

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

For

ACCUCAL LIMITED
NZBN:9429031158022

Prepared by: Brett Piskulic – Veritek Limited

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Audit report due date: 29-May-22

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EXECUTIVE SUMMARY

Accucal Limited (Accucal) is a Metering Equipment Provider (MEP) and is required to undergo an audit by 29 May 2022, in accordance with clause 16A.17(a).

The audit found eight areas of non-compliance, an increase from the four found in the last audit. The main areas of non-compliance are as follows:

- late registry updates,
- incomplete certification records due to the burden range not recorded in measuring transformer certification reports,
- registry validation was not conducted for every month of the audit period,
- monitoring was not conducted for each month for two metering installations certified at a lower category, and
- certification expired for one metering installation due to ongoing delays to a planned switchgear upgrade by the customer.

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 12 months, after reviewing Accucal's responses I agree with this recommendation.

The matters raised are recorded in the tables below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Registry updates	3.2	2 of Schedule 11.4	One registry update later than 15 business days.	Strong	Low	1	Cleared
Changes to registry records	4.10	3 of Schedule 11.4	11 records updated on the registry later than 10 business days.	Strong	Low	1	Identified
Accurate and Complete Records	5.1	Clause 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4	Burden range not recorded in certification records for six ICPs.	Strong	Low	1	Investigating
MEP Response to Switch Notification	6.1	1(1) of Schedule 11.4	Two late MN files.	Strong	Low	1	Identified
Registry validation	6.3	6 of schedule 11.4	Registry validation not conducted for every	Moderate	Low	2	Identified

			month of the audit period.				
Certification cancellation	6.4	20 of Schedule 10.7	Certification not cancelled on the registry within 10 business days for two metering installations certified at a lower category where monitoring was not conducted for each month.	Moderate	Low	2	Identified
Certification of metering installations	7.1	10.38 (a), clause 1 & clause 15 of Schedule 10.7	Certification expired for one metering installation.	Strong	Low	1	Investigating
Certification as a Lower Category	7.6	6(1)(b) and (d), and 6(2)(b) of Schedule 10.7	Monitoring was not conducted for each month for two metering installations certified at a lower category.	Moderate	Low	2	Identified
Future Risk Rating						11	
Indicative Audit Frequency						12 months	

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	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 four exemptions in place.

Audit commentary

Accrual had four exemptions in place during the audit period, all to allow the use of subtractive metering. The exemptions are listed below with the ICPs.

Exemption 308: 0003133903AA777, expires December 2030.

Exemption 246: 0009805800AL991, expires 30 June 2025.

Exemption 202: 0000880392WEA92, expires 31 December 2022.

Exemption 187: 0000032431HR99C, expires 31 December 2023.

1.2. Structure of Organisation

Russell Mann is the MEP Manager and has several metering technicians in the organisation. Russell is the main contact for compliance issues.

1.3. Persons involved in this audit

Auditor:

Brett Piskulic

Veritek Limited

Electricity Authority Approved Auditor

Accrual personnel assisting in this audit were:

Name	Title
Russell Mann	Technical 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

Accucal does not use contractors to perform MEP responsibilities.

Audit commentary

Accucal does not use contractors to perform MEP responsibilities.

1.5. Hardware and Software

Accucal MEP data is held in a spreadsheet. Data is stored on two servers in its Hamilton office, there are also servers in Hamilton, Christchurch and Auckland which are synced to the Hamilton office server. Backups of all data are also written to a separate hard drive on all four servers. A back-up is also written to a virtual PC six days per week.

1.6. Breaches or Breach Allegations

Accucal confirmed there were no breach allegations related to the scope of this audit.

1.7. ICP Data

Metering Category	Number of ICPs
1	2
2	12
3	17
4	33
5	70

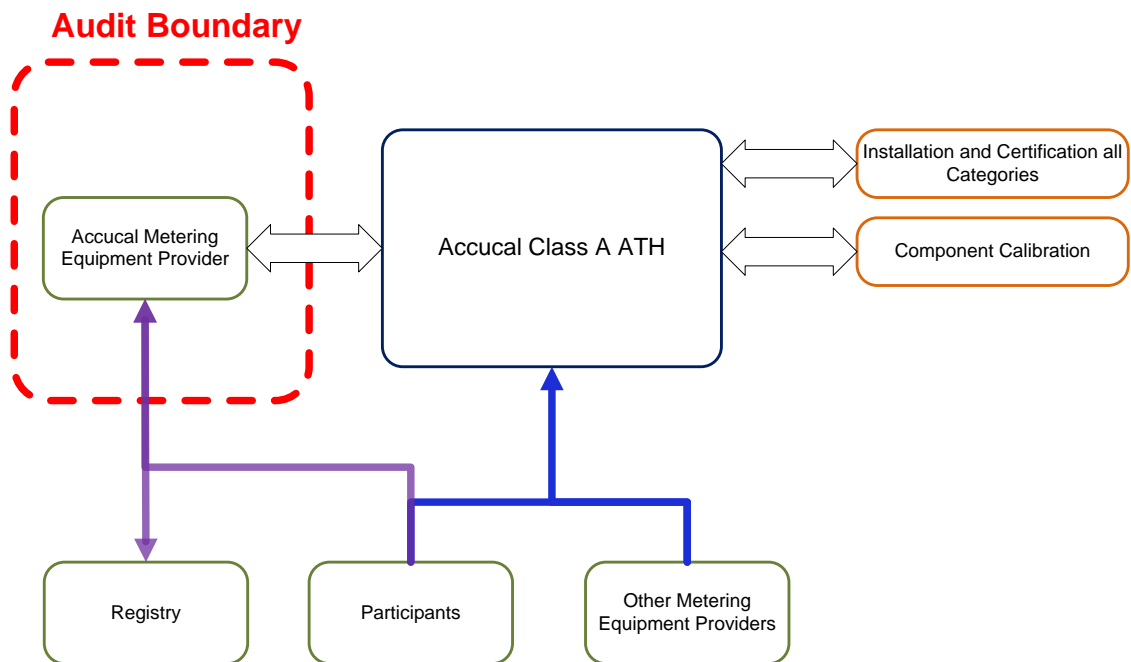
1.8. Authorisation Received

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.



Accucal is the MEP for a small number of higher category metering installations and they are also the ATH.

1.10. Summary of previous audit

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

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Changes to registry records	4.10	3 of Schedule 11.4	Five records updated on the registry later than 10 business days.	Still existing
Registry validation	6.3	6 of schedule 11.4	Registry validation not conducted for every month of the audit period.	Still existing
Certification of metering installations	7.1	10.38 (a), clause 1 & clause 15 of Schedule 10.7	Certification expired for one metering installation.	Still existing
Statement of Situation	9.3	10.46(2)	Statement of situation not provided to affected participant and Authority within three business days for one ICP.	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

I checked certification records for 13 metering installations in relation to recording of the services access interface.

Audit commentary

The services access interface was recorded correctly for all 13 examples. Accucal does not collect data as an MEP so the services access interface is always at the data storage device in the metering installation.

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

Accucal 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

Accucal uses the ACCM 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

I checked that the ATH has a process to check the relevant type test certificates to ensure compliance with this clause.

Audit commentary

Accucal ensures all communication equipment is appropriately certified with the relevant telecommunications standards. This is recorded in type test certificates and other approval documents. A reference to the type test reports is included in the metering installation certification reports.

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 Accucal 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.

Audit observation

I checked if Accucal had sent or received any invoices.

Audit commentary

Accucal has not sent or received any invoices in relation to this clause during the audit period.

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 June 2020 to 28 February 2022 for all records where Accucal became the MEP to evaluate the timeliness of updates.

Audit commentary

There was one late update identified by the audit compliance report. The late update was due to a correction of the meter channels backdated to the installation date. The original update was within 15 business days.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 2 of Schedule 11.4 From: 05-Aug-20 To: 01-Mar-21	One registry update later than 15 business days. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are in place to ensure the timeliness of updates. The impact on other participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
This was due to the new registry check process that identified an issue with channel setups and the registry was corrected. We don't expect this to occur again.		22/05/2022	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
As stated, we don't expect this issue to occur again.		22/05/2022	

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 Accucal to confirm whether there had been any requests from other MEPs.

Audit commentary

This has not occurred, and no examples are available to examine.

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 MEPs 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 Accucal has ceased to be responsible for some metering installations by checking the event detail report.

Audit commentary

Accucal has ceased to be responsible for some metering installations and they still continue with their responsibilities, mainly in relation to the storage or records, which are kept indefinitely. Three ICPs were decommissioned during the audit period and the records are 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

I checked Accucal's standard design reports to confirm compliance.

Audit commentary

Accucal is an ATH and an MEP, therefore there are no examples of provision of design reports to other parties. I checked the Accucal design reports, and I confirmed that they contained all of the points listed above and they were prepared by a person with the appropriate level of skills, expertise, experience and qualifications.

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

I confirmed that Accucal is also an ATH, and they haven't used any other ATHs during the audit period.

Audit commentary

I confirmed that Accucal is also an ATH, and they haven't used any other ATHs during the audit period. Accucal has an appropriate and current 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 Accucal to ensure compliance with the design and with the error thresholds stipulated in Table 1. I also checked the certification records for 13 metering installations.

Audit commentary

Accucal has their own calculator for recording error and uncertainty results. This calculator uses meter class accuracy and has results over a load range of 5% to 120% at different power factors. This approach is conservative and takes into account forecast load by including multiple load points. The system used by Accucal has been approved by IANZ during the ISO 17025 audit; therefore, I have confirmed compliance in this report. The calculator includes consideration of temperature and temperature is recorded as part of the certification tests.

With regard to the design of the installation (including data storage device and interrogation system), Accucal ensures 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. There are no components installed where “coarse” rounding is in place for the data, or where meters with a low pulse rate are connected to separate data storage devices.

Accucal ensures the metering installation complies with the requirements of Part 10 and the design reports were referenced in the 13 certification records checked.

Audit outcome

Compliant

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

Code reference

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

Audit commentary

Accucal has four ICPs with subtractive metering. Exemptions which allow the use of subtraction are in place for these four ICPs as recorded in **section 1.1**.

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

I checked the audit compliance report to confirm compliance with this requirement.

Audit commentary

I checked the audit compliance report and I confirm compliance with this requirement.

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

I checked if Accucal is responsible for any NSP metering.

Audit commentary

Accucal is the MEP for two Embedded Networks with NSP metering. I checked and confirm that subtraction is not used to determine submission information.

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

I checked if Accucal is responsible for any GXP metering by reviewing the NSP Mapping Table.

Audit commentary

Accucal is recorded as the MEP for 19 points of connection. The metering installations are certified, and the certification expiry dates are recorded in the NSP Table.

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 asked Accucal to provide details of how they ensure the suitability of metering installations.

Audit commentary

Accucal has appropriate practices and documentation to ensure compliance with this requirement. The completed compliance check sheets include an Electrical Safety Certificate which confirms that the prescribed electrical work completed meets the requirements of regulation 74A of the Electricity Safety Regulations. Accucal has not identified any installations with inappropriate physical or electrical characteristics.

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 whether appropriate consultation had occurred.

Audit commentary

There were no design changes during the audit period. Accucal has previously provided copies of the design reports to all relevant distributors and traders in order to achieve compliance with this requirement.

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 report for the period 1 June 2020 to 28 February 2022 to evaluate the timeliness of registry updates.

Audit commentary

The audit compliance report identified that the registry was updated on 114 occasions.

There were seven new connections and two were updated late. The late updates were due to late nomination by the trader.

There were 107 recertification updates and nine were updated late due to processing delays.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.10 With: Clause 3 of Schedule 11.4 From: 01-Jun-20 To: 28-Feb-22	11 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 in this area because Accucal has checks in place to identify and resolve discrepancies and the number of late updates was low. The impact on participants, customers or settlement could be minor where a tariff change may be required; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We are continuing to work at streamlining processing and the notifications to ensure registry updates are completed on time. This has suffered a setback with a staff member that had been trained leaving the company.		22/05/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Once new employees come on board we will ensure there are more than one person that can complete registry updates.		In progress	

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

Accucal has addressed compatibility but does not manage a data collection system that would be considered “metering infrastructure”.

Audit commentary

Accucal has addressed compatibility but does not manage a data collection system that would be considered “metering infrastructure”.

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 3 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 Accucal 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 Accucal whether they had approved any burden changes during the audit period.

Audit commentary

There were no examples of burden changes where Accucal is the MEP. Accucal is the MEP and ATH, so the requirements of this clause will be met with existing processes.

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

I checked if there any examples of changes in accordance with these clauses.

Audit commentary

No changes occurred during the audit period. The Accucal process ensures that any changes would lead to recertification of the metering installations affected.

Audit outcome

Compliant

4.15. Temporary Electrical Connection (Clauses 10.29A)

Code reference

Clause 10.28(6)

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

I checked if there were any examples of temporary electrical connection for the purposes of testing.

Audit commentary

Accucal does not conduct temporary electrical connection, all metering installations are certified at the time of connection.

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

I checked if there were any examples of temporary electrical connection for the purposes of testing.

Audit commentary

Accucal does not conduct temporary electrical connection, all metering installations are certified at the time of connection.

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

I checked if there were any examples of temporary electrical connection for the purposes of testing.

Audit commentary

Accucal does not conduct temporary electrical connection, all metering installations are certified at the time of connection.

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 certification records for 13 metering installations to evaluate compliance with this clause. I also checked all five inspection reports for the audit period.

Audit commentary

All certification records were complete and accurate, with the exception of recording of the burden range in certification reports for measuring transformers. The Code was changed on 1st February 2021 requiring the ATH to determine and record the range that the measuring transformers in-service burden must be within (Clauses 2(1)(e) and 3(c)(vi) of Schedule 10.8). There were six examples where the burden range was not recorded by the Accucal ATH. Whilst the burden range was not recorded in all six cases the measuring transformers were operating within their appropriate burden ranges.

The inspection process did not identify any information related issues.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 5.1 With: Clause 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4 From: 01-Feb-21 To: 22-Apr-22	Burden range not recorded in certification records for six ICPs. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong as the ATH burden processes ensure measuring transformers are operating within appropriate burden ranges. There is no impact on settlement and participants; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Working with the ATH templates to include this 'burden range'.		In progress	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
This will be an automated entry in the templates to ensure compliance.		In progress	

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 Accucal whether any requests had been made for copies of inspection reports.

Audit commentary

Accucal 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 the Accucal record keeping processes to confirm compliance.

Audit commentary

Accucal keeps records indefinitely.

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

Accucal will comply with this requirement as it arises. There are no current examples where this has occurred.

Audit commentary

Accucal will comply with this requirement as it arises. There are no current examples where this has occurred.

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 switch breach history detail report to confirm whether all responses were within 10 business days.

Audit commentary

The switch breach history detail report for the audit period contained two ICPs where the Accucal response was later than 10 business days. The details are shown in the table below.

ICP	Nomination Date	Acceptance Date	Days to acceptance
1099568476CN11D	22/07/2020	13/08/2020	16
0000010061TEFFC	08/09/2020	30/11/2020	58

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.1 With: 1(1) of Schedule 11.4 From: 06-Aug-20 To: 30-Nov-20	Two late MN files. Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. There was no impact; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
The 16 day issue was due to the trader nominating ACCM without any prior correspondence and therefore an agreement had to be reached. The 58 day issue was due to the trader nominating ACCM well prior to installation and livening of the metering. We were unable to update the registry until the metering was livened.	22/05/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Developing an improved registry notification system to highlight non-rsp alerts.	In progress	

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 report and the list file to identify discrepancies.

Audit commentary

Analysis of the audit compliance report and list file identified no discrepancies.

Audit outcome

Compliant

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 Accucal’s process to identify and update errors.

Audit commentary

This clause is quite specific and prescriptive in that it requires a complete metering record comparison to be undertaken.

At the time of the last audit Accucal had developed and implemented a spreadsheet tool to enable a complete validation of registry records. The validation process was implemented in April 2020, and I confirmed that the report had been run each month until November 2021 and corrections were done within five business days. The report was last run in October 2021 and has not been run since due to the resignation of the staff member responsible. Accucal is currently planning to assign this task to another staff member.

I have recorded non-compliance as the validation process had 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: 30-Nov-21 To: 22-Apr-22	Registry validation not conducted for every month of the audit period. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because Accucal has a validation process, but it has not been run each month. 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

System exists and had been used until the staff member left AccuCal and hasn't been completed since then. This is a workload issue and will be addressed by training a different staff member to do the check.	In progress	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Additional staff members will be involved in the checking process and also in ensuring it is completed.	In progress	

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

I checked the points mentioned above as follows:

Insufficient load certification

I checked two examples of metering installations certified with insufficient load, Accucal confirmed that monitoring had been conducted. Sufficient load was subsequently identified in both cases and the ATH returned and completed the certification tests. The details of these are recorded in **section 7.7**.

Certification at a lower category

I checked two examples of metering installations certified at a lower category which required monitoring. Metering installation Nos 3 and 4 at ICP 0009805800AL991 which are nominally Category 5 were certified at Category 4 on 20th July 2021. Accucal confirmed that the DA had not been notified of the requirement to monitor in both cases, therefore certification is automatically cancelled on 31st August 2021. I have recorded non-compliance as certification had not been cancelled within 10 business days. Non-compliance is also recorded in **section 7.6**.

Inspection

All inspections were conducted during the required inspection window.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.4 With: Clause 20 of Schedule 10.7 From: 31-Aug-21 To: 22-Apr-22	Certification not cancelled on the registry within 10 business days for two metering installations certified at a lower category where monitoring was not conducted for each month. Potential impact: Medium Actual impact: None 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 most processes are managed with sufficient controls to avoid cancellation of certification. Whilst monitoring has not taken place each month, the maximum demand has not exceeded the category limit, so the impact is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Have not cancelled the certification as the status of these installations is known to be nowhere near the limits of Category 4, even without monthly checks. One installation is very rarely ever on load and the other has loading not exceeding 2500 kVA.	22/05/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Will ensure this is undertaken for any future occurrences but most likely will not down-grade any further installations.	22/05/2022	

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 Accucal 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 Accucal 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 certification 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 report was checked to identify ICPs with expired certification,
- the new connections process was checked by using the event detail report, PR255 and the list file to identify ICPs where the certification was not conducted within five business days of energisation.

Audit commentary

At the time of the audit there was one metering installation with expired certification, ICP 1000024020BP627. This ICP is for a backup supply which is rarely used. Due to an inability to access the measuring transformers to conduct certification tests this metering installation had alternative certification which expired on 19th January 2020. It was expected that the customer would have completed a planned upgrade of the switchgear on site prior to the certification expiry date. The switchgear upgrade has been delayed and the customer has advised that it is planned to take place in June 2023.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 7.1 With: Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7 From: 19-Jan-20 To: 22-Apr-22	Certification expired for one metering installation. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	<p>I have recorded the controls as strong as Accucal has a good process for monitoring certification expiry dates and has taken reasonable steps to arrange to recertify.</p> <p>The impact on settlement is recorded as low because it is unlikely that the expiry of the certification will lead to of failure or inaccuracy of the metering installation.</p> <p>The audit risk rating is recorded as low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Continuing to work with the customer on this ICP. The EA are aware of the status and have been kept informed.		22/05/2022	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
N/A		N/A	

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

I checked the certification records for 13 metering installations to confirm compliance.

Audit commentary

Accucal is the MEP and ATH which ensures the appropriate approval is complied with. I checked 13 metering installation records to confirm the appropriate tests were conducted. The certification records contain fields which detail the tests that are completed.

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

All relevant metering is compliant with this clause.

Audit commentary

All relevant metering is compliant with this clause.

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

Not applicable

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 Accucal if there were any examples of burden changes or the addition of non-metering equipment being connected to measuring transformers.

Audit commentary

Some installations certified by the Accucal ATH have other equipment connected to the measuring transformers. I checked an example where the CTs and VTs were also used for instrumentation. The design report and certification records include all relevant details and calculations in relation to non-metering equipment connected. The certification report contains a field which records if any other equipment is connected to the CTs or VTs. See extract from certification report below:

Wiring and Connection Details		
Item	Details	Comments
CT secondary earth point location	CT Secondary Terminals	
CT dedicated to metering	Shared with Instrumentation	
VT secondary earth point location	VT Secondary Terminals	
VT dedicated to metering	Shared with Instrumentation	

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 if there were any examples of certification at a lower category.

Audit commentary

I checked two examples of metering installations certified at a lower category which required monitoring. Metering installation Numbers 3 and 4 at ICP 0009805800AL991 which are nominally Category 5 were certified at Category 4 on 20th July 2021. Accucal confirmed that the DA had not been notified of the requirement to monitor in both cases. I have recorded non-compliance as the MEP has not received a report for each month since certification. Non-compliance is also recorded in **section 6.4**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 7.6 With: Clause 6(1)(b) and (d), and 6(2)(b) of Schedule 10.7 From: 31-Aug-21 To: 22-Apr-22	Monitoring was not conducted for each month for two metering installations certified at a lower category. Potential impact: Medium Actual impact: None 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 Accucal have a process to ensure monitoring occurs, but it was not followed in these cases. Whilst monitoring has not taken place each month, the maximum demand has not exceeded the category limit, so the impact is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Have engaged the data collector to notify ACCM if the load exceeds the Cat 4 limit for these two installations.		22/05/2022	
Preventative actions taken to ensure no further issues will occur		Completion date	
Will ensure this is also undertaken for any future installations but most likely will not down-grade any further installations.		22/05/2022	

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

I checked two examples where insufficient load certification was conducted by the Accucal ATH. ICP 1000599199PCECA was certified with insufficient load on 6th May 2021. Monitoring identified sufficient load in June 2021 and the ATH returned to site and completed the testing on 29th June 2021. ICP 0000010061TEFFC was certified with insufficient load on 20th November 2020. Monitoring identified sufficient load in January 2021 and the ATH returned to site and completed the testing on 19th January 2021.

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 one business day:*
- *the MEP must follow the procedure for handling faulty metering installations (clause 10.43 - 10.48).*

Audit observation

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

Audit commentary

I checked two examples where insufficient load certification was conducted by the Accucal ATH. ICP 1000599199PCECA was certified with insufficient load on 6th May 2021. Monitoring identified sufficient load in June 2021 and the ATH returned to site and completed the testing on 29th June 2021. ICP 0000010061TEFFC was certified with insufficient load on 20th November 2020. Monitoring identified sufficient load in January 2021 and the ATH returned to site and completed the testing on 19th January 2021. In both examples testing confirmed that the metering installation was within the relevant maximum permitted error.

I confirmed that Accucal understands the requirement to cancel certification 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.

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 five 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 been applied to three metering installations. The certification of one has expired as recorded in **section 7.1**. The remaining two were completed during the audit period. I checked the certification records for one of these to confirm compliance (ICP 1001138597LC16C). The metering installation was originally certified under this clause on 8th November 2020 with an expiry date determined by the meter expiry date as 12th February 2021. The Accucal ATH replaced the meter and recertified using alternative certification with an expiry date of 8th November 2022, 24 months from the initial alternative certification date. I have considered whether the Code allows the ATH to recertify in this way. Clause 32(1)(a) of Schedule 10.7 states that the ATH can certify the metering installation for a period not exceeding 24 months if the measuring transformer has not previously been certified under this clause. As it is the metering installation that is certified under this clause and not the measuring transformer, I have determined that the recertification is compliant.

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 Accucal whether there were any metering installations with time switches switching meter registers.

Audit commentary

Accucal confirmed there are no metering installations with with time switches switching meter registers.

Audit outcome

Compliant

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

Accucal is not the MEP for any metering installations with control devices.

Audit commentary

Accucal is not the MEP for any metering installations with control devices.

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

Accucal is not the MEP for any metering installations with control devices.

Audit commentary

Accucal is not the MEP for any metering installations with control devices.

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

Accucal has not conducted any statistical sampling during the audit period.

Audit outcome

Compliant

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 records for 13 Category 2 and above metering installations to confirm that compensation factors were correctly recorded on the registry. I also checked an example of a non-standard compensation factor identified by the audit compliance report.

Audit commentary

Compensation factors have been updated accurately on the registry. I confirmed this by checking the records for 13 ICPs. Accucal confirmed that the non-standard compensation factor identified by the audit compliance report was correct.

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

I checked the certification records for 13 metering installations to confirm compliance.

Audit commentary

Meters were certified for all 13 installations.

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

I checked the certification records for 13 metering installations to confirm compliance.

Audit commentary

Measuring transformers were certified for all 13 installations.

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

I checked the certification records for 13 metering installations to confirm compliance.

Audit commentary

The 13 certification records that I checked confirmed that data storage devices are being correctly certified.

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

I checked the ATH register to confirm compliance.

Audit commentary

Accual as an 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

Accual does not have any interim certified metering installations.

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

Accucal is responsible for two Category 1 metering installations, I checked if any of these installations were due for inspection during the audit period.

Audit commentary

Accucal has not been required to complete any Category 1 inspections during the audit period. None of the two Category 1 metering installations are due for inspection until 2026.

Audit outcome

Compliant

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, and I then checked the inspection records for all relevant ICPs and a sample of five completed inspection reports.

Audit commentary

There were 37 inspections required to be completed during the audit period. All 37 inspections were conducted within the applicable period. All five inspection reports requested were provided and contained all the required information.

Audit outcome

Compliant

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 inspection process and a sample of five completed inspection reports from the 37 completed to confirm compliance.

Audit commentary

All inspections are conducted by the Accucal ATH. The inspection check-sheet is prepopulated with all of the existing metering information. A comparison is done by the technician on-site and any discrepancies recorded. The registry is updated if any discrepancies are found on return of the check-sheet.

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*
- 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 for examples of notification of missing seals.

Audit commentary

Accucal has a documented process in place for the management of seals and any subsequent investigation and reporting.

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 the Accucal processes and whether there had been any faulty metering installations during the audit period.

Audit commentary

Accucal has a documented process in place for the management of faulty metering installations and any subsequent investigation and reporting. No specific examples were identified during the audit period.

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 the Accucal processes and whether there had been any faulty metering installations during the audit period.

Audit commentary

Accucal has a documented process in place for the management of faulty metering installations and any subsequent investigation and reporting. No specific examples were identified during the audit period.

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 the Accucal processes and whether there had been any faulty metering installations during the audit period.

Audit commentary

Accucal has a documented process in place for the management of faulty metering installations and any subsequent investigation and reporting. No specific examples were identified during the audit period.

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 the Accucal processes and whether there had been any faulty metering installations during the audit period.

Audit commentary

Accucal has a documented process in place for the management of faulty metering installations and any subsequent investigation and reporting. No specific examples were identified during the audit period.

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

Accucal has not had any requests for access to raw meter data.

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

Accucal has not had any requests for access to raw meter data.

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

Access will be provided as required. No requests have been made.

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

Access will be provided as required. No requests have been made.

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic 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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

Audit outcome

Not applicable

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic 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 choses 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

Accucal does not conduct electronic data collection as an MEP.

Audit commentary

Accucal does not conduct electronic data collection as an MEP.

Audit outcome

Not applicable

CONCLUSION

The audit found eight areas of non-compliance, an increase from the four found in the last audit. The main areas of non-compliance are as follows:

- late registry updates,
- incomplete certification records due to the burden range not recorded in measuring transformer certification reports,
- registry validation was not conducted for every month of the audit period,
- monitoring was not conducted for each month for two metering installations certified at a lower category, and
- certification expired for one metering installation due to ongoing delays to a planned switchgear upgrade by the customer.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The future risk rating indicates an audit frequency of 12 months, after reviewing Accucal's responses I agree with this recommendation.

PARTICIPANT RESPONSE

We believe the majority of issues are related to lack of resource, both due to two staff members leaving and also the current environment. New staff members are being sought and the intention is to ensure that more than just one person is checking and managing the MEP responsibilities.