Audit outcome

Compliant

4.15. Temporary Electrical Connection (Clause 10.29A)

Code reference

Clause 10.29A

Code related audit information

An MEP must not request that a grid owner temporarily electrically connect a POC to the grid unless the MEP is authorised to do so by the grid owner responsible for that POC and the MEP has an arrangement with that grid owner to provide metering services.

Audit observation

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made.

Audit commentary

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made. Contact understands its responsibilities regarding temporary electrical connections.

Audit outcome

Compliant

4.16. Temporary Electrical Connection (Clause 10.30A)

Code reference

Clause 10.30A

Code related audit information

An MEP must not request that a distributor temporarily electrically connect an NSP that is not a POC to the grid unless the MEP is authorised to do so by the reconciliation participant responsible for that NSP and the MEP has an arrangement with that reconciliation participant to provide metering services.

Audit observation

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made.

Audit commentary

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made. Contact understands its responsibilities regarding temporary electrical connections.

Audit outcome

Compliant

4.17. Temporary Electrical Connection (Clause 10.31A)

Code reference

Clause 10.31A

Code related audit information

Only a distributor may, on its network, temporarily electrically connect an ICP that is not an NSP. A MEP may only request the temporary electrical connection of the ICP if it is for the purpose of certifying a metering installation, or for maintaining, repairing, testing, or commissioning a metering installation at the ICP.

Audit observation

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made.

Audit commentary

Contact has not completed any new connections during the audit period, so there have been no temporary electrical connections made. Contact understands its responsibilities regarding temporary electrical connections.

Audit outcome

Compliant

5. METERING RECORDS

5.1. Accurate and Complete Records (Clause 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4)

Code reference

Clause 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4

Code related audit information

The MEP must, for each metering installation for which it is responsible, keep accurate and complete records of the attributes set out in Table 1 of Schedule 11.4. These include:

- a) The certification expiry date of each metering component in the metering installation*
- b) All equipment used in relation to the metering installation, including serial numbers and details of the equipment's manufacturer*
- c) The manufacturer's or (if different) most recent test certificate for each metering component in the metering installation*
- d) The metering installation category and any metering installations certified at a lower category*
- e) All certification reports and calibration reports showing dates tested, tests carried out, and test results for all metering components in the metering installation*
- f) The contractor who installed each metering component in the metering installation*
- g) The certification sticker, or equivalent details, for each metering component that is certified under Schedule 10.8 in the metering installation:*
- h) Any variations or use of the 'alternate certification' process*
- i) Seal identification information*
- j) Any applicable compensation factors*
- k) The owner of each metering component within the metering installation*
- l) Any applications installed within each metering component*
- m) The signed inspection report confirming that the metering installation complies with the requirements of Part 10.*

Audit observation

I checked the certification records for the recertification by statistical sampling conducted during the audit period.

Audit commentary

The certification records contained all the relevant information required.

Non-compliance is recorded in **section 7.13** due to the ATH process not ensuring that the sample was representative of the population being certified.

Audit outcome

Compliant

5.2. Inspection Reports (Clause 4(2) of Schedule 10.6)

Code reference

Clause 4(2) of Schedule 10.6

Code related audit information

The MEP must, within 10 business days of receiving a request from a participant for a signed inspection report prepared under clause 44 of Schedule 10.7, make a copy of the report available to the participant.

Audit observation

I asked Contact whether any requests had been made for copies of inspection reports.

Audit commentary

Contact has not been requested to supply any inspection reports, but these are available and can be supplied on request.

Audit outcome

Compliant

5.3. Retention of Metering Records (Clause 4(3) of Schedule 10.6)

Code reference

Clause 4(3) of Schedule 10.6

Code related audit information

The MEP must keep metering installation records for 48 months after any metering component is removed, or any metering installation is decommissioned.

Audit observation

I checked Contact's record keeping processes to confirm compliance.

Audit commentary

Contact keeps records indefinitely and I checked the availability of records for two decommissioned ICPs to confirm compliance.

Audit outcome

Compliant

5.4. Provision of Records to ATH (Clause 6 Schedule 10.6)

Code reference

Clause 6 Schedule 10.6

Code related audit information

If the MEP contracts with an ATH to recertify a metering installation and the ATH did not previously certify the metering installation, the MEP must provide the ATH with a copy of all relevant metering records not later than 10 business days after the contract comes into effect.

Audit observation

Contact has provided information to ATH's in the past and this may occur in future. There are no current examples to examine.

Audit commentary

Contact has provided information to ATH's in the past and this may occur in future. There are no current examples to examine

Audit outcome

Compliant

6. MAINTENANCE OF REGISTRY INFORMATION

6.1. MEP Response to Switch Notification (Clause 1(1) of Schedule 11.4)

Code reference

Clause 1(1) of Schedule 11.4

Code related audit information

Within 10 business days of being advised by the registry that it is the gaining MEP for the metering installation for the ICP, the MEP must enter into an arrangement with the trader and advise the registry it accepts responsibility for the ICP and of the proposed date on which it will assume responsibility.

Audit observation

I checked the event detail report and switch breach history detail report to confirm whether all responses were within 10 business days.

Audit commentary

Contact was not the gaining MEP for any ICPs during the audit period.

Audit outcome

Compliant

6.2. Provision of Registry Information (Clause 7 (1), (1A), (2) and (3) of Schedule 11.4)

Code reference

Clause 7 (1), (2) and (3) of Schedule 11.4

Code related audit information

The MEP must provide the information indicated as being 'required' in Table 1 of clause 7 of Schedule 11.4 to the registry manager, in the prescribed form for each metering installation for which the MEP is responsible.

The MEP does not need to provide 'required' information if the information is only for the purpose of a distributor direct billing consumers on its network.

From 1 April 2015, a MEP is required to ensure that all the registry metering records of its category 1 metering installations are complete, accurate, not misleading or deceptive, and not likely to mislead or deceive.

The information the MEP provides to the registry manager must derive from the metering equipment provider's records or the metering records contained within the current trader's system.

Audit observation

I checked the audit compliance reports to identify discrepancies.

Audit commentary

Analysis of the audit compliance reports and list file for all ICPs found some discrepancies. The table below shows these and includes a comparison with the previous audit results.

Quantity of ICPs April 2022	Quantity of ICPs Oct 2020	Quantity of ICPs April 2019	Quantity of ICPs Sept 2018	Quantity of ICPs Sept 2017	Quantity of ICPs Sept 2016	Issue
0	0	0	0	0	0	Blank records on the registry.
0	0	0	0	0	0	Interim certified installations over Category 1.
0	0	0	0	0	6	Fully certified installations with compensation factors of 3.
0	0	0	0	0	0	Category 1 Installations with compensation factors greater than 3.
10,744	13,135	18,701	8,957	10,824	40,464	Control device details not populated in the registry.
0	0	0	0	1	2	Incorrect certification date or certification expiry date for Cat 2.
0	0	3	0	0	2	Incorrect certification duration on Category 1 installations.
4	4	4	5,220	0	7,470	Interim certified installations recorded as fully certified with certification and expiry dates both 01/04/15 Contact response: Contact has a Reconciliation Participant exemption to submit unmetered DUML as HHR – however to correctly reflect the HHR settlement indicator on the registry there must be a MEP record for this unmetered supply. We create an MEP record (ie a pseudo/dummy MEP record) to enable the correct HHR settlement indicator to be populated to flag the submission type as a HHR. Contact continues to work with providers of street light logger data to identify a method that would allow the loggers installed, to determine the hours of operation, to be certified consistent with the Code.
27	27	27	83	27	665	Interim certified ICPs without 01/04/2015 as the certification expiry date. Expiry dates of

						31/12/9999 for unmetered streetlight ICPs Contact response: Contact has a Reconciliation Participant exemption to submit unmetered DUML as HHR – however to correctly reflect the HHR settlement indicator on the registry there must be a MEP record for this unmetered supply. We create an MEP record (ie a pseudo/dummy MEP record) to enable the correct HHR settlement indicator to be populated to flag the submission type as a HHR. Contact continues to work with providers of street light logger data to identify a method that would allow the loggers installed, to determine the hours of operation, to be certified consistent with the Code.
0	0	0	0	0	0	New connection ICPs with no certification date populated and showing as interim certified.
0	0	0	0	0	0	Installations with AMI but 365 days for interrogation cycle.
0	0	1	0	3	2	Category 2 plus installations without CT information on the registry.
0	0	0	0	0	0	CN only (residential)
0	0	0	0	0	2	Day and night do not = 24.
0	0	0	0	0	2	Day with no night.
0	0	0	0	0	5	Night with no day.
0	0	0	0	13		Max interrogation cycle of zero days. Unmetered.
0	1	1	1	1	1	Quantity of metering installations with compensation factor of 101
1	53	69	-	-	-	UN only with a control device. It is likely this should be INEM. Contact response: the issue resolved – register code has been updated to INEM

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.2 With: Clause 7 (1), (2) and (3) of Schedule 11.4 From: 01-Jul-19 To: 30-Sep-20	Some registry records incomplete or incorrect. Potential impact: Medium Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls as strong in this area. Sound validations are in place to ensure data is accurate. Very few of the discrepancies have an impact on participants, customers or settlement. The only relevant ones in this regard are tariff related and there were only a small number. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
[Comments have been included against specific items in the Table above]		Completed	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
[Comments have been included against specific items in the Table above]		Ongoing	

6.3. Correction of Errors in Registry (Clause 6 of Schedule 11.4)

Code reference

Clause 6 of Schedule 11.4

Code related audit information

By 0900 hours on the 13th business day of each reconciliation period, the MEP must obtain from the registry:

- *a list of ICPs for the metering installations the MEP is responsible for*
- *the registry metering records for each ICP on that list.*

No later than five business days following collection of data from the registry, the MEP must compare the information obtained from the registry with the MEP's own records.

Within five business days of becoming aware of any discrepancy between the MEP's records and the information obtained from the registry, the MEP must correct the records that are in error and advise the registry of any necessary changes to the registry metering records.

Audit observation

I conducted a walkthrough of the validation processes to confirm compliance. I checked Contact’s process to identify and update errors.

Audit commentary

Contact had a process which conducted a complete validation at least once every fortnight. The process has not been conducted since November 2021. The process uses an Access database which has been unable to run after an upgrade of the Windows operating system of user PCs in November 2021.

I have recorded non-compliance as the validation process has not been performed for every month of the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.3 With: Clause 6 of Schedule 11.4 From: 31-Dec-21 To: 05-May-22	Registry validation not conducted for every month of the audit period. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as weak because Contact has been unable to run the validation process since November 2021. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We acknowledged that registry validation has not been conducted for a couple of months (specifically January and February 2022) due to system upgrade.		Completed	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

<p>Contact reconciles core metering attributes on a monthly basis using the data in the registry and our records by obtaining a daily snapshot and fortnightly metering details reports from the registry to ensure comparisons and subsequent corrections are meeting the requirement. It is noted that Contact no longer installs new metering equipment, and any replacement equipment becomes a smart meter, therefore any errors in metering data are extremely rare (almost non-existent).</p> <p>We would appreciate these aspects being considered in the rating assessment.</p>	Ongoing	
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6.4. Cancellation of Certification (Clause 20 of Schedule 10.7)

Code reference

Clause 20 of Schedule 10.7

Code related audit information

The certification of a metering installation is automatically cancelled on the date on which one of the following events takes place:

- a) the metering installation is modified otherwise than under sub clause 19(3), 19(3A) or 19(3C)*
- b) the metering installation is classed as outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1, defective or not fit for purpose under this Part or any audit*
- c) an ATH advises the metering equipment provider responsible for the metering installation of a reference standard or working standard used to certify the metering installation not being compliant with this Part at the time it was used to certify the metering installation, or the failure of a group of meters in the statistical sampling recertification process for the metering installation, or the failure of a certification test for the metering installation*
- d) the manufacturer of a metering component in the metering installation determines that the metering component does not comply with the standards to which the metering component was tested*
- e) an inspection of the metering installation, that is required under this Part, is not carried out in accordance with the relevant clauses of this Part*
- f) if the metering installation has been determined to be a lower category under clause 6 and:

 - a. the MEP has not received the report under 6(2A)(a) or 6(2A)(b); or*
 - b. the report demonstrates the maximum current is higher than permitted; or*
 - c. the report demonstrates the electricity conveyed exceeds the amount permitted**
- g) the metering installation is certified under clause 14 and sufficient load is available for full certification testing and has not been retested under clause 14(4)*
- h) a control device in the metering installation certification is, and remains for a period of at least 10 business days, bridged out under clause 35(1)*
- i) the metering equipment provider responsible for the metering installation is advised by an ATH under clause 48(6)(b) that a seal has been removed or broken and the accuracy and continued integrity of the metering installation has been affected.*
- j) the installation is an HHR AMI installation certified after 29 August 2013 and

 - a. the metering installation is not interrogated within the maximum interrogation cycle; or*
 - b. the HHR and NHH register comparison is not performed; or*
 - c. the HHR and NHH register comparison for the same period finds a difference of greater than 1 kWh and the issue is not remediated within 3 business days**

A metering equipment provider must (unless the installation has been recertified within the 10 business days) within 10 business days of becoming aware that one of the events above has occurred in relation to a metering installation for which it is responsible, update the metering installation’s certification expiry date in the registry.

If any of the events in Clause 20(1)(j) of Schedule 10.7 have occurred, update the AMI flag in the registry to ‘N’.

Audit observation

I checked for examples of all of the points listed above, and checked whether certification had been cancelled, and whether the registry had been updated within 10 business days.

Audit commentary

Contact confirmed that it did not conduct inspections of its Category 1 metering installations by statistical sampling in 2020. As recorded in **section 8.1** there were 5,068 Category 1 ICPs certified more than 84 months before 2020 which were due for inspection. Non-compliance is recorded as certification is cancelled, and the registry was not updated.

I checked the registry information and determined that there were five ICPs at Category 2 that were due for inspection during the audit period. Four of the five inspections were not conducted. Certification is therefore cancelled, and the registry has not been updated. Non-compliance is recorded in **section 8.2** for the missed inspections.

There were no examples of any of the other points listed above.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.4 With: Clause 6 of Schedule 11.4 From: 31-Dec-20 To: 05-May-22	Certification cancelled, and registry not updated for 5,068 Category 1 ICPs due inspection by statistical sample not being conducted in 2020. Certification cancelled, and registry not updated for four Category 2 ICPs with overdue inspections. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls as weak in this area as the Contact process had not identified ICPs with cancelled certification dating back to 2020. The issues found can all potentially have a low impact on other participants and on settlement. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status

<p>We acknowledge that these installations were not inspected within the given timeframes. We also acknowledge that the certification details of these metering installations weren't updated in the registry.</p> <p>Contact has been engaged in a commercial process to sell our remaining assets, which has, for a number of reasons, taken longer than we expected to conclude. The delay has resulted in the pausing of 2021 compliance and certification programme as the potential purchaser had indicated they would conduct the compliance and certification process to enable a clean transition. The sale is nearing completion and it is still our understanding that the purchaser will complete the compliance and certification work. We have kept (and will continue to keep) the Authority up to date on this process, (our most recent communication was on 5 April 2022) and would appreciate this being considered when performing final recommendations.</p>	Completed	Identified
<p>Preventative actions taken to ensure no further issues will occur</p>	Completion date	
<p>As above, if sale proceeds compliance and certification tasks will be included in the new MEP's program of work. If the sale does not proceed, Contact will initiate our next metering compliance and certification program.</p>	Ongoing	

6.5. Registry Metering Records (Clause 11.8A)

Code reference

Clause 11.8A

Code related audit information

The MEP must provide the registry with the required metering information for each metering installation the MEP is responsible for and update the registry metering records in accordance with Schedule 11.4.

Audit observation

This clause refers to schedule 11.4 which is discussed in **section 6.2**, apart from the requirement to provide information in the "prescribed form". I checked for examples of Contact not using the prescribed form.

Audit commentary

This clause refers to schedule 11.4 which is discussed in **section 6.2**, apart from the requirement to provide information in the "prescribed form". I checked for examples of Contact not using the prescribed form and did not find any exceptions.

Audit outcome

Compliant

7. CERTIFICATION OF METERING INSTALLATIONS

7.1. Certification and Maintenance (Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7)

Code reference

Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7

Code related audit information

The MEP must obtain and maintain certifications for all installations and metering components for which it is responsible. The MEP must ensure it:

- performs regular maintenance, battery replacement, repair/replacement of components of the metering installations
- updates the metering records at the time of the maintenance
- has a recertification programme that will ensure that all installations are recertified prior to expiry.

Audit observation

I conducted the following checks to identify metering installations with expired, cancelled or late certification:

- the audit compliance reports were checked to identify ICPs with expired certification, and
- I checked ICPs where certification was cancelled to ensure the registry was updated accordingly.

Audit commentary

The audit compliance reports identified 848 ICPs with expired certification. 724 are Category 1 and 124 are Category 2.

As mentioned in **section 6.4**, 5,068 Category 1 and four Category 2 ICPs have cancelled certification due to inspections not being completed.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 7.1</p> <p>With: Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7</p> <p>From: 15-Feb-19</p> <p>To: 05-May-22</p>	<p>Certification expired for 848 ICPs and certification cancelled for 5,072 ICPs.</p> <p>Potential impact: High</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>I have recorded the controls as weak in this area as the Contact process had not identified ICPs with cancelled certification dating back to 2020.</p> <p>The impact on settlement is recorded as low. There is an increased likelihood of failure or inaccuracy for metering installations with expired certification, but the numbers are low, therefore the audit risk rating is low.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
<p>In relation to the cancellation of 4 CAT2 metering installations, we acknowledged that these installations were not inspected within the given timeframe. We have updated the certification details of these metering installations in the registry.</p> <p>Contact has been engaged in a commercial process to sell our remaining assets, which has, for a number of reasons, taken longer than we expected to conclude. The delay has resulted in the pausing of 2021 compliance and certification programme as the potential purchaser had indicated they would conduct the compliance and certification process to enable a clean transition. The sale is nearing completion and it is still our understanding that the purchaser will complete the compliance and certification work. We have kept (and will continue to keep) the Authority up to date on this process, (our most recent communication was on 5 April 2022) and would appreciate this being considered when performing final recommendations.</p>	Completed	Identified
<p>Preventative actions taken to ensure no further issues will occur</p>	Completion date	
<p>As above, if sale proceeds compliance and certification tasks will be included in the new MEP's program of work. If the sale does not proceed, Contact will initiate our next metering compliance and certification program.</p>	Ongoing	

7.2. Certification Tests (Clause 10.38(b) and clause 9 of Schedule 10.6)

Code reference

Clause 10.38(b) and clause 9 of Schedule 10.6

Code related audit information

For each metering component and metering installation an MEP is responsible for, the MEP must ensure that:

- *an ATH performs the appropriate certification and recertification tests*
- *the ATH has the appropriate scope of approval to certify and recertify the metering installation.*

Audit observation

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work and inspections. Contact confirmed that there have been no changes to the certification processes.

Audit commentary

I have checked the most recent Delta ATH audit report and confirmed that their processes include the appropriate certification tests.

Audit outcome

Compliant

7.3. Active and Reactive Capability (Clause 10.37(1) and 10.37(2)(a))

Code reference

Clause 10.37(1) and 10.37(2)(a)

Code related audit information

For any category 2 or higher half-hour metering installation that is certified after 29 August 2013, the MEP must ensure that the installation has active and reactive measuring and recording capability.

Consumption only installations that is a category 3 metering installation or above must measure and separately record:

- a) import active energy*
- b) import reactive energy*
- c) export reactive energy.*

Consumption only installations that are a category 2 metering installation must measure and separately record import active energy.

All other installations must measure and separately record:

- a) import active energy*
- b) export active energy*
- c) import reactive energy*
- d) export reactive energy.*

All grid connected POCs with metering installations which are certified after 29 August 2013 should measure and separately record:

- a) import active energy*
- b) export active energy*
- c) import reactive energy*
- d) export reactive energy*

Audit observation

Contact does not have any HHR installations.

Audit commentary

Contact does not have any HHR installations.

Audit outcome

Compliant

7.4. Local Service Metering (Clause 10.37(2)(b))

Code reference

Clause 10.37(2)(b)

Code related audit information

The accuracy of each local service metering installation in grid substations must be within the tolerances set out in Table 1 of Schedule 10.1.

Audit observation

This clause relates to Transpower as an MEP.

Audit commentary

This clause relates to Transpower as an MEP.

Audit outcome

Compliant

7.5. Measuring Transformer Burden (Clause 30(1) and 31(2) of Schedule 10.7)

Code reference

Clause 30(1) and 31(2) of Schedule 10.7

Code related audit information

The MEP must not permit a measuring transformer to be connected to equipment used for a purpose other than metering, unless it is not practical for the equipment to have a separate measuring transformer.

The MEP must ensure that a change to, or addition of, a measuring transformer burden or a compensation factor related to a measuring transformer is carried out only by:

- a) the ATH who most recently certified the metering installation*
- b) for a POC to the grid, by a suitably qualified person approved by both the MEP and the ATH who most recently certified the metering installation.*

Audit observation

I asked Contact if there were any examples of burden changes, or the addition of non-metering equipment connected to metering CTs.

Audit commentary

There are no examples of burden changes, or the addition of non-metering equipment connected to metering CTs having occurred.

Audit outcome

Compliant

7.6. Certification as a Lower Category (Clauses 6(1)(b) and (d), and 6(2)(b) of Schedule 10.7)

Code reference

Clauses 6(1)(b) and (d), and 6(2)(b) of Schedule 10.7

Code related audit information

A category 2 or higher metering installation may be certified by an ATH at a lower category than would be indicated solely on the primary rating of the current if the MEP, based on historical metering data, reasonably believes that:

- the maximum current will at all times during the intended certification period be lower than the current setting of the protection device for the category for which the metering installation is certified, or is required to be certified by the Code; or*
- the metering installation will use less than 0.5 GWh in any 12-month period.*

If a metering installation is categorised under clause 6(1)(b), the ATH may, if it considers appropriate, and, at the MEP's request, determine the metering installation's category according to the metering installation's expected maximum current.

If a meter is certified in this manner:

- *the MEP must, each month, obtain a report from the participant interrogating the metering installation, which details the maximum current from raw meter data from the metering installation by either calculation from the kVA by trading period, if available, or from a maximum current indicator if fitted in the metering installation conveyed through the point of connection for the prior month; and*
- *if the MEP does not receive a report, or the report demonstrates that the maximum current conveyed through the POC was higher than permitted for the metering installation category it is certified for, then the certification for the metering installation is automatically cancelled.*

Audit observation

I checked the audit compliance reports for examples where the CT ratio was above the threshold to confirm that protection was appropriate or that monitoring was in place.

Audit commentary

The audit compliance reports identified three metering installations that were nominally Category 3 and have been certified as Category 2. A check of the certification records confirmed that there is a current limiting device installed to limit the current to within the Category 2 limit at all three ICPs.

Audit outcome

Compliant

7.7. Insufficient Load for Certification Tests (Clauses 14(3) and (4) of Schedule 10.7)

Code reference

Clauses 14(3) and (4) of Schedule 10.7

Code related audit information

If there is insufficient electricity conveyed through a POC to allow the ATH to complete a prevailing load test for a metering installation that is being certified as a half hour meter and the ATH certifies the metering installation the MEP must:

- *obtain and monitor raw meter data from the metering installation at least once each calendar month to determine if load during the month is sufficient for a prevailing load test to be completed:*
- *if there is sufficient load, arrange for an ATH to complete the tests (within 20 business days).*

Audit observation

I checked if there were any examples of insufficient load certifications.

Audit commentary

There are no examples of insufficient load certifications.

Audit outcome

Compliant

7.8. Insufficient Load for Certification – Cancellation of Certification (Clause 14(6) of Schedule 10.7)

Code reference

Clause 14(6) of Schedule 10.7

Code related audit information

If the tests conducted under clause 14(4) of Schedule 10.7 demonstrate that the metering installation is not within the relevant maximum permitted error:

- *the metering installation certification is automatically revoked:*
- *the certifying ATH must advise the MEP of the cancellation within 1 business day:*
- *the MEP must follow the procedure for handling faulty metering installations (clause 10.43 - 10.48).*

Audit observation

There are no examples of insufficient load certifications.

Audit commentary

There are no examples of insufficient load certifications.

Audit outcome

Compliant

7.9. Alternative Certification Requirements (Clauses 32(2), (3) and (4) of Schedule 10.7)

Code reference

Clauses 32(2), (3) and (4) of Schedule 10.7

Code related audit information

If an ATH cannot comply with the requirements to certify a metering installation due to measuring transformer access issues, and therefore certifies the metering installation in accordance with clause 32(1) of Schedule 10.7, the MEP must:

- *advise the market administrator, by no later than 10 business days after the date of certification of the metering installation, of the details in clause 32(2)(a) of Schedule 10.7*
- *respond, within 5 business days, to any requests from the market administrator for additional information*
- *ensure that all of the details are recorded in the metering installation certification report*
- *take all steps to ensure that the metering installation is certified before the certification expiry date.*

If the market administrator determines the ATH could have obtained access the metering installation is deemed to be defective, and the MEP must follow the process of handling faults metering installations in clauses 10.43 to 10.48.

Audit observation

I checked the registry records to confirm whether alternative certification had been applied.

Audit commentary

Alternative certification has not been applied to any metering installations.

Audit outcome

Compliant

7.10. Timekeeping Requirements (Clause 23 of Schedule 10.7)

Code reference

Clause 23 of Schedule 10.7

Code related audit information

If a time keeping device that is not remotely monitored and corrected controls the switching of a meter register in a metering installation, the MEP must ensure that the time keeping device:

- a) has a time keeping error of not greater than an average of 2 seconds per day over a period of 12 months*
- b) is monitored and corrected at least once every 12 months.*

Audit observation

I asked Contact whether there were any metering installations with time switches and checked the results of any time checks completed.

Audit commentary

Contact confirmed there are 184 active metering installations with non-monitored timekeeping devices which control meter registers. I checked the process for checking the time. Contact arranges for the time to be checked annually. Contact provided the results of the latest checks which took place in 2021 which are summarised in the following table,

Meter_Clock status/Job_Status	Number
Not checked	7
Accurate	172
Inaccurate	5
Grand Total	184

There were seven ICPs where the ATH was unable to locate or access the installation to perform the checks. Non-compliance is recorded for these seven ICPs as they were not monitored every 12 months.

There were five ICPs where the timekeeping error exceeded an average of two seconds per day over a period of 12 months (>12 minutes error). Non-compliance is recorded for these five ICPs.

The Code requires that the time keeping device is monitored and corrected at least once every 12 months. The Contact process meets the requirement to monitor the time keeping devices at least once every 12 months but does not include a process to correct the time when errors are found. There were 79 ICPs where time errors of less than two seconds per day over a period of 12 months (>12 minutes error) were reported and not corrected.

Audit outcome

Non-compliant

Non-compliance	Description
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<p>Audit Ref: 7.10 With: Clause 23 of Schedule 10.7 From: 01-Jul-19 To: 05-May-22</p>	<p>Seven ICPs with time switches not checked within 12 months. Five ICPs with time errors exceeding an average of two seconds per day over a period of 12 months. 79 ICPs where time errors were not corrected.</p> <p>Potential impact: Medium Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>I have recorded the controls as moderate in this area because Contact has processes to ensure time switches are checked every 12 months but does not have a process to correct the time.</p> <p>The impact is low as the trader is not using the timed registers for submission; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Contact acknowledges that there are 7 ICPs where time keeping checks could not be completed, primarily due to access issues, and 5 ICPs were identified to have time keeping errors that will be investigated further and corrected.</p> <p>Contacts interpretation of the 79 ICPs noted to contain time errors differs to what the audit findings have outlined, based on the Part 10.7 of the Code, clause (23. (b)). We believe that these ICPs do not require correction due to the fact, the time keeping error is not greater than an average of two seconds per day over a period of 12 months for these installations.</p> <p>We haven't heard from Electricity Authority about our interpretation that has been put through our previous MEP Audit. We would appreciate clarification of our interpretation and if our understanding is correct, for the risk rating to be reassessed as appropriate.</p>		Completed	<p>Investigating for 7 ICPs not checked and 5 ICPs with errors exceeding 2 seconds per day.</p> <p>Disputed for 79 ICPs where time errors were not corrected.</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>If sale proceeds time keeping requirement tasks will be included in the new MEP's program of work. If the sale does not proceed, Contact will continue to investigate and correct any time clock errors.</p>		Ongoing	

7.11. Control Device Bridged Out (Clause 35 of Schedule 10.7)

Code reference

Clause 35 of Schedule 10.7

Code related audit information

The participant must, within 10 business days of bridging out a control device or becoming aware of a control device being bridged out, notify the following parties:

- *the relevant reconciliation participant*
- *the relevant metering equipment provider.*

If the control device is used for reconciliation, the metering installation is considered defective in accordance with 10.43.

Audit observation

I checked the process for the management of bridged control devices, and I checked whether any notifications were required to other parties.

Audit commentary

Contact has a process for dealing with control devices which have been bridged out. If any are bridged out for more than 10 business days, they notify as required by this clause. There were no examples of bridged control devices identified during the audit period.

Audit outcome

Compliant

7.12. Control Device Reliability Requirements (Clause 34(5) of Schedule 10.7)

Code reference

Clause 34(5) of Schedule 10.7

Code related audit information

If the MEP is advised by an ATH that the likelihood of a control device not receiving signals would affect the accuracy or completeness of the information for the purposes of Part 15, the MEP must, within three business days inform the following parties of the ATH's determination (including all relevant details):

- a) *the reconciliation participant for the POC for the metering installation*
- b) *the control signal provider.*

Audit observation

I checked the steps Contact had taken to identify regions with signal propagation issues.

Audit commentary

Contact has not been advised of any areas by the ATH.

Audit outcome

Compliant

7.13. Statistical Sampling (Clauses 16(1) and (5) of Schedule 10.7)

Code reference

Clauses 16(1) and (5) of Schedule 10.7

Code related audit information

The MEP may arrange for an ATH to recertify a group of category 1 metering installations for which the MEP is responsible using a statistical sampling process.

The MEP must update the registry in accordance with Part 11 on the advice of an ATH as to whether the group meets the recertification requirements.

Audit observation

I checked whether statistical sampling had occurred during the audit period.

Audit commentary

A total of 1,668 ICPs were recertified for seven years on 12th May 2021 by the Delta ATH. A sample of 128 meters were removed and tested using the testing by attributes method as described in AS/NZS 1284. When selecting the sample, the ATH is required to ensure that the sample is representative of the group and to document the process it follows and any assumptions it makes.

The Delta ATH provided information detailing the process for selecting the sample. The information provided indicated that the ATH had not ensured that the sample was representative of the group. The group was made up of 1,763 meters of 66 different types identified by a model number. There were 72 meters with the model recorded as "Unknown". Assuming that meters with slight variations in model number are of a similar type, the meters can be sorted into 35 types. There were 16 types represented in the sample and 19 types not represented in the sample. Including the 72 unknown meters there are a total of 689 meters or 39% of the group not represented in the sample.

The group included a mix of electronic and ferraris disc meters with both single and three phase meters included. The test results for the sample included details of the number of phases and whether the meter was an electronic or ferraris disc type. This information was not provided for the meters not included in the sample.

I have recorded non-compliance as the sample is not confirmed as representative of the group certified due to the number of meters not represented in the sample.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 7.13 With: Clause 16(1) of Schedule 10.7 From: 12-May-21 To: 05-May-22	Sample not representative of the group of meters certified using the statistical recertification method. Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 6
Audit risk rating	Rationale for audit risk rating
Medium	I have rated the controls as weak because the ATH process did not ensure correct selection of samples. The impact could be significant, as it is likely that inaccurate metering installations have been recertified. The audit risk rating is medium.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact accepts the findings within the audit and would like to provide some background information relating these findings. We would also like to express at the outset, our disappointment at only recently being made aware (in May 2022) of a significant non-compliance or error by Delta (our ATH) in relation to our 2020 statistical sampling programme of work, despite the ATH, the Authority and the Auditors being aware of and conversing on this topic (to the exclusion of Contact).	Completed	Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
Since we were only made aware (in May 2022) of the errors in relation to our 2020 statistical sampling programme of work, we are still investigating the error and the presumed breakdown in communication. We have not been able to find copies of a notification of the errors and had we not received confirmation from the ATH [who confirmed that it was all fine?] on [insert date] that our programme of work was successful, we would have taken immediate remedial action. Contact will continue to investigate the errors and failure in communication to Contact and will be in touch with all parties involved to ensure we understand what has occurred, have clear steps to remedy and hopefully avoid a similar poor industry outcome for other parties that may be in a similar situation.	Ongoing	

7.14. Compensation Factors (Clause 24(3) of Schedule 10.7)

Code reference

Clause 24(3) of Schedule 10.7

Code related audit information

If an external compensation factor must be applied to a metering installation that is an NSP, the MEP must advise the reconciliation participant responsible for the metering installation of the compensation factor within 10 days of certification of the installation.

In all other cases the MEP must update the compensation factor recorded in the registry in accordance with Part 11.

Audit observation

I checked the audit compliance reports for any incorrect compensation factors. There were no certifications completed for category 2 and above metering installations during the audit period.

Audit commentary

The audit compliance reports did not identify any incorrect compensation factors. There were no certifications completed for category 2 and above metering installations during the audit period.

Audit outcome

Compliant

7.15. Metering Installations Incorporating a Meter (Clause 26(1) of Schedule 10.7)

Code reference

Clause 26(1) of Schedule 10.7

Code related audit information

The MEP must ensure that each meter in a metering installation it is responsible for is certified.

Audit observation

Contact has not conducted any certification activities during the audit period other than statistical recertification. Contact has engaged the Delta ATH to conduct field work and inspections. Contact confirmed that there have been no changes to the certification processes.

Audit commentary

I have checked the most recent Delta ATH audit report and confirmed that their processes include certification of meters.

Audit outcome

Compliant

7.16. Metering Installations Incorporating a Measuring Transformer (Clause 28(1) of Schedule 10.7)

Code reference

Clause 28(1) of Schedule 10.7

Code related audit information

The MEP must ensure that each measuring transformer in a metering installation it is responsible for is certified.

Audit observation

There were no certifications completed for category 2 and above metering installations during the audit period. No measuring transformers were certified.

Audit commentary

There were no certifications completed for category 2 and above metering installations during the audit period. No measuring transformers were certified.

Audit outcome

Compliant

7.17. Metering Installations Incorporating a Data Storage Device (Clause 36(1) of Schedule 10.7)

Code reference

Clause 36(1) of Schedule 10.7

Code related audit information

The MEP must ensure that each data storage device in a metering installation it is responsible for is certified.

Audit observation

Contact is not the MEP for any installations containing data storage devices.

Audit commentary

Contact is not the MEP for any installations containing data storage devices.

Audit outcome

Compliant

7.18. Notification of ATH Approval (Clause 7 (3) Schedule 10.3)

Code reference

Clause 7 (3) Schedule 10.3

Code related audit information

If the MEP is notified by the Authority that an ATH's approval has expired, been cancelled or been revised, the MEP must treat all metering installations certified by the ATH during the period where the ATH was not approved to perform the activities as being defective and follow the procedures set out in 10.43 to 10.48.

Audit observation

Contact has not completed any certification activities during the audit period. Contact has engaged the Delta ATH to conduct field work and inspections. I checked the ATH register to confirm compliance.

Audit commentary

The Delta ATH has appropriate approval.

Audit outcome

Compliant

7.19. Interim Certification (Clause 18 of Schedule 10.7)

Code reference

Clause 18 of Schedule 10.7

Code related audit information

The MEP must ensure that each interim certified metering installation on 28 August 2013 is certified by no later than 1 April 2015.

Audit observation

I checked the registry records (PR255) to identify any ICPs with interim certification recorded.

Audit commentary

There are no previously interim certified installations with expired certification.

Audit outcome

Compliant

8. INSPECTION OF METERING INSTALLATIONS

8.1. Category 1 Inspections (Clause 45 of Schedule 10.7)

Code reference

Clause 45 of Schedule 10.7

Code related audit information

The MEP must ensure that category 1 metering installations (other than interim certified metering installations):

- *have been inspected by an ATH within 126 months from the date of the metering installation's most recent certification or*
- *for each 12-month period, commencing 1 January and ending 31 December, ensure an ATH has completed inspections of a sample of the category 1 metering installations selected under clause 45(2) of Schedule 10.7.*

Before a sample inspection process can be carried out, the MEP must submit a documented process for selecting the sample to the Electricity Authority, at least 2 months prior to first date on which the inspections are to be carried out, for approval (and promptly provide any other information the Authority may request).

The MEP must not inspect a sample unless the Authority has approved the documented process.

The MEP must, for each inspection conducted under clause 45(1)(b), keep records detailing:

- *any defects identified that have affected the accuracy or integrity of the raw meter data recorded by the metering installation*
- *any discrepancies identified under clause 44(5)(b)*
- *relevant characteristics, sufficient to enable reporting of correlations or relationships between inaccuracy and characteristics*
- *the procedure used, and the lists generated, to select the sample under clause 45(2).*

The MEP must, if it believes a metering installation that has been inspected is or could be inaccurate, defective or not fit for purpose:

- *comply with clause 10.43*
- *arrange for an ATH to recertify the metering installation if the metering is found to be inaccurate under Table 1 of Schedule 10.1, or defective or not fit for purpose.*

The MEP must by 1 April in each year, provide the Authority with a report that states whether the MEP has, for the previous 1 January to 31 December period, arranged for an ATH to inspect each category 1 metering installation for which it is responsible under clause 45(1)(a) or 45(1)(b).

This report must include the matters specified in clauses 45(8)(a) and (b).

If the MEP is advised by the Authority that the tests do not meet the requirements under clause 45(9) of Schedule 10.7, the MEP must select the additional sample under that clause, carry out the required inspections, and report to the Authority, within 40 business days of being advised by the Authority.

Audit observation

I checked the process, and the results for the Category 1 inspection regime to confirm compliance.

Audit commentary

Contact confirmed that it did not conduct inspections of its Category 1 metering installations by statistical sampling in 2020. There were 5,068 Category 1 ICPs certified more than 84 months before 2020 which

were due for inspection. Non-compliance is recorded here for the missed inspections and in **section 6.4** as the registry was not updated with the cancellation of certification within 10 business days.

Contact provided the details of inspections of its Category 1 metering installations by statistical sampling that were conducted in 2021. The selection process and results confirm that the inspections were completed as required. Non-compliance is recorded as Contact did not provide a report to the Authority as required by this clause.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 8.1 With: Clause 45 of Schedule 10.7 From: 31-Dec-20 To: 11-Jul-21	Inspection by statistical sampling not conducted in 2020. Inspection report not provided to the Authority for inspections conducted in 2021. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls as moderate as Contact has an inspection regime in place, but this was not conducted in 2020. It is unlikely that the missed inspections will impact on other participants and on settlement. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has been engaged in a commercial process to sell our remaining assets, which has, for a number of reasons, taken longer than we expected to conclude. The delay has resulted in the pausing of 2021 compliance and certification programme as the potential purchaser had indicated they would conduct the compliance and certification process to enable a clean transition. The sale is nearing completion and it is still our understanding that the purchaser will complete the compliance and certification work. We have kept (and will continue to keep) the Authority up to date on this process, (our most recent communication was on 5 April 2022) and would appreciate this being considered when performing final recommendations.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As above, if sale proceeds compliance and certification tasks will be included in the new MEP’s program of work. If the sale does not proceed, Contact will initiate our next metering compliance and certification program.		Ongoing	

8.2. Category 2 to 5 Inspections (Clause 46(1) of Schedule 10.7)

Code reference

Clause 46(1) of Schedule 10.7

Code related audit information

The MEP must ensure that each category 2 or higher metering installation is inspected by an ATH at least once within the applicable period. The applicable period begins from the date of the metering installation's most recent certification and extends to:

- 120 months for Category 2
- 60 months for Category 3
- 30 months for Category 4
- 18 months for Category 5.

Audit observation

I checked the registry information to confirm which ICPs were due for inspection. There were five Category 2 metering installations due for inspection during the audit period.

Audit commentary

There were five Category 2 metering installations due for inspection during the audit period. Four of the five inspections were not conducted. Non-compliance is recorded here for the missed inspections and in **section 6.4** as the registry was not updated with the cancellation of certification within 10 business days.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 8.2 With: Clause 46(1) of Schedule 10.7 From: 12-Jul-20 To: 05-Nov-20	Inspections not conducted for four Category 2 metering installations. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls as moderate in this area because Contact has not been able to complete inspections within the inspection window. The impact on settlement is recorded as low. There is an increased likelihood of failure or inaccuracy for metering installations which have not been inspected, but the numbers are low, therefore the audit risk rating is low. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status

Contact Response: We acknowledged that 4 CAT2 metering installations were not inspected within the given timeframe. We have updated the certification details of these metering installations in the registry and cancelled their certification.	Completed	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
As above, if sale proceeds compliance and certification tasks will be included in the new MEP's program of work. If the sale does not proceed, Contact will initiate our next metering compliance and certification program.	Ongoing	

8.3. Inspection Reports (Clause 44(5) of Schedule 10.7)

Code reference

Clause 44(5) of Schedule 10.7

Code related audit information

The MEP must, within 20 business days of receiving an inspection report from an ATH:

- *undertake a comparison of the information received with its own records*
- *investigate and correct any discrepancies*
- *update the metering records in the registry.*

Audit observation

I checked the process and results from inspection regimes to ensure any incorrect records were updated.

Audit commentary

Contact checked the relevant details during the Category 1 inspections, and I observed evidence that updates had occurred where discrepancies were found.

Audit outcome

Compliant

8.4. Broken or removed seals (Clause 48(1G), (4) and (5) of Schedule 10.7)

Code reference

Clause 48(4) and (5) of Schedule 10.7

Code related audit information

If the MEP is advised of a broken or removed seal it must use reasonable endeavours to determine

- a) *who removed or broke the seal, and*
- b) *the reason for the removal or breakage.*

and arrange for an ATH to carry out an inspection of the removal or breakage and determine any work required to remedy the removal or breakage.

The MEP must make the above arrangements within

- a) 3 business days, if the metering installation is category 3 or higher*
- b) 10 business days if the metering installation is category 2*
- c) 20 business days if the metering installation is category 1.*

If the MEP is advised under 48(1B)(c) or (48(1F)(d) the MEP must update the relevant meter register content code for the relevant meter channel.

Audit observation

I checked all examples of notification of missing seals, which were all as a result of inspection processes or notification by field technicians.

Audit commentary

I checked five examples of seals found missing during Category 1 inspections conducted in 2021. In all five cases the seals were replaced by the ATH at the time of inspection.

Audit outcome

Compliant

9. PROCESS FOR HANDLING FAULTY METERING INSTALLATIONS

9.1. Investigation of Faulty Metering Installations (Clause 10.43(4) and (5))

Code reference

Clause 10.43(4) and (5)

Code related audit information

If the MEP is advised or becomes aware that a metering installation may be inaccurate, defective, or not fit for purpose, it must investigate and report on the situation to all affected participants as soon as reasonably practicable after becoming aware of the information, but no later than:

- a) 20 business days for Category 1,*
- b) 10 business days for Category 2 and*
- c) 5 business days for Category 3 or higher.*

Audit observation

I checked eight examples where Contact had become aware of suspected faulty metering installations.

Audit commentary

In all eight cases the trader had requested Contact to investigate Category 1 meters following customer queries regarding the accuracy of the metering. Contact arranged for an ATH to go to site and investigate. In all eight examples the ATH attended, and the results were provided to the trader within 20 business days.

Audit outcome

Compliant

9.2. Testing of Faulty Metering Installations (Clause 10.44)

Code reference

Clause 10.44

Code related audit information

If a report prepared under clause 10.43(4)(c) demonstrates that a metering installation is inaccurate, defective, or not fit for purpose, the MEP must arrange for an ATH to test the metering installation and provide a 'statement of situation'.

If the MEP is advised by a participant under clause 10.44(2)(a) that the participant disagrees with the report that demonstrates that the metering installation is accurate, not defective and fit for purpose, the MEP must arrange for an ATH to:

- a) test the metering installation*
- b) provide the MEP with a statement of situation within five business days of:*
- c) becoming aware that the metering installation may be inaccurate, defective or not fit for purpose; or*
- d) reaching an agreement with the participant.*

The MEP is responsible for ensuring the ATH carries out testing as soon as practicable and provides a statement of situation.

Audit observation

I checked eight examples where Contact had become aware of suspected faulty metering installations.

Audit commentary

The results showed that in five cases testing conducted on site by the ATH confirmed that the metering was accurate. In three cases the meters were removed and sent to a Class A ATH for testing. The certification records and reporting by the Class A ATH meet the requirement for provision of a statement of situation.

Audit outcome

Compliant

9.3. Statement of Situation (Clause10.46(2))

Code reference

Clause10.46(2)

Code related audit information

Within three business days of receiving the statement from the ATH, the MEP must provide copies of the statement to:

- *the relevant affected participants*
- *the market administrator (for all category 3 and above metering installations and any category 1 and category 2 metering installations) on request.*

Audit observation

I checked eight examples where Contact had become aware of suspected faulty metering installations.

Audit commentary

The results showed that in five cases testing conducted on site by the ATH confirmed that the metering was accurate. In three cases the meters were removed and sent to a Class A ATH for testing. The certification records and reporting by the Class A ATH meet the requirement for provision of a statement of situation. This information was provided to the trader as required by this clause.

Audit outcome

Compliant

9.4. Timeframe for correct defects and inaccuracies (Clause10.46A)

Code reference

Clause10.46A

Code related audit information

When the metering equipment provider is advised under 10.43 or becomes aware a metering installation it is responsible for is inaccurate, defective or not fit for purpose the metering equipment provider must undertake remedial actions to address the issue.

The metering equipment provider must use its best endeavours to complete the remedial action within 10 business days of the date it is required to provide a report to participants under 10.43(4)(c).

Audit observation

I checked eight examples where Contact had become aware of suspected faulty metering installations.

Audit commentary

The ATH was sent to site to investigate in all eight cases. In five cases testing conducted on site by the ATH confirmed that the metering was accurate. In three cases the meters were removed and sent to a Class A ATH for testing. The requirement to undertake remedial action within three business days was met as the meters were replaced while the ATH was on site.

Audit outcome

Compliant

9.5. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33(C)

Code related audit information

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

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

Audit observation

I checked for examples of bridged meters.

Audit commentary

There were no examples of bridged meters.

Audit outcome

Compliant

10. ACCESS TO AND PROVISION OF RAW METER DATA AND METERING INSTALLATIONS

10.1. Access to Raw Meter Data (Clause 1 of Schedule 10.6)

Code reference

Clause 1 of Schedule 10.6

Code related audit information

The MEP must give authorised parties access to raw meter data within 10 business days of receiving the authorised party making a request.

The MEP must only give access to raw meter data to a trader or person, if that trader or person has entered into a contract to collect, obtain, and use the raw meter data with the end customer.

The MEP must provide the following when giving a party access to information:

- a) the raw meter data; or*
- b) the means (codes, keys etc.) to enable the party to access the raw meter data.*

The MEP must, when providing raw meter data or access to an authorised person use appropriate procedures to ensure that:

- the raw meter data is received only by that authorised person or a contractor to the person*
- the security of the raw meter data and the metering installation is maintained*
- access to the raw meter data is limited to only the specific raw meter data under clause 1(7)(c) of Schedule 10.6.*

Audit observation

I checked whether any parties had requested access to raw meter data.

Audit commentary

No requests have been received but Contact advised access could be granted in accordance with this clause if necessary.

Audit outcome

Compliant

10.2. Restrictions on Use of Raw Meter Data (Clause 2 of Schedule 10.6)

Code reference

Clause 2 of Schedule 10.6

Code related audit information

The MEP must not give an authorised person access to raw meter data if to do so would breach clause 2(1) of Schedule 10.6.

Audit observation

I checked whether any parties had requested access to raw meter data.

Audit commentary

No requests have been received but Contact advised access could be granted in accordance with this clause if necessary.

Audit outcome

Compliant

10.3. Access to Metering Installations (Clause 3(1), (3) and (4) of Schedule 10.6)

Code reference

Clause 3(1), (3) and (4) of Schedule 10.6

Code related audit information

The MEP must within 10 business days of receiving a request from one of the following parties, arrange physical access to each component in a metering installation:

- *a relevant reconciliation participant with whom it has an arrangement (other than a trader)*
- *the Authority*
- *an ATH*
- *an auditor*
- *a gaining MEP.*

This access must include all necessary means to enable the party to access the metering components

When providing access, the MEP must ensure that the security of the metering installation is maintained and physical access is limited to only the access required for the purposes of the Code, regulations in connection with the party's administration, audit and testing functions.

Audit observation

I checked whether any parties had requested access to metering installations.

Audit commentary

No requests have been received but Contact advised access could be granted in accordance with this clause if necessary.

Audit outcome

Compliant

10.4. Urgent Access to Metering Installations (Clause 3(5) of Schedule 10.6)

Code reference

Clause 3(5) of Schedule 10.6

Code related audit information

If the party requires urgent physical access to a metering installation, the MEP must use its best endeavours to arrange physical access.

Audit observation

I checked whether any parties had requested access to metering installations.

Audit commentary

No requests have been received, but Contact advised access could be granted in accordance with this clause if necessary.

Audit outcome

Compliant

10.5. Electronic Interrogation of Metering Installations (Clause 8 of Schedule 10.6)

Code reference

Clause 8 of Schedule 10.6

Code related audit information

When raw meter data can only be obtained from an MEP's back office, the MEP must

- *ensure that the interrogation cycle does not exceed the maximum interrogation cycle shown in the registry*
- *interrogate the metering installation at least once within each maximum interrogation cycle.*

When raw meter data can only be obtained from an MEP's back office, the MEP must ensure that the internal clock is accurate, to within ± 5 seconds of:

- *New Zealand standard time; or*
- *New Zealand daylight time.*

When raw meter data can only be obtained from an MEP's back office, the MEP must record in the interrogation and processing system logs, the time, the date, and the extent of any change in the internal clock setting in the metering installation.

The MEP must compare the time on the internal clock of the data storage device with the time on the interrogation and processing system clock, calculate and correct (if required by this provision) any time error, and advise the affected reconciliation participant.

When raw meter data can only be obtained from an MEP's back office, the MEP must, when interrogating a metering installation, download the event log, check the event log for evidence of an events that may affect the integrity or operation of the metering installation, such as malfunctioning or tampering.

The MEP must investigate and remediate any events and advise the reconciliation participant.

The MEP must ensure that all raw meter data that can only be obtained from the MEPs back office, that is downloaded as part of an interrogation, and that is used for submitting information for the purpose of Part 15 is archived:

- *for no less than 48 months after the interrogation date*
- *in a form that cannot be modified without creating an audit trail*
- *in a form that is secure and prevents access by any unauthorised person*
- *in a form that is accessible to authorised personnel.*

Audit observation

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit commentary

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit outcome

Not applicable

10.6. Security of Metering Data (Clause 10.15(2))

Code reference

Clause 10.15(2)

Code related audit information

The MEP must take reasonable security measures to prevent loss or unauthorised access, use, modification or disclosure of the metering data.

Audit observation

I checked the security and storage of metering data.

Audit commentary

All data is secure and can only be accessed by appropriate staff.

Audit outcome

Compliant

10.7. Time Errors for Metering Installations (Clause 8(4) of Schedule 10.6)

Code reference

Clause 8(4) of Schedule 10.6

Code related audit information

When raw meter data can only be obtained from the MEPs back office, the MEP must ensure that the data storage device it interrogates does not exceed the maximum time error set out in Table 1 of clause 8(5) of Schedule 10.6.

Audit observation

Contact is not the MEP for AMI metering installations.

Audit commentary

Contact is not the MEP for AMI metering installations.

Audit outcome

Not applicable

10.8. Event Logs (Clause 8(7) of Schedule 10.6)

Code reference

Clause 8(7) of Schedule 10.6

Code related audit information

When raw meter data can only be obtained from the MEP's back office, the MEP must, when interrogating a metering installation:

- a) *ensure an interrogation log is generated*
- b) *review the event log and:*
 - i. *take appropriate action*
 - ii. *pass the relevant entries to the reconciliation participant.*
- c) *ensure the log forms part of an audit trail which includes:*
 - i. *the date and*

- ii. *time of the interrogation*
- iii. *operator (where available)*
- iv. *unique ID of the data storage device*
- v. *any clock errors outside specified limits*
- vi. *method of interrogation*
- vii. *identifier of the reading device used (if applicable).*

Audit observation

Contact is not the MEP for AMI metering installations.

Audit commentary

Contact is not the MEP for AMI metering installations.

Audit outcome

Not applicable

10.9. Comparison of HHR Data with Register Data (Clause 8(9) of Schedule 10.6)

Code reference

Clause 8(9) of Schedule 10.6

Code related audit information

When raw meter data can only be obtained from the MEP’s back office, the MEP must ensure that each electronic interrogation that retrieves half-hour metering information compares the information against the increment of the metering installations accumulating meter registers for the same period.

Audit observation

Contact is not the MEP for AMI HHR metering installations.

Audit commentary

Contact is not the MEP for AMI HHR metering installations.

Audit outcome

Not applicable

10.10. Correction of Raw Meter Data (Clause 10.48(2),(3))

Code reference

Clause 10.48(2),(3)

Code related audit information

If the MEP is notified of a question or request for clarification in accordance with clause 10.48(1), the MEP must, within 10 business days:

- *respond in detail to the questions or requests for clarification*
- *advise the reconciliation participant responsible for providing submission information for the POC of the correction factors to apply and period the factors should apply to.*

Audit observation

Contact has not received any requests in relation to this clause.

Audit commentary

Contact has not received any requests in relation to this clause.

Audit outcome

Not applicable

10.11.Raw meter data and compensation factors (Clause 8(10) of Schedule 10.6)

Code reference

Clause 8(10) of Schedule 10.6

Code related audit information

The MEP must not apply the compensation factor recorded in the registry to raw meter data downloaded as part of the interrogation of the metering installation.

Audit observation

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit commentary

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit outcome

Not applicable

10.12.Investigation of AMI interrogation failures (Clause 8(11), 8(12) and 8(13) of Schedule 10.6)

Code reference

Clause 8(11), 8(12) and 8(13) of Schedule 10.6

Code related audit information

If an interrogation does not download all raw meter data the MEP must investigate the registry why or update the registry to show the meter is no longer AMI.

If the MEP chooses to investigate the reasons for the failure the MEP has no more than 30 days or 25% of the maximum interrogation cycle, from the date of the last successful interrogation (whichever is shorter).

If the MEP does not restore communications within this time or determines they will be unable to meet this timeframe they must update the registry to show the meter is no longer AMI.

Audit observation

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit commentary

Contact is not the MEP for AMI metering installations and does not conduct data collection as an MEP.

Audit outcome

Not applicable

CONCLUSION

Contact is the MEP for 17,450 ICPs with non-AMI metering installations, this is a reduction from 21,008 recorded in the previous audit.

The audit found nine non-compliances, the main issues causing noncompliance are as follows:

- the sample was not representative of the group of meters recertified by the Delta ATH using the statistical recertification method,
- 848 ICPs with expired certification,
- sample inspection not conducted for 5,068 Category 1 ICPs; the certification of these metering installations is therefore cancelled,
- inspections not conducted for four Category 2 metering installations due for inspection during the audit period; the certification of these metering installations is therefore cancelled,
- certification not cancelled on the registry for the 5,072 ICPs with missed inspections,
- registry validation not conducted for every month of the audit period, and
- the monitoring and correction of time keeping devices not completed as required.

The future risk rating provides some guidance on this matter and recommends an audit frequency of six months. After considering Contact's responses to the areas of non-compliance I agree with this recommendation.

PARTICIPANT RESPONSE

Contact accepts the findings within the audit and would like to provide some background information relating these findings. We would also like to express at the outset, our disappointment at only recently being made aware (in May 2022) of a significant non-compliance or error by Delta (our ATH) in relation to our 2020 statistical sampling programme of work, despite the ATH, the Authority and the Auditors being aware of and conversing on this topic (to the exclusion of Contact).

Intended sale of Contact's remaining legacy meters

Contact has been engaged in a commercial process to sell our remaining assets, which has, for a number of reasons, taken longer than we expected to conclude. The delay has resulted in the pausing of 2021 compliance and certification programme as the potential purchaser had indicated they would conduct the compliance and certification process to enable a clean transition. The sale is nearing completion and it is still our understanding that the purchaser will complete the compliance and certification work. We have kept (and will continue to keep) the Authority up to date on this process, (our most recent communication was on 5 April 2022) and would appreciate this being considered when performing final recommendations.

2020 statistical sampling error

Since we were only made aware (in May 2022) of the errors in relation to our 2020 statistical sampling programme of work, we are still investigating the error and the presumed breakdown in communication. We have not been able to find copies of a notification of the errors and had we not received confirmation from the ATH [who confirmed that it was all fine?] on [insert date] that our programme of work was successful, we would have taken immediate remedial action. Contact will continue to investigate the errors and failure in communication to Contact and will be in touch with all parties involved to ensure we understand what has occurred, have clear steps to remedy and hopefully avoid a similar poor industry outcome for other parties that may be in a similar situation.