

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

For

**COUNTIES ENERGY LIMITED
NZBN:9429038874208**

Prepared by: Steve Woods – Veritek Limited

Date audit commenced: 8 February 2023

Date audit report completed: 27 February 2023

Audit report due date: 01-Mar-23

TABLE OF CONTENTS

| | |
|--|----|
| Executive summary | 5 |
| Audit summary | 5 |
| Non-compliances | 5 |
| Recommendations | 7 |
| Issues 7 | |
| 1. Administrative | 9 |
| 1.1. Exemptions from Obligations to Comply with Code (Section 11) | 9 |
| 1.2. Structure of Organisation | 9 |
| 1.3. Persons involved in this audit..... | 10 |
| 1.4. Use of Agents (Clause 10.3)..... | 10 |
| 1.5. Hardware and Software | 10 |
| 1.6. Breaches or Breach Allegations..... | 11 |
| 1.7. ICP Data | 13 |
| 1.8. Authorisation Received | 13 |
| 1.9. Scope of Audit | 13 |
| 1.10. Summary of previous audit | 13 |
| Table of Non-Compliance..... | 14 |
| Table of Recommendations | 15 |
| 2. Operational Infrastructure | 17 |
| 2.1. MEP responsibility for services access interface (Clause 10.9(2))..... | 17 |
| 2.2. Dispute Resolution (Clause 10.50(1) to (3)) | 18 |
| 2.3. MEP Identifier (Clause 7(1) of Schedule 10.6)..... | 18 |
| 2.4. Communication Equipment Compatibility (Clause 40 Schedule 10.7)..... | 19 |
| 2.5. Participants to Provide Accurate Information (Clause 11.2 and Clause 10.6) | 19 |
| 3. Process for a Change of MEP | 21 |
| 3.1. Payment of Costs to Losing MEP (Clause 10.22) | 21 |
| 3.2. Registry Notification of Metering Records (Clause 2 of Schedule 11.4) | 21 |
| 3.3. Provision of Metering Records to Gaining MEP (Clause 5 of Schedule 10.6)..... | 23 |
| 3.4. Termination of MEP Responsibility (Clause 10.23) | 23 |
| 4. Installation and Modification of Metering Installations | 25 |
| 4.1. Design Reports for Metering Installations (Clause 2 of Schedule 10.7)..... | 25 |
| 4.2. Contracting with ATH (Clause 9 of Schedule 10.6)..... | 26 |
| 4.3. Metering Installation Design & Accuracy (Clause 4(1) of Schedule 10.7) | 27 |
| 4.4. Net Metering and Subtractive metering (Clause 10.13A and 4(2)(a) of Schedule 10.7). 27 | |
| 4.5. HHR Metering (Clause 4(2)(b) of Schedule 10.7) | 28 |
| 4.6. NSP Metering (Clause 4(3) of Schedule 10.7)..... | 28 |
| 4.7. Responsibility for Metering Installations (Clause 10.26(10)) | 28 |
| 4.8. Suitability of Metering Installations (Clause 4(4) of Schedule 10.7) | 29 |
| 4.9. Installation & Modification of Metering Installations (Clauses 10.34(2), (2A) 2(D) and (3)) | 29 |
| 4.10. Changes to Registry Records (Clause 3 of Schedule 11.4)..... | 30 |
| 4.11. Metering Infrastructure (Clause 10.39(1)) | 32 |
| 4.12. Decommissioning of an ICP (Clause 10.23A)..... | 33 |

| | | |
|-------|---|----|
| 4.13. | Measuring Transformer Burden and Compensation Requirements (Clause 31(4) and (5) of Schedule 10.7) | 33 |
| 4.14. | Changes to Software ROM or Firmware (Clause 39(1) and 39(2) of Schedule 10.7) | 34 |
| 4.15. | Temporary Electrical Connection (Clause 10.29A) | 34 |
| 4.16. | Temporary Electrical Connection (Clause 10.30A) | 35 |
| 4.17. | Temporary Electrical Connection (Clause 10.31A) | 35 |
| 5. | Metering Records..... | 36 |
| 5.1. | Accurate and Complete Records (Clause 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4) | 36 |
| 5.2. | Inspection Reports (Clause 4(2) of Schedule 10.6) | 37 |
| 5.3. | Retention of Metering Records (Clause 4(3) of Schedule 10.6) | 38 |
| 5.4. | Provision of Records to ATH (Clause 6 Schedule 10.6)..... | 38 |
| 6. | Maintenance of Registry Information..... | 39 |
| 6.1. | MEP Response to Switch Notification (Clause 1(1) of Schedule 11.4) | 39 |
| 6.2. | Provision of Registry Information (Clause 7 (1), (1A), (2) and (3) of Schedule 11.4) | 39 |
| 6.3. | Correction of Errors in Registry (Clause 6 of Schedule 11.4) | 42 |
| 6.4. | Cancellation of Certification (Clause 20 of Schedule 10.7) | 42 |
| 6.5. | Registry Metering Records (Clause 11.8A) | 46 |
| 7. | Certification of Metering Installations | 47 |
| 7.1. | Certification and Maintenance (Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7) | 47 |
| 7.2. | Certification Tests (Clause 10.38(b) and clause 9 of Schedule 10.6)..... | 49 |
| 7.3. | Active and Reactive Capability (Clause 10.37(1) and 10.37(2)(a)) | 50 |
| 7.4. | Local Service Metering (Clause 10.37(2)(b)) | 51 |
| 7.5. | Measuring Transformer Burden (Clause 30(1) and 31(2) of Schedule 10.7) | 52 |
| 7.6. | Certification as a Lower Category (Clauses 6(1)(b) and (d), and 6(2)(b) of Schedule 10.7)..... | 52 |
| 7.7. | Insufficient Load for Certification Tests (Clauses 14(3) and (4) of Schedule 10.7) | 53 |
| 7.8. | Insufficient Load for Certification – Cancellation of Certification (Clause 14(6) of Schedule 10.7) | 54 |
| 7.9. | Alternative Certification Requirements (Clauses 32(2), (3) and (4) of Schedule 10.7) ... | 54 |
| 7.10. | Timekeeping Requirements (Clause 23 of Schedule 10.7)..... | 55 |
| 7.11. | Control Device Bridged Out (Clause 35 of Schedule 10.7) | 55 |
| 7.12. | Control Device Reliability Requirements (Clause 34(5) of Schedule 10.7)..... | 56 |
| 7.13. | Statistical Sampling (Clauses 16(1) and (5) of Schedule 10.7)..... | 57 |
| 7.14. | Compensation Factors (Clause 24(3) of Schedule 10.7)..... | 57 |
| 7.15. | Metering Installations Incorporating a Meter (Clause 26(1) of Schedule 10.7)..... | 58 |
| 7.16. | Metering Installations Incorporating a Measuring Transformer (Clause 28(1) of Schedule 10.7) | 58 |
| 7.17. | Metering Installations Incorporating a Data Storage Device (Clause 36(1) of Schedule 10.7) | 59 |
| 7.18. | Notification of ATH Approval (Clause 7 (3) Schedule 10.3)..... | 59 |
| 7.19. | Interim Certification (Clause 18 of Schedule 10.7)..... | 60 |
| 8. | Inspection of metering installations | 61 |
| 8.1. | Category 1 Inspections (Clause 45 of Schedule 10.7)..... | 61 |
| 8.2. | Category 2 to 5 Inspections (Clause 46(1) of Schedule 10.7) | 62 |
| 8.3. | Inspection Reports (Clause 44(5) of Schedule 10.7) | 63 |
| 8.4. | Broken or removed seals (Clause 48(1G), (4) and (5) of Schedule 10.7) | 64 |

| | | |
|----------------------------|--|----|
| 9. | Process for Handling Faulty Metering Installations | 65 |
| 9.1. | Investigation of Faulty Metering Installations (Clause 10.43(4) and (5))..... | 65 |
| 9.2. | Testing of Faulty Metering Installations (Clause 10.44)..... | 65 |
| 9.3. | Statement of Situation (Clause10.46(2))..... | 66 |
| 9.4. | Timeframe for correct defects and inaccuracies (Clause10.46A) | 66 |
| 10. | Access to and Provision of Raw meter Data and Metering Installations..... | 68 |
| 10.1. | Access to Raw Meter Data (Clause 1 of Schedule 10.6)..... | 68 |
| 10.2. | Restrictions on Use of Raw Meter Data (Clause 2 of Schedule 10.6)..... | 68 |
| 10.3. | Access to Metering Installations (Clause 3(1), (3) and (4) of Schedule 10.6)..... | 69 |
| 10.4. | Urgent Access to Metering Installations (Clause 3(5) of Schedule 10.6) | 69 |
| 10.5. | Electronic Interrogation of Metering Installations (Clause 8 of Schedule 10.6) | 70 |
| 10.6. | Security of Metering Data (Clause 10.15(2)) | 71 |
| 10.7. | Time Errors for Metering Installations (Clause 8(4) of Schedule 10.6) | 72 |
| 10.8. | Event Logs (Clause 8(7) of Schedule 10.6)..... | 73 |
| 10.9. | Comparison of HHR Data with Register Data (Clause 8(9) of Schedule 10.6)..... | 74 |
| 10.10. | Correction of Raw Meter Data (Clause 10.48(2),(3))..... | 75 |
| 10.11. | Raw meter data and compensation factors (Clause 8(10) of Schedule 10.6) | 75 |
| 10.12. | Investigation of AMI interrogation failures (Clause 8(11), 8(12) and 8(13) of Schedule 10.6) | |
| | 76 | |
| Conclusion | | 77 |
| Participant response | | 78 |

EXECUTIVE SUMMARY

Counties Energy Limited (Counties) is a Metering Equipment Provider (MEP) and was required to undergo an audit by 1 March 2022, in accordance with clause 16A.14.

Counties is recorded as the MEP for 46,097 ICPs on the Counties Energy network at the time of the audit. Counties uses Intellihub as an agent for the collection and provision of AMI data for its AMI metering installations.

Counties has improved compliance in several areas during the audit period. The number of uncertified Category 1 metering installations is now only 459, and the majority of issues present are not ones that Counties can resolve, because they require customers and/or Traders to resolve such issues as customer refusal, unsafe wiring or metering enclosure upgrades. The requirements of the Code in relation to AMI data collection have largely been met and the controls are much stronger.

The audit records 15 non-compliances and makes two recommendations, the main issues are as follows:

- Some inaccuracies and late updating of registry information,
- Certification reports are missing several fields, and
- Expired or cancelled metering installation certification for 464 ICPs.

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 indicates an audit frequency of three months. I have considered the Counties responses to the areas of non-compliance and recommend an audit frequency of 18 months to reflect that Counties has robust plans in place to address non-compliances where they have influence, and that almost all of the uncertified metering installations need assistance from other parties to progress further.

AUDIT SUMMARY

NON-COMPLIANCES

| Subject | Section | Clause | Non-Compliance | Controls | Audit Risk Rating | Breach Risk Rating | Remedial Action |
|--|---------|--------------------|--|----------|-------------------|--------------------|-----------------|
| MEP responsibility for services access interface | 2.1 | 10.9(2) | Each services access interface not identified for 26 metering installations. | Strong | Low | 1 | Identified |
| Provision of accurate information | 2.5 | 11.2 and 10.6 | Some information is incorrect, as recorded in Sections 5.1, 6.2 and 6.4 | Moderate | Low | 2 | Identified |
| Registry updates | 3.2 | 2 of Schedule 11.4 | 6 registry updates later than 15 business days | Strong | Low | 1 | Unknown |
| Design Reports for Metering Installations | 4.1 | 2 of Schedule 10.7 | Maximum interrogation cycle for each services access interface not recorded in design reports. Design report not recorded for three | Strong | Low | 1 | Identified |

| | | | | | | | |
|-----------------------------------|------|--|---|----------|--------|---|---------------|
| | | | installations certified by VCOM | | | | |
| Changes to Registry Records | 4.10 | 3 of Schedule 11.4 | Some records updated on the registry later than 10 business days. | Moderate | Low | 2 | Identified |
| Accurate and Complete Records | 5.1 | 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4 | Some inaccurate certification records. | Moderate | Low | 2 | Identified |
| Provision of Registry Information | 6.2 | 7 (1), (2) and (3) of Schedule 11.4 | Some registry records incomplete or incorrect. | Moderate | Low | 2 | Identified |
| Certification cancellation | 6.4 | 20 of Schedule 10.7 | Certification not cancelled within 10 business days on the registry for: <ul style="list-style-type: none"> - One metering installation where the inspection was not completed, - Two metering installations where low burden is present, and - One ICP with failed sum-check. | Moderate | Low | 2 | Investigating |
| Certification and Maintenance | 7.1 | 10.38 (a), clause 1 and clause 15 of Schedule 10.7 | Certification expired for: <ul style="list-style-type: none"> - 339 previously interim certified category 1 ICPs, - 120 category 1 ICPs, Certification cancelled for four metering installations. | Moderate | Medium | 4 | Identified |
| Certification Tests | 7.2 | 10.38(b) | Prevailing load test not conducted for one category 1 metering installation. | Strong | Low | 1 | Cleared |
| Control device bridged out | 7.11 | 35 of schedule 10.7 | Reconciliation participant not notified of two bridged control devices. | Moderate | Low | 2 | Cleared |
| Interim certification | 7.19 | 18 of Schedule 10.7 | 339 ICPs with expired interim certification. | Moderate | Medium | 4 | Identified |

| | | | | | | | |
|--|------|-------------------------------|--|--------|-----|-----------------|---------------|
| Cat 2 – 5 inspections | 8.2 | Clause 46(1) of Schedule 10.7 | Inspection not conducted for one installation. | Strong | Low | 1 | Identified |
| Timeframe for correct defects and inaccuracies | 9.4 | 10.46A | Remedial actions not undertaken within the required timeframe for three ICPs where sumcheck failures occurred. | Strong | Low | 1 | Investigating |
| Time Errors for Metering Installations | 10.7 | 8(4) of Schedule 10.6 | 46 examples of clock errors outside the allowable thresholds in the 2 December 2022 report | Strong | Low | 1 | Cleared |
| Future Risk Rating | | | | | | 27 | |
| Indicative Audit Frequency | | | | | | 3 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 | Description | |
|---------------------|---------|--|------------|
| Certification Tests | 7.2 | Work with the AMS ATH to ensure the details and results of all testing completed are recorded in the metering installation certification reports provided. | Identified |
| Meter certification | 7.15 | Work with the AMS ATH to ensure the details of meter calibration and certification are recorded in the metering installation certification reports provided. | Identified |

ISSUES

| Subject | Section | Recommendation | Description |
|----------------------------------|---------|--|--|
| Data collection responsibilities | 1.6 | Clarification required for data collection responsibilities as an MEP. | Counties admitted breaching clause 8(7) of Schedule 10.6, however clause 8 only applies when "...raw meter data can only be obtained from a metering equipment provider's back office." In this case, the data is collected by the MV90 system, not by an AMI system, therefore any data collector on behalf of any Reconciliation Participant is able to collect the data. The metering installation is not recorded in the registry as AMI. The Authority published a case study in relation to this matter, which also incorrectly stated that data collection was the responsibility of the MEP. Whilst Counties has contracted an agent to conduct the data collection, the Code appears clear that data collection is not the MEPs |

| | | | |
|--|--|--|---|
| | | | responsibility if the data is not derived from the MEP's back-office systems. |
|--|--|--|---|

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

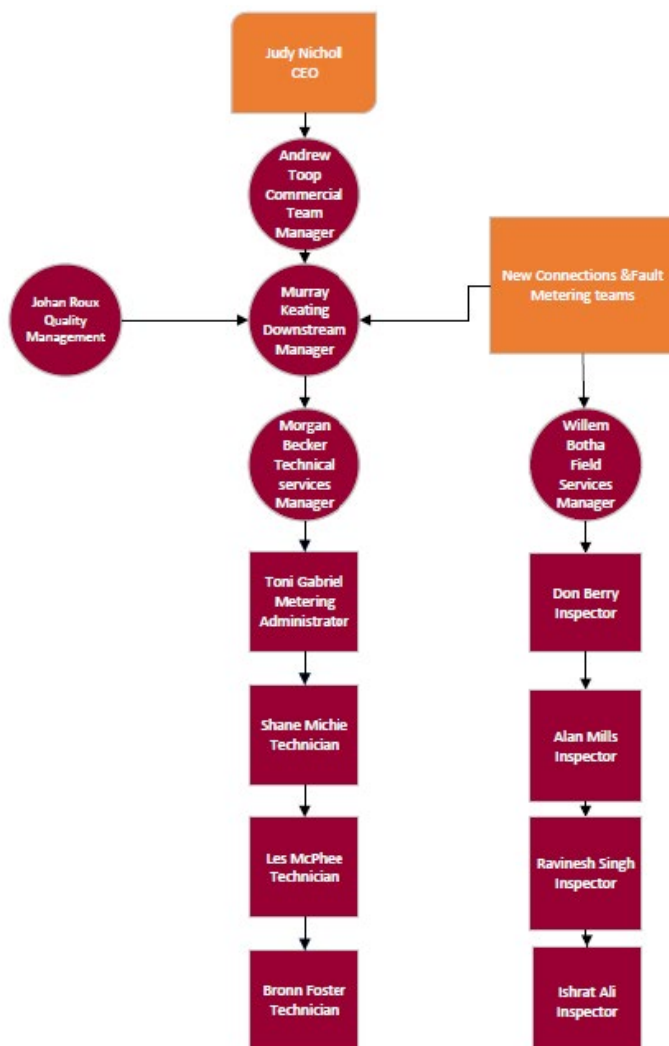
I checked the Electricity Authority website and I confirm there are no exemptions in place.

Audit commentary

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

1.2. Structure of Organisation

Counties MEP Structure:



1.3. Persons involved in this audit

Auditor: Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Counties personnel assisting in this audit were:

| Name | Title |
|----------------|-------------------------------|
| Murray Keating | Downstream Technology Manager |
| Morgan Becker | Technical Services Manager |
| Dale Oliver | Systems Analyst |

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

Audit observation

Counties engages with ATHs to conduct certification activities, but there are no contractors used to perform MEP responsibilities.

Audit commentary

Counties has responsibility for AMI data collection, which is conducted by Intellihub as an agent to Counties. The scope of this audit includes the Intellihub data collection operation.

1.5. Hardware and Software

Counties MEP provided the following details about its systems and backup arrangements.

Counties utilises Microsoft Business Central as the platform for housing metering asset data and all MEP transactional data exchanged with the Electricity Registry.

Business Central is an ERP application with Microsoft SQL Server as the back-end.

The primary SQL Server (SOMNUS) is a virtual server hosted on a Nutanix Virtual Environment.

The SOMNUS SQL Server is backed up incrementally as part of the Nutanix cloud backup using Rubrik VM Agent. This provides for rapid restore to multiple points in time in the event of a critical failure.

AMI data collection is conducted by Intellihub as an agent to Counties.

1.6. Breaches or Breach Allegations

There was one breach allegation recorded during the audit period.

On 23 June 2022, the Authority appointed an investigator under regulation 12 of the Regulations to investigate alleged breaches of clauses 10.6(1), 10.13(3), 10.44(8) of the Electricity Industry Participation Code 2010 (Code), and clauses 8(5)(f) and 8(7) of Schedule 10.6 of the Code, by Counties Energy Limited (Counties) between March 2019 and February 2021.

The alleged beaches resulted from a fault with a metering installation for which Counties was the metering equipment provider. The fault started in March 2019 and was detected in October 2020. The fault caused the amount of electricity measured by the metering installation to be reduced to about two thirds of actual consumption. The faulty metering installation was replaced and recertified in February 2021.

Counties admitted breaching clause 8(7) of Schedule 10.6, however clause 8 only applies when “...raw meter data can only be obtained from a metering equipment provider’s back office.” In this case, the data is collected by the MV90 system, not by an AMI system, therefore any data collector on behalf of any Reconciliation Participant is able to collect the data. The metering installation is not recorded in the registry as AMI. The Authority published a case study in relation to this matter, which also incorrectly stated that data collection was the responsibility of the MEP. Whilst Counties has contracted an agent to conduct the data collection, the Code appears clear that data collection is not the MEPs responsibility if the data is not derived from the MEP’s back-office systems. The Authority provided a memo on 18/12/2013 clarifying responsibilities. The relevant part is shown below.

MEP obligations matrix

Further to the April 2013 auditor forum it has come to our attention that there remains some confusion regarding when it is the responsibility for a MEP to interrogate a metering installation and when it is the reconciliation participant’s responsibility.

A good rule of thumb is if the remote communication is ‘exclusive’ (i.e. it is not possible for another party to access the metering via the communication setup) then it is the MEP’s responsibility to interrogate the meter, otherwise it is the reconciliation participant’s obligation.

Specific examples to consider are below:

| <i>Metering Type</i> | <i>Scenario</i> | <i>Responsibility</i> | <i>Comments</i> |
|----------------------|---|-----------------------------------|---|
| <i>HHR</i> | <i>Where it is possible for other parties to interrogate the metering installation</i> | <i>Reconciliation Participant</i> | <i>Electronic interrogation.</i> |
| <i>HHR</i> | <i>Where the MEP WILL NOT provide the interrogation capability, password, or encryption details to the reconciliation participant.</i> | <i>Reconciliation Participant</i> | <i>Although password means not possible for other parties to collect data, it is possible if MEP provides access. Electronic interrogation.</i> |
| <i>HHR</i> | <i>Where the MEP WILL provide the interrogation capability, password, or encryption</i> | <i>Reconciliation Participant</i> | <i>Electronic interrogation.</i> |

| | | | |
|----------------------|---|------------------------------------|---|
| | <i>to the reconciliation participant.</i> | | |
| <i>AMI</i> | <i>Where the MEP WILL NOT provide the interrogation capability, password, or encryption details to the reconciliation participant</i> | <i>Metering Equipment Provider</i> | <i>Note that where interrogation is via radio mesh or GPRS, the nature of communication and metering management systems means MEP back office system are required to meet code obligations. Electronic interrogation.</i> |
| <i>AMI</i> | <i>Where the MEP WILL NOT provide the interrogation capability, password, or encryption details to the reconciliation participant and uses an agent to interrogate the metering installation</i> | <i>Metering Equipment Provider</i> | <i>The MEP cannot contract out of its Code obligations. Electronic interrogation.</i> |
| <i>NHH (non-AMI)</i> | <i>Where the MEP restricts access to the metering installations, and WILL NOT provide the interrogation capability/ password/encryption to the reconciliation participant</i> | <i>Reconciliation Participant</i> | <i>Although password means not possible for other parties to collect data, it is possible if MEP provides access. Electronic interrogation.</i> |
| <i>NHH (non-AMI)</i> | <i>Where it is possible for any party to interrogate the metering installation</i> | <i>Reconciliation Participant</i> | <i>Manual interrogation.</i> |

I've raised this as an issue for the Authority to clarify.

| Issue | Description | Remedial action |
|-----------------------|--|--|
| 8(7) of Schedule 10.6 | Clarification required for data collection responsibilities as an MEP. | Counties admitted breaching clause 8(7) of Schedule 10.6, however clause 8 only applies when "...raw meter data can only be obtained from a metering equipment provider's back office." In this case, the data is collected by the MV90 system, not by an AMI system, therefore any data collector on behalf of any Reconciliation Participant is able to collect the data. The metering installation is not recorded in the registry as AMI. The Authority published a case study in relation to this matter, which also incorrectly stated that data collection was the responsibility of the MEP. Whilst Counties has contracted an agent to conduct the data collection, the Code appears clear that data collection is not the MEPs responsibility if the data is not derived from the MEP's back-office systems. |

I agree that Counties breached Clauses 10.13(3) and 10.44(8)

1.7. ICP Data

| Metering Category | Number of ICPs |
|-------------------|----------------|
| 1 | 45,585 |
| 2 | 439 |
| 3 | 43 |
| 4 | 15 |
| 5 | 11 |
| 9 | 4 |

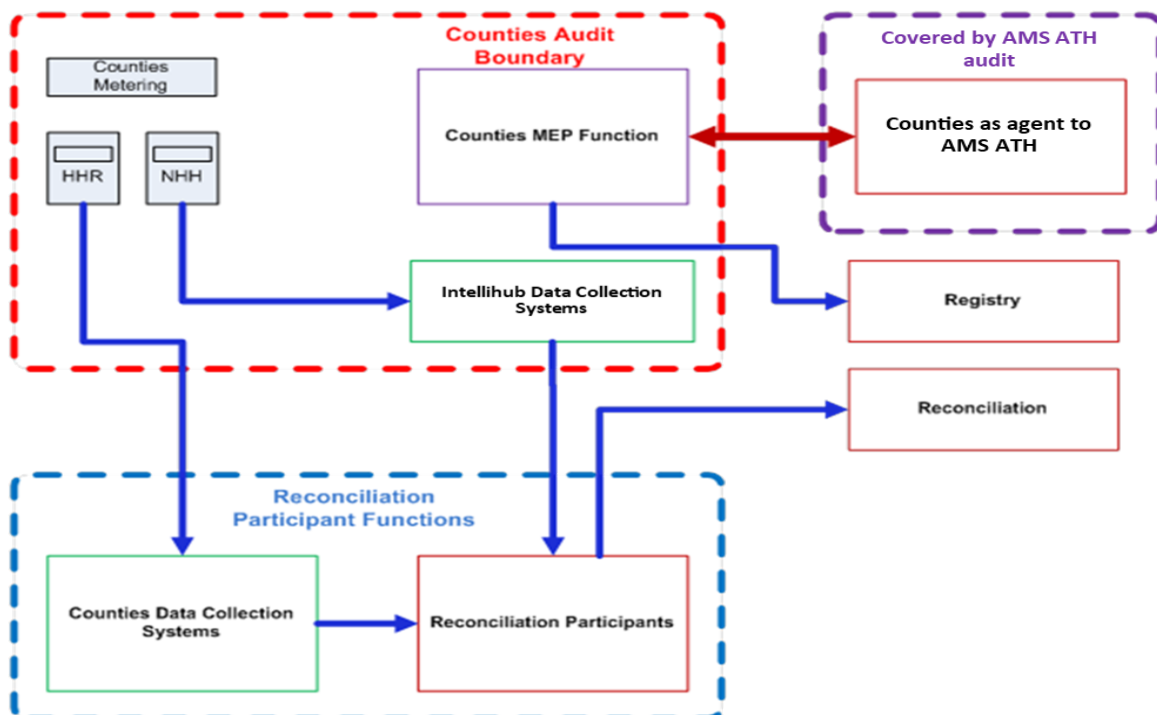
1.8. Authorisation Received

A letter of authorisation was not required or requested.

1.9. Scope of Audit

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

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



1.10. Summary of previous audit

The previous audit was conducted in January 2022 by Brett Piskulic of Veritek Limited. The table below shows the status of the 14 areas of non-compliance identified.

Table of Non-Compliance

| Subject | Section | Clause | Non-compliance | Status |
|--|---------|--|--|----------------|
| MEP responsibility for services access interface | 2.1 | 10.9(2) | Each services access interface not identified for 31 metering installations. | Still existing |
| Provision of accurate information | 2.5 | 11.2 and 10.6 | Some information in the registry is incorrect. | Still existing |
| Registry updates | 3.2 | 2 of Schedule 11.4 | 3 registry updates later than 15 business days. | Still existing |
| Design Reports for Metering Installations | 4.1 | 2 of Schedule 10.7 | Maximum interrogation cycle for each services access interface not recorded in design reports. | Still existing |
| Changes to Registry Records | 4.10 | 3 of Schedule 11.4 | Some records updated on the registry later than 10 business days. | Still existing |
| Accurate and Complete Records | 5.1 | 4(1)(a) and (b) of Schedule 10.6, and Table 1, Schedule 11.4 | Some inaccurate certification records. | Still existing |
| Provision of Registry Information | 6.2 | 7 (1), (2) and (3) of Schedule 11.4 | Some registry records incomplete or incorrect. | Still existing |
| Certification cancellation | 6.4 | 20 of Schedule 10.7 | <p>Certification not cancelled within 10 business days on the registry for:</p> <ul style="list-style-type: none"> - six metering installations where inspections were not completed, - three metering installations where low burden is present, and <p>86 ICPs with failed sum-checks.</p> | Still existing |

| Subject | Section | Clause | Non-compliance | Status |
|---|---------|--|---|----------------|
| Certification and Maintenance | 7.1 | 10.38 (a), clause 1 and clause 15 of Schedule 10.7 | Certification expired for: <ul style="list-style-type: none"> - 519 previously interim certified category 1 ICPs, - 299 category 1 ICPs, and certification cancelled for 45 metering installations. | Still existing |
| Certification Tests | 7.2 | 10.38(b) | Prevailing load test not conducted for one category 1 metering installation. | Still existing |
| Interim certification | 7.19 | 18 of Schedule 10.7 | 519 ICPs with expired interim certification. | Still existing |
| Cat 2 – 5 inspections | 8.2 | Clause 46(1) of Schedule 10.7 | Inspections not conducted for six installations. | Still existing |
| Time Errors for Metering Installations | 10.7 | 8(4) of Schedule 10.6 | 34 examples of clock errors outside the allowable thresholds in the 2 December 2021 report. | Still existing |
| Investigation of AMI interrogation failures | 10.12 | 8(11), 8(12) and 8(13) of Schedule 10.6 | Reporting and processes not in place to resolve interrogation issues or change the AMI flag to “N” at 25% of the MIC or 30 days between 1 February and 20 May 2021. No action taken to change the AMI flag to “N” or cancel the certification for five meters which had not been successfully interrogated within 30 days or 25% of the maximum interrogation cycle. | Cleared |

Table of Recommendations

| Subject | Section | Clause | Recommendation for improvement | Status |
|---------------------|---------|--|--|----------------|
| Certification Tests | 7.2 | 10.38(b) and clause 9 of Schedule 10.6 | Work with the AMS ATH to ensure the details and results of all testing completed are recorded in the metering installation certification reports provided. | Still existing |

| Subject | Section | Clause | Recommendation for improvement | Status |
|---------------------|---------|------------------------|--|----------------|
| Meter certification | 7.15 | 26(1) of Schedule 10.7 | Work with the AMS ATH to ensure the details of meter calibration and certification are recorded in the metering installation certification reports provided. | Still existing |

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 50 metering installations, covering all relevant ATHs.

Audit commentary

The Code places responsibility for maintaining the services access interface on the MEP and places responsibility for determining and recording it with ATHs. The code was changed from 1st February 2021 to require the ATH to record each services access interface and the conditions under which each services access interface may be used. The code change was announced on 15th December 2020. Prior to this change the ATH was required to determine and record a single services access interface.

I checked the certification records for 50 metering installations and found that each services access interface was not recorded for 26 of the 50 records. 24 certification records prepared by the AMS ATH identified the services access interface as remote only for AMI metering installations. It is also possible that the services access interface may be changed to local for these metering installations if there are problems communicating with the meters. Two certification reports prepared by the Accucal ATH had the services access interface recorded as “meter registers” but the installations are showing as AMI in the registry.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|--|-----------------|------------------------|
| Audit Ref: 2.1 With: Clause 10.9(2) From: 01-Jan-22 To: 30-Nov-22 | Each services access interface not identified for 26 metering installations. Potential impact: Low Actual impact: None Audit history: Twice Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | I have recorded the controls as strong because the services access interface is still maintained in a compliant manner despite the incorrect recording in certification reports. There is no impact because the MEP normally determines the location of the services access interface; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |

| | | |
|---|------------------------------|------------|
| Both the service access interfaces will be displayed when the new installation report format is applied | Proposed date August 2023 | Identified |
| Preventative actions taken to ensure no further issues will occur | Completion date | |
| The revision to the field tool application will enforce service access interface data capture | Proposed date August 2023 | |

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

Counties 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

Counties uses the COUP 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

Relevant documentation was checked to ensure the compatibility of communication equipment.

Audit commentary

Counties ensures all communication equipment is appropriately certified with the relevant telecommunications standards. This is recorded in type test certificates and other approval documents. I checked a folder containing type test reports to confirm that Counties has ensured that all components have appropriate approvals.

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 Counties has taken all practicable steps to ensure that information is complete and accurate in most cases; however, in **sections 5.1, 6.2 and 6.4** the report records that some information was not updated as soon as practicable. The main issue is that the registry is not always updated when certification is cancelled.

Audit outcome

Non-compliant

| Non-compliance | Description | |
|---|--|------------------------|
| Audit Ref: 2.5 With: Clause 11.2 and Clause 10.6 From: 01-Jan-22 To: 30-Nov-22 | Some information is incorrect, as recorded in Sections 5.1, 6.2 and 6.4 Potential impact: Medium Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2 | |
| Audit risk rating | Rationale for audit risk rating | |
| Low | Controls are recorded as moderate because there is room to improve processes. 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 |
| Noted as a percentage of all fields uploaded, there are some data errors published on Registry | | Identified |
| Preventative actions taken to ensure no further issues will occur | Completion date | |
| Ongoing staff training and logic rules applied to the data entry continues to improve the error rates | | |

3. PROCESS FOR A CHANGE OF MEP

3.1. Payment of Costs to Losing MEP (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 Counties had sent or received any invoices.

Audit commentary

Counties 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 report for the period 1 January 2021 to 30 November 2022 for all records where Counties became the MEP to evaluate the timeliness of updates.

Audit commentary

I examined the audit compliance report for 19 switches in relation to this clause and the findings are shown in the table below.

I checked the six late ICPs in detail, and I found that late nomination by the trader was the cause of the late update for one ICP. One was a correction, and the original update was on time. Four updates were late due to processing issues.

When Counties has not been nominated at the time their Navision system is updated, the registry update will fail, and this results in manually re-sending the file once they have been nominated. An automated email is sent to the retailer when metering is installed but a nomination has not been sent. In most cases the retailer is Contact Energy, and their system does not allow a nomination to be sent until after metering is installed.

| Audit | Total ICPs | Total within 15 days | Total over 15 days | % compliant |
|-----------------|------------|----------------------|--------------------|---------------|
| Jan 2021 | 131 | 100 | 31 | 76.34% |
| Jan 2022 | 13 | 10 | 3 | 76.92% |
| Jan 2023 | 19 | 13 | 6 | 68.42% |

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|---|-----------------|------------------------|
| Audit Ref: 3.2 With: Clause 2 of Schedule 11.4 From: 01-Jan-21 To: 30-Nov-22 | 6 registry updates later than 15 business days. Potential impact: Medium Actual impact: Low Audit history: Twice 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, but Counties is often prevented from updating the registry due to not being nominated at the time of the metering installation. 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 |
| Typically, the aim is for next day turn around of completed jobs to Registry update, and usually any delay is due to delay in submission of certification report or similar. However, the administration team has been reminded of the requirement to upload of Registry data within 10 business days of connection of an ICP. We also must point out Traders continue to issue COUP metering jobs prior to nominating MEP Status and also prior to accepting responsibility for the ICP on Registry. We have no direct control on these Participants, so if they are non-compliant this rolls through to compliance for COUP | | | Unknown |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |

| | | |
|--|--|--|
| Also: There are multiple scenarios where data cannot be directly loaded to registry due to conflicts with other participants data or dates etc in some cases requiring manual actions or requests for reversals etc. However regardless all efforts will continue be made to meet the targets. | | |
|--|--|--|

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

Audit commentary

This has not occurred, and no examples are available to examine. Counties confirmed that information will be provided as necessary.

Audit outcome

Compliant

3.4. Termination of MEP Responsibility (Clause 10.23)

Code reference

Clause 10.23

Code related audit information

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

The MEP is responsible if it:

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

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

An MEP's obligations terminate only when;

- the ICP changes under clause 10.22(1)(a),*
- the NSP changes under clause 10.22(1)(b), in which case the MEPs obligations terminate from the date on which the gaining MEP assumes responsibility,*
- the metering installation is no longer required for the purposes of Part 15, or*
- the load associated with an ICP is converted to be used solely for unmetered load.*

Audit observation

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

Audit commentary

Counties 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.

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 the design reports provided by Counties to relevant ATHs, and I checked that ATHs were correctly recording the design report in the certification records.

Audit commentary

The design reports include all relevant details required by the Code with the exception of the requirement to record the maximum interrogation cycle for each services access interface. This requirement was introduced with the Code changes effective 1st February 2021. Counties intends to update these design reports.

My checks of 50 metering installation records confirmed that the ATHs had correctly recorded the design report reference in 47 cases, but three reports by VCOM did not have design report references.

Audit outcome

Non-compliant

| Non-compliance | Description |
|--|---|
| Audit Ref: 4.1 With: 2 of Schedule 10.7 From: 01-Jan-22 To: 17-Feb-23 | Maximum interrogation cycle for each services access interface not recorded in design reports. Design report not recorded for three installations certified by VCOM Potential impact: Medium Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1 |
| Audit risk rating | Rationale for audit risk rating |

| | | | |
|--|--|------------------------|-------------------------------|
| Low | Strong controls are in place because Counties is preparing a new standard design report which includes all required information. There is little impact because the installations are compliant despite the incorrect design reports. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Noted. Amendments to design reports will state both interrogation cycles. | | March 2023 | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| A field app update will ensure the design report reference is populated on the metering installation records | | August 2023 | |

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 Counties has used the Accucal, AMS and Wells ATHs.

Audit commentary

I have checked the Authority's website and confirm that the Accucal, AMS and Wells ATHs have current and appropriate scopes 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 Counties to ensure compliance with the design and with the error thresholds stipulated in Table 1. I also checked the certification records for 50 metering installations.

Audit commentary

The Counties process requires the design report to be recorded on the metering installation certification report, all of the 50 reports I checked included a reference to the design report.

All fully calibrated certifications are conducted by the Accucal ATH. Comparative recertifications were conducted by the Accucal and Wells ATHs. I checked the certification records for nine installations using these methods and can confirm that the measured error and uncertainty were appropriately recorded.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 4(2)(b) of Schedule 10.7

Code related audit information

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

Audit observation

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

Audit commentary

The audit compliance report confirmed that all metering installations at Category 3 and above have HHR metering installations.

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 Counties is responsible for any NSP metering.

Audit commentary

Counties is the MEP for metering at MTG0111 and subtraction does not occur.

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

Counties is not responsible for any grid metering.

Audit commentary

Counties is not responsible for any grid metering.

Audit outcome

Compliant

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

Code reference

Clause 4(4) of Schedule 10.7

Code related audit information

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

Audit observation

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

Audit commentary

The certification record contains a field in relation to this clause, and the technician is required to confirm that installations are compliant and safe.

Counties has issued a written instruction to installers regarding the suitability of enclosures and protection for metering installations. The physical and electrical requirements for metering installations are contained in the “Counties Power – Metering Requirements for Electrical Installations” which is published on the Counties Energy website.

Audit outcome

Compliant

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

Code reference

Clauses 10.34(2), (2A), 2(D) 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.

Audit observation

Counties is also the distributor in all cases where they are the MEP and therefore agreement is implicit in that relationship. Consultation with traders has occurred through the Use of System Agreement and the Distribution Code. The Use of System Agreement refers to the fact that metering will comply with the Code and with the Distribution Code. The Distribution Code states that metering requirements are those contained in the “Counties Power – Metering Requirements for Electrical Installations”.

Audit commentary

Counties is also the distributor in all cases where they are the MEP and therefore agreement is implicit in that relationship. Consultation with traders has occurred through the Use of System Agreement and the Distribution Code. The Use of System Agreement refers to the fact that metering will comply with the Code and with the Distribution Code. The Distribution Code states that metering requirements are those contained in the “Counties Power – Metering Requirements for Electrical Installations”; this document is published on the Counties Energy website.

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 November 2020 to 22 November 2021 to evaluate the timeliness of registry updates.

Audit commentary

The table below shows that there were registry updates for 1,178 new connections completed of which 78 were late, and 93.38% of updates were compliant. I checked all 78 records in detail, and I found that late updates were caused by late nomination by the trader for 36 of the 78. Seven of the late updates were due to replaced events where the original updates were on time. The remaining 35 were the result of late updates by Counties due to processing delays.

There were 1,856 registry updates completed after recertification of which 371 were late, and 80.01% of updates were compliant. 34 of the late updates were greater than 100 days, I checked these in detail and confirmed that 29 were due to replaced events where the original updates were on time, and five were due to processing delays. I checked 26 records in detail where the late update was less than 100 days, and I found that 12 of the late updates were due to replaced events where the original updates were on time. The remaining ones were the result of a late update by Counties due to processing delays.

| Event | Year | Total ICPs | ICPs Notified Within 10 Days | ICPs Notified Greater Than 10 Days | Percentage Compliant |
|----------------|-----------------|--------------|------------------------------|------------------------------------|----------------------|
| New connection | Jan 2019 | 578 | 516 | 62 | 89.3% |
| | Oct 2019 | Not recorded | Not recorded | Not recorded | Not recorded |
| | Jan 2021 | 1,327 | 1,243 | 84 | 93.67% |
| | Jan 2022 | 1,504 | 1,442 | 52 | 96.52% |
| | Jan 2023 | 1,178 | 1,100 | 78 | 93.38% |
| Update | Jan 2019 | 38,945 | 38,692 | 253 | 99.4% |
| | Oct 2019 | 31,125 | 30,871 | 254 | 99.2% |
| | Jan 2021 | 2,206 | 2,039 | 167 | 92.43% |
| | Jan 2022 | 1,797 | 1,544 | 253 | 85.92% |
| | Jan 2023 | 1,856 | 1,485 | 371 | 80.01% |

ICP 0099553413CN121 was recertified on 16/11/2022 because certification was cancelled due to an inspection not being conducted.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|---|------------------------|-------------------------------|
| Audit Ref: 4.10 With: Clause 3 of Schedule 11.4 From: 01-Jan-21 To: 30-Nov-22 | Some records updated on the registry later than 10 business days. Potential impact: Medium Actual impact: Low Audit history: Multiple times 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 there is room to improve and shorten the notification process for updates. The late updates for new connections occurred after the trader had populated their records, therefore the impact on participants, customers or settlement is minor, therefore the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |

| | | |
|---|------------------------|-------------------|
| <p>The administration team has been reminded of the requirement to upload of Registry data within 10 business days of connection of an ICP. We however must point out Traders continue to issue COUP metering jobs prior to nominating MEP Status and also prior to accepting responsibility for the ICP on Registry. We have no direct control on these Participants, so if they are non-compliant this rolls through to compliance for COUP</p> | | <p>Identified</p> |
| <p>Preventative actions taken to ensure no further issues will occur</p> | <p>Completion date</p> | |
| <p>Also: There are multiple scenarios where data cannot be directly loaded to registry due to conflicts with other participants data or dates etc in some cases requiring manual actions or requests for reversals etc. However regardless ongoing efforts will continue be made to meet the targets.</p> | | |

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

Counties uses Intellihub as an agent for the collection of AMI data. The Intellihub data collection systems are considered “metering infrastructure”. Operation of the Intellihub systems were checked in **section 10** of this audit and confirm that the systems operate as intended.

Audit commentary

There were no obvious issues with the operation of the AMI systems. All components operate as intended in an integrated manner.

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, and*
- *the responsible trader must arrange for a final interrogation of the metering installation.*

Audit observation

I checked whether Counties 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 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 Counties whether they had approved any burden changes during the audit period.

Audit commentary

There have not been any examples of this occurring during the audit period.

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

Counties has not conducted any updates during the audit period.

Audit outcome

Compliant

4.15. Temporary Electrical Connection (Clause 10.29A)

Code reference

Clause 10.29A

Code related audit information

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

Audit observation

Counties is not responsible for any grid metering.

Audit commentary

Counties is not responsible for any grid metering.

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 any NSPs where Counties is the MEP had been temporarily electrically connected during the audit period.

Audit commentary

There were no temporary electrical connections of NSPs where Counties is the MEP during the audit period.

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 for examples where the metering installation certification date was prior to the initial electrical energisation date of the ICP to determine whether there were any examples of temporary electrical connection for the purpose of testing and certification.

Audit commentary

There were no temporary connections of ICPs where COUP is the MEP during the audit period.

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, and
- m) the signed inspection report confirming that the metering installation complies with the requirements of Part 10.

Audit observation

I checked certification records for 50 metering installations, and I also checked the inspection record template and 11 inspection reports to evaluate compliance with this clause.

Audit commentary

Some issues were identified with the content of certification reports and registry records. They are listed in the table below.

| Quantity Jan 2023 | Issue |
|----------------------|--|
| 9 | CT burden range not recorded in certification reports by Accucal ATH. |
| 2 | CT burden range incorrectly recorded in Wells ATH certification reports. |
| 2 | All services access interfaces and maximum interrogation cycles not recorded by ACCL ATH |
| 29 | Maximum interrogation cycle not recorded in AMS ATH Category 1 certification reports. |
| 29 | Each services access interface not recorded in AMS ATH Category 1 certification reports. |
| 24 | NHH meters incorrectly recorded as HHR in AMS ATH Category 1 certification reports. |

| | |
|----|--|
| 29 | Test results not recorded in AMS ATH Category 1 certification reports. |
|----|--|

During the certification report checks it was identified that a system issue is preventing certification reports from showing existing metering components. The only components showing are those removed or installed. There were seven examples, where the registry was correct but the certification reports were not correct.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|---|-----------------|------------------------|
| Audit Ref: 5.1 With: Clause 4(1) of Schedule 10.6 From: 01-Jan-22 To: 30-Nov-22 | Some inaccurate certification records. Potential impact: Medium Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | I have recorded the controls as moderate because there is room for improvement. There is a minor impact on other participants; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| A project that includes altering output report format template is already underway. | | August 2023 | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Once the new template is implemented the system will ensure all metering assets with status are correctly indicated on the report. | | | |

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

Audit commentary

Counties has not been requested to supply any inspection reports.

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 Counties processes to confirm compliance.

Audit commentary

The Counties processes ensure that records are kept 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

I checked the details of the information supplied to ATHs prior to recertification when the ATHs hadn't completed the original certification.

Audit commentary

There were examples where this has occurred when category 2 installations previously certified by AMS are recertified by Accucal or Wells. In these cases, the relevant records were supplied with the initial job request.

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 (PR040) for the period 1 January 2021 to 30 November 2023 to confirm whether all responses were within 10 business days.

Audit commentary

All responses were within 10 business days.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

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

Audit observation

I checked the audit compliance report and list file for 100% of records to identify discrepancies.

Audit commentary

Analysis of the list file and audit compliance report for all Counties ICPs found the following issues:

| Quantity of ICPs Jan 2023 | Quantity of ICPs Jan 2022 | Quantity of ICPs Jan 2021 | Quantity of ICPs Oct 2019 | Quantity of ICPs Jan 2019 | Quantity of ICPs Dec 2017 | Issue | Resolved? |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|-----------|
| 3 | 2 | 4 | 0 | 0 | 0 | Blank records on the registry. Meters removed but trader and distributor have not updated the status to decommissioned. | No |
| 5 | 5 | 10 | 162 | - | - | Active with no metering. 2 Caused by automatic acceptance of incorrect MN by Trader. 1 due to no access to install metering. 2 have records in Navision but not the registry | No |
| | 0 | 0 | 0 | 0 | 0 | Fully certified installations since 29/08/13 with a multiplier of 3. | n/a |
| | 0 | 3 | 0 | 0 | 0 | Incorrect metering category. | n/a |
| 4 | 2 | 3 | 6 | 1 | 1 | Incorrect certification, expiry or event dates. | No |
| | 0 | 0 | 0 | 0 | 0 | CTs on Category 1 installation | n/a |
| | 0 | 0 | 0 | 0 | 0 | Category 2 or above without CTs. | n/a |
| 5 | 2 | 4 | - | 7 | - | Incorrect ATH identifier recorded. 3 VEMS not VCOM 2 VCOM not ACCL | No |
| 2 | 0 | 2 | 0 | - | - | HHR profile and submission type and meter or installation type is not HHR. | No |
| 0 | 0 | 13 | 3 | - | - | Metering installation type incorrectly recorded as NHH for Cat 3+ HHR installations | n/a |

| | | | | | | | |
|-----|-----|-------|-------|---|---|---|-----|
| 3 | 5 | 8 | 14 | - | - | CN only. Supplies to pumps with control only, ok. | Ok |
| 684 | 852 | 1,048 | 1,670 | - | - | No control device recorded. Older installations where ripple relays were not included in certification information. | No |
| 78 | 81 | 84 | 101 | - | - | Night without day. All have SWDPK, WWDPK, WDOP, N register contents. | Ok |
| 3 | 0 | 26 | 6 | - | - | UN only with a control device | Yes |
| 1 | | | | | | Two installations on site, only one in the registry | No |

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|--|-----------------|------------------------|
| Audit Ref: 6.2 With: Clause 7 (1), (2) and (3) of Schedule 11.4 From: 01-Jan-22 To: 30-Nov-22 | Some registry records are incomplete or incorrect. Potential impact: Medium Actual impact: Low Audit history: Multiple times 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 there are still a small number of areas where improvement can be made. Very few of the discrepancies have an impact on participants, customers or settlement. The audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Noted miscellaneous updates to implement. | | | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| A memo highlighting these anomalies will be sent to the administration team. | | | |

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.

Audit commentary

Counties has in place a MEP Registry Reconciliation process. This is an automated process which runs daily within Navision. An EDA file is downloaded from the registry and a comparison is done with the Navision master data. A report is provided detailing any differences found. I confirmed that the process is being run daily by checking the contents of a network folder which contained the daily reports. The reports are reviewed at least weekly, and any issues are addressed when found. I did not find any examples of updates which were not completed within five business days.

Audit outcome

Compliant

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

Inspection

I identified 12 Category 2 and above metering installations which were due for inspection based on the certification details recorded in the registry. I checked the inspection reports for 11 completed inspections and confirmed they had been completed within the required timeframe. There was one installation which had been recertified due to the inspection not being conducted, but the registry has not been updated with the new certification details. The ICP is 0099553413CN121, which was recertified on 16/11/2022, but the certification was not cancelled within 10 days of the inspection due date of 09/10/2022 and the new certification details have not been updated in the registry.

Current transformer in-service burden

The ATH must ensure that the in-service burden is within the burden range of the measuring transformers when certifying metering installations. I checked a sample of 21 Category 2 and above certifications to confirm compliance. All 21 installations had appropriate burden.

During previous audits it was found that some metering installations were certified with in-service burden lower than the burden range of the current transformers. Two of these are yet to be resolved, as detailed in the table below. Certification has not been cancelled in the registry.

| ICP | ATH | Date certified | CT make/model | Ratio | Rated burden | Lowest in-service burden | Comment |
|-----------------|-------|----------------|---------------|-------|--------------|--------------------------|--|
| 0003404652CN0C6 | Wells | 26/10/21 | TWS SEW90B | 200/5 | 5VA | 0.99VA | Burden resistors added but in-service burden still less than 25% of the stated rated burden of 5VA. |
| 0069016303CN40E | Wells | 6/07/20 | Atco 2.5B | 300/5 | 10VA | 1.46VA | Burden resistors added but in-service burden still less than 25% of the stated rated burden of 10VA. |

In both cases, burden resistors have been added, but it appears the burden added was insufficient, or there may be an issue with the accuracy of the burden measurements.

Insufficient load certification

One metering installation was identified in my checks of 21 Category 2+ certification records which were certified in accordance with the insufficient load clause and required monitoring. I checked and confirmed that it had been added to the list maintained by Counties of installations requiring monitoring and confirmed that monitoring had taken place each month. Compliance is confirmed.

Certification at a lower category

Two metering installations were identified in my checks of 21 category 2+ certification records which were certified at a lower category and required monitoring to ensure that the load does not exceed the category limit. I checked and confirmed that both had been added to the list maintained by Counties of installations requiring monitoring and confirmed that monitoring had taken place each month. Compliance is confirmed.

Bridged meters in Category 1 metering installations.

I checked the details of one case where meters had been bridged during the audit period. The work order notes state that the bridge was removed, and the installation was recertified, but the registry has not been updated. This is recorded as non-compliance in Section 6.2.

Maximum interrogation cycle

I checked for examples where meters were not interrogated within the maximum interrogation and the AMI flag is still “Y” and certification was not cancelled. As recorded in **section 10.5** there were 219 ICPs not interrogated within the maximum interrogation cycle. In all 219 cases the AMI flag was changed to “N”. Certification is not cancelled for these ICPs. Compliance is confirmed.

Comparison of HHR Data with Register Data (Sum-check)

I checked for examples where certification was not cancelled after meters had failed a sum-check, or a sum-check was not performed within 30 days or 25% of the maximum interrogation cycle and the AMI flag is still “Y”. As recorded in **section 10.9** there were 69 ICPs identified with sum-check failures which

were not resolved within three business days. I checked a sample of 20 of these ICPs and found that certification had not been cancelled within 10 business days for ICP 1099572724CNC32.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|-----------------|------------------------|
| Audit Ref: 6.4 With: Clause 20 of Schedule 10.7 From: 01-Jan-22 To: 31-Dec-22 | Certification not cancelled within 10 business days on the registry for: <ul style="list-style-type: none"> - One metering installation where the inspection was not completed, - Two metering installations where low burden is present, and - One ICP with failed sum-check. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Moderate Breach risk rating: 2 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | I have recorded the controls as moderate as there is room for improvement. The installations with low burden are both recording within the allowable 2.5% therefore the impact on settlement is minor. The responsibility for Counties is to cancel certification on the registry once they know certification is cancelled and the impact of not doing this is minor, therefore the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Jobs to recertify the two ICPs with arguable certification status / burden measurements recorded or identified were reissued and second visits completed. However, we are still trying to interpret the documentation and anomalies within it, as the text advises burdens measure ok however the original metering certification number remains unchanged etc, so we are following up for clarification. Regardless careful review of new CT metering installation certificates to check for these measurements will be made. | | | Investigating |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| The audit has picked up some non-compliance around sum-checks and AMI flag status updates that are pre-dating systems and processes now already implemented. | | | |

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 Counties 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 Counties 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 electrical connection, and
- I checked ICPs where certification was cancelled to ensure the registry was updated accordingly.

Audit commentary

I analysed the registry information from November 2022, and then refreshed this information using the output from Navision in February 2023 to get more accurate results. The reporting from Navision identified 120 Category 1 metering installations with expired full certification and 339 interim certified installations with expired interim certification. This is an improvement from the 299 fully certified and 519 interim certified reported in the last audit. Counties recertification activities have

Counties provided a breakdown of reasons for the inability to complete certification for both groups of ICPs. The tables below show the results.

Fully certified

| Reason | Quantity |
|---------------------------------------|----------|
| Board substandard | 15 |
| Customer refusal | 32 |
| locate ICP | 2 |
| No Load | 6 |
| Room on switchboard | 12 |
| Substandard Wiring | 22 |
| Unable to arrange appointment | 14 |
| No access to metering, customer issue | 6 |
| Scheduled for 2023 | 9 |
| Incorrect ICP | 2 |

Interim Certified

| Reason | Quantity |
|-----------------------------------|----------|
| Board substandard | 36 |
| Customer refusal | 47 |
| Medically dependent customer | 1 |
| locate ICP | 3 |
| No Load | 1 |
| Room on switchboard | 8 |
| Substandard Wiring | 155 |
| Unable to arrange appointment | 17 |
| Vacant | 3 |
| Unable to access – customer issue | 56 |
| Job scheduled in 2023 | 12 |

As recorded in **section 6.4** there are four metering installations where certification is automatically cancelled but the registry has not been updated with the new expiry date.

Category 2 ICP 0005901420CN102 was recorded as having expired certification. This was an error with the expiry date and is now resolved.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|---|-----------------|------------------------|
| <p>Audit Ref: 7.1</p> <p>With: Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7</p> <p>From: 01-Jan-22</p> <p>To: 14-Feb-23</p> | <p>Certification expired for:</p> <ul style="list-style-type: none"> - 339 previously interim certified category 1 ICPs, - 120 category 1 ICPs, <p>Certification cancelled for four metering installations.</p> <p>Potential impact: High</p> <p>Actual impact: Medium</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p> | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Medium | <p>I have recorded the controls as moderate in this area because certification has been expired for a number of years for some ICPs and because some of the expired installations were fully certified at one point.</p> <p>The impact on settlement is recorded as moderate because of the increased likelihood of failure or inaccuracy for metering installations with expired certification, therefore the audit risk rating is medium.</p> | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |

| | | |
|---|-----------------|------------|
| A continuing program of work to address and recertify the small numbers remnant category 1 ICP with expired certification is in place.] | | Identified |
| Preventative actions taken to ensure no further issues will occur | Completion date | |
| [Letters have been sent to the associated Retailers requesting they engage with the customers at the ICPs with expired metering to provide access or undertake the remedial actions required. | February 2023 | |

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, and
- the ATH has the appropriate scope of approval to certify and recertify the metering installation.

Audit observation

I checked the certification records for 50 metering installations to confirm compliance.

Audit commentary

The certification reports for all 21 Category 2 and above metering installations included test results which confirmed that all required testing had been completed.

The 29 certification reports for Category 1 metering installations certified by the AMS ATH did not contain the details or results of the certification tests conducted. I recommend Counties work with the AMS ATH to ensure the details and results of all testing completed are recorded in the metering installation certification reports provided.

| Recommendation | Description | Audited party comment | Remedial action |
|---------------------------|--|---|-----------------|
| Regarding Clause 10.38(b) | Work with the AMS ATH to ensure the details and results of all testing completed are recorded in the metering installation certification reports provided. | The omission of some certification test data is attributable to failure of Counties Energy to comply with the AMS ATH requirements. The required corrections within Counties Energy reporting / systems are already being actioned. | Identified |

There was one example, ICP 1099582300CN9F0, where a category 1 metering installation was recertified by the AMS ATH on 04/10/2022 after a meter was unbridged. Table 3 of Schedule 10.1 requires that a prevailing load test is conducted when a category 1 metering installation is recertified without the meter being changed. Clause 9(1)(a) requires that prevailing load tests must be conducted using a working

standard connected to the metering installation. I have recorded non-compliance as the ATH did not conduct a prevailing load test using a working standard.

Audit outcome

Non-compliant

| Non-compliance | Description | |
|--|---|------------------------|
| Audit Ref: 7.2 With: Clause 10.38(b) From: 04-Oct-22 To: 04-Oct-22 | Prevailing load test not conducted for one category 1 metering installation. Potential impact: Low Actual impact: None Audit history: Once Controls: Strong Breach risk rating: 1 | |
| Audit risk rating | Rationale for audit risk rating | |
| Low | The controls are recorded as strong because a raw meter data output test was conducted, which confirms the correct operation of the metering installation. The impact is low as the accuracy of the metering installation is unlikely to have been impacted by the prevailing load test not being completed, the audit risk rating is low. | |
| Actions taken to resolve the issue | Completion date | Remedial action status |
| Unfortunately, the requirements of the code on this occasion were impractical whilst the technician was conducting the work at a hostile customers property following up from a theft of power scenario. In this situation the technician was satisfied the bridge was external only and was opinion, the accuracy and continued integrity of the meter was unaffected. | | Cleared |
| Preventative actions taken to ensure no further issues will occur | Completion date | |
| | | |

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

Counties has metering installations at, and above Category 2 and they record energy in accordance 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 Counties if there were any examples of burden changes, or the addition of non-metering equipment being connected to metering CTs.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

If a meter is certified in this manner:

- the MEP must, each month, obtain a report from the participant interrogating the metering installation, which details the maximum current from raw meter data from the metering installation by either calculation from the kVA by trading period, if available, or from a maximum current indicator if fitted in the metering installation conveyed through the point of connection for the prior month; and*

- *if the MEP does not receive a report, or the report demonstrates that the maximum current conveyed through the POC was higher than permitted for the metering installation category it is certified for, then the certification for the metering installation is automatically cancelled.*

Audit observation

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

Audit commentary

There are 16 metering installations where the CT ratio is above the metering category threshold. The certification records were checked for all 16, which confirmed that the ATH has recorded that a protection device has been installed which limits the maximum current of the installation to be within the certified category for 14 ICPs. This meets the requirements of Clause 6(1)(a) of Schedule 10.7.

There are two metering installations, ICPs 0005011760CN758 and 0005001600CN94D, where monitoring occurs. I checked and confirmed that both were the list maintained by Counties of installations requiring monitoring, and also confirmed that monitoring had taken place each month.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

I checked if there were any examples of Insufficient load certifications and if monitoring was conducted as required.

Audit commentary

There is one example of insufficient load certification, ICP 1099581223CN381. I checked and confirmed that this ICP is on the list maintained by Counties of installations requiring monitoring, and also confirmed that monitoring had taken place each month.

Audit outcome

Compliant

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

Code reference

Clause 14(6) of Schedule 10.7

Code related audit information

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

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

Audit observation

There is one example of insufficient load certification as detailed in **section 7.7**.

Audit commentary

I checked and confirmed that monitoring has been conducted by Counties each month for this ICP and sufficient load is not yet available.

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, and*
- *take all steps to ensure that the metering installation is certified before the certification expiry date.*

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

Audit observation

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

Audit commentary

Alternative certification has not been applied to any metering installations.

Audit outcome

Compliant

7.10. Timekeeping Requirements (Clause 23 of Schedule 10.7)

Code reference

Clause 23 of Schedule 10.7

Code related audit information

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

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

Audit observation

I asked Counties whether there were any metering installations with time switches.

Audit commentary

Counties confirmed there are no installations with time switches.

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

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

Audit commentary

Counties has a process for the management of bridged control devices. There were four examples identified where control devices were bridged during the audit period. These were identified by the inspection process. ICPs 0001731071CN09F and 0099548497CN260 both still have bridged control devices and the relevant reconciliation participant wasn't notified until 15/02/2023. The installations are not considered defective because the control devices do not support the operation of an approved profile.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|---|-----------------|------------------------|
| Audit Ref: 7.11 With: Clause 35 of Schedule 10.7 From: 27-Sep-22 To: 15-Feb-23 | Reconciliation participant not notified of two bridged control devices. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. 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 |
| Actions will be taken to ensure the Retailer knows a control device has been bridged | | | Cleared |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Review of the inspections carried out in the field and corrective actions are to be carried out more promptly. In one example of the retailer response to notification of a bridged load control: The Retailer simply requested reinstatement of the load control <u>without</u> any discussion with the customer. On our discussion with the customer it was established in fact the customer desired to switch to an uncontrolled tariff. | | | |

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

Code reference

Clause 34(5) of Schedule 10.7

Code related audit information

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

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

Audit observation

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

Audit commentary

Counties has not received notification from ATHs in accordance with this clause. Counties is the distributor and MEP in their region, and they confirm there are no signal propagation issues on their network.

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

Counties 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 21 Category 2 and above metering installations to confirm that compensation factors were correctly recorded on the registry.

Audit commentary

Compensation factors have been updated accurately on the registry. Checking the records for 21 ICPs confirmed this.

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 50 metering installations to confirm compliance.

Audit commentary

Meters were certified for all 50 installations. For new smart meters the meters have been certified by the supplier, re-installed meters are certified by the class A ATH which performs the calibration. For Category 1 metering installations the meters are checked to ensure they have a certification sticker prior to installation and photos are taken of the certification sticker. There is no reference to the meter calibration or certification in the metering installation certification report. I recommend that Counties work with the AMS ATH to ensure the details of meter calibration and certification are recorded in the metering installation certification reports provided.

| Recommendation | Description | Audited party comment | Remedial action |
|---|--|--|-----------------|
| Regarding Clause 26(1) of Schedule 10.7 | Work with the AMS ATH to ensure the details of meter calibration and certification are recorded in the metering installation certification reports provided. | Noted This omission to be addressed with the new certification report format to be implemented. We do note the meter calibration and component certifications are recorded in the photographs associated with certification. | Identified |

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 18 category 2 and above metering installations certified using the fully calibrated and selected component methods to confirm compliance.

Audit commentary

Measuring transformers were certified for the 21 metering installations. New CTs are supplied pre-certified by TWS. Existing VT's and CTs are calibrated and re-certified by Accucal in higher category 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 50 metering installations to confirm compliance.

Audit commentary

The 50 certification records that I checked confirmed that the data storage devices are being correctly certified. The data storage devices are incorporated in the meters and the meters are being certified correctly as part of the meter certification in all cases. I have made a recommendation in **section 7.15** to record meter certification details in Category 1 metering installation certification reports.

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

The Accucal, AMS and Wells ATHs have 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 audit compliance report to identify any ICPs with interim certification recorded.

Audit commentary

There are 339 previously interim certified installations with expired certification. Further detail regarding expired certifications is included in **section 7.1**.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|---|-----------------|------------------------|
| Audit Ref: 7.19 With: Clause 18 of Schedule 10.7 From: 01-Apr-15 To: 14-Feb-23 | 339 ICPs with expired interim certification. Potential impact: High Actual impact: Medium Audit history: Multiple times Controls: Moderate Breach risk rating: 4 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Medium | I have recorded the controls as moderate in this area because certification has been expired for a number of years for these ICPs. The impact on settlement is recorded as moderate because of the increased likelihood of failure or inaccuracy for metering installations with expired certification, therefore the audit risk rating is medium. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Per previous commentary we have requested assistance of the Retailer to help ultimately resolve the ICP remaining in operation with non-compliant metering installations. | | | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| We would suggest the customer or property owner has some obligations and these also be included somehow with the regulations. | | | |

8. INSPECTION OF METERING INSTALLATIONS

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

Code reference

Clause 45 of Schedule 10.7

Code related audit information

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

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

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

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

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

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

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

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

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

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

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

Audit observation

I checked to determine whether Counties was required to conduct any inspections during the audit period.

Audit commentary

Counties has conducted sample inspections for Category 1 metering installations. The process was approved by the Authority and all inspections were completed within the required timeframe. Reporting

has been prepared and supplied to the Authority. Out of the 440 ICPs inspected the following issues were found:

| Count of ICPs | Description of Non-compliance: |
|---------------|--|
| 28 | Seal or seals broken |
| 1 | Installation certification expired (now recertified) |
| 2 | Unmetered circuits |
| 2 | Bypassed control device |

All missing or broken seals were replaced at the time of inspection.

The installation with expired certification has subsequently been recertified.

The other issues are still in progress.

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. There were 12 category 2+ installations due for inspection.

Audit commentary

I identified 12 Category 2 and above metering installations which were due for inspection based on the certification details recorded in the registry. I checked the inspection reports for 11 completed inspections and confirmed they had been completed within the required timeframe. There was one installation which had been recertified due to the inspection not being conducted. The ICP is 0099553413CN121, which was recertified on 16/11/2022.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|------------------------|--|
| Audit Ref: 8.2 With: Clause 46(1) of Schedule 10.7 From: 09-Oct-22 To: 16-Nov-22 | Inspection not conducted for one installation. Potential impact: Medium Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on settlement and participants could be minor; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | Completion date | Remedial action status | |
| The missed inspection is already recertified, we would point out resources in the field of Approved Test Houses is severely constrained, and access into customers property is not always as straightforward as those outside the industry would likely expect. | | Identified | |
| Preventative actions taken to ensure no further issues will occur | Completion date | | |
| Inspection Jobs are issued at least 3 months in advance of expiry. | | | |

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, and*
- *update the metering records in the registry.*

Audit observation

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

Audit commentary

The Counties inspection process includes a comparison with registry records, discrepancies are corrected within the required timeframe.

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 if there were any examples of notification of missing seals.

Audit commentary

During the Category 1 inspections 28 examples of broken seals were identified. In all cases the installation was re-sealed by the ATH following confirmation that the integrity of the installation was not compromised.

Counties 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 asked Counties to provide examples where they had become aware of a faulty metering installation.

Audit commentary

Counties has a documented process in place for the management of faulty metering installations and any subsequent investigation and reporting.

Counties provided one example where a meter had been bridged. The ATH attended, unbridged the meter and recertified the metering installation. Notification was provided to the trader within the required timeframe.

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 for examples where Counties had become aware of faulty metering installations which required testing.

Audit commentary

Counties provided one example where the meter had been bridged. The ATH attended, unbridged the meter and recertified the metering installation within the required timeframe. The information returned by the ATH met the requirement for the provision of a statement of situation.

Audit outcome

Compliant

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

Code reference

Clause10.46(2)

Code related audit information

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

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

Audit observation

I asked Counties to provide examples where they had been provided with a statement of situation.

Audit commentary

Counties provided one example where the meter had been bridged. The ATH attended, unbridged the meter and recertified the metering installation within the required timeframe. The information returned by the ATH met the requirement for the provision of a statement of situation.

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 one example where Counties had become aware of a faulty metering installation, where the meters had been bridged.

I checked three examples of failed sumcheck, where recertification had not occurred within 33 days.

Audit commentary

I checked one example where the meter had been bridged during the audit period. The ATH attended, unbridged the meter and recertified the metering installation within the required timeframe.

I checked three examples of failed sumcheck, where recertification had not occurred within 33 days. The 33 days is made up of three days to resolve the issue, 20 days to investigate, if resolution is not within three days, and ten days to complete remedial actions.

The three ICPs are: 1099576343CN489, 0099552681CN5E4, and 1099573984CN386.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|--|-----------------|------------------------|
| Audit Ref: 9.4 With: Clause 10.46A From: 09-Oct-22 To: 16-Nov-22 | Remedial actions not undertaken within the required timeframe for three ICPs where sumcheck failures occurred. Potential impact: Medium Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on settlement and participants could be minor; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| The 10 day timeframe prescribed in the code is impractical and we cannot always access the metering installation within a customers property at short notice. | | | Investigating |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Often these meter changes are an unnecessary inconvenience to the customer. We could in many cases resolve the sumcheck issue via over the air update and correction, but the code prohibits this. | | | |

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

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

Code reference

Clause 1 of Schedule 10.6

Code related audit information

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

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

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 2 of Schedule 10.6

Code related audit information

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 3(5) of Schedule 10.6

Code related audit information

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 8 of Schedule 10.6

Code related audit information

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

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

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

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

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

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

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

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

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

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

Audit observation

Counties uses Intellihub as an agent for data collection. Counties provided details of the processes used by Intellihub and performance related information in the form of reports provided to Counties by Intellihub.

Interrogation cycle

I checked reporting of meters not read during the maximum interrogation cycle.

Clock synchronisation

Clock synchronisation is discussed in **section 10.7**.

Event logs

Event logs are discussed in **section 10.8**.

Security of raw meter data

I checked the security and storage of data by looking at examples of data and by checking security protocols.

Audit commentary

Interrogation cycle

Counties provided reporting from Intellihub of ICPs where interrogation had not occurred within the maximum interrogation cycle of the meter. The report identified 219 ICPs and included a field showing the status of the “AMI Comm” flag. The “AMI Comm” flag was set to “N” for all 219 ICPs, which means compliance is achieved. Intellihub provides a weekly report to Counties which identifies meters which have not been read within 60% of the maximum interrogation cycle to ensure that Counties can update the “AMI Comm” flag to “N” before the maximum interrogation cycle is reached.

Security of raw meter data

All users have login and password to access working data and only certain IT experts can access raw data. There are no business processes that allow data to be edited. Event data is archived along with consumption data.

Audit outcome

Compliant

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

Counties uses Intellihub as an agent for data collection. Counties provided details of the processes used by Intellihub and performance related information in the form of reports provided to Counties by Intellihub.

I checked the security and storage of data by looking at examples of data more than 48 months old.

Audit commentary

Data is transmitted securely by SFTP and is only accessible to authorised persons with appropriate passwords. There are no business processes that allow data to be edited. Event data is archived along with consumption data.

Audit outcome

Compliant

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

Code reference

Clause 8(4) of Schedule 10.6

Code related audit information

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

Audit observation

Counties uses Intellihub as an agent for data collection. Counties provided details of the processes used by Intellihub and performance related information in the form of reports provided to Counties by Intellihub. I checked the time synchronisation report from 2nd December 2021 to check compliance.

Audit commentary

Time synchronisation occurs as follows: The clock setting is 10 seconds to 20 minutes. For errors over 20 minutes a user must manually set the time. This list is run weekly and sent to Silverspring for them to adjust the clock.

Intellihub advises affected reconciliation participants of time error adjustments or any potential effect on raw meter data. Intellihub monitors devices with multiple clock errors to ensure the meters are replaced.

This clause is slightly different to the clause in Part 15 for reconciliation participants. This clause requires MEPs to ensure the time is not outside the allowable thresholds, therefore non-compliance exists for those examples where time has drifted outside the allowable threshold. The 2 December 2022 report contained 64 records from the previous week where clock errors were greater than 30 seconds for Category 1 HHR, or 10 seconds for Category 2 HHR, or 60 seconds for Category 1 and 2 NHH metering installations. Further analysis found that 18 of these records were time corrections of meters which occurred on the same day as the meter was first installed. It is normal for a meter to require a time correction when it first communicates. I have recorded non-compliance for the remaining 46 meters that required corrections greater than the maximum allowable time errors as detailed in the table below:

| | Number of meters |
|-----------------------------------|------------------|
| Cat 1 HHR time error > 30 seconds | 32 |
| Cat 2 HHR time error > 10 seconds | 1 |
| Cat 2 NHH time error > 60 seconds | 13 |

Audit outcome

Non-compliant

| Non-compliance | Description | |
|---|---|------------------------|
| Audit Ref: 10.7 With: Clause 8(4) of Schedule 10.6 From: 02-Dec-22 To: 02-Dec-22 | 46 examples of clock errors outside the allowable thresholds in the 2 December 2022 report. Potential impact: Medium Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1 | |
| Audit risk rating | Rationale for audit risk rating | |
| Low | I have recorded the controls as strong because clocks are synchronised during every successful interrogation. The impact is considered minor because most clock errors are small and are corrected within one half hour. The audit risk rating is low. | |
| Actions taken to resolve the issue | Completion date | Remedial action status |
| No comment | | Cleared |
| Preventative actions taken to ensure no further issues will occur | Completion date | |
| No comment | | |

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

Counties uses Intellihub as an agent for data collection. Counties provided details of the processes used by Intellihub and performance related information in the form of event reports provided to Counties by Intellihub.

Audit commentary

Intellihub provides a weekly report to Counties of all critical meter events. Counties reviews the reports and advises the reconciliation participants and appropriate action is taken including site visits as required. I reviewed the report from 2nd December 2022, it included tamper, temperature and reverse energy events. I examined the process for filtering and managing events and I confirm that this is complete and robust.

Audit outcome

Compliant

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

Counties uses Intellihub as an agent for data collection. Counties provided details of the processes used by Intellihub and performance related information in the form of sum-check reports provided to Counties by Intellihub.

Audit commentary

Sum-check validation occurs daily and is based on midnight-to-midnight NZST. The "fail" setting is 1 kWh, and all trading periods must be present for a pass to occur.

The Code requires additional practices and reporting from 1 February 2021, specifically: If an electronic interrogation is incomplete (missing register or missing intervals), Clause 8(11) of Schedule 10.6 applies, which is the requirement to complete an interrogation within the lesser of 30 days or 25% of the maximum interrogation cycle. If the interrogation is successful before 30 days or 25% of the maximum interrogation cycle, sum-check can be performed for the period the data had been incomplete. For example, if there is a successful interrogation on day 1 but the next successful interrogation (100% complete data including the register reading), is on day 5, sum-check can occur for a 5-day period. It also seems that if a sum-check is not performed for 30 days or 25% of the maximum interrogation cycle, the AMI flag must be changed to "N". With the flag set to "N", certification is not cancelled, because the services access interface changes from remote to local once the flag changes from "Y" to "N", and this clause only relates to installations where the services access interface is remote.

Intellihub implemented new processes and reporting on the 17th of May 2021 to meet the new code requirements with regard to managing the AMI flag within the lesser of 30 days or 25% of the maximum interrogation cycle and investigating interrogation failures. Intellihub provided reporting for the audit period which identified 69 meters which had failed sum-checks which were not resolved within three business days. I checked a sample of 20 of these ICPs and found that certification had not been cancelled within 10 business days for ICP 1099572724CNC32.

Non-compliance is recorded in **section 6.4** as certification was not cancelled within 10 business days for one ICP. Compliance is recorded in this section because the sum-check is conducted.

Audit outcome

Compliant

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

I checked whether correction of raw meter data occurs.

Audit commentary

Data correction of raw meter data does not occur, but Intellihub has an estimation capability which can provide information to reconciliation participants as requested. There were no specific examples to examine.

Audit outcome

Compliant

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

I checked whether Intellihub was applying compensation factors to raw meter data on behalf of Counties.

Audit commentary

Intellihub is not applying compensation factors to raw meter data.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

Audit observation

I checked whether reporting was in place for installations not interrogated within 30 days or 25% of the maximum interrogation cycle.

Audit commentary

I checked the process implemented by Intellihub to meet the new code requirements which require that a successful interrogation must occur within the lesser of 30 days or 25% of the maximum interrogation cycle. A “missing data export” report identifies meters where there are gaps in either the interval or register data. These are followed up to attempt to retrieve the missing data from the meter or Counties is advised to update the AMI flag to “N” on the registry or cancel certification.

I examined a report provided by Intellihub on 5th December 2022. The report identified 30 meters which had not been successfully interrogated within 30 days or 25% of the maximum interrogation cycle. I checked the registry for these 30 meters and found that the meter had been replaced and metering installation recertified for two ICPs. 10 had been returned to AMI=Y because communication had restarted. All others had the AMI flag changed to N.

Compliance is achieved.

Audit outcome

Compliant

CONCLUSION

Counties is recorded as the MEP for 46,097 ICPs on the Counties Energy network at the time of the audit. Counties uses Intellihub as an agent for the collection and provision of AMI data for its AMI metering installations.

Counties has improved compliance in several areas during the audit period. The number of uncertified Category 1 metering installations is now only 459, and the majority of issues present are not ones that Counties can resolve, because they require customers and/or Traders to resolve such issues as customer refusal, unsafe wiring or metering enclosure upgrades. The requirements of the Code in relation to AMI data collection have largely been met and the controls are much stronger.

The audit records 15 non-compliances and makes two recommendations, the main issues are as follows:

- Some inaccuracies and late updating of registry information,
- Certification reports are missing several fields, and
- Expired or cancelled metering installation certification for 464 ICPs.

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 indicates an audit frequency of three months. I have considered the Counties responses to the areas of non-compliance and recommend an audit frequency of 18 months to reflect that Counties has robust plans in place to address non-compliances where they have influence, and that almost all of the uncertified metering installations need assistance from other parties to progress further.

PARTICIPANT RESPONSE

Counties Energy has made exhaustive efforts with the Category 1 compliance objectives in order to get non-compliant ICPs to below 1% of total ICPs.

Generally, in the context of the volumes of work completed and associated vast number of data fields published to Registry - the small number of miscellaneous non compliances or technicalities identified - would be statistically outliers with respect to the number of correct fields.