

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

For

NOVA ENERGY LIMITED

Prepared by: Brett Piskulic – Veritek Limited

Date audit commenced: 24 January 2020

Date audit report completed: 23 March 2020

Audit report due date: 27-Mar-20

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EXECUTIVE SUMMARY

Nova Energy Limited (Nova) is a Metering Equipment Provider (MEP) and is required to undergo an audit by 27 March 2020, in accordance with clause 16A.17(a).

Since the previous audit Nova has commenced deployment of AMI meters and operation of an AMI data collection system. The increased deployment activity impacted the ability to provide timely registry updates and conduct discrepancy reporting between the registry and Nova records. This issue has been addressed with the implementation of bulk updating and an increase in staff resources.

The audit found eight non-compliances, five of which are related to the updating and accuracy of registry information. 56 ICPs have expired certification, the majority of these have not been recertified due to inability to gain access and health and safety issues on site.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and recommends an audit frequency of 18 months. I recommend a 24 month period as Nova had taken action to resolve a number of issues prior to this report being finalised.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Registry Notification of Metering Records	3.2	2 of schedule 11.4	Some registry updates later than 15 business days.	Strong	Low	1	Cleared
Changes to registry records	4.10	3 of Schedule 11.4	Some records updated on the registry later than 10 business days.	Strong	Low	1	Cleared
MEP Response to Switch Notification	6.1	1(1) of Schedule 11.4	Two late MN files.	Strong	Low	1	Cleared
Provision of Registry Information	6.2	7 (1), (2) and (3) of Schedule 11.4	Some registry records incomplete or incorrect.	Strong	Low	1	Cleared
Registry Metering Records	6.3	6 of Schedule 11.4	Discrepancy report not run for five months.	Strong	Low	1	Cleared
Certification of metering installations	7.1	10.38 (a), clause 1 and clause 15 of Schedule 10.7	Certification expired for 56 ICPs.	Strong	Low	1	Identified

Interim certification	7.18	18 of Schedule 10.7	37 ICPs with expired interim certification.	Strong	Low	1	Identified
Time Errors for Metering Installations	10.7	8(4) of Schedule 10.6	Clock errors greater than the threshold for 5 ICPs.	Strong	Low	1	Identified
Future Risk Rating						8	
Indicative Audit Frequency						18 months	

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Recommendation	Description
			Nil

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

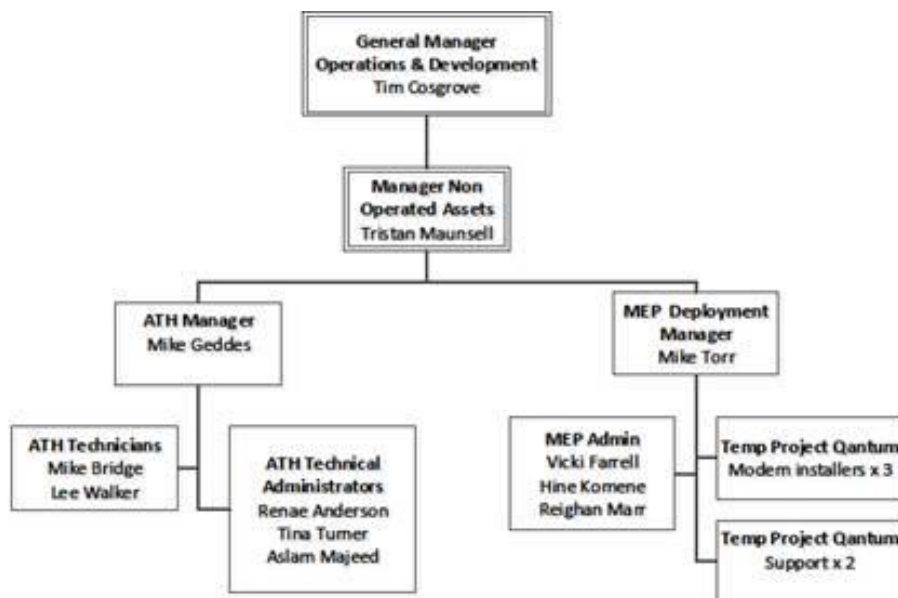
I checked the Electricity Authority website, and I confirm that there is one exemption in place (Exemption No. 276).

Audit commentary

Under exemption No. 276 Nova Energy Limited (“Nova”) is exempted from complying with the obligation in clause 7(1) of Schedule 11.4 of the Electricity Industry Participation Code 2010 (“Code”) to provide to the registry manager the information indicated in line 30 of Table 1 in Schedule 11.4 of the Code. This exemption allows Nova to record the settlement indicator for unused EG data channels as “N” for devices with an AMI flag of “Y”.

1.2. Structure of Organisation

NOVA MEP-ATH Structure as of 31st October 2019 (note the position of MEP Deployment Manager is currently vacant and is being covered by the Manager Non Operated Assets)



1.3. Persons involved in this audit

Auditor:

Brett Piskulic

Veritek Limited

Electricity Authority Approved Auditor

Nova personnel assisting in this audit were:

Name	Title
Vicky Farrell	Asset Administrator
Tristan Maunsell	Manager Non Operated Assets Temporarily covering MEP Deployment Manager role
Lee-Harrison Walker	ATH Technician

1.4. Use of Agents (Clause 10.3)

Code reference

Clause 10.3

Code related audit information

A participant who uses a contractor

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

Audit observation

Nova engages with ATHs to conduct certification activities and they are an ATH themselves, but there are no contractors used to perform MEP responsibilities.

Audit commentary

Nova engages with ATHs to conduct certification activities and they are an ATH themselves, but there are no contractors used to perform MEP responsibilities.

1.5. Hardware and Software

Nova MEP data is held in a metering database (CMMS), which is subject to backup arrangements in accordance with standard industry protocols.

1.6. Breaches or Breach Allegations

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

1.7. ICP Data

Metering Category	Number of ICPs
1	15,709
2	287
3	22
4	1
5	0
9	3

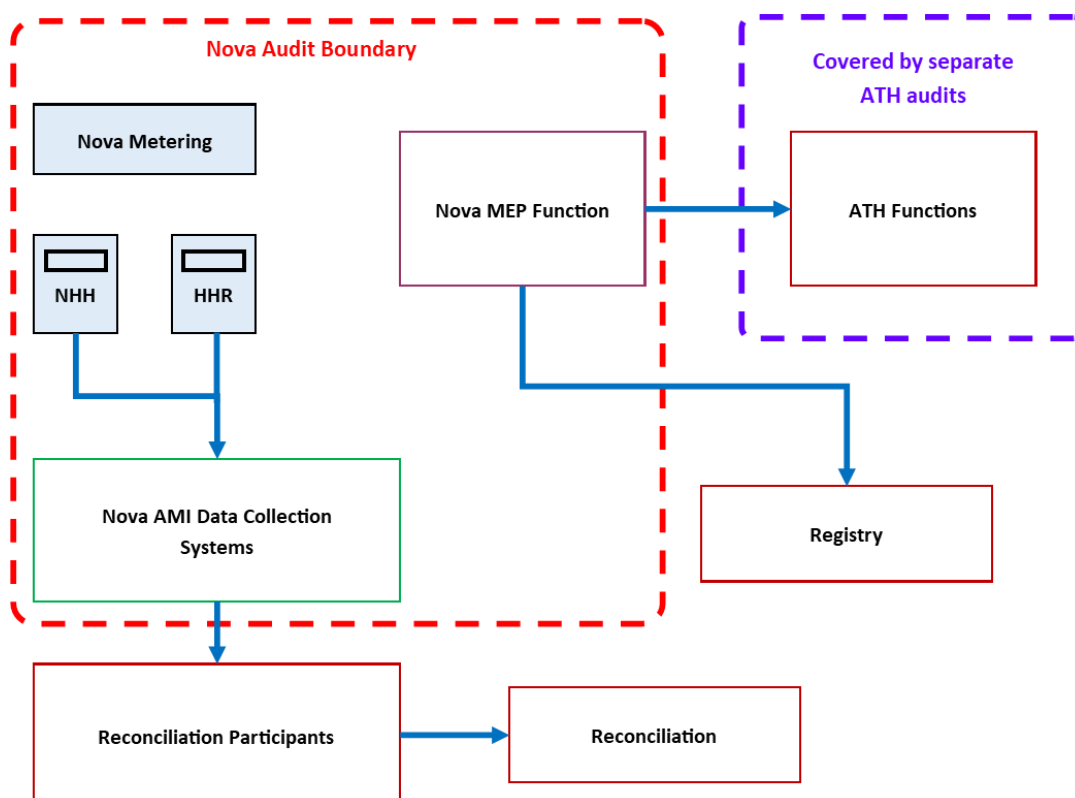
1.8. Authorisation Received

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 V2.1, 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 April 2018 by Steve Woods of Veritek Limited. The table below shows the status of the issues raised.

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Changes to registry records	4.10	3 of schedule 11.4	Some records updated on the registry later than 10 business days.	Still existing
Accuracy of registry records	6.2	7 (1), (2) and (3) of Schedule 11.4	Three ICPs with IN24.	Still existing
Certification of metering installations	7.1	10.38(a) of part 10 & clause 15 of schedule 10.7	Certification expired for 99 ICPs.	Still existing for 56 ICPs
Inspections	8.2	46 of schedule 10.7	Some inspections not conducted within the allowable window. Recertification occurred immediately when this was discovered.	Cleared
Faulty metering installations	9.1	10.43(4) and (5)	Five late reports for faulty metering installations.	Cleared

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
			Nil	

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.9(2)

Code related audit information

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

Audit observation

I checked certification records for 30 metering installations, covering all relevant ATHs.

Audit commentary

I checked 30 certification records and found the services access interface was recorded by all ATHs.

Audit outcome

Compliant

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

Code reference

Clause 10.50(1) to (3)

Code related audit information

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

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

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

Audit observation

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

Audit commentary

Nova 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

Nova uses the BOPE identifier in all cases.

Audit outcome

Compliant

2.4. Communication Equipment Compatibility (Clause 40 Schedule 10.7)

Code reference

Clause 40 Schedule 10.7

Code related audit information

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

Audit observation

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

Audit commentary

Nova ensures all communication equipment is appropriately certified with the relevant telecommunications standards. This is recorded in type test certificates. Telecommunications providers no longer provide “approval”, but the type test reports confirm no interference will occur.

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 Nova has taken all practicable steps to ensure that information is complete and accurate.

Audit outcome

Compliant

3. PROCESS FOR A CHANGE OF MEP

3.1. 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 notification requirements are met (in relation to the registry and the reconciliation manager).

The gaining MEP must pay the losing MEP a proportion of the costs within 20 business days of assuming responsibility.

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.

Audit observation

I checked if Nova had sent or received any invoices.

Audit commentary

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

Audit outcome

Not applicable

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 01/01/19 to 11/12/19 for all records where Nova became the MEP to evaluate the timeliness of updates.

Audit commentary

I examined the audit compliance report for 4082 switches in relation to this clause and the findings are shown in the table below.

Audit	Total ICPs	Total within 15 days	Total over 15 days	% compliant
Jan 2020	4082	2885	1197	70.68%

Nova provided a breakdown of the reasons for the late updates as detailed in the table below:

Reason for late updates	Number
Bulk updates on 06/03/2019 to change settlement indicator of EG registers to N in accordance with exemption No. 276.	377
Data corrections	337
Late updates due to insufficient staff resourcing to manage the increased numbers due to AMI deployment. This issue has been addressed with the implementation of bulk updating and an increase in staff resources.	483

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.2</p> <p>With: Clause 2 of Schedule 11.4</p> <p>From: 01-Jan-19</p> <p>To: 11-Dec-19</p>	<p>Some registry updates later than 15 business days.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>I have recorded the controls as strong in this area because Nova has implemented changes to improve their ability to ensure timely updates of the registry.</p> <p>The impact on other participants is minor; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
An electronic process has been utilised to process bulk AMI deployment metering paperwork, and resource levels have increased to ensure timely processing of any manual systems.		Complete	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Visibility of metering paperwork received by ATH for validation, highlights any potential backlog.</p> <p>A processing spreadsheet automatically calculates timeline of install date to processing date to highlight any patterns of non compliance.</p>		Complete	

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

Audit commentary

This has not occurred, and no examples are available to examine. Some records have been requested by a retailer but not by any MEPs. There is a Standard Operating Procedure for this event should it occur.

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

Audit commentary

Nova 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. I checked ICP 1000017463BP78F, which was decommissioned in August 2016 and the records were still available. Standard Operating Procedure (SOP) 008 states records will be kept for 48 months.

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, 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

Nova has engaged Accucal as an ATH and Nova is an ATH themselves. Nova has prepared design reports which are used by the Nova ATH. Accucal have prepared design reports which have been checked during their ATH audits.

Audit commentary

The design reports include all of the requirements noted above and have been prepared by a person with the appropriate level of skills, expertise, experience and qualifications. I checked 30 certification records and confirmed that the design report was recorded in all 30 records.

Audit outcome

Compliant

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

Code reference

Clause 9 of Schedule 10.6

Code related audit information

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

Audit observation

I confirmed that Nova has used Accucal and their own ATH (Nova Class B) during the audit period.

Audit commentary

I checked the Authority's website and confirm that all ATHs have 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 Nova to ensure compliance with the design and with the error thresholds stipulated in Table 1. I also checked the certification records for 30 metering installations.

Audit commentary

The Nova uncertainty calculator was developed in conjunction with MSL for use when conducting comparative certification. The uncertainty calculator is updated after working standard calibrations are completed.

With regard to the design of the installation (including data storage device and interrogation system), Nova ensures the sum of the measured error and the smallest possible increment of the energy value of the raw meter data does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of installation. There are no components installed where “coarse” rounding is in place for the data, or where meters with a low pulse rate are connected to separate data storage devices.

Nova ensures the metering installation complies with the design report and the requirements of Part 10 by requiring ATH’s to confirm the installations matches the design, or by requiring updates to be provided if the installation does not match the design. The design report was recorded correctly for all 30 metering installations checked.

All Category 2 certification reports are checked to ensure fields, such as the design report, are correctly populated. Certification reports for all new connections are also checked regardless of metering category.

Audit outcome

Compliant

4.4. Subtractive Metering (Clause 4(2)(a) of Schedule 10.7)

Code reference

Clause 4(2)(a) of Schedule 10.7

Code related audit information

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

Audit commentary

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

Audit outcome

Not applicable

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 Nova's list file to confirm compliance with this requirement.

Audit commentary

I checked Nova's list file and I confirm that all category 3 and above metering installations are HHR.

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 Nova is responsible for any NSP metering.

Audit commentary

Nova is not responsible for any NSP metering.

Audit outcome

Not applicable

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

Code reference

Clause 10.26(10)

Code related audit information

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

Audit observation

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

Audit commentary

Nova is not responsible for any GXP metering.

Audit outcome

Not applicable

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 Nova 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. Photo checking is conducted to confirm that metering installations are suitable.

Audit outcome

Compliant

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

Code reference

Clauses 10.34(2), (2A) 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 installations:

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

- *functionality for controllable load.*

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

Audit observation

I checked whether appropriate consultation had occurred.

Audit commentary

A notification has been sent to all the Traders and Distributors. To date no responses have been received.

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

The MEP must advise the registry of the registry metering records or any change to the registry metering records for a metering installation for which it is responsible, no later than 10 business days following:

- the electrical connection of an ICP that is not also an NSP*
- any subsequent change in any matter covered by the metering records.*

Audit observation

I checked the audit compliance report for the period 01/01/19 to 11/12/19 to evaluate the timeliness of registry updates.

Audit commentary

The table below shows that there were a high number of late registry updates within the audit period.

Event	Year	Total ICPs	ICPs Notified Within 10 Days	ICPs Notified Greater Than 10 Days	Average Notification Days	Percentage Compliant
New connection	2016	20	12	8	Not calculated	60%
	2017	53	53	0	2.8	100%
	2018	40	40	0	1.9	100%
	2020	180	97	83	Not calculated	53.89%
Update	2016	589	383	206	109.4	65%
	2017	5,174	498	4,676	469	11%
	2018	3,833	3,708	125	21	97%
	2020	8463	5699	2765	28.32	67.34%

Nova provided a breakdown of the late updates which detailed the reasons for the lateness as detailed in the table below:

Reason for late updates	New Connection	Update
Bulk updates on 06/03/2019 to change settlement indicator of EG registers to N in accordance with exemption No. 276.	59	986
Data corrections	15	742
Late updates due to insufficient staff resourcing to manage the increased numbers due to AMI deployment. This issue has been addressed with the implementation of bulk updating and an increase in staff resources.	9	1037

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 4.10</p> <p>With: Clause 3 of Schedule 11.4</p> <p>From: 01-Jan-19</p> <p>To: 11-Dec-19</p>	<p>Some records updated on the registry later than 10 business days.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>	
Audit risk rating	Rationale for audit risk rating	
Low	<p>I have recorded the controls as strong in this area because Nova has implemented changes to improve their ability to ensure timely updates of the registry.</p> <p>The impact on other participants is minor; therefore, the audit risk rating is low.</p>	
Actions taken to resolve the issue		Completion date
An electronic process has been utilised to process bulk AMI deployment metering paperwork, and resource levels have increased to ensure timely processing of any manual systems.		Complete
Preventative actions taken to ensure no further issues will occur		Completion date

<p>Visibility of metering paperwork received by ATH for validation, highlights any potential backlog.</p> <p>A processing spreadsheet automatically calculates timeline of install date to processing date to highlight any patterns of non compliance.</p> <p>Discrepancy reporting is completed every 10 days to ensure any corrections required are completed within EA timeframes.</p>	Complete	
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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

Nova recently implemented an AMI data collection system, a material change audit covering the implementation was completed in November 2017. The AMI metering and data collection system is considered “metering infrastructure”. The design report and type test report were checked to confirm compliance.

Audit commentary

The type test report, design report and this audit report confirm that the system will operate in a compliant manner.

Audit outcome

Compliant

4.12. Responsibility for Metering at ICP (Clause 11.18B(3))

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 metering equipment provider that is responsible for decommissioning the metering installation must—

(a) if the metering equipment provider is responsible for interrogating the metering installation—

(i) arrange for a final interrogation to take place before the metering installation is decommissioned; and

(ii) provide the raw meter data from the interrogation to the trader that is recorded in the registry as being responsible for the ICP; or

(b) if another participant is responsible for interrogating the metering installation, advise the other participant not less than three business days before the decommissioning—

(i) of the date and time of the decommissioning; and

(ii) that the participant must carry out a final interrogation.

(2) To avoid doubt, if a metering installation at an ICP is to be decommissioned because the ICP is being decommissioned—

(a) the metering equipment provider is not responsible for arranging a final interrogation of the metering installation; and

(b) the trader that is recorded in the registry as being responsible for the ICP must arrange for a final interrogation of the metering installation under clause 11.18(3).

Audit observation

I checked whether Nova was the MEP at any decommissioned ICPs 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 Nova whether they had approved any burden changes during the audit period.

Audit commentary

There have not been any examples of burden changes occurring during the audit period except at the time of recertification.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

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

Audit observation

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

Audit commentary

There were no examples of changes during the audit period.

Audit outcome

Compliant

4.15. Temporary Energisation (Clause 10.28(6))

Code reference

Clause 10.28(6)

Code related audit information

An MEP must not request the temporary energisation of a new POC unless authorised to do so by the reconciliation participant responsible for that POC and has an arrangement with that reconciliation participant to provide metering services.

Audit observation

I checked examples of insufficient load certification to determine whether there were any examples of temporary energisation for the purposes of testing.

Audit commentary

I checked examples of insufficient load certification to determine whether there were any examples of temporary energisation for the purposes of testing. None were identified.

Audit outcome

Compliant

5. METERING RECORDS

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

Code reference

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

Code related audit information

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

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

Audit observation

I checked certification records for 30 metering installations to evaluate compliance with this clause. I also checked the Category 1 inspection records for the 2019 year.

Audit commentary

All certification records were complete and accurate, and the inspection process did not identify any information related issues.

Audit outcome

Compliant

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

Code reference

Clause 4(2) of Schedule 10.6

Code related audit information

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 4(3) of Schedule 10.6

Code related audit information

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

Audit observation

I checked old metering records to confirm compliance.

Audit commentary

Nova keeps records indefinitely. I confirmed this by checking some records more than four years old.

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

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

Audit commentary

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

Audit outcome

Not applicable

6. MAINTENANCE OF REGISTRY INFORMATION

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

Code reference

Clause 1(1) of Schedule 11.4

Code related audit information

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

Audit observation

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

Audit commentary

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

ICP	Nomination Date	Acceptance Date	Days to acceptance
0011004386PC9F4	11-01-2019	19-03-2019	45
1000022281BPDDBA	20-07-2018	30-07-2019	256

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.1 With: 1(1) of Schedule 11.4 From: 03-Aug-18 To: 11-Dec-19	Two late MN files. Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. There was no impact; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
<p>0011004386PC9F4 – This ICP was selected for bulk deployment. The late MN acceptance occurred when the site switched from Nova to another Trader and the original BOPE MEP nomination was removed. The ICP failed to be recalled from deployment so we requested a back dated MEP nomination from the new Trader.</p> <p>1000022281BPDBA – BOPE was MEP nominated for this ICP by Genesis in 2018. At the time BOPE didn't accept MEP nominations from other Retailers (given BOPE didn't provide MEP services to other retailers) and doesn't send a Rejection MN file which is required to clear the nomination from the Registry. The site then switched Traders to Todd in 2019 and we accepted the original 'uncleared' MEP nomination in error.</p>	Complete	Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A report is run twice weekly to identify trader switches on Nova ICPs selected for deployment. These ICPs are recalled from deployment ensuring BOPE meter changes do not occur on these sites.</p> <p>The MN Breach file is checked every 5 days to ensure MEP nominations are accepted in a timely manner.</p>	Complete	

6.2. Provision of Registry Information (Clause 7 (1), (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, in the prescribed form for each metering installation for which the MEP is responsible.

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 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 to identify discrepancies.

Audit commentary

Analysis of the audit compliance report, list file and 30 certification records identified a small number of issues. The table below shows the issues found and has a comparison to the previous audit results.

Quantity 2016	Quantity 2017	Quantity 2018	Quantity 2020	Issue	Resolved?
1	1	0	0	Installations without CT information populated on the registry.	-
2	1	0	0	Metering installation with blank records.	-
2	0	0	0	ICPs with compensation factors above 3 but recorded as Category 1.	-
1	0	0	0	Incorrect compensation factor of 109 recorded in the registry. Has been corrected to 100.	-
1	0	0	0	"Invalid" certification date recorded on the registry.	-
40	0	0	0	Category 1 installations with certification duration of more than 15 years.	-
2	0	0	1	Category 2 installations certified for longer than the period allowed in Table 1.	Yes
246	7	3	5	ICPs with IN24.	Yes
2	1	0	1	CN only with a residential ANZSIC code indicating domestic use. This is a pump and it's possible the ANZSIC code may be incorrect (this is a trader field outside the MEPs control). The CN code is correct.	No
0	1	0	4	Night without Day, these are NC there is no day required. (compliant)	Not required
1,300	9	0	0	No control device information on the registry for certified control devices.	-
-	-	1	1	UN without 24	Yes
-	-	-	7	Incorrect ATH	Yes

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 6.2</p> <p>With: Clause 7 (1), (2) and (3) of Schedule 11.4</p> <p>From: 01-Apr-18</p> <p>To: 11-Dec-19</p>	<p>Some registry records incomplete or incorrect.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating

Low	<p>I have recorded the controls as strong in this area because there were only a small number of issues and these were all known to Nova and have been corrected.</p> <p>The discrepancies may have a minor impact on tariff and therefore billing accuracy. The audit risk rating is therefore low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Discrepancies have been investigated and corrected		01/03/2020	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Regular discrepancy reports are reconciled, and self audits are completed on AMI data to ensure any errors are picked up and corrected.		Complete	

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

Code reference

Clause 6 of Schedule 11.4

Code related audit information

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

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

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

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

Audit observation

I conducted a walkthrough of the validation processes to confirm compliance. I checked Nova's reporting which shows days elapsed between finding a discrepancy and updating the registry.

Audit commentary

Nova has a metering database (CMMS) which has daily reporting of discrepancies. These discrepancies are dealt with fortnightly. Nova demonstrated that all issues were resolved within five business days in the most recent report.

I checked a folder containing the discrepancy reports for the audit period. The discrepancy report was not run for a period of five months from November 2018 and April 2019 due to a lack of staff resources. This issue has been addressed with the implementation of bulk updating and increased staff resources.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.3 With: Clause 6 of Schedule 11.4 From: 01-Nov-18 To: 30-Apr-19	Discrepancy report not run for five months. Potential impact: Medium Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls strong. Whilst the discrepancy reporting did not occur for a period of five months. Nova has a process for completing discrepancy reporting which has been followed since mid 2019. Analysis of the registry information has confirmed a high level of accuracy, therefore the impact on participants is likely to be minimal. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We now have adequate resourcing levels to manage increased deployment workload and maintain regular discrepancy reporting		Complete	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Discrepancy reporting is run fortnightly to enable corrections to be made within registry timeframes. We have not had any backlog since May 2019		Complete	

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:

- the metering installation is modified otherwise than under sub clause 19(3) or 19(6)
- 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
- 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 the maximum current conveyed through the metering installation at any time exceeds the current rating of its metering installation category as set out in Table 1 of Schedule 10.1*
 - 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.*

A metering equipment provider must, 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.

Audit observation

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

Audit commentary

I checked two examples of meters that had been bridged. In both cases the bridged meters were replaced, and the installation was recertified within 10 business days. As the new certification replaced the previous certification the requirement to cancel certification within 10 business days was met.

No other examples of cancelled certification were found.

Audit outcome

Compliant

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 Nova 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 Nova not using the prescribed form and did not find any exceptions.

Audit outcome

Compliant

7. CERTIFICATION OF METERING INSTALLATIONS

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

Code reference

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

Code related audit information

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

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

Audit observation

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

- the audit compliance report was checked to identify ICPs with expired certification,
- the new connections process was checked by using the event detail report, PR255 and the list file to identify ICPs where the certification was not conducted within five business days of energisation, and
- I checked ICPs where certification was cancelled to ensure the registry was updated accordingly.

Audit commentary

At the time of the audit there were 56 installations with expired certification. 19 of these were previously fully certified and 37 were previously interim certified.

Nova provided the table below which details the reasons for not being able to complete a meter replacement at 52 installations:

Reason	Comment	2019
Access	Customer refusals and issues with access	24
Health & Safety	Asbestos boards, unsafe wiring.	21
Other MEP nominated	Other MEP nominated.	2
Unable to locate	ICPs that have been unable to locate	5

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 7.1 With: Clause 10.38 (a), clause 1 and clause 15 of Schedule 10.7 From: 01-Apr-15 To: 11-Dec-19	Certification expired for 56 ICPs. Potential impact: High 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 Nova has engaged in correspondence with Retailers for a long period of time to attempt to get access. The impact on settlement is recorded as low. There is an increased likelihood of failure or inaccuracy for metering installations with expired certification, but the quantity is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Continued follow up with retailers to gain access to installations, and recertification procedure followed in 2018		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Monthly reporting identifies sites with expired certification. A Recertification SOP outlines procedure for identifying ICPs and notifying traders of impending recertifications.		Ongoing	

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

Code reference

Clause 10.38(b) and clause 9 of Schedule 10.6

Code related audit information

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

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

Audit observation

I checked the certification records for 30 metering installations to confirm compliance. ATHs have shown that their processes include all tests and the reports confirm tests are completed.

Audit commentary

Most certification activities have been conducted by Nova with some being conducted by Accucal. The most recent audit reports for all ATHs confirm the appropriate testing is conducted.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

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

All other installations must measure and separately record:

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

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

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

Audit observation

All relevant metering is compliant with this clause.

Audit commentary

All relevant metering is compliant with this clause.

Audit outcome

Compliant

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

Code reference

Clause 10.37(2)(b)

Code related audit information

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

Audit observation

This clause relates to Transpower as an MEP.

Audit commentary

This clause relates to Transpower as an MEP.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

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

Audit observation

I asked Nova 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.

Audit outcome

Not applicable

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 of ICPs where the CT ratio was above the threshold to confirm that protection was appropriate or that monitoring was in place.

Audit commentary

There were no ICPs certified at a lower category.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

I checked if there were any examples of Insufficient load certifications

Audit commentary

Nova does not allow certification in accordance with this clause. Load banks are required to be used to increase the load to conduct testing.

Audit outcome

Not applicable

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

Nova does not allow certification in accordance with this clause. Load banks are required to be used to increase the load to conduct testing.

Audit commentary

Nova does not allow certification in accordance with this clause. Load banks are required to be used to increase the load to conduct testing.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

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

Audit observation

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

Audit commentary

Alternative certification has not been applied to any metering installations.

Audit outcome

Not applicable

7.10. Timekeeping Requirements (Clause 23 of Schedule 10.7)

Code reference

Clause 23 of Schedule 10.7

Code related audit information

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

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

Audit observation

I asked Nova whether there were any metering installations with timeclocks.

Audit commentary

Nova confirmed there are no metering installations with timeclocks.

Audit outcome

Not applicable

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

Nova has a process in place for the management of bridged control devices. Nova provided details of 15 installations with bridged control devices. In all 15 cases the control devices were unbridged within 10 business days. Notification was provided in a compliant manner.

Audit outcome

Compliant

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

Code reference

Clause 34(5) of Schedule 10.7

Code related audit information

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

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

Audit observation

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

Audit commentary

Nova has not received notification from ATHs in accordance with this clause.

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

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

Audit outcome

Not applicable

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 a 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 advise the registry of the compensation factor.

Audit observation

I checked the records for seven CT metered metering installations to confirm that compensation factors were correctly recorded on the registry.

Audit commentary

Compensation factors have been updated accurately on the registry. I confirmed this by checking the records for seven ICPs.

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 30 metering installations to confirm compliance.

Audit commentary

Meters were certified for all 30 installations.

Audit outcome

Compliant

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

Code reference

Clause 28(1) of Schedule 10.7

Code related audit information

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

Audit observation

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

Audit commentary

Measuring transformers were certified for all seven 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 29 metering installations to confirm compliance.

Audit commentary

The 29 certification records that I checked confirmed that data storage devices are being correctly certified.

Audit outcome

Compliant

7.18. Interim Certification (Clause 18 of Schedule 10.7)

Code reference

Clause 18 of Schedule 10.7

Code related audit information

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

Audit observation

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

Audit commentary

There are 37 previously interim certified installations with expired certification.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 7.18 With: Clause 18 of Schedule 10.7 From: 01-Apr-15 To: 11-Dec-19	37 ICPs with expired interim certification. Potential impact: High Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	I have recorded the controls as strong because Nova has engaged in correspondence with Retailers for a long period of time to attempt to get access. The impact on settlement is recorded as low. There is an increased likelihood of failure or inaccuracy for metering installations with expired certification, but the quantity is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Continued follow up with retailers to gain access to installations		On-going	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Monthly reporting identifies sites with expired certification. A Recertification SOP outlines procedure for identifying ICPs and notifying traders of impending recertifications.	On-going	
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7.19. 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

All relevant ATHs have appropriate approval.

Audit outcome

Compliant

8. INSPECTION OF METERING INSTALLATIONS

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

Code reference

Clause 45 of Schedule 10.7

Code related audit information

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

- *have been inspected by an ATH within 120 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, a sample of the category 1 metering installations selected under clause 45(2) of Schedule 10.7 has been inspected by an ATH.*

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 two 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 whether Nova had conducted sample inspections for Category 1 metering installations.

Audit commentary

Nova had conducted sample inspections in 2018. I checked the inspection process and the associated reporting. I confirmed that the report was sent to the Authority on 29th March 2019.

Audit outcome

Compliant

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

Code reference

Clause 46(1) of Schedule 10.7

Code related audit information

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

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

Audit observation

I checked the registry information to confirm which ICPs were due for inspection and I then checked the inspection reports for all relevant ICPs.

Audit commentary

There was one Category 3 installation due for inspection during the audit period. Nova provided details of the inspection of this installation which confirmed that it was completed within the applicable period. Nova has a dashboard which details the inspection windows for installations. This is used to ensure all inspections are conducted on time. The inspection schedule is currently up to date.

Audit outcome

Compliant

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

Code reference

Clause 44(5) of Schedule 10.7

Code related audit information

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

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

Audit observation

I checked the inspection process and the results to confirm compliance.

Audit commentary

The inspection report information was checked against Nova's records within the required timeframe.

Audit outcome

Compliant

8.4. Broken or removed seals (Clause 48(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) three 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.*

Audit observation

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

Audit commentary

Nova has a documented process in place for the management of seals and any subsequent investigation and reporting. There were 24 examples found during the inspection process and in all cases, the seals were replaced immediately once it was determined there was no damage or tampering.

Audit outcome

Compliant

9. PROCESS FOR HANDLING FAULTY METERING INSTALLATIONS

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

Code reference

Clause 10.43(4) and (5)

Code related audit information

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

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

Audit observation

I checked Nova's spreadsheet of faulty metering installations to determine compliance. I checked the timeframe from the service request date to the statement of situation date for 15 examples.

Audit commentary

In all 15 examples from 2018 and 2019 reports were prepared within the allowable number of days.

Audit outcome

Compliant

9.2. Testing of Faulty Metering Installations (Clause 10.44)

Code reference

Clause 10.44

Code related audit information

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

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

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

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

Audit observation

I checked Nova's spreadsheet of faulty metering installations to determine compliance. I checked the timeframe from the service request date to the statement of situation date for 15 examples.

Audit commentary

In all cases, appropriate testing and reporting was conducted immediately. There were no disputes regarding results.

Audit outcome

Compliant

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

Code reference

Clause10.46(2)

Code related audit information

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

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

Audit observation

I checked Nova's spreadsheet of faulty metering installations to determine compliance. I checked the timeframe from the service request date to the statement of situation date for 15 examples.

Audit commentary

Statements of situation were provided as soon as they were received from the ATH.

Audit outcome

Compliant

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

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

Code reference

Clause 1 of Schedule 10.6

Code related audit information

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

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

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

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

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

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

Audit observation

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

Audit commentary

No requests have been received but Nova 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 metering installations.

Audit commentary

No requests have been received, but Nova 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

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 3(5) of Schedule 10.6

Code related audit information

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 8 of Schedule 10.6

Code related audit information

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

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

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

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

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

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

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 malfunctioning or tampering, and if this is detected, carry out the appropriate requirements of Part 10.

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

Interrogation cycle

I conducted a walk-through of the process and 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 checking security protocols.

Audit commentary

Interrogation cycle

Nova is focussed on ensuring that the maximum interrogation cycle is not exceeded. Jobs are issued to repair communication issues prior to the maximum interrogation cycle of 90 days being exceeded. Any that cannot be resolved are changed to AMI non-communicating prior to reaching the maximum. Nova provided reporting that confirmed 37 installations have been switched to AMI non-communicating and there were no examples that exceeded the maximum interrogation cycle.

Security of raw meter data

Data is stored indefinitely and is transmitted securely by SFTP and is only accessible to authorised persons with appropriate passwords.

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

I conducted a walkthrough of the data security processes.

Audit commentary

Data is transmitted securely by SFTP and is only accessible to authorised persons with appropriate passwords.

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

I conducted a walkthrough of the management of time errors and I checked the relevant reports.

Audit commentary

The MEP must ensure that a data storage device in a metering installation does not exceed the maximum time error set out in Table 1 of clause 8(5) of Schedule 10.6. 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. The relevant part of this table is shown below:

Metering Installation Category	HHR Metering Installations (seconds)	NHH Metering Installations (seconds)
1	±30	±60
2	±10	±60

The clock synchronisation setting is 10 seconds. Any clock errors less than 10 seconds are adjusted automatically. Any errors outside these times are also adjusted automatically and reporting is provided to retailers as required by the Code. I checked the latest clock synchronisation reports and found 5 examples of errors greater than 30 seconds.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 10.7 With: Clause 8(4) of Schedule 10.6 From: 01-Apr-18 To: 11-Dec-19	Clock errors greater than the threshold for 5 ICPs. Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because interrogation is attempted daily, and clock errors are addressed during all interrogations. The errors were all small and none were across a trading period, therefore there is no impact on participants or settlement. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Clock sync errors are reported on daily and exception reporting delivered to retailers.		Complete	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Reporting will pick up any repetitive clock sync errors outside the threshold, and if it occurs more than 5 times the meter is replaced.		Complete	

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

I conducted a walkthrough of the event management process and I checked the most recent report sent to all relevant retailers.

Audit commentary

Nova provided copies of event reports provided to retailers and the results of their review of the events. Events are reviewed daily and jobs are created for field work to address relevant events. The relevant events include the following:

- tamper,
- reverse power (indicating generation where generation is not expected),
- time changes, and
- phase failure.

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.

Audit observation

I conducted a walkthrough of the sum-check process, and I checked the most recent reporting.

Audit commentary

Sum-check validation occurs with each interrogation and is based on midnight to midnight NZST. The “fail” setting is a maximum of 0.70% with a maximum absolute setting of 0.004 kWh and all trading periods must be present for a pass to occur. Any failures are investigated to determine the cause, in most cases the failures are data issues such as missing intervals due to comms problems which are resolved during subsequent validations.

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

Correction and estimation processes are not conducted.

Audit commentary

Correction and estimation processes are not conducted.

Audit outcome

Not applicable

CONCLUSION

Since the previous audit Nova has commenced deployment of AMI meters and operation of an AMI data collection system. The increased deployment activity impacted the ability to provide timely registry updates and conduct discrepancy reporting between the registry and Nova records. This issue has been addressed with the implementation of bulk updating and an increase in staff resources.

The audit found eight non-compliances, five of which are related to the updating and accuracy of registry information. 56 ICPs have expired certification, the majority of these have not been recertified due to inability to gain access and health and safety issues on site.

PARTICIPANT RESPONSE

Nova acknowledges it experienced some initial growing pains in embarking on a national smart meter roll-out program as reflected by the number of non-compliances highlighted in this audit report that were generated over the early stages of the project. Its unfortunate that over 50% of the reported non-compliance relate to the same issue but count heavily towards the 'future risk rating' given the causal factors were addressed in early 2019. The derived future risk rating arguably does not reflect the current state, though we acknowledge this is a function of the current audit methodology prescribed under the Code.