

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT



For

PRIME ENERGY LIMITED

Prepared by: Rebecca Elliot

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Date audit report completed: 24 February 2020

Audit report due date: 26 February 2020

TABLE OF CONTENTS

Executive summary	5
Audit summary	6
Non-compliances	6
Recommendations	8
Issues 8	
1. Administrative	9
1.1. Exemptions from Obligations to Comply with Code (Section 11)	9
1.2. Structure of Organisation	9
1.3. Persons involved in this audit	10
1.4. Use of Agents (Clause 15.34)	10
1.5. Hardware and Software	10
1.6. Breaches or Breach Allegations	11
1.7. ICP Data	11
1.8. Authorisation Received	12
1.9. Scope of Audit	13
1.10. Summary of previous audit	15
2. Operational Infrastructure	18
2.1. Relevant information (Clause 10.6, 11.2, 15.2)	18
2.2. Provision of information (Clause 15.35)	20
2.3. Data transmission (Clause 20 Schedule 15.2)	21
2.4. Audit trails (Clause 21 Schedule 15.2)	22
2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)	22
2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))	23
2.7. Physical location of metering installations (Clause 10.35(1)&(2))	24
2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)	24
2.9. Connection of an ICP (Clause 10.32)	25
2.10. Temporary Electrical Connection of an ICP (Clause 10.33)	26
2.11. Electrical Connection of Point of Connection (Clause 10.33A)	26
2.12. Arrangements for line function services (Clause 11.16)	27
2.13. Arrangements for metering equipment provision (Clause 10.36)	28
3. Maintaining registry information	29
3.1. Obtaining ICP identifiers (Clause 11.3)	29
3.2. Providing registry information (Clause 11.7(2))	29
3.3. Changes to registry information (Clause 10 Schedule 11.1)	30
3.4. Trader responsibility for an ICP (Clause 11.18)	34
3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)	35
3.6. ANZSIC codes (Clause 9 (1)(k) of Schedule 11.1)	37
3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)	39
3.8. Management of “active” status (Clause 17 Schedule 11.1)	40
3.9. Management of “inactive” status (Clause 19 Schedule 11.1)	41
3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)	42
4. Performing customer and embedded generator switching	44
4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)	44

4.2.	Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)	45
4.3.	Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)	46
4.4.	Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)	49
4.5.	Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)	50
4.6.	Disputes - standard switch (Clause 7 Schedule 11.3)	50
4.7.	Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3) ..	51
4.8.	Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)	53
4.9.	Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)	54
4.10.	Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)	55
4.11.	Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3) ..	58
4.12.	Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3)	59
4.13.	Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3) ..	60
4.14.	Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule 11.3)	61
4.15.	Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3)	61
4.16.	Metering information (Clause 21 Schedule 11.3)	63
4.17.	Switch saving protection (Clause 11.15AA to 11.15AB)	64
5.	Maintenance of unmetered load	65
5.1.	Maintaining shared unmetered load (Clause 11.14)	65
5.2.	Unmetered threshold (Clause 10.14 (2)(b))	66
5.3.	Unmetered threshold exceeded (Clause 10.14 (5))	66
5.4.	Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B)	67
6.	Gathering raw meter data	70
6.1.	Electricity conveyed & notification by embedded generators (Clause 10.13, Clause 10.24 and 15.13)	70
6.2.	Responsibility for metering at GIP (Clause 10.26 (6), (7) and (8))	71
6.3.	Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3) ..	71
6.4.	Reporting of defective metering installations (Clause 10.43(2) and (3))	72
6.5.	Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2) ..	72
6.6.	Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)	73
6.7.	NHH meter reading application (Clause 6 Schedule 15.2)	75
6.8.	Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)	75
6.9.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	77
6.10.	NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)	78
6.11.	NHH meter interrogation log (Clause 10 Schedule 15.2)	80
6.12.	HHR data collection (Clause 11(1) Schedule 15.2)	80
6.13.	HHR interrogation data requirement (Clause 11(2) Schedule 15.2)	81
6.14.	HHR interrogation log requirements (Clause 11(3) Schedule 15.2)	82
7.	Storing raw meter data	83
7.1.	Trading period duration (Clause 13 Schedule 15.2)	83
7.2.	Archiving and storage of raw meter data (Clause 18 Schedule 15.2)	83
7.3.	Non metering information collected / archived (Clause 21(5) Schedule 15.2)	84
8.	Creating and managing (including validating, estimating, storing, correcting and archiving) volume information	85
8.1.	Correction of NHH meter readings (Clause 19(1) Schedule 15.2)	85

8.2.	Correction of HHR metering information (Clause 19(2) Schedule 15.2)	86
8.3.	Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)	87
8.4.	Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)	87
9.	Estimating and validating volume information	89
9.1.	Identification of readings (Clause 3(3) Schedule 15.2)	89
9.2.	Derivation of volume information (Clause 3(4) Schedule 15.2)	89
9.3.	Meter data used to derive volume information (Clause 3(5) Schedule 15.2)	90
9.4.	Half hour estimates (Clause 15 Schedule 15.2)	91
9.5.	NHH metering information data validation (Clause 16 Schedule 15.2)	92
9.6.	Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)	93
10.	Provision of metering information to the GRID OWNER in accordance with subpart 4 of Part 13 (clause 15.38(1)(f))	95
10.1.	Generators to provide HHR metering information (Clause 13.136)	95
10.2.	Unoffered & intermittent generation provision of metering information (Clause 13.137)	95
10.3.	Loss adjustment of HHR metering information (Clause 13.138)	96
10.4.	Notification of the provision of HHR metering information (Clause 13.140)	96
11.	Provision of submission information for reconciliation	97
11.1.	Buying and selling notifications (Clause 15.3)	97
11.2.	Calculation of ICP days (Clause 15.6)	97
11.3.	Electricity supplied information provision to the reconciliation manager (Clause 15.7)	101
11.4.	HHR aggregates information provision to the reconciliation manager (Clause 15.8)	103
12.	Submission computation	104
12.1.	Daylight saving adjustment (Clause 15.36)	104
12.2.	Creation of submission information (Clause 15.4)	104
12.3.	Allocation of submission information (Clause 15.5)	106
12.4.	Grid owner volumes information (Clause 15.9)	107
12.5.	Provision of NSP submission information (Clause 15.10)	108
12.6.	Grid connected generation (Clause 15.11)	108
12.7.	Accuracy of submission information (Clause 15.12)	109
12.8.	Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)	112
12.9.	Reconciliation participants to prepare information (Clause 2 Schedule 15.3)	114
12.10.	Historical estimates and forward estimates (Clause 3 Schedule 15.3)	115
12.11.	Historical estimate process (Clause 4 and 5 Schedule 15.3)	116
12.12.	Forward estimate process (Clause 6 Schedule 15.3)	118
12.13.	Compulsory meter reading after profile change (Clause 7 Schedule 15.3)	121
13.	Submission format and timing	122
13.1.	Provision of submission information to the RM (Clause 8 Schedule 15.3)	122
13.2.	Reporting resolution (Clause 9 Schedule 15.3)	123
13.3.	Historical estimate reporting to RM (Clause 10 Schedule 15.3)	124
Conclusion	127
Participant response	128

EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Prime Energy Limited (Prime)**, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1.

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.2.

Wells is an agent to Prime, providing NHH meter readings where the meter is not AMI capable, or the MEP cannot provide readings. Because the Wells audit is more than seven months old, additional checks were undertaken to confirm that there were no changes to Wells' processes or systems which could have a negative impact on Prime's compliance, and checks were conducted for a sample of meter condition events.

Prime has continued to make improvements to resolve the issues identified in the last audit. The benefit of these will be more evident in the next audit as revisions are processed. Specifically, they have:

- deployed improved validation reporting with greater detail to identify and resolve discrepancies earlier,
- appointed an additional staff member to review and improve overall accuracy; and
- timeliness of registry updates has continued to improve year on year.

Some areas of improvement were identified:

- the accuracy of average daily consumption figures recorded in the CS files,
- if an actual read is sent in a CS file the last read date needs to align with this; and
- NSP changes are not working correctly in Orion which is a known issue, and these are being checked while Agility are working on a fix for this in Orion.

The team at Prime have a high level of expertise and I have every confidence that they will continue to improve the level of compliance.

The audit found 17 non-compliance issues and makes one recommendation. The breach risk rating total is 35, which gives an indicative next audit due date of 12 months. I have considered this in conjunction with Prime's comments and agree with this recommendation.

The matters raised are shown in the tables below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	One ICP recorded with the incorrect disconnection date. Volumes being submitted against the incorrect NSPs.	Moderate	Low	2	Identified
Changes to registry information	3.3	10 Schedule 11.1	12 late status updates. 15 late trader updates.	Moderate	Low	2	Identified
Provision of information to the registry manager	3.5	9 Schedule 11.1	The registry was not updated within five business days of commencement of trading for three ICPs.	Moderate	Low	2	Identified
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	Two ANZSIC codes were incorrectly recorded, and both have been corrected.	Strong	Low	1	Cleared
Management of "inactive" status	3.9	19 Schedule 11.1	One ICP recorded with the incorrect disconnection date.	Moderate	Low	2	Cleared
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	The estimated daily kWh values were not consistent with the average consumption for the last read to read period in transfer CS files. One incorrect last actual read date was recorded in a transfer CS file.	Weak	Low	3	Identified
Gaining trader informs registry of switch request - switch move	4.7	9 Schedule 11.3	Switch move NTs were sent for two ICPs where the customers were not moving in effective from the switch date.	Moderate	Low	2	Investigating
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	An incorrect AN response code was applied for one switch move.	Strong	Low	1	Cleared

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	The estimated daily kWh values were not consistent with the average consumption for the last read to read period in switch move CS files. Three incorrect last actual read dates were recorded in switch move CS files.	Weak	Low	3	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	Three late switch withdrawals.	Strong	Low	1	Investigating
Meter data used to derive volume information	9.3	3(5) Schedule 15.2	Raw meter data is rounded upon receipt and not when volume information is created.	None	Low	5	Identified
Calculation of ICP days	11.2	15.6	The AV110 report includes inactive ICP days. The AV110 calculates the ICP days from the date the ICP was entered into Orion, which may differ from the actual start date. Four ICP days were reported with an incorrect submission type. NSP changes are not being reported correctly in Orion causing ICP day discrepancies.	Moderate	Low	2	Identified
Creation of submission information	12.2	15.4	Prime Energy Limited (PRME) failed to submit data to the reconciliation manager by 16:00 on 7th February 2018 BD 4 in breach of Part 15.4 (1) of the Code. PRME submitted the data late at 16:02 on the 7th February 2018 (BD4).	Strong	Low	1	Cleared

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Accuracy of submission information	12.7	15.12	Some submission information was incorrect.	Moderate	Low	2	Identified
Permanence of meter readings for reconciliation	12.8	4 of Schedule 15.2	Some estimates were not replaced by revision 14.	Moderate	Low	2	Identified
Historic estimate process	12.11	4 and 5 Schedule 15.3	Scenario L calculating incorrectly.	Moderate	Low	2	Identified
Historical estimate reporting to RM	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Moderate	Low	2	Identified
Future Risk Rating						35	

Future risk rating	0	1-3	4-14	16-40	41-55	55+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Remedial Action
Electrical connection of point of connection	2.11	Check meters are certified at point of reconnection.	Emailed Wells to confirm all Legacy meters are changed to AMI during the reconnection. If for any reason they aren't, then confirm if the legacy meters are certified during reconnection. Waiting for their response.

ISSUES

Subject	Section	Description	Issue

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

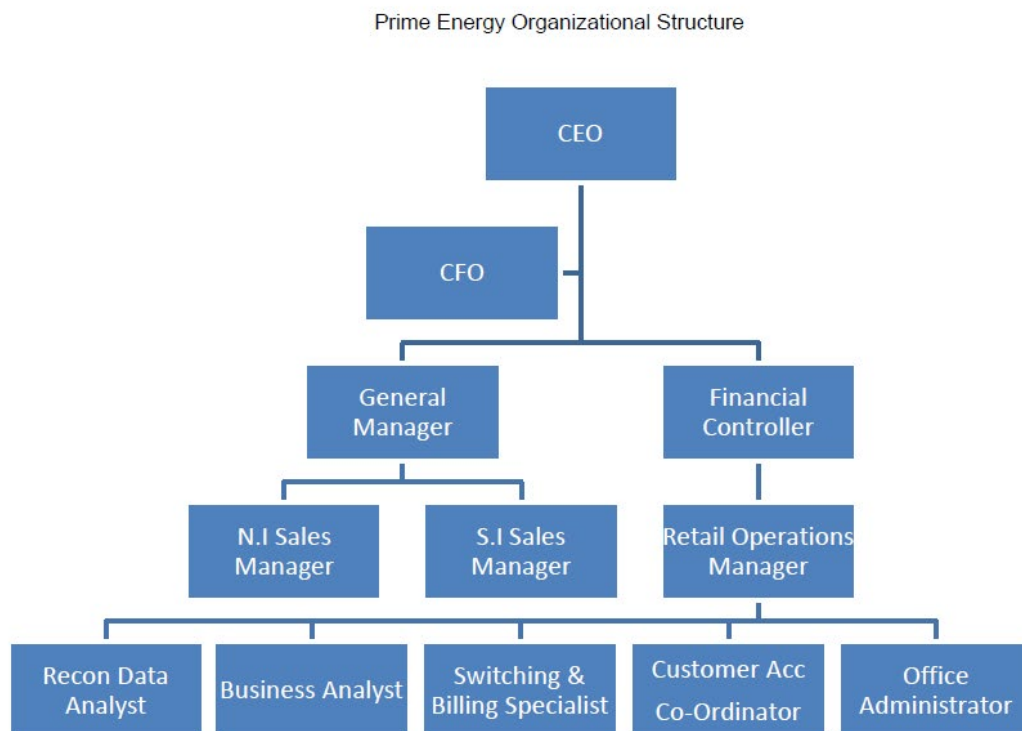
Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

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

1.2. Structure of Organisation

Prime provided a copy of their structure as at January 2020.



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

Prime Energy personnel assisting with this audit:

Name	Title
Shainaz Rafiq	Retail Operations Manager

1.4. Use of Agents (Clause 15.34)

Code reference

Clause 15.34

Code related audit information

A reconciliation participant who uses an agent

- *remains responsible for the contractor's fulfilment of the participant's Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to something the agent has or has not done*

Audit observation

Use of agents was discussed with Prime.

Audit commentary

Prime uses Wells to conduct NHH manual data collection where the meter is not AMI capable, or the MEP cannot provide readings. Because the Wells audit is more than seven months old, additional checks were undertaken to confirm that there were no changes to Wells' processes or systems which could have a negative impact on Prime's compliance, and checks were conducted for a sample of meter condition events.

AMS, Metrix, Arc Innovations, and FCLM provide data as MEPs and are subject to a separate audit regime. AMS also provides data for Smartco meters.

All other functions are conducted in-house.

1.5. Hardware and Software

Prime uses the Orion system for functions included in the scope of the audit. Access to Orion is restricted using logins and passwords.

Amazon and in-house backups are performed.

1.6. Breaches or Breach Allegations

The EA confirmed that one minor alleged breach occurred during the audit period:

Breach no	Breach of	Description	Outcome
1904PREL1 27/06/2019	Part 15 clause 15.4 (1)	Prime Energy Limited (PRME) failed to submit data to the reconciliation manager by 16:00 on 7th February 2018 BD 4 in breach of Part 15.4 (1) of the Code. PRME submitted the data late at 16:02 on the 7th February 2018 (BD4).	Early closure

This is discussed further in **section 12.2**.

1.7. ICP Data

All active ICPs are summarised by metering category in the table below. All 12 active ICPs with a metering category of 9 or blank are unmetered load ICPs.

Metering Category	(2020)	(2019)	(2018)	(2017)	(2016)
1	1,173	1,110	1,045	784	532
2	143	141	126	69	38
3		-	-	-	-
4		-	-	-	-
5		-	-	-	-
9	6	6	6	6	4
Blank	6	9	9	6	4

All ICPs on the list file are summarised on the table below.

Status	Number of ICPs (2020)	Number of ICPs (2019)	Number of ICPs (2018)	Number of ICPs (2017)	Number of ICPs (2016)
Active (2,0)	1,328	1,266	1,186	865	580
Inactive – new connection in progress (1,12)	6	11	3	-	1
Inactive – electrically disconnected vacant property (1,4)	5	3	3	2	3
Inactive – electrically disconnected remotely by AMI meter (1,7)	8	4	1	1	1
Inactive – electrically disconnected at pole fuse (1,8)	2	-	-	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	1	4	5	9	1
Inactive – electrically disconnected at meter box fuse (1,10)	2	1	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	1	1	4	4	1
Inactive – reconciled elsewhere (1,5)	-	-	-	1	1
Decommissioned (3)	118	97	83	73	1

1.8. Authorisation Received

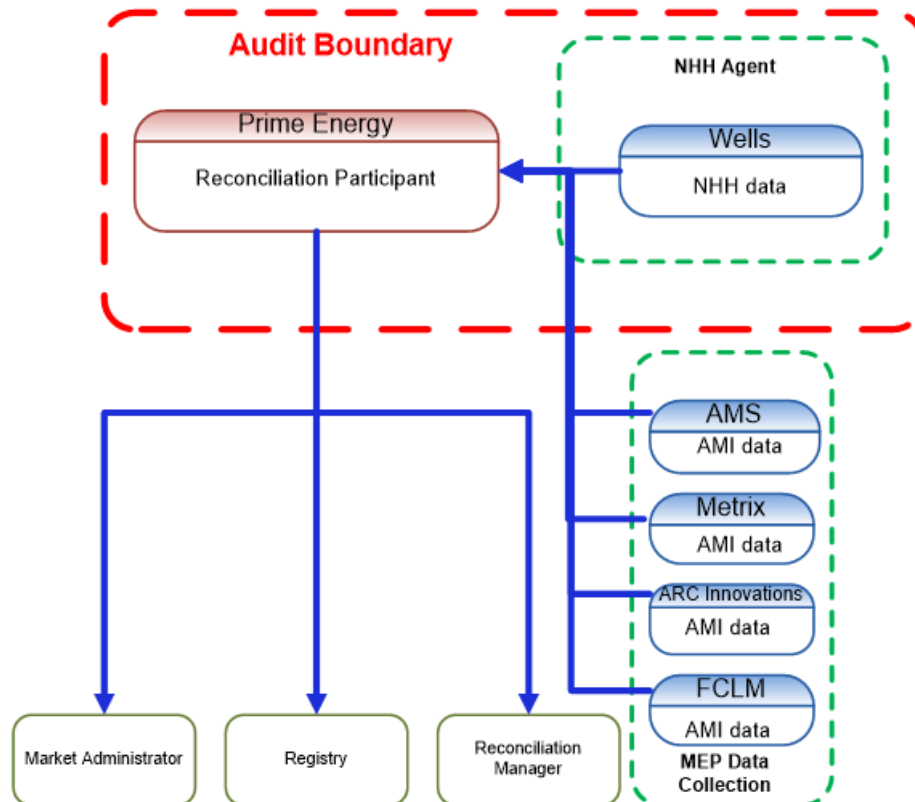
Prime provided all information directly, and authorisation was not required.

1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Prime, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1.

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.2, at Prime's premises in Auckland on 29-30 January 2020.

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



Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data	Wells – NHH	AMCI AMS FCLM MTRX SMCO ARCS
(c)(iii) - Creation and management of volume information		
(d) (i)– Calculation of ICP days		
(d)(ii) - delivery of electricity supplied information under clause 15.7		
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8		
(e) – Provision of submission information for reconciliation		
(f) - Provision of metering information to the Grid Owner	EMS	

Wells has been audited in accordance with the Guidelines for Reconciliation Participant Audits, and the agent audit report is expected to be submitted along with this report. Because the Wells audit is more than seven months old, additional checks were undertaken to confirm that there were no changes to Wells' processes or systems which could have a negative impact on Prime's compliance, and checks were conducted for a sample of meter condition events.

AMS, Arc Innovations, FCLM, and Metrix are subject to a separate audit regime as MEPs. They are not acting as agents to Prime.

1.10. Summary of previous audit

Prime provided a copy of their previous audit report conducted in March 2019 by Tara Gannon of Veritek Limited. The summary table below shows the statuses of the non-compliances and recommendations raised in the previous audit. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-compliance	Status
Relevant information	2.1	10.6, 11.2, 15.2	One ICP with distributed generation has an incorrect profile recorded on the registry.	Still existing
Changes to registry information	3.3	10 Schedule 11.1	Eight late status updates. Seven late MEP nominations. 34 late trader updates.	Still existing
Provision of information to the registry manager	3.5	9 Schedule 11.1	The registry was not updated within five business days of commencement of trading for two ICPs.	Still existing
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	Two ANZSIC codes were incorrectly recorded and were updated during the audit.	Still existing
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	An incorrect AN response code was applied for one transfer switch.	Cleared
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	At least ten estimated daily kWh values were not consistent with the average consumption for the last read to read period in transfer CS files.	Still existing
Retailers must use same reading - standard switch	4.4	6(1) and 6A Schedule 11.3	One CS read was recorded in Orion with an incorrect date and read sub-type.	Cleared
Gaining trader informs registry of switch request - switch move	4.7	9 Schedule 11.3	Switch move NTs were sent for three ICPs where the customers were not moving in effective from the switch date.	Still existing
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	An incorrect AN response code was applied for one switch move.	Still existing

Subject	Section	Clause	Non-compliance	Status
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	One incorrect last actual read date was recorded in a switch move CS file. At least eight estimated daily kWh values were not consistent with the average consumption for the last read to read period in switch move CS files.	Still existing
Gaining trader changes to switch meter reading - switch move	4.11	12 Schedule 11.3	Two late RR files for switch moves. One RR file was not supported by two validated actual readings.	Cleared
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	Two late switch withdrawals.	Still existing
Distributed unmetered load	5.4	11 Schedule 15.3, Clause 15.37B	Prime's Wellington DUML database has not been audited.	Still existing
NHH meter reading application	6.7	6 Schedule 15.2	One CS read was recorded in Orion with an incorrect date and read sub-type.	Cleared
NHH meters interrogated annually	6.9	8(1) and (2) Schedule 15.2	One meter reading frequency report was submitted one business days late.	Cleared
NHH metering information data validation	9.5	16 Schedule 15.2	Where a subsequent read is lower than the switch in reading, an estimated reading is applied.	Cleared
Calculation of ICP days	11.2	15.6	The AV110 report includes inactive ICP days. The AV110 calculates the ICP days from the date the ICP was entered into Orion, which may differ from the actual start date. Four ICP days were reported with an incorrect submission type.	Still existing
Electricity supplied information provision to the reconciliation manager	11.3	15.7	Where multiple invoices and reversals occurred billed consumption does not always reflect what was billed during the month.	Cleared

Subject	Section	Clause	Non-compliance	Status
Accuracy of submission information	12.7	15.12	Some submission information was incorrect.	Still existing
Permanence of meter readings for reconciliation	12.8	4 of Schedule 15.2	Some estimates were not replaced by revision 14.	Still existing
Historical estimate reporting to RM	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Still existing

2. OPERATIONAL INFRASTRUCTURE

2.1. Relevant information (Clause 10.6, 11.2, 15.2)

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide is:

- a) complete and accurate*
- b) not misleading or deceptive*
- c) not likely to mislead or deceive.*

If the participant becomes aware that in providing information under this Part, the participant has not complied with that obligation, the participant must, as soon as practicable, provide such further information as is necessary to ensure that the participant does comply.

Audit observation

The process to find and correct incorrect information was examined. The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were examined to confirm that information was correct and not misleading. The registry validation process was examined in detail in relation to the achievement of this requirement.

Audit commentary

Prime validates their data against the registry. Prior to each AV080 NHH volumes and AV110 ICP days submission aggregation factors for each ICP are checked against a date ranged registry list. This reporting has been revised and improved during the audit period and checks all fields. All discrepancies are investigated. This is now down to meter register level and is run through a python coded database. The ICP discrepancy report identifies differences between the registry and Orion information for meter type information (HHR, NHH, UNM), dedicated NSP, installation type, meter multiplier flag, meter register count, network, ANZSIC code, unmetered load and ICP (which detects ICPs missing on the registry or in Orion).

ICP status is not date ranged in Orion, so status is not matched to the registry. ICP statuses are managed using occupier accounts, and this process is discussed further in **section 3.9**.

Registry notification files are not reviewed. Prime relies on the checks above and paperwork received from MEPs to identify changes to registry information made by other parties.

The analysis of the list file and AC020 returned the following findings:

Item No.	Issue	2020	2019	2018	Comments
1	Status mismatch between registry and Prime	-	-	1	Compliant.
2	Active ICPs with blank MEP and no MEP nominated and UML = N	-	-	-	Compliant.
3	Incorrect submission flag	-	-	-	Compliant, all ICPs have submission type NHH.

Item No.	Issue	2020	2019	2018	Comments
4	Active with blank ANZSIC codes	-	-	-	Compliant.
5	Active with ANZSIC "T999" not stated	-	-	-	Compliant.
6	Active with ANZSIC "T994" don't know	-	-	1	Compliant.
7	Active ICP with cat 9 and UML= N	-	-	-	Compliant.
8	ICPs with Distributor unmetered load populated but retail unmetered load is blank	-	-	3	Compliant.
9	ICPs with unmetered load flag Y but load is recorded as zero	-	-	-	Compliant.
10	ICPs with incorrect shared unmetered load	-	-	-	Compliant, no shared unmetered load was identified.
11	ICPs with Distributed Generation indicated but no DG profile	-	1	-	Compliant.
12	ICP at status "new connection in progress" (1,12) or "ready" (0,0) with an initial energisation date populated by the Distributor	-			Compliant.
13	Active date variance with initial electrical connection date	10			In all cases the initial electrical connection date has not been populated by the distributor, and Prime's active dates matches the MEP's meter certification date. See section 3.8 .
14	Incorrect status or status date	1			ICP 0395203449LC28E was incorrectly recorded as disconnected from 27/02/2018 instead of 27/02/2019. See section 3.9 .
15	Meter cat 3 or known commercial site with residential ANZSIC code	-			No meter category three or above ICPs are supplied.

The 2019 audit found ICP 0007146643RNB87 had an incorrect profile recorded on the registry. I confirmed that a backdated correction to RPS PV1 has been processed.

During the audit period NSP changes have not been flowing correctly in Orion resulting in volume being submitted against the incorrect NSP. The issue was discovered in August 2019. Agility are working on a

fix for this. In the interim, NSP discrepancies are being checked and manually corrected as part of the end of month validation process. This also affected the ICP days accuracy.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 10.6, 11.2, 15.2 From: 27-Feb-18 To: 21-Nov-19	One ICP recorded with the incorrect disconnection date. Volumes being submitted against the incorrect NSPs. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate as processes in place identify discrepancies and correct these most of the time. The impact is assessed to be low as corrections are being made to ensure volumes are submitted against the correct NSP.		
Actions taken to resolve the issue		Completion date	Remedial action status
We have already implemented manual checks to validate the AV080 detailed file against the LIS file		Nov 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Our systems IT team (Agility) has found the cause & we are already working on the permanent fix to ensure the ICPs are reported against the correct GXP. This job will fix other non-compliances as well.		202006/07	

2.2. Provision of information (Clause 15.35)

Code reference

Clause 15.35

Code related audit information

If an obligation exists to provide information in accordance with Part 15, a participant must deliver that information to the required person within the timeframe specified in the Code, or, in the absence of any such timeframe, within any timeframe notified by the Authority. Such information must be delivered in the format determined from time to time by the Authority.

Audit observation

Processes to provide information were reviewed and observed throughout the audit.

Audit commentary

This area is discussed in several sections in this report. I saw evidence during the audit that discrepancies identified were promptly investigated and updated.

Audit outcome

Compliant

2.3. Data transmission (Clause 20 Schedule 15.2)

Code reference

Clause 20 Schedule 15.2

Code related audit information

Transmissions and transfers of data related to metering information between reconciliation participants or their agents, for the purposes of the Code, must be carried out electronically using systems that ensure the security and integrity of the data transmitted and received.

Audit observation

Prime receives meter readings from AMS, Metrix, Arc, and FCLM as MEPs, and Wells as an agent.

I reviewed the method to receive meter reading data from each MEP and agent. I traced a diverse sample of readings for 20 ICPs from the source files to Orion, including two ICPs for each MEP, and ten ICPs for Wells.

Audit commentary

All data transmissions to Prime are via SFTP, which ensures the security and integrity of the data. Upon receipt, reading files are archived to a folder on the network.

Orion requires reads to be imported in a consistent format. The data contained in each read file is reformatted using a template prior to being imported into Orion. For AMI meters, daily readings are imported so they are available for finalising customer accounts, the read renegotiation process, and historic estimate process.

I traced a diverse sample of readings for 20 ICPs including each MEP and agent from the source files to Orion and found the readings matched the source files.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

Each reconciliation participant must ensure that a complete audit trail exists for all data gathering, validation, and processing functions of the reconciliation participant.

The audit trail must include details of information:

- *provided to and received from the registry manager*
- *provided to and received from the reconciliation manager*
- *provided and received from other reconciliation participants and their agents.*

The audit trail must cover all archived data in accordance with clause 18.

The logs of communications and processing activities must form part of the audit trail, including if automated processes are in operation.

Logs must be printed and filed as hard copy or maintained as data files in a secure form, along with other archived information.

The logs must include (at a minimum) the following:

- *an activity identifier (clause 21(4)(a))*
- *the date and time of the activity (clause 21(4)(b))*
- *the operator identifier for the person who performed the activity (clause 21(4)(c)).*

Audit observation

A complete audit trail was checked for all data gathering, validation and processing functions. I viewed audit trails in Orion for a small sample of events.

Audit commentary

Audit trails include the activity identifier, date and time, and an operator identifier.

Audit outcome

Compliant

2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)

Code reference

Clause 10.4

Code related audit information

If a participant must obtain a consumer's consent, approval, or authorisation, the participant must ensure it:

- *extends to the full term of the arrangement*
- *covers any participants who may need to rely on that consent.*

Audit observation

I reviewed Prime's current terms and conditions.

Audit commentary

Prime's current terms and conditions with their customers includes consent to access for authorised parties for the duration of the contract.

Audit outcome

Compliant

2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))

Code reference

Clause 10.7(2),(4),(5) and (6)

Code related audit information

The responsible reconciliation participant must, if requested, arrange access for the metering installation to the following parties:

- *the Authority*
- *an ATH*
- *an auditor*
- *an MEP*
- *a gaining metering equipment provider.*

The trader must use its best endeavours to provide access:

- *in accordance with any agreements in place*
- *in a manner and timeframe which is appropriate in the circumstances.*

If the trader has a consumer, the trader must obtain authorisation from the customer for access to the metering installation, otherwise it must arrange access to the metering installation.

The reconciliation participant must provide any necessary facilities, codes, keys or other means to enable the party to obtain access to the metering installation by the most practicable means.

Audit observation

I reviewed Prime's current terms and conditions and discussed compliance with these clauses.

Audit commentary

Prime's current terms and conditions with their customers include consent to access for authorised parties for the duration of the contract.

Prime confirmed that there have been no instances where access could not be arranged for other parties during the audit period.

Audit outcome

Compliant

2.7. Physical location of metering installations (Clause 10.35(1)&(2))

Code reference

Clause 10.35(1)&(2)

Code related audit information

A reconciliation participant responsible for ensuring there is a category 1 metering installation or category 2 metering installation must ensure that the metering installation is located as physically close to a point of connection as practical in the circumstances.

A reconciliation participant responsible for ensuring there is a category 3 or higher metering installation must:

- a) if practical in the circumstances, ensure that the metering installation is located at a point of connection; or*
- b) if it is not practical in the circumstances to locate the metering installation at the point of connection, calculate the quantity of electricity conveyed through the point of connection using a loss compensation process approved by the certifying ATH.*

Audit observation

The physical meter location point is not specifically mentioned in Prime's terms and conditions, but the existing practices in the electrical industry achieve compliance.

The registry list as at 21/11/19 was reviewed.

Audit commentary

Prime has only supplied ICPs with metering categories 1 and 2. No ICPs have required loss compensation.

Audit outcome

Compliant

2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)

Code reference

Clause 11.15B

Code related audit information

A trader must at all times ensure that the terms of each contract between a customer and a trader permit:

- the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and*
- the terms of the assigned contract to be amended on such an assignment to—*
- the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or*
- such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii)); and*
- the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*

- *the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and*
- *the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).*

The terms specified in subclause (1) must be expressed to be for the benefit of the Authority for the purposes of the Contracts (Privacy) Act 1982, and not be able to be amended without the consent of the Authority (clause 11.15B(2)).

Audit observation

I reviewed Prime's current terms and conditions.

Audit commentary

Prime's terms and conditions have specific clauses covering this requirement.

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

A reconciliation participant must only request the connection of a point of connection if they:

- *accept responsibility for their obligations in Parts 10, 11 and 15 for the point of connection; and*
- *have an arrangement with an MEP to provide 1 or more metering installations for the point of connection.*

Audit observation

The new connection process was examined in detail to evaluate the strength of controls. The registry list file as at 21/11/19 and AC020 trader compliance reports for 25/12/2018 to 21/11/19 were analysed to confirm whether process compliance and controls are functioning as expected.

Audit commentary

Prime's new connection process normally requires all ICPs to be taken to the "new connection in progress" status in the registry and the MEP is nominated at the same time unless the ICP has already been electrically connected. In these instances, the ICP is moved to active and the MEP nomination is issued. The timeliness of updates to the registry is discussed in **section 3.5**.

The design of the new connections process does not allow ICPs to be connected without authorisation by Prime, or an arrangement with an MEP.

Review of the AC020 report confirmed that all new connections had an MEP nominated, and no ICPs had a blank MEP.

Audit outcome

Compliant

2.10. Temporary Electrical Connection of an ICP (Clause 10.33)

Code reference

Clause 10.33(1)

Code related audit information

A reconciliation participant may temporarily electrically connect a point of connection, or authorise a MEP to temporarily electrically connect a point of connection, only if:

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
- *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
- *if the ICP has metered load, 1 or more certified metering installations are in place*
- *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

The new connection process was examined in detail.

Audit commentary

Prime usually claims ICPs at 1,12 (“inactive new connection in progress”) status which helps to ensure that the trader is recorded on the registry if an ICP is temporarily electrically connected. No temporary electrical connections were identified.

Audit outcome

Compliant

2.11. Electrical Connection of Point of Connection (Clause 10.33A)

Code reference

Clause 10.33A(1)

Code related audit information

A reconciliation participant may electrically connect or authorise the electrical connection of a point of connection only if:

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
- *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
- *if the ICP has metered load, 1 or more certified metering installations are in place*
- *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

The new connection process was examined in detail to evaluate the strength of controls.

The AC020 trader compliance report for 01/11/18 to 16/09/19 was examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

All ICPs recorded as active with metering installed have an MEP recorded.

Prime's new connection process ensures that an MEP is nominated and metering is certified within five business days.

No specific check is in place to identify ICPs with expired metering from being reconnected. The risk is very low of this occurring as Prime's customers either have an AMI meter or any sites with legacy meters are changed out for an AMI when switching in, however I recommend that this check is put in place to avoid such an event in the future.

Description	Recommendation	Audited party comment	Remedial action
Electrical connection of point of connection	Check meters are certified at point of reconnection.	Emailed Wells to confirm all Legacy meters are changed to AMI during the reconnection. If for any reason they aren't, then confirm if the legacy meters are certified during reconnection. Waiting for their response.	Investigating

Review of the AC020 audit compliance report found:

- no late certifications for new connections of metered ICPs; and
- no late certifications for reconnections of metered ICPs.

No bridged meters were identified during the audit period.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must ensure that it, or its customer, has made any necessary arrangements for the provision of line function services in relation to the relevant ICP

Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must have entered into an arrangement with an MEP for each metering installation at the ICP.

Audit observation

The process to ensure an arrangement is in place before trading commences on a network was examined.

Audit commentary

Prime has use of system agreements or arrangements in place with all the networks they trade on. Nelson Electricity was added during the audit period, and an arrangement is in place.

Networks which Prime has arrangements with are loaded in Orion. ICPs cannot be loaded if the network they are connected to is not available in Orion.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

A reconciliation participant must ensure it has an arrangement with the relevant MEP prior to accepting responsibility for an installation.

Audit observation

The process to ensure an arrangement is in place with the metering equipment provider before an ICP can be created or switched in was checked.

Audit commentary

Prime has arrangements in place with all relevant MEPs. No new MEPs were added during the audit period.

MEPs which Prime has arrangements with are loaded in Orion. ICPs cannot be loaded if the MEP is not available in Orion.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

The following participants must, before assuming responsibility for certain points of connection on a local network or embedded network, obtain an ICP identifier for the point of connection:

- a) a trader who has agreed to purchase electricity from an embedded generator or sell electricity to a consumer*
- b) an embedded generator who sells electricity directly to the clearing manager*
- c) a direct purchaser connected to a local network or an embedded network*
- d) an embedded network owner in relation to a point of connection on an embedded network that is settled by differencing*
- e) a network owner in relation to a shared unmetered load point of connection to the network owner's network*
- f) a network owner in relation to a point of connection between the network owner's network and an embedded network.*

ICP identifiers must be obtained for points of connection at which any of the following occur:

- a consumer purchases electricity from a trader 11.3(3)(a)*
- a trader purchases electricity from an embedded generator 11.3(3)(b)*
- a direct purchaser purchases electricity from the clearing manager 11.3(3)(c)*
- an embedded generator sells electricity directly to the clearing manager 11.3(3)(d)*
- a network is settled by differencing 11.3(3)(e)*
- there is a distributor status ICP on the parent network point of connection of an embedded network or at the point of connection of shared unmetered load. 11.3(3)(f)*

Audit observation

The new connection process was examined in detail to confirm compliance with the requirement to obtain ICP identifiers for points of connection to local or embedded networks.

Audit commentary

This requirement is well understood and managed by Prime.

Audit outcome

Compliant

3.2. Providing registry information (Clause 11.7(2))

Code reference

Clause 11.7(2)

Code related audit information

Each trader must provide information to the registry manager about each ICP at which it trades electricity in accordance with Schedule 11.1.

Audit observation

The new connection process was examined in detail. The registry list as at 21/11/19, event detail report for 01/01/19 to 19/11/19, and AC020 report for 25/12/2018 to 21/11/19 were analysed to evaluate the updating of the registry in relation to new connections. This clause links directly to **section 3.5** below. The findings for the timeliness of updates is detailed there.

The process to update the registry was reviewed for a diverse sample of ten new connections.

Audit commentary

The new connection process is detailed in **sections 2.9** and **3.5**. The process in place ensures that trader information is populated as required by this clause.

Audit outcome

Compliant

3.3. Changes to registry information (Clause 10 Schedule 11.1)

Code reference

Clause 10 Schedule 11.1

Code related audit information

If information provided by a trader to the registry manager about an ICP changes, the trader must provide written notice to the registry manager of the change no later than 5 business days after the change.

Audit observation

The process to manage status changes is discussed in detail in **sections 3.8** and **3.9** below. The process to manage trader updates, including MEP nominations was reviewed.

The AC020 trader compliance report for 25/12/2018 to 21/11/19 was reviewed, and all late updates were examined.

Audit commentary

The AC020 trader compliance report was reviewed to determine the timeliness of registry updates.

Status updates

Prime processes have not changed in the audit period. All status updates are completed manually on the registry, once paperwork is received. Active and inactive ICPs are recorded as active in Orion, to ensure that all consumption is captured and reported. ICPs are transferred to an “occupier” customer in Orion for any vacant periods, and an “occupier (disconnected)” customer for any inactive periods.

The timeliness of status updates to active (for reconnections) is set out on the table below.

Status	Year	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	2016	5	50%	37.4
	2017	9	55%	14
	2018	7	82%	5
	2019	1	92%	2
	2020	4	92.59%	11.78

I checked all late updates to active status. The late updates were accurately processed from the correct event date.

The timeliness of status updates to inactive is set out on the table below.

Status	Year	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Inactive	2016	12	40.00%	174.1
	2017	4	80.95%	25
	2018	5	86.49%	19
	2019	7	81.58%	74
	2020	8	89.47%	25.09

I checked all late updates to inactive status. The late updates were accurately processed from the correct event date except for ICP 0395203449LC28E which was incorrectly recorded as electrically disconnected on 27/2/18 instead of 27/2/19. This is recorded as non-compliance in **sections 2.1 & 3.9**. Prime confirmed volumes have been submitted for this ICP, but the registry status is incorrect. The network has subsequently decommissioned the ICP. Prime are requesting the network to reverse their status so that Prime can correct this.

Trader updates

Trader updates are manually updated on the registry.

The timeliness of trader updates is set out on the table below.

Year	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2019	41	34.5%	116.81
2020	7	61.11%	7.78

I checked all late trader updates and found that late paperwork was the cause of more than half of these. The late updates were accurately processed from the correct event date.

In addition, the AC020 identified eight late updates to ANZSIC codes. All were corrections backdated to the ICP switch in date. The late updates were accurately processed from the correct event date.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.3</p> <p>With: Clause 10 Schedule 11.1</p> <p>From: 05-Jan-19</p> <p>To: 30-Oct-19</p>	<p>12 late status updates.</p> <p>15 late trader updates.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as they are robust enough to correct errors most of the time but there is room for errors to occur.</p> <p>The risk is low as most updates were completed on time or soon after they were due.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Most of the late status updates were updates reversed & corrected. This was due to confirmation of inactive/active but the visit confirmed otherwise so the dates were corrected.</p> <p>ICP with incorrect inactive date 2018 was due to a typo error. Although the Registry showed ICP as inactive, we submitted consumption because we do submissions for all sites with consumption despite what the status is on the Registry.</p> <p>ANZSIC late update: It was either correction of and existing code or updating from a Generic to a more detailed code eg: changing from H45 to H451100. This is part of our report & ANZSIC code validation of the LIS file against Orion</p>		N/A	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>The new Registry report 'Audit Compliance Report' looks very promising & will be utilised to monitor our performance. We will also monitor our performance on our Service Request report to chase up late paperwork. This is an area we cannot avoid delays, however; we will definitely endeavour to improve how we monitor the delays & performance for all parties involved.</p>		202004	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

A trader becomes responsible for an ICP when the trader is recorded in the registry as being responsible for the ICP.

A trader ceases to be responsible for an ICP if:

- *another trader is recorded in the registry as accepting responsibility for the ICP (clause 11.18(2)(a)); or*
- *the ICP is decommissioned in accordance with clause 20 of Schedule 11.1 (clause 11.18(2)(b)).*
- *if an ICP is to be decommissioned, the trader who is responsible for the ICP must (clause 11.18(3)):*
 - o *arrange for a final interrogation to take place prior to or upon meter removal (clause 11.18(3)(a)); and*
 - o *advise the MEP responsible for the metering installation of the decommissioning (clause 11.18(3)(b)).*

A trader who is responsible for an ICP (excluding UML) must ensure that an MEP is recorded in the registry for that ICP (clause 11.18(4)).

A trader must not trade at an ICP (excluding UML) unless an MEP is recorded in the registry for that ICP (clause 11.18(5)).

Audit observation

Retailers Responsibility to Nominate and Record MEP in the Registry

The AC020 trader compliance report for 25/12/2018 to 21/11/19 was examined to confirm whether all active ICPs have an MEP recorded, and MEP nominations were accepted.

ICP decommissioning

The process for the decommissioning of ICPs was examined. The event detail report for 01/01/19 to 19/11/19 was reviewed to identify all ICPs decommissioned during the period. A diverse sample of ten decommissioned ICPs were checked to prove the process and confirm controls are in place.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process is discussed in detail in **sections 2.9** and **3.5**. Prime usually nominates the MEP at the same time as taking the ICP to the “inactive - new connection in progress” status. All new connections have an MEP nominated.

Review of the registry list confirmed that all active metered ICPs have an MEP recorded. All 12 active ICPs with a metering category of 9 or blank have unmetered load recorded.

Review of the AC020 report did not identify any rejected MEP nominations.

ICP Decommissioning

ICPs that are vacant and either active or inactive will still be maintained in Orion. An attempt is made to read the meter at the time of removal and if this is not possible then the last actual meter reading is used. This last actual reading is normally the one taken at the time of disconnection. Prime also advises the MEP responsible that the site is to be decommissioned, or has been decommissioned, dependent on the distributor's process.

18 ICPs were decommissioned during the audit period, all were dismantled. I checked a diverse sample of ten ICPs covering different networks and confirmed Prime met their obligation to arrange a meter interrogation prior to or upon meter removal.

Audit outcome

Compliant

3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)

Code reference

Clause 9 Schedule 11.1

Code related audit information

Each trader must provide the following information to the registry manager for each ICP for which it is recorded in the registry as having responsibility:

- a) the participant identifier of the trader, as approved by the Authority (clause 9(1)(a))*
- b) the profile code for each profile at that ICP, as approved by the Authority (clause 9(1)(b))*
- c) the metering equipment provider for each category 1 metering or higher (clause 9(1)(c))*
- d) the type of submission information the trader will provide to the RM for the ICP (clause 9(1)(ea))*
- e) if a settlement type of UNM is assigned to that ICP, either:*
 - the code ENG if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*
 - in all other cases, the daily average kWh of unmetered load at the ICP (clause 9(1)(f)(ii)).*
 - the type and capacity of any unmetered load at each ICP (clause 9(1)(g))*
 - the status of the ICP, as defined in clauses 12 to 20 (clause 9(1)(j))*
 - except if the ICP exists for the purposes of reconciling an embedded network or the ICP has distributor status, the trader must provide the relevant business classification code applicable to the customer (clause 9(1)(k)).*

The trader must provide information specified in (a) to (j) above within 5 business days of trading (clause 9(2)).

The trader must provide information specified in 9(1)(k) no later than 20 business days of trading (clause 9(3))

Audit observation

The new connection process was examined in detail. The AC020 trader compliance report for 25/12/2018 to 21/11/19 was reviewed, and all late updates were examined.

The accuracy of all status event dates for new connections was checked by comparing the earliest active date, meter certification date (if available) and initial electrical connection date (if available) using the AC020 report. All discrepancies were checked against supporting information to confirm the correct status date.

Audit commentary

New connection information timeliness

The new connection process is described in detail in **section 2.9**. MEP nomination usually occurs when the ICP is at new connection in progress (1,12) status as part of the service request process.

The AC020 report did not record any late updates to new connection in progress status.

The timeliness of status updates to active (for new connections) is set out on the table below.

Year	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2016	12	0%	46.75
2017	2	71%	5
2018	11	58%	10
2019	2	83%	3
2020	3	87.50%	2.83

I checked all late updates to active status and found two were late due to late paperwork and one was due to an internal resource constraint. An additional staff member has joined the team, so this not expected to be an issue in the future. Overall the percentage completed within five days is high.

New connection information accuracy

Active dates for new connections were compared to the distributor's initial electrical connection date, and MEP's certification date using the AC020 report. Ten ICPs had an active status date consistent with the meter certification date, but no initial electrical connection date was populated. I sighted the paperwork for these and confirmed that the correct active date had been applied.

The AC020 report did not identify any ICPs with initial electrical connection dates populated which had not been made active.

I checked a sample of 13 initial electrical connection dates, and found they were accurately processed from the correct event date.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 08-Jan-19 To: 26-Sep-19	The registry was not updated within five business days of commencement of trading for three ICPs. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, because they are sufficient to ensure that the registry is updated on time most of the time. The risk rating is low, as only three ICPs were updated late and all were 2 or 3 days late.		
Actions taken to resolve the issue		Completion date	Remedial action status
We have been updating details upon receiving the paperwork. One site was livened before the ICP was issued so we could only claim & liven once the ICP was issued by the network.		N/A	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Performance reports are being invented to capture delays & prompt alerts to ensure we chase up missing paperwork. We are also actively monitoring the progress of all our new connections.		202004/05	

3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)

Code reference

Clause 9 (1(k) of Schedule 11.1

Code related audit information

Traders are responsible to populate the relevant ANZSIC code for all ICPs for which they are responsible.

Audit observation

The process to capture and manage ANZSIC codes was examined.

The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were examined to check ANZSIC codes, including active ICPs with T99 series or blank ANZSIC codes.

To confirm the validity of the ANZSIC codes selected, I checked a diverse sample of 50 active ICPs across 13 different ANZSIC codes which made up more than 1.0% of the total ICPs.

Audit commentary

Prime checks ANZSIC codes on switch in and corrects any ICPs with blank or unknown ANZSIC codes. ANZSIC codes are now checked as part of the regular discrepancy reporting processes.

The validity of ANZSIC codes was checked:

- no ICPs with blank or T99 series ANZSIC codes were recorded on the AC020,
- no ICPs have meter category three or higher; and
- ICP 0007044178RNA85 has meter category two and a residential ANZSIC code, this has been corrected to match the code in Orion.

The sample of 50 ICPs found all but one to be correct. ICP 1001275498LCAB7 was corrected during the site audit.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: Clause 9 (1(k)) of Schedule 11.1 From: 08-Apr-17 To: 11-Feb-19	Two ANZSIC codes were incorrectly recorded, and both have been corrected. Potential impact: Low Actual impact: Low Audit history: Three Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong. Prime has good knowledge of their customer base and update the ANZSIC codes as required. The audit risk rating is low as this has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
We updated the codes as soon as we became aware. Majority of the bulk update was just updating them from Generic to more specific code.		202001	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
In the past we never had any validation process for ANZSIC codes. We have now implemented a new validation report that compares the customer names against the ANZSIC code used in Orion, and then compares the ANZSIC code in Orion with the Registry. We also have staff contacting the customers and carrying out site visits to confirm the type of businesses (if required).		202001/02	

3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)

Code reference

Clause 9(1)(f) of Schedule 11.1

Code related audit information

if a settlement type of UNM is assigned to that ICP, the trader must populate:

the code ENG - if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or

the daily average kWh of unmetered load at the ICP - in all other cases (clause 9(1)(f)(ii)).

Audit observation

The process to manage unmetered load was examined. The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were examined to identify any ICPs where:

- unmetered load is identified by the Distributor and none is recorded by Prime
- Prime's unmetered load figure does not match with the Distributor's figure (where it is possible to calculate this if the Distributor is using the recommended format) and the variance is greater than 1.0 kWh per day (1.0 kWh per day was chosen as a sample only; this does not indicate compliance is achieved if an error is found that is less than 1.0 kWh per day).

Audit commentary

Prime supplies 11 ICPs with standard unmetered load indicated, and three DUML ICPs. Prime does not supply any ICPs with shared unmetered load, these are rejected as part of the application process. If shared unmetered load is added for an existing ICP, Prime can reject the shared unmetered load.

Review of the AC020 report found:

- no ICPs where the unmetered flag was set to "Y" and the daily unmetered kWh was blank or zero,
- no ICPs where the distributor had unmetered load recorded, but Prime did not; and
- no ICPs where the trader's daily kWh differed from the distributor's daily kWh by more than ± 0.1 kWh.

The 2019 audit found four ICPs which had trader unmetered load details inconsistent with the distributor's unmetered load details. All have been corrected, except:

ICP	Distributor UNM details	Trader UNM details	Comments
0000540879TU14A	UNDER VARANDA H TAURANG A - 115W- 24HR	115W; 12H; UNDER VERANDAH	The customer confirmed the load is connected for only 12 hours and I can confirm that these lights are not on during the day as they are in Tauranga. Prime is working with the Distributor to get them to update their unmetered load to reflect the correct burn hours.

Each unmetered ICP has a dummy meter associated with it. End of month readings are calculated as the last read + (daily unmetered kWh x active days in the month) and copied into a template before being loaded into Orion. I checked the calculation for five ICPs and confirmed them to be correct. Historic estimate calculations for unmetered load were also checked in **section 12.11** and found to be compliant.

As described in **section 2.1**, Prime's unmetered load kWh is checked as part of the monthly registry discrepancy process.

Audit outcome

Compliant

3.8. Management of "active" status (Clause 17 Schedule 11.1)

Code reference

Clause 17 Schedule 11.1

Code related audit information

The ICP status of "active" is managed by the relevant trader and indicates that:

- *the associated electrical installations are electrically connected (clause 17(1)(a))*
- *the trader must provide information related to the ICP in accordance with Part 15, to the reconciliation manager for the purpose of compiling reconciliation information (clause 17(1)(b)).*

Before an ICP is given the "active" status, the trader must ensure that:

- *the ICP has only one customer, embedded generator, or direct purchaser (clause 17(2)(a))*
- *the electricity consumed is quantified by a metering installation or a method of calculation approved by the Authority (clause 17(2)(b)).*

Audit observation

The new connection process was examined in detail as discussed in **sections 2.9** and **3.5**.

The process to manage unmetered load was examined. The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were reviewed to determine compliance.

- The timeliness and accuracy of data for new connections is assessed in **section 3.5**.
- The timeliness of data for reconnections is assessed in **section 3.3**, and a sample of six updates were checked for accuracy.

Audit commentary

Prime's Orion system will not allow more than one active customer per ICP. An Orion system wizard is used to transfer ICPs between customer accounts, and dates are automatically populated to ensure that there is no overlap between customers.

Orion requires all ICPs to have an MEP and meter recorded. Unmetered ICPs have a dummy meter, which unmetered volumes are recorded against.

Active dates for new connections were compared to the distributor's initial electrical connection date, and MEP's certification date using the AC020 report. Ten ICPs had an active status date consistent with the meter certification date, but no initial electrical connection date was populated by the Distributor. Prime's date was confirmed as correct in all instances.

A typical sample of six reconnections were checked to confirm that the correct status and date had been applied.

Some late status changes to active are recorded as non-compliance in **sections 3.3** and **3.5**.

Audit outcome

Compliant

3.9. Management of “inactive” status (Clause 19 Schedule 11.1)

Code reference

Clause 19 Schedule 11.1

Code related audit information

The ICP status of “inactive” must be managed by the relevant trader and indicates that:

- *electricity cannot flow at that ICP (clause 19(a)); or*
- *submission information related to the ICP is not required by the reconciliation manager for the purpose of compiling reconciliation information (clause 19(b)).*

Audit observation

The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were reviewed to determine compliance.

The inactive status of “new connections in progress” is usually used for all new connections. The list file was examined to identify any ICPs that had been at the “Inactive - new connection in progress” with an initial energisation date populated, and for any of these ICPs that had been at this status for greater than 24 months.

The process to manage ICPs at the other inactive statuses was examined. A sample of 24 status updates to “inactive” were checked for accuracy.

The findings in relation to the timeliness of updates to registry is recorded in **section 3.3**.

Audit commentary

Prime processes all status updates manually on the registry once paperwork is received. Inactive ICPs are recorded as active in Orion, to ensure that all consumption is captured and reported. ICPs are transferred to an “occupier” customer in Orion for any vacant periods, and an “occupier (disconnected)” customer for any inactive periods.

58 ICPs were updated to inactive statuses during the audit period. I reviewed a sample of 24 updates to inactive status, including at least five ICPs updated to each inactive status (or all if less than five examples were available) and confirmed the status reason codes and event dates were correctly applied based on the paperwork provided at the time of the update for all but one example. ICP 0395203449LC28E was incorrectly recorded as disconnected from 27/02/2018 instead of 27/02/2019. Prime confirmed volumes have been submitted for this ICP, but the registry status is incorrect. The network has subsequently decommissioned the ICP. Prime are requesting the network to reverse their status so that Prime can correct this. This is recorded as non-compliance below and in **section 2.1**.

No ICPs at “inactive new connection in progress” status had an initial electrical connection date recorded, and no ICPs have been at “inactive new connection in progress” status for over two years.

Prime provided a list of three ICPs with inactive status which had consumption recorded. All consumption occurred prior to disconnection. Status was correctly recorded on the registry for all three ICPs.

Some late status updates to inactive are recorded as non-compliance in **section 3.3**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.9 With: Clause 19 Schedule 11.1 From: 27-Feb-18 To: 21-Nov-19	One ICP recorded with the incorrect disconnection date. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate as processes are in place to identify discrepancies and correct these most of the time. The impact is assessed to be low as this affected one ICP.		
Actions taken to resolve the issue		Completion date	Remedial action status
This was a typo error made when updating the status in the Registry. The date has since been corrected		202002	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Human errors are unavoidable but moving forward; hopefully with the new Registry Compliance Report, we will be able to monitor this		202002	

3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of "New" or "Ready" for 24 calendar months or more, the distributor must ask the trader whether it should continue to have that status, and must decommission the ICP if the trader advises the ICP should not continue to have that status.

Audit observation

Whilst this is a Distributor's code obligation, I investigated whether any queries had been received from Distributors in relation to ICPs at the "new" or "ready" status for more than 24 months and what process is in place to manage and respond to such requests.

I analysed the registry list of ICPs with "new" or "ready" status.

Audit commentary

Prime uses the status “inactive – new connection in progress” and usually changes the status once it is set to “ready”. Analysis of the AC020 report confirmed that no ICPs have had “new” or “ready” status for more than two years.

Any requests from distributors on ICPs which have been at “new” or “ready” status for more than two years are investigated and responded to when they are received. None of these queries had been received during the audit period.

Prime monitors the progress of any new connections using a whiteboard, and spreadsheet. I viewed both during the audit and confirmed that they were up to date.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)

Code reference

Clause 2 Schedule 11.3

Code related audit information

The standard switch process applies where a trader and a customer or embedded generator enters into an arrangement in which the trader commences trading electricity with the customer or embedded generator at a non-half hour or unmetered ICP at which another trader supplies electricity, or the trader assumes responsibility for such an ICP.

If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.

A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and one or more profile codes associated with that ICP.

Audit observation

The switch gain process was examined to determine when Prime deem all conditions to be met. A typical sample of five ICPs were checked to confirm that these were notified to the registry within two business days, and that the correct switch type was selected.

Audit commentary

Prime's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met, and the withdrawal process is used if the customer changes their mind.

Transfer switch type is applied where a customer is transferring between retailers at an address, and a certain contract start date is not required. Application of switch move for some transfer switches is recorded as non-compliance in **section 4.7**.

The five NT files checked were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.

Audit outcome

Compliant

4.2. Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

Within three business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12-month period, at least 50% of the event dates must be no more than five business days after the date of notification. The losing trader must then:

- *provide acknowledgement of the switch request by (clause 3(a) of Schedule 11.3):*
- *providing the proposed event date to the registry manager and a valid switch response code (clause 3(a)(i) and (ii) of Schedule 11.3); or*
- *providing a request for withdrawal of the switch in accordance with clause 17 (clause 3(c) of Schedule 11.3).*

When establishing an event date for clause 4, the losing trader may disregard every event date established by the losing trader for an ICP for which when the losing trader received notice from the registry manager under clause 22(a) the losing trader had been responsible for less than 2 months.

Audit observation

The event detail report for 01/01/19 to 19/11/19 was reviewed to:

- identify AN files issued by Prime during the audit period;
- assess compliance with the requirement to meet the setting of event dates requirement; and
- a sample of two (or all) ANs per response code were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

AN response codes are selected manually. The six AN response codes checked were correctly applied. Event dates set by losing trader must be no more than 10 business days after receipt of an NT file. Over a 12-month period 50% of event dates must be within five business days.

The event detail report was reviewed for all 27 transfer ANs to assess compliance with the setting of event dates requirements:

- all ANs had proposed event dates within ten business days of the NT receipt date; and
- 81.5% had an event date set within five business days.

Prime uses the switch breach report to manage the sending of all switching files. The switch breach report confirmed all transfer AN files were sent within the allowable timeframes.

Audit outcome

Compliant

4.3. Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)

Code reference

Clause 5 Schedule 11.3

Code related audit information

If the losing trader provides information to the registry manager in accordance with clause 3(a) of Schedule 11.3 with the required information, no later than 5 business days after the event date, the losing trader must complete the switch by:

- *providing event date to the registry manager (clause 5(a)); and*
- *provide to the gaining trader a switch event meter reading as at the event date, for each meter or data storage device that is recorded in the registry with accumulator of C and a settlement indicator of Y (clause 5(b)); and*
- *if a switch event meter reading is not a validated reading, provide the date of the last meter reading (clause 5(c)).*

Audit observation

The event detail report for 01/01/19 to 19/11/19 was reviewed to identify CS files issued by Prime during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of five records. The content checked included:

- correct identification of meter readings and correct date of last meter reading,
- accuracy of meter readings; and
- accuracy of average daily consumption.

CS files with average daily kWh that was negative, zero, or over 200 kWh were identified. All of these CS files were checked to determine whether the average daily consumption was correct.

The process to manage the sending of the CS file within five business days of the event date was examined, and the switch breach history report for the audit period was reviewed to identify late CS files.

Audit commentary

CS timeliness

Prime uses the switch breach report to identify files which are due and aims to process all files within two business days. Prime is aware that the days due recorded on this report are not consistently accurate.

The switch breach report did not record any late CS files for transfer switches.

CS content

CS files are created manually on the registry based on information recorded in Orion.

Prime calculated the estimated daily consumption as the average daily consumption over the past year, or the period of supply if less than 12 months until August 2019. This is now calculated manually from the average daily consumption between the last two validated reads. The sample checked covered the whole audit period. The sample found all had the incorrect value recorded. One of these occurred prior to the process change. The remaining four were after the process change and were due to human error in the calculation. Further training is being undertaken to address this.

Analysis estimated daily kWh provided in CS files on the event detail report identified:

Estimated daily kWh	Count of transfer CS files	Findings
Negative	0	
Zero	2	Both were checked and confirmed to be correct
More than 200 kWh	5	All five were checked. Three were correct and occurred after the process changed. Two occurred prior to the process change and were incorrect due to the average daily consumption methodology used at that time. In all these cases, the estimated daily consumption in the CS file was a reasonable estimate of the average daily consumption over the past year which is significantly different to the average daily consumption between two validated reads.

The content of a sample of five transfer CS files were checked. I found all content was correct except:

- the estimated daily consumption values, which did not match the consumption for the last read to read period; and
- the last read date for ICP 1001115747LC5C4 was sent as an actual but the last read date recorded was post Prime's period of supply; if an actual read is sent, then the last read date is expected to align with this.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.3</p> <p>With: Clause 5</p> <p>Schedule 11.3</p> <p>From: 01-Jan-19</p> <p>To: 19-Dec-19</p>	<p>The estimated daily kWh values were not consistent with the average consumption for the last read to read period in transfer CS files.</p> <p>At least one incorrect last actual read date was recorded in a transfer CS file.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as weak, because the calculations were being incorrectly calculated and this was not picked up for some time indicating controls are weak.</p> <p>The audit risk rating is low because the average daily kWh information provided reflected the true average daily kWh for a longer period, and most of the other information in the CS files was correct.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Last year we put measures in place to manually calculate the average daily consumption based on last 2 actuals. However; the daily reads were divided by 2 because of 2 different dates. And for some site the multiplier wasn't applied to the calculation. In Dec/Jan extra training has been provided in this area to ensure staff check for multipliers and calculate the average daily consumption correctly.</p>		201912/202001	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>We have been working with our systems IT to change the logic used in calculating the average daily consumption. This has taken longer than we anticipated as other submission reports tool priority. We are hoping to have this rolled out before the next audit.</p>		2020	

4.4. Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

The losing trader and the gaining trader must both use the same switch event meter reading as determined by the following procedure:

- *if the switch event meter reading provided by the losing trader differs by less than 200 kWh from a value established by the gaining trader, the gaining trader must use the losing trader's validated meter reading or permanent estimate (clause 6(a)); or*
- *the gaining trader may dispute the switch meter reading if the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more. (clause 6(b)).*

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within four calendar months of the registry manager giving the gaining trader written notice of having received information about the switch completion, provide to the losing trader a changed switch event meter reading supported by two validated meter readings.

- *the losing trader can choose not to accept the reading however must advise the gaining trader no later than five business days after receiving the switch event meter reading from the gaining trader (clause 6A(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader (clause 6A(b)).*

Audit observation

The process for the management of read change requests was examined.

The event detail report for 01/01/19 to 19/11/19 was analysed to identify all read change requests and acknowledgements during the audit period. No RRs were issued by Prime for transfer switches. All AC files issued for transfer switches were checked to confirm that Orion reflected the outcome of the RR process.

I also checked all CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded in Orion.

The switch breach report for the audit period was reviewed.

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. Prime will issue an RR file once they have received two actual readings if the difference is:

- more than ± 200 kWh,
- is negative and the actual reads are not expected to catch up within the month; or
- Prime has AMI readings which prove that the read is incorrect.

If there is a small negative difference, Prime waits for the AMI readings to “catch up” and exceed the switch read and estimates zero consumption.

No RR files were issued for transfer switches, and Prime issued two AC files for one transfer switch. The RR was initially rejected and then accepted when reissued with a different reading. The accepted RR was checked, and I confirmed that the correct readings were recorded in Orion.

Review of all three transfer CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in Orion for all of the ICPs.

The switch breach report recorded did not record any late RR or AC files for transfer switches.

Audit outcome

Compliant

4.5. Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AML certified meter flagged Y in the registry: and

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b));*
- *the gaining trader within five business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.*

Audit observation

The event detail report for the period from 01/01/19 to 19/11/19 was reviewed to identify all read change requests and acknowledgements where clause 6(2) and (3) of schedule 11.3 applied.

Audit commentary

Prime only uses submission type NHH and did not issue any read change requests where clause 6(2) and (3) of schedule 11.3 applied.

No read changes were issued to Prime under clause 6(2) and (3) of schedule 11.3 by other traders.

Prime is aware of the requirements of this clause and intends to comply.

Audit outcome

Compliant

4.6. Disputes - standard switch (Clause 7 Schedule 11.3)

Code reference

Clause 7 Schedule 11.3

Code related audit information

A losing trader or gaining trader may give written notice to the other that it disputes a switch event meter reading provided under clauses 1 to 6. Such a dispute must be resolved in accordance with clause 15.29 (with all necessary amendments).

Audit observation

Disputes were discussed with Prime.

Audit commentary

Prime confirmed that no disputes have needed to be resolved in accordance with this clause.

Audit outcome

Compliant

4.7. Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)

Code reference

Clause 9 Schedule 11.3

Code related audit information

The switch move process applies where a gaining trader has an arrangement with a customer or embedded generator to trade electricity at an ICP using non half-hour metering or an unmetered ICP, or to assume responsibility for such an ICP, and no other trader has an agreement to trade electricity at that ICP, this is referred to as a switch move and the following provisions apply:

If the “uninvited direct sale agreement” applies, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.

In the event of a switch move, the gaining trader must advise the registry manager of a switch and the proposed event date no later than two business days after the arrangement comes into effect.

In its advice to the registry manager the gaining trader must include:

- *a proposed event date (clause 9(2)(a)); and*
- *that the switch type is "MI" (clause 9(2)(b)); and*
- *one or more profile codes of a profile at the ICP. (clause 9(2)(c))*

Audit observation

The switch gain process was examined to determine when Prime deem all conditions to be met. A typical sample of five ICPs were checked to confirm that these were notified to the registry within two business days, and that the correct switch type was selected.

Audit commentary

Prime’s processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met, and the withdrawal process is used if the customer changes their mind.

Most Prime switches are requested as switch moves (94%), rather than transfer switches (6%). Switch type is selected based on information provided by the customer on application. Following issues with other retailers not providing transfer CS files on the requested date for contract customers, Prime requests some switches as “switch moves” where a certain contract start date is needed.

Two of the five NT files checked were requested as switch moves where the customers were not moving in effective from the switch date. This is recorded as non-compliance below.

All NT files were confirmed to be sent within two business days of pre-conditions being cleared.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.7</p> <p>With: Clause 9 Schedule 11.3</p> <p>From: 24-Jun-19 and, 29-Oct-19</p>	<p>Switch move NTs were sent for two ICPs where the customers were not moving in effective from the switch date.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>The controls are rated as moderate, because the switch type is not correctly applied in certain circumstances.</p> <p>The audit risk rating is low. There is no impact on settlement or other participants, and it helps to ensure ICPs are switched on the correct date. There is some impact on market switching statistics.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Some mutual customers might finalise the account with the losing retailer, so the switch is requested as NTTR because the losing retailer doesn't have an active account. Sometimes this is due to prev NW's and if the losing retailer has already finalised the account then they don't want to rebill them, and the gaining retailers are happy to take over from the original date. Another scenario is where companies enter contracts & they have to be from a certain date. This is sent as an NTMI so the losing retailer doesn't bill the customer on uncontracted rates or charge the customer a penalty for breaking the contract</p>			Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>I am sure we are not the only retailer doing this as it was a mutual agreement by all retailers at previous switching forums. As mentioned in the previous audit we strongly believe that introducing a new NT code NTTC – Transfer Contract or NTUC – Under Contract will resolve this issue. It will also help EA monitor how many customers are switching because they are contracted.</p>			

4.8. Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

10(1) Within 5 business days after receiving notice of a switch move request from the registry manager—

- 10(1)(a) If the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry manager:
 - o confirmation of the switch event date; and
 - o a valid switch response code; and
 - o final information as required under clause 11; or
- 10(1)(b) If the losing trader does not accept the event date proposed by the gaining trader, the losing trader must acknowledge the switch request to the registry manager and determine a different event date that—
 - o is not earlier than the gaining trader's proposed event date, and
 - o is no later than 10 business days after the date the losing trader receives notice; or
- 10(1)(c) request that the switch be withdrawn in accordance with clause 17.

Audit observation

The event detail report for 01/01/19 to 19/11/19 was reviewed to:

- identify AN files issued by Prime during the audit period;
- assess compliance with the requirement to meet the setting of event dates requirement; and
- a sample of two (or all) ANs per response code were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

AN response codes are selected manually. Ten of the 11 AN response codes checked were correctly applied. The MU code was applied incorrectly due to human error:

ICP	Event date	Applied Code	Correct Code
0000722700WPAA4	20/04/19	"MU" (unmetered supply)	"AA" (accept & acknowledge)

The event detail report was reviewed for all 103 switch move ANs to assess compliance with the setting of event dates requirements:

- all had proposed event dates within ten business days of NT receipt; and
- no AN proposed event dates were before the gaining trader's proposed event date.

Prime uses the switch breach report to identify files which are due and aims to process all files within two business days. Prime is aware that the days due recorded on this report are not consistently accurate.

The switch breach report was reviewed to determine whether switch move AN and CS files were issued on time. Four late AN files and nine late CS files were recorded for switch moves; none were genuine breaches.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3 From: 20-April-19	An incorrect AN response code was applied for one switch move. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls over AN responses are strong. Staff are trained in the correct use of codes. Codes are manually selected but as this is a manual process some errors can occur. The impact is assessed as low as this was a one-off error with no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
It was a one off error, and AN response codes cannot be corrected unless the switch is withdrawn & a new NT is sent by the gaining retailer.			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Only 1 AN error in whole audit period. Staff will be more careful when processing Ans.			

4.9. Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)

Code reference

Clause 10(2) Schedule 11.3

Code related audit information

If the losing trader determines a different date, then within 10 business days of receiving notice the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):

- *the event date proposed by the losing trader; and*
- *a valid switch response code; and*
- *final information as required under clause 1.*

Audit observation

An event detail report for 01/01/19 to 19/11/19 was reviewed to identify AN files issued by Prime during the audit period, and assess compliance with the setting of event dates requirements.

Audit commentary

Analysis found all 103 switch move ANs had a valid switch response code and compliant proposed event dates. No ANs had proposed event dates earlier than the gaining trader's proposed date.

Switches were completed as required by this clause.

Audit outcome

Compliant

4.10. Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)

Code reference

Clause 11 Schedule 11.3

Code related audit information

The losing trader must provide final information to the registry manager for the purposes of clause 10(1)(a)(ii), including—

- *the event date (clause 11(a)); and*
- *a switch event meter reading as at the event date for each meter or data storage device that is recorded in the registry with an accumulator type of C and a settlement indicator of Y (clause 11(b)); and*
- *if the switch event meter reading is not a validated meter reading, the date of the last meter reading of the meter or storage device (clause (11(c)).*

Audit observation

The event detail report for 01/01/19 to 19/11/19 was reviewed to identify CS files issued by Prime during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of five records. The content checked included:

- correct identification of meter readings and correct date of last meter reading,
- accuracy of meter readings; and
- accuracy of average daily consumption.

CS files with average daily kWh that was negative, zero, or over 200 kWh were identified. A sample of ten of these CS files were checked to determine whether the average daily consumption was correct.

Audit commentary

CS files are created manually on the registry based on information recorded in Orion.

Prime calculated the estimated daily consumption as the average daily consumption over the past year, or the period of supply if less than 12 months until August 2019 when the process changed. This is now calculated manually from the average daily consumption between the last two validated reads. The sample checked covered the whole audit period. The sample found two of the five checked had the incorrect value recorded. One of these occurred prior to the process change. The other ICP was after the process change and was due to human error in the calculation. As noted in **section 4.3**, further training is being undertaken to address this. This is recorded as non-compliance below.

Analysis estimated daily kWh provided in CS files on the event detail report identified:

Estimated daily kWh	Count of switch move CS files	Findings
Negative	0	
Zero	11	A sample of five files were checked, all had genuine zero consumption in the last read to read period.
More than 200 kWh	6	An extreme case sample of the ICPs with the highest estimated daily kWh (212-307 kWh) were checked. Two were correct. Three occurred prior to the process change and were incorrect due to the average daily consumption methodology used at that time. In all these cases, the estimated daily consumption in the CS file was a reasonable estimate of the average daily consumption over the past year which is significantly different to the average daily consumption between two validated reads.

The content of a sample of five switch move CS files were checked. I found all content was correct except:

- two estimated daily consumption values, which did not match the consumption for the last read to read period; and
- three last actual read date where the reads were sent as actuals but the last read dates recorded were post Prime's period of supply; if an actual read is sent then the last read date is expected to align with this.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.10</p> <p>With: 11 Schedule 11.3</p> <p>From: 01-Jan-19</p> <p>To: 19-Dec-19</p>	<p>The estimated daily kWh values were not consistent with the average consumption for the last read to read period in switch move CS files.</p> <p>At least three incorrect last actual read dates were recorded in switch move CS files.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as weak, because the calculations were being incorrectly calculated and this was not picked up for some time indicating controls are weak.</p> <p>The audit risk rating is low because the average daily kWh information provided reflected the true average daily kWh for a longer period, and most of the other information in the CS files was correct.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Last year we put measures in place to manually calculate the average daily consumption based on last 2 actuals. However; the daily reads were divided by 2 because of 2 different dates. And for some site the multiplier wasn't applied to the calculation. In Dec/Jan extra training has been provided in this area to ensure staff check for multipliers and calculate the average daily consumption correctly.</p>		202001/02	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>We are hopeful the ADC/UPD in Orion will be updated in the next couple of months. In the meantime staff will be extra cautious when processing CS. We are also doing random CS checks to identify any errors & deal to it promptly.</p>		202004/05	

4.11. Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)

Code reference

Clause 12 Schedule 11.3

Code related audit information

The gaining trader may use the switch event meter reading supplied by the losing trader or may, at its own cost, obtain its own switch event meter reading. If the gaining trader elects to use this new switch event meter reading, the gaining trader must advise the losing trader of the switch event meter reading and the actual event date to which it refers as follows:

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within four calendar months of the date the registry manager gives the gaining trader written notice of having received information about the switch completion, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by two validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
- *advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 12(3)(b)).*

12(2A) If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AMI certified meter flagged Y in the registry,

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 12(2A)(b));*
- *the gaining trader no later than five business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading (clause 12(2B)).*

Audit observation

The event detail report for 01/01/19 to 19/11/19 was analysed to identify all read change requests and acknowledgements during the audit period. A sample of five RR files issued by Prime, and all AC files issued by Prime were checked.

I also checked all CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded in Orion.

The switch breach report for the audit period was reviewed.

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. Prime will issue an RR file once they have received two actual readings if the difference is:

- more than ± 200 kWh,
- is negative and the actual reads are not expected to catch up within the month; or
- Prime has AMI readings which prove that the read is incorrect.

If there is a small negative difference, Prime waits for the AMI readings to “catch up” and exceed the switch read and estimates zero consumption. This process is discussed further in **section 9.5**.

Prime issued nine RR files for switch moves, relating to seven ICPs. Five were accepted when they were first issued, and two were accepted on reissue with different readings. In all cases there was a genuine reason for Prime’s RR, the file content was accurate, and the reads recorded in Prime’s system reflected the outcome of the RR process. All were supported by two actual reads obtained by Prime.

Prime issued five AC files for switch moves. Three were accepted when they were first issued, and one was accepted on reissue with the same readings. I confirmed that the correct readings were recorded in Orion.

Review of five switch move CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in Orion.

The switch breach report recorded did not record any late RR or AC files for switch moves.

Audit outcome

Compliant

4.12. Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3)

Code reference

Clause 14 Schedule 11.3

Code related audit information

The gaining trader switch process applies when a trader has an arrangement with a customer or embedded generator to trade electricity at an ICP at which the losing trader trades electricity with the customer or embedded generator, and one of the following applies at the ICP:

- *the gaining trader will trade electricity through a half hour metering installation that is a category 3 or higher metering installation; or*
- *the gaining trader will trade electricity through a non-AMI half hour metering installation and the losing trader trades electricity through a non-AMI non half hour metering installation; or*
- *the gaining trader will trade electricity through a non-AMI non half hour metering installation and the losing trader trades electricity through a non-AMI half hour metering installation*

If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.

A gaining trader must advise the registry manager of the switch and expected event date no later than three business days after the arrangement comes into effect.

14(2) The gaining trader must include in its advice to the registry manager:

- a) a proposed event date; and*
- b) that the switch type is HH.*

14(3) The proposed event date must be a date that is after the date on which the gaining trader advises the registry manager, unless clause 14(4) applies.

14(4) The proposed event date is a date before the date on which the gaining trader advised the registry manager, if:

14(4)(a) – the proposed event date is in the same month as the date on which the gaining trader advised the registry manager; or

14(4)(b) – the proposed event date is no more than 90 days before the date on which the gaining trader advises the registry manager and this date is agreed between the losing and gaining traders.

Audit observation

An event detail report for 01/01/19 to 19/11/19 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

Prime did not initiate any HH switches during the period reviewed, and only supplies NHH ICPs.

Audit outcome

Not applicable

4.13. Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3)

Code reference

Clause 15 Schedule 11.3

Code related audit information

Within 3 business days after the losing trader is informed about the switch by the registry manager, the losing trader must:

15(a) - provide to the registry manager a valid switch response code as approved by the Authority; or

15(b) - provide a request for withdrawal of the switch in accordance with clause 17.

Audit observation

An event detail report for 01/01/19 to 19/11/19 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

Meridian issued one HH switch request to Prime for ICP 0007191354RN1D4, which is a new connection in progress and did not have metering details recorded on the registry.

The switch request was withdrawn for metering issues prior to switch completion and was later reissued as a switch move.

Audit outcome

Compliant

4.14. Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule 11.3)

Code reference

Clause 16 Schedule 11.3

Code related audit information

The gaining trader must complete the switch no later than 3 business days, after receiving the valid switch response code, by advising the registry manager of the event date.

If the ICP is being electrically disconnected, or if metering equipment is being removed, the gaining trader must either-

16(a)- give the losing trader or MEP for the ICP an opportunity to interrogate the metering installation immediately before the ICP is electrically disconnected or the metering equipment is removed; or

16(b)- carry out an interrogation and, no later than 5 business days after the metering installation is electrically disconnected or removed, advise the losing trader of the results and metering component numbers for each data channel in the metering installation.

Audit observation

An event detail report for 01/01/19 to 19/11/19 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

Prime did not initiate or complete any HH switches during the period reviewed, and only supplies NHH ICPs.

Audit outcome

Not applicable

4.15. Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3)

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

A losing trader or gaining trader may request that a switch request be withdrawn at any time until the expiry of two calendar months after the event date of the switch.

If a trader requests the withdrawal of a switch, the following provisions apply:

- *for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*
 - o *the participant identifier of the trader making the withdrawal request (clause 18(c)(i));*
 - and*
 - o *the withdrawal advisory code published by the Authority (clause 18(c)(ii))*
- *within five business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal (clause 18(d))*

- *on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c). All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request (clause 18(e))*
- *if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within two business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16 (clause 18(f)).*

Audit observation

An event detail report for 01/01/19 to 19/11/19 was reviewed to:

- identify all switch withdrawal requests issued by Prime, the content of a sample of at least two ICPs from the event detail report for each withdrawal code (or all if less than two were available) were checked using the typical sampling methodology, including five withdrawal requests rejected by other traders;
- identify all switch withdrawal acknowledgements issued by Prime, all rejections were checked; and
- confirm timeliness of switch withdrawal requests, as this is not currently being identified in the switch breach report.

The switch breach reports were checked for any late switch withdrawal requests or acknowledgements.

Audit commentary

Withdrawals are processed manually on the registry, and the withdrawal code is chosen by the user based on the information available.

Analysis of the switch withdrawal codes confirmed all of the 22 sampled were correctly coded.

Three (7.8%) of the 38 NWs were issued more than 60 business days after the event date. All related to backdated switch moves causing these to be greater than 60 business days. The withdrawal requests were sent within two days of the receipt of the NT for ICP 1001107017LC96F and 30 days from completion of the switch for ICP 1001257715LC928.

Four (19.0%) of the 21 AWs issued by Prime were rejections. I reviewed all rejections by Prime, and confirmed they were rejected based on the information available at the time the response was issued.

The switch breach report recorded four late NWs, and no late AW files. The breaches for late NWs were not genuine.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.15 With: Clauses 17 and 18 Schedule 11.3 From: 01-Jan-19 To: 18-Jun-19	Three late switch withdrawals. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Prime have robust controls in place, and in both cases, these were backdated switches which makes complying with this rule difficult. The impact is low. The files were sent as soon as possible in both instances.		
Actions taken to resolve the issue		Completion date	Remedial action status
We always sent NW's within the timeframe of CS completion but for 2 years now we have had this non-compliance due to backdated switches.			Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We suggested this in our last response and once again we request this compliance to measure against the CS input date rather than the CS event date. Then it will be correctly measured.			

4.16. Metering information (Clause 21 Schedule 11.3)

Code reference

Clause 21 Schedule 11.3

Code related audit information

For an interrogation or validated meter reading or permanent estimate carried out in accordance with Schedule 11.3:

21(a)- the trader who carries out the interrogation, switch event meter reading must ensure that the interrogation is as accurate as possible, or that the switch event meter reading is fair and reasonable.

21(b) and (c) - the cost of every interrogation or switch event meter reading carried out in accordance with clauses 5(b) or 11(b) or (c) must be met by the losing trader. The costs in every other case must be met by the gaining trader.

Audit observation

The meter reading process in relation to meter reads for switching purposes was examined.

Audit commentary

The reads applied in switching files were examined in **section 4.3** for standard switches, **section 4.10** for switch moves, and **sections 4.4** and **4.11** for read changes. The meter readings used in the switching process are validated meter readings or permanent estimates.

Prime's policy regarding the management of meter reading expenses is compliant.

Audit outcome

Compliant

4.17. Switch saving protection (Clause 11.15AA to 11.15AB)

Code reference

Clause 11.15AA to 11.15AB

Code related audit information

A trader that buys electricity from the clearing manager may elect to have a switch saving protection by giving notice to the Authority in writing.

If a protected trader enters into an arrangement with a customer of another trader (the losing trader), or a trader enters into an arrangement with a customer of a protected trader, to commence trading electricity with the customer, the losing trader must not, by any means, initiate contact with the customer to attempt to persuade the customer to terminate the arrangement during the period from the receipt of the NT to the event date of the switch including by:

11.15AB(4)(a)- making a counter offer to the customer; or

11.15AB(4)(b)- offering an enticement to the customer.

Audit observation

The Electricity Registry switch save protected retailer list was examined.

Win-back processes were discussed. The event detail report for 01/01/19 to 19/11/19 was analysed to identify all withdrawn switches with a CX code applied prior to the switch completion date for any switch save protected retailer.

Audit commentary

Prime has been a switch save protected retailer since 10/02/2015 and does not complete any win-back activity. Prime contacts customers in the process of switching out only confirm that they have initiated a switch, and to advise of break fees (if any).

The event detail report identified seven NWs with the CX (customer cancellation) withdrawal reason code; all were requested after the switch was completed.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

The trader must adhere to the process for maintaining shared unmetered load as outlined in clause 11.14:

11.14(2) - The distributor must give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.

11.14(3) - A trader who receives such a notification from a distributor must give written notice to the distributor if it wishes to add or omit any ICP from the ICPs across which unmetered load is to be shared.

11.14(4) - A distributor who receives such a notification of changes from the trader under (3) must give written notice to the registry manager and each trader responsible for any of the ICPs across which the unmetered load is shared.

11.14(5) - If a distributor becomes aware of any change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must give written notice to all traders affected by that change as soon as practicable after that change or decommissioning.

11.14(6) - Each trader who receives such a notification must, as soon as practicable after receiving the notification, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP.

11.14(7) - A trader must take responsibility for shared unmetered load assigned to an ICP for which the trader becomes responsible as a result of a switch in accordance with Part 11.

11.14(8) - A trader must not relinquish responsibility for shared unmetered load assigned to an ICP if there would then be no ICPs left across which that load could be shared.

11.14(9) - A trader can change the status of an ICP across which the unmetered load is shared to inactive status, as referred to in clause 19 of Schedule 11.1. In that case, the trader is not required to give written notice to the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were examined to identify any ICPs with shared unmetered load.

Audit commentary

Prime does not supply any ICPs with shared unmetered load and does not intend to.

Processes to prevent ICPs with shared unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load are discussed in **section 3.7**.

Audit outcome

Compliant

5.2. Unmetered threshold (Clause 10.14 (2)(b))

Code reference

Clause 10.14 (2)(b)

Code related audit information

The reconciliation participant must ensure that unmetered load does not exceed 3,000 kWh per annum, or 6,000 kWh per annum if the load is predictable and of a type approved and published by the Authority.

Audit observation

The AC020 trader compliance report for 25/12/2018 to 21/11/19 was examined to identify all unmetered load over 3,000 kWh per annum.

Audit commentary

Of the 14 active ICPs with unmetered load recorded:

- eight have unmetered load under 3,000 kWh per annum,
- three have unmetered load between 3,000 and 6,000 kWh per annum, which is predictable, and of a type approved and published by the Authority; and
- three have DUML databases and are discussed in **section 5.4**.

Audit outcome

Compliant

5.3. Unmetered threshold exceeded (Clause 10.14 (5))

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

- *within 20 business days, commence corrective measure to ensure it complies with Part 10*
- *within 20 business days of commencing the corrective measure, complete the corrective measures*
- *no later than 10 business days after it becomes aware of the limit having been exceeded, advise each participant who is or would be expected to be affected of:*
 - *the date the limit was calculated or estimated to have been exceeded*
 - *the details of the corrective measures that the retailer proposes to take or is taking to reduce the unmetered load.*

Audit observation

The AC020 trader compliance report for 25/12/2018 to 21/11/19 was examined to identify all unmetered load over 6,000 kWh per annum.

Audit commentary

The three ICPs with unmetered kWh over 6000 kWh per annum have DUML databases and are discussed in **section 5.4**.

Audit outcome

Compliant

5.4. Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B)

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

An up-to-date database must be maintained for each type of distributed unmetered load for which the retailer is responsible. The information in the database must be maintained in a manner that the resulting submission information meets the accuracy requirements of clause 15.2.

A separate audit is required for distributed unmetered load data bases.

The database must satisfy the requirements of Schedule 15.5 with regard to the methodology for deriving submission information.

Audit observation

Prime supplies three ICPs with distributed unmetered load, recorded in two databases. Both databases were audited by Veritek during the audit period.

Audit commentary

The Electricity Authority issued a memo on 18 June 2019 confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed; and
- wash up volumes must take into account where historical corrections have been made to the DUML load and volumes.

There is very little change that occurs with these DUML databases. I confirmed that when changes do occur the change in load is calculated from the date of the change.

The Wellington DUML audit was submitted late, and this non-compliance was cleared. Compliance was confirmed in relation to all other parts of the code. That audit is still under review at the time of writing this report.

The DUML audit results are set out in the table below.

			Compliance Achieved (Yes/No)								
Database	Next audit due date	DUML Audit completed 16A.26 and 17.295F	Deriving submission information 11(1) of schedule 15.3	ICP identifier 11(2)(a) of schedule 15.3	Location of items of load 11(2)(b) of schedule 15.3	Description of load 11(2)(c)&(d) of schedule 15.3	All load recorded in database 11(2A) of schedule 15.3	Tracking of load changes 11(3) of schedule 15.3	Audit trail 11(4) of schedule 15.3	Database accuracy 15.2 and 15.37B(b)	Volume information accuracy 15.2 and 15.37B(c)
DUML - AIAL AKLBBD	01/06/2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DUML - CKHK WLGBBD	Under review	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Audit outcome

Compliant

6. GATHERING RAW METER DATA

6.1. Electricity conveyed & notification by embedded generators (Clause 10.13, Clause 10.24 and 15.13)

Code reference

Clause 10.13, Clause 10.24 and Clause 15.13

Code related audit information

A participant must use the quantity of electricity measured by a metering installation as the raw meter data for the quantity of electricity conveyed through the point of connection.

This does not apply if data is estimated or gifted in the case of embedded generation under clause 15.13.

A trader must, for each electrically connected ICP that is not also an NSP, and for which it is recorded in the registry as being responsible, ensure that:

- *there is one or more metering installations*
- *all electricity conveyed is quantified in accordance with the Code*
- *it does not use subtraction to determine submission information for the purposes of Part 15.*

An embedded generator must give notification to the reconciliation manager for an embedded generating station, if the intention is that the embedded generator will not be receiving payment from the clearing manager or any other person through the point of connection to which the notification relates.

Audit observation

The registry list file as at 21/11/19, AC020 trader compliance report for 25/12/2018 to 21/11/19, and meter event details reports were reviewed to determine compliance.

Processes for distributed generation were reviewed.

Audit commentary

Metering installations installed

All active, metered ICPs have an MEP, and at least one meter channel.

Prime's new connection process includes a check that metering is installed before electrical connection occurs, and that any unmetered load is quantified.

No ICPs have submission information determined by subtraction.

Distributed generation

Prime's application process rejects any ICP which has "B" in the Installation Type field, and distributed generation ICPs are not usually supplied and are only accepted on a case by case basis.

Prime supplies three ICPs with distributed generation recorded by the distributor; all have EG meter registers, solar generation and PV1 profiles recorded.

Review of the AC020 report confirmed that there were no ICPs with generation recorded by the distributor where Prime did not record a generation profile.

The 2019 audit found ICP 0007146643RNB87 had generation incorrectly reported with flow direction X and profile RPS from January 2019-February 2019, and RPS profile was recorded on the registry. A backdated profile correction has been processed on the registry, and volumes have been provided with the correct profile and flow direction through the revision process.

Bridged meters

No bridged meters were identified during the audit period.

Audit outcome

Compliant

6.2. Responsibility for metering at GIP (Clause 10.26 (6), (7) and (8))

Code reference

Clause 10.26 (6), (7) and (8)

Code related audit information

For each proposed metering installation or change to a metering installation that is a connection to the grid, the participant, must:

- *provide to the grid owner a copy of the metering installation design (before ordering the equipment)*
- *provide at least 3 months for the grid owner to review and comment on the design*
- *respond within 3 business days of receipt to any request from the grid owner for additional details or changes to the design*
- *ensure any reasonable changes from the grid owner are carried out.*

The participant responsible for the metering installation must:

- *advise the reconciliation manager of the certification expiry date not later than 10 business days after certification of the metering installation*
- *become the MEP or contract with a person to be the MEP*
- *advise the reconciliation manager of the MEP identifier no later than 20 days after entering into a contract or assuming responsibility to be the MEP.*

Audit observation

The NSP table was reviewed.

Audit commentary

Review of the NSP table confirmed that Prime is not responsible for any GIPs.

Audit outcome

Not applicable

6.3. Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3)

Code reference

Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3

Code related audit information

The reconciliation participant must advise the metering equipment provider if a control device is used to control load or switch meter registers.

The reconciliation participant must ensure the control device is certified prior to using it for reconciliation purposes.

Audit observation

The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were reviewed to determine compliance.

Audit commentary

Prime has only used the RPS and PV1 profiles, and control devices are not used for reconciliation purposes.

Audit outcome

Compliant

6.4. Reporting of defective metering installations (Clause 10.43(2) and (3))

Code reference

Clause 10.43(2) and (3)

Code related audit information

If a participant becomes aware of an event or circumstance that lead it to believe a metering installation could be inaccurate, defective, or not fit for purpose they must:

- *advise the MEP*
- *include in the advice all relevant details.*

Audit observation

Processes relating to defective metering were examined. No defective meters were identified during the audit period.

Audit commentary

Defective meters are typically identified through the meter reading validation process, or from information provided by the MEP or customer. Upon identifying a possible defective meter, Prime raises a field services job to investigate.

Audit outcome

Compliant

6.5. Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2)

Code reference

Clause 2 Schedule 15.2

Code related audit information

Only a certified reconciliation participant may collect raw meter data, unless only the MEP can interrogate the meter, or the MEP has an arrangement which prevents the reconciliation participant from electronically interrogating the meter:

2(2) - The reconciliation participant must collect raw meter data used to determine volume information from the services interface or the metering installation or from the MEP.

2(3) - The reconciliation participant must ensure the interrogation cycle is such that it does not exceed the maximum interrogation cycle in the registry.

2(4) - The reconciliation participant must interrogate the meter at least once every maximum interrogation cycle.

2(5) - When electronically interrogating the meter the participant must:

- a) ensure the system is to within +/- 5 seconds of NZST or NZDST*
- b) compare the meter time to the system time*
- c) determine the time error of the metering installation*
- d) if the error is less than the maximum permitted error, correct the meter's clock*
- e) if the time error is greater than the maximum permitted error then:*
 - i) correct the metering installation's clock*
 - ii) compare the metering installation's time with the system time*
 - iii) correct any affected raw meter data.*
- f) download the event log.*

2(6) – The interrogation systems must record:

- the time*
- the date*
- the extent of any change made to the meter clock.*

Audit observation

The data collection and clock synchronisation processes were examined.

MEPs are responsible for the collection of AMI data. Collection of data and clock synchronisation were reviewed as part of their MEP audits.

Manual readings are provided by Wells as an agent. Their processes were reviewed as part of their agent audit.

Audit commentary

All information used to determine volume information is collected from the services interface or the metering installation by Prime, their agents, or the MEP.

Wells' data collection processes were reviewed as part of their agent audit in June 2019 and found to be compliant. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Prime's compliance.

Prime has not received notification of any clock synchronisation events outside the maximum permissible errors during the audit period and does not deal with HHR data.

Audit outcome

Compliant

6.6. Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)

Code reference

Clause 3(1), 3(2) and 5 Schedule 15.2

Code related audit information

All meter readings must in accordance with the participants certified processes and procedures and using its certified facilities be sourced directly from raw meter data and, if appropriate, be derived and calculated from financial records.

All validated meter readings must be derived from meter readings.

A meter reading provided by a consumer may be used as a validated meter reading only if another set of validated meter readings not provided by the consumer are used during the validation process.

During the manual interrogation of each NHH metering installation the reconciliation participant must:

- a) obtain the meter register*
- b) ensure seals are present and intact*
- c) check for phase failure (if supported by the meter)*
- d) check for signs of tampering and damage*
- e) check for electrically unsafe situations.*

If the relevant parts of the metering installation are visible and it is safe to do so.

Audit observation

The data collection process was examined.

Processes to provide meter condition information were reviewed as part of Wells' agent audit. Prime's processes to manage meter condition information were reviewed.

Processes for customer and photo reads were reviewed.

Audit commentary

Wells readings

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Prime's compliance.

During manual interrogation, the meter register value is collected and entered into a hand-held device. This reading enters Prime's systems and is labelled as a reading, which denotes that it is a meter reading collected and validated by a meter reader.

Wells monitors meter condition, as required by schedule 15.2 and provides information on meter condition along with the daily reads, and monthly summary report containing missing seal and broken seal events.

Prime confirmed that notes files mostly contain unread ICPs. I reviewed the notes from three days in January 2020 and found most related to access issues, and the process to review these is discussed in **section 6.8**.

I reviewed three examples of meter condition from Wells. One was due to a new meter (which was a timing difference) and two related to meters with blank screens (which were both confirmed to be disconnected).

I checked a sample of ten readings provided by Wells and confirmed that they are loaded into Orion as actual readings and are validated.

Customer and customer photo readings

Customer supplied readings and photo readings are treated as customer readings. These customer readings are not treated as validated readings by the historic estimate or switching processes.

I reviewed five examples of customer supplied readings and confirmed that all were correctly classified as customer readings.

In the rare event that customer readings are obtained by Wells, a no read is recorded, and the customer reading is inserted in the notes. No examples of this were available during the audit period.

Staff photo readings

Where Wells cannot access a meter, Prime staff may take a photo reading instead. As part of their reading process they check the condition of the meter and take a clear photograph. These readings are entered into Orion from the photos and are correctly recorded as actual.

Audit outcome

Compliant

6.7. NHH meter reading application (Clause 6 Schedule 15.2)

Code reference

Clause 6 Schedule 15.2

Code related audit information

For NHH switch event meter reads, for the gaining trader the reading applies from 0000 hours on the day of the relevant event date and for the losing trader at 2400 hours at the end of the day before the relevant event date.

In all other cases, All NHH readings apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation.

Audit observation

The process of the application of meter readings was examined.

Audit commentary

NHH readings apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation except in the case of a switch event meter reading which applies to the end of the day prior to the event date for the losing trader and the start of the event date for the gaining trader as required by this clause.

All AMI systems have a clock synchronisation function, which ensures correct time-stamping. Manual readings taken by Wells are applied correctly.

Application of reads was reviewed as part of the historic estimate checks in **section 12.11** and found to be compliant.

The content of CS and RR files was examined in **sections 4.3, 4.4, 4.10 and 4.11** and all reads were confirmed to be correct.

Audit outcome

Compliant

6.8. Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)

Code reference

Clause 7(1) and (2) Schedule 15.2

Code related audit information

Each reconciliation participant must ensure that a validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, and used to create volume information.

This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 7(1).

Audit observation

The process to manage missed reads was reviewed. Reporting on ICPs not read during the period of supply was examined.

Audit commentary

A validated meter reading must be obtained in respect of every meter register for every NHH metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

The NHH meter reading frequency guidelines published by the Electricity Authority define “Exceptional circumstances” as meaning “circumstances in which access to the relevant meter is not achieved despite the reconciliation participant’s best endeavours”. “Best endeavours” is defined as:

“Where a reconciliation participant failed to interrogate an ICP as a result of access issues, the reconciliation participant had made a minimum of three attempts to contact the customer, by using at least two methods of communication”.

The process for missed reads was examined. Unread meters have no meter reading loaded in Orion, and an end of month system estimate is inserted.

Missing reads are identified as part of the meter read frequency reporting process, Wells no read reporting, and meter event reporting.

- Prime reviews the meter read frequency report each month and acts to obtain readings for unread ICPs. They focus on the ICPs with the longest period unread first, working backwards to the shortest period.
- AMI meter communication issues are also identified through the meter event reporting and communication from the MEPs. Daily AMI readings are loaded instead of only month end readings, which has improved read attainment for ICPs with intermittent communication issues. ICPs are moved to Wells reading routes if the MEP cannot resolve the issue quickly. If communication is restored, AMI readings will also be imported as soon as they are received.
- Wells provides no read reporting. A new staff member has been appointed and these are reviewed and actioned on a case by case basis.
- An Orion segment report identifies meters not read during the period of supply. Prime’s sales representatives assist with contacting customers to arrange access and arranging staff readings.

I found that all meters were read at least once during the period of supply where the period of supply ended during the audit period.

Audit outcome

Compliant

6.9. NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)

Code reference

Clause 8(1) and (2) Schedule 15.2

Code related audit information

At least once every 12 months, each reconciliation participant must obtain a validated meter reading for every meter register for non half hour metered ICPs, at which the reconciliation participant trades continuously for each 12-month period.

If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 8(1).

Audit observation

The meter reading process was examined. Monthly reports for November 2018 to October 2019 were provided and reviewed to determine whether they met the requirements of clauses 8 and 9 of schedule 15.2.

Unread ICPs on the NSPs where less than 100% read attainment was achieved for April to October 2019 were reviewed to determine whether exceptional circumstances existed.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Nov-18	96	2	3	99.62%
Dec-18	99	2	3	99.63%
Jan-19	100	1	1	99.88%
Feb-19	100	1	1	99.88%
Mar-19	103	1	1	99.88%
Apr-19	100	2	2	99.77%
May-19	103	2	2	99.80%
Jun-19	103	2	2	99.79%
Jul-19	103	1	1	99.89%
Aug-19	104	-	-	100.00%
Sep-19	107	-	-	100.00%
Oct-19	105	2	2	99.80%

As discussed in **section 6.8**, there are processes in place to monitor read attainment, and attempt to resolve issues preventing read attainment.

Unread ICPs on the NSPs where less than 100% read attainment was achieved for April to October 2019 were reviewed and I found that Prime had met the best endeavours requirement in all cases.

I reviewed meter reading reports for November 2018 to October 2019 and confirmed that they met the meter reading frequency report requirements and were submitted on time.

Audit outcome

Compliant

6.10. NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each four months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every four months for 90% of the non half hour metered ICPs.

A report is to be sent to the Authority providing the percentage, in relation to each NSP, for which consumption information has been collected no later than 20 business days after the end of each month.

If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 9(1).

Audit observation

The meter reading process was examined. Monthly reports for November 2018 to October 2019 were reviewed.

Unread ICPs on the NSPs where less than 90% read attainment was achieved for April to October 2019 were reviewed to determine whether exceptional circumstances existed.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	Total ICPs unread for 4 months	Overall percentage read
Nov-18	119	3	12	98.94%
Dec-18	118	1	10	99.11%
Jan-19	119	2	10	99.16%
Feb-19	119	1	17	98.59%
Mar-19	119	2	17	98.59%
Apr-19	119	2	12	99.02%
May-19	119	2	12	99.04%
Jun-19	119	2	10	99.19%
Jul-19	119	3	9	99.27%
Aug-19	123	3	12	99.01%
Sep-19	123	1	13	98.95%
Oct-19	120	-	9	98.95%

As discussed in **section 6.8**, there are processes in place to monitor read attainment, and attempt to resolve issues preventing read attainment.

Unread ICPs on the NSPs where less than 90% read attainment was achieved for April to October 2019 were reviewed. In all cases Prime could demonstrate that exceptional circumstances existed, or the best endeavours requirement had been met.

Audit outcome

Compliant

6.11. NHH meter interrogation log (Clause 10 Schedule 15.2)

Code reference

Clause 10 Schedule 15.2

Code related audit information

The following information must be logged as the result of each interrogation of the NHH metering:

10(a) - the means to establish the identity of the individual meter reader

10(b) - the ICP identifier of the ICP, and the meter and register identification

10(c) - the method being used for the interrogation and the device ID of equipment being used for interrogation of the meter.

10(d) - the date and time of the meter interrogation.

Audit observation

NHH data is collected by MEPs and Wells. The data interrogation log requirements were reviewed as part of their agent and MEP audits.

Audit commentary

Compliance with this clause has been demonstrated by Prime's agents and MEPs as part of their own audits.

I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Prime's compliance.

Audit outcome

Compliant

6.12. HHR data collection (Clause 11(1) Schedule 15.2)

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

Raw meter data from all electronically interrogated metering installations must be obtained via the services access interface.

This may be carried out by a portable device or remotely.

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

6.13. HHR interrogation data requirement (Clause 11(2) Schedule 15.2)

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

11(2)(a) - the unique identifier of the data storage device

11(2)(b) - the time from the data storage device at the commencement of the download unless the time is within specification and the interrogation log automatically records the time of interrogation

11(2)(c) - the metering information, which represents the quantity of electricity conveyed at the point of connection, including the date and time stamp or index marker for each half hour period. This may be limited to the metering information accumulated since the last interrogation

11(2)(d) - the event log, which may be limited to the events information accumulated since the last interrogation

11(2)(e) - an interrogation log generated by the interrogation software to record details of all interrogations.

The interrogation log must be examined by the reconciliation participant responsible for collecting the data and appropriate action must be taken if problems are apparent or an automated software function flags exceptions.

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

6.14. HHR interrogation log requirements (Clause 11(3) Schedule 15.2)

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

The interrogation log forms part of the interrogation audit trail and, as a minimum, must contain the following information:

11(3)(a)- the date of interrogation

11(3)(b)- the time of commencement of interrogation

11(3)(c)- the operator identification (if available)

11(3)(d)- the unique identifier of the meter or data storage device

11(3)(e)- the clock errors outside the range specified in Table 1 of clause 2

11(3)(f)- the method of interrogation

11(3)(g)- the identifier of the reading device used for interrogation (if applicable).

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

The trading period duration, normally 30 minutes, must be within $\pm 0.1\%$ (± 2 seconds).

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

7.2. Archiving and storage of raw meter data (Clause 18 Schedule 15.2)

Code reference

Clause 18 Schedule 15.2

Code related audit information

A reconciliation participant who is responsible for interrogating a metering installation must archive all raw meter data and any changes to the raw meter data for at least 48 months, in accordance with clause 8(6) of Schedule 10.6.

Procedures must be in place to ensure that raw meter data cannot be accessed by unauthorised personnel.

Meter readings cannot be modified without an audit trail being created.

Audit observation

Processes to archive and store raw meter data were reviewed. The oldest raw meter data available was viewed, to confirm it is retained. Audit trails were reviewed in **section 2.4**.

Audit commentary

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Prime's compliance.

Data is retained for more than 48 months. I viewed raw meter reading information from 2013 on Prime's network.

Review of audit trails in **section 2.4** confirmed that reads cannot be modified without an audit trail being created. Access to modify readings is restricted through log on privileges.

Audit outcome

Compliant

7.3. Non metering information collected / archived (Clause 21(5) Schedule 15.2)

Code reference

Clause 21(5) Schedule 15.2

Code related audit information

All relevant non-metering information, such as external control equipment operation logs, used in the determination of profile data must be collected, and archived in accordance with clause 18.

Audit observation

Processes to record non-metering information were discussed.

Audit commentary

External control equipment logs are not used by Prime.

Prime records non-metering information associated with its DUMML databases, and unmetered ICPs. I confirmed that unmetered load information from 2015 was available.

Audit outcome

Compliant

8. CREATING AND MANAGING (INCLUDING VALIDATING, ESTIMATING, STORING, CORRECTING AND ARCHIVING) VOLUME INFORMATION

8.1. Correction of NHH meter readings (Clause 19(1) Schedule 15.2)

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

If a reconciliation participant detects errors while validating non-half hour meter readings, the reconciliation participant must:

19(1)(a) - confirm the original meter reading by carrying out another meter reading

19(1)(b) - replace the original meter reading the second meter reading (even if the second meter reading is at a different date)

19(1A) if a reconciliation participant detects errors while validating non half hour meter readings, but the reconciliation participant cannot confirm the original meter reading or replace it with a meter reading from another interrogation, the reconciliation participant must:

- *substitute the original meter reading with an estimated reading that is marked as an estimate; and*
- *subsequently replace the estimated reading in accordance with clause 4(2)*

Audit observation

Processes for the correction of NHH meter readings were reviewed.

Audit commentary

Where errors are detected during read validation a check reading will be performed for manually read meters, or AMI readings for surrounding days will be checked. If an original meter reading cannot be validated it will be made a misread, and an appropriately labelled estimated reading will be added. Misreads are excluded from billing and historic estimate processes in Orion. The specific processes to manage corrections are described below:

Defective meters

Closing meter readings for the defective meters are estimated based on the best information available, either consumption on the meter prior to the fault, or consumption on the new meter.

No ICPs with defective meters were identified during the audit period.

Multiplier corrections

Multipliers are stored on the meters tab in Orion, and any corrections to this field will flow through to all reconciliation submissions for the affected meter.

Two incorrect multipliers were identified during the audit period. Both were examined and corrections have been correctly processed in both instances.

Bridged meter corrections

The volumes for any bridged meter sites are estimated based on the best information available, usually from consumption post the un-bridging of the meter or if that is not available, consumption on the meter prior to the bridging.

No bridged meters were identified during the audit period.

Inactive ICPs with consumption

Inactive ICPs remain active in Orion, and continue to be read, with volumes submitted, and billed.

Prime provided a list of three ICPs with inactive status which had consumption recorded. For all ICPs consumption occurred prior to disconnection and the status was correctly recorded on the registry.

Transposed meters

If a transposed meter is identified, the meter reader is informed, and a correction is processed to move the readings to the correct meter register.

No examples of transposed meters were identified during the audit period.

Audit outcome

Compliant

8.2. Correction of HHR metering information (Clause 19(2) Schedule 15.2)

Code reference

Clause 19(2) Schedule 15.2

Code related audit information

If a reconciliation participant detects errors while validating half hour meter readings, the reconciliation participant must correct the meter readings as follows:

19(2)(a) - if the relevant metering installation has a check meter or data storage device, substitute the original meter reading with data from the check meter or data storage device; or

19(2)(b) - if the relevant metering installation does not have a check meter or data storage device, substitute the original meter reading with data from another period provided:

- (i) The total of all substituted intervals matches the total consumption recorded on a meter, if available; and*
- (ii) The reconciliation participant considers the pattern of consumption to be materially similar to the period in error*

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

8.3. Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

A reconciliation participant may use error compensation and loss compensation as part of the process of determining accurate data. Whichever methodology is used, the reconciliation participant must document the compensation process and comply with audit trail requirements set out in the Code.

Audit observation

The physical meter location point is not specifically mentioned in Prime's terms and conditions, but the existing practices in the electrical industry achieve compliance.

The registry list as at 21/11/19 was reviewed.

Audit commentary

Prime has only supplied ICPs with metering categories 1 and 2. No ICPs have required loss compensation.

Audit outcome

Compliant

8.4. Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)

Code reference

Clause 19(4) and (5) Schedule 15.2

Code related audit information

In correcting a meter reading in accordance with clause 19, the raw meter data must not be overwritten. If the raw meter data and the meter readings are the same, an automatic secure backup of the affected data must be made and archived by the processing or data correction application.

If data is corrected or altered, a journal must be generated and archived with the raw meter data file. The journal must contain the following:

19(5)(a)- the date of the correction or alteration

19(5)(b)- the time of the correction or alteration

19(5)(c)- the operator identifier for the person within the reconciliation participant who made the correction or alteration

19(5)(d)- the half-hour metering data or the non half hour metering data corrected or altered, and the total difference in volume of such corrected or altered data

19(5)(e)- the technique used to arrive at the corrected data

19(5)(f)- the reason for the correction or alteration.

Audit observation

Corrections are discussed in **section 8.1**, which confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data retention for MEPs and agents was reviewed as part of their own audits.

Audit commentary

Raw meter data is held by AMS, Metrix, Arc and FCLM as MEPs, and Wells as an agent. Compliance was confirmed as part of their agent and MEP audits.

Prime only corrects working data and keeps an appropriate audit trail.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

9.1. Identification of readings (Clause 3(3) Schedule 15.2)

Code reference

Clause 3(3) Schedule 15.2

Code related audit information

All estimated readings and permanent estimates must be clearly identified as an estimate at source and in any exchange of metering data or volume information between participants.

Audit observation

A sample of reads and volumes were traced from the source files to Prime's systems in **section 2.3**.

Provision of estimated reads to other participants during switching was reviewed in **sections 4.3, 4.4, 4.10 and 4.11**.

Correct identification of estimated reads, and review of the estimation process was completed in **section 8.1**.

Audit commentary

All estimated readings and validated readings are clearly identified as required by this clause. Permanent estimates such as switch event readings and closing readings are marked as actuals, but reference information denotes the source of the read and read sub-type.

Customer provided readings and customer provided photo readings are recorded as customer readings in Orion. Customer readings are not treated as actual by the reconciliation process.

On some occasions, such as when corrections are required, staff manually enter estimated readings. Training has been provided to staff to ensure they are aware of the correct read types. Spot checks are also conducted when reviewing the meter reading frequency reports where an ICP suddenly has a reading after an extended period with no readings.

Audit outcome

Compliant

9.2. Derivation of volume information (Clause 3(4) Schedule 15.2)

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

Volume information must be directly derived, in accordance with Schedule 15.2, from:

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

Audit commentary

Review of submission data confirmed that it is based on readings as required by this clause.

Audit outcome

Compliant

9.3. Meter data used to derive volume information (Clause 3(5) Schedule 15.2)

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

All meter data that is used to derive volume information must not be rounded or truncated from the stored data from the metering installation.

Audit observation

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

Raw unrounded meter data retention for MEPs and agents was reviewed as part of their own audits.

Audit commentary

The MEP or agent retains raw, unrounded data. Compliance was demonstrated by Prime's MEPs and agent during their own audits.

A sample of 20 reads were traced from the source files to Orion in **section 2.3**. The source files contained the raw unrounded data.

Arc and Wells readings are provided with zero decimal places and are not rounded. AMS, Smartco, Metrix and FCLM readings are rounded to zero decimal places on import. This has previously been recorded as compliant because the MEP has the unrounded raw meter data, however a recent review of the wording of this clause has led to a revised interpretation, which is that rounding should not occur until volume information is created. Rounding occurs prior to the creation of volume information, therefore non-compliance exists.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 9.3 With: Clause 3(5) of schedule 15.2 From: 01-Jan-19 To: 21-Nov-19	Raw meter data is rounded upon receipt and not when volume information is created. Potential impact: Low Actual impact: Low Audit history: None Controls: None Breach risk rating: 5		
Audit risk rating	Rationale for audit risk rating		
Low	There are no controls to prevent rounding of raw meter data, the system is designed to round as soon as the data arrives. There is very little impact because no metered consumption information is "missing", therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
It's a shame that few years back we actually changed our system to round off the reads because the decimal digits weren't important. We are working with our IT to increase the field size to hold 4 decimal places.		202008	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Once the field size is increased, this non-compliance will be cleared.		202008	

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

If a reconciliation participant is unable to interrogate an electronically interrogated metering installation before the deadline for providing submission information, the submission to the reconciliation manager must be the reconciliation participant's best estimate of the quantity of electricity that was purchased or sold in each trading period during any applicable consumption period for that metering installation.

The reconciliation participant must use reasonable endeavours to ensure that estimated submission information is within the percentage specified by the Authority.

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

9.5. NHH metering information data validation (Clause 16 Schedule 15.2)

Code reference

Clause 16 Schedule 15.2

Code related audit information

Each validity check of non half hour meter readings and estimated readings must include the following:

16(2)(a) - confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register

16(2)(b) - checks for invalid dates and times

16(2)(c) - confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern, or trend

16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected 0 values.

Audit observation

I reviewed and observed the NHH data validation process, including checking a sample of data validations.

Audit commentary

NHH data is validated by several processes.

Meter reader validation

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Prime's compliance.

For meters read by Wells, a localised validation occurs at the hand-held device to ensure the reading is within expected high/low parameters. Readings which fail this validation are required to be re-entered, and if the two readings are the same the second reading will be accepted. If the second reading is different (potentially indicating the first reading was incorrect) then the second reading is required to be re-entered. Wells also provide meter condition information, as discussed in **section 6.6**.

Orion validation

Once manual and AMI readings are received, further validation is completed.

1. Upon receipt of meter reading files Prime staff manually check that read dates are valid and reformat the data as described in **section 2.3**.
2. The Orion import process confirms that there is an open meter and ICP for the reading to be recorded against. If no open ICP or meter is found, an exception is created.
3. Exceptions are created for multiple readings on the same day, high readings, low readings, and zero readings. Every instance of zero consumption is investigated, and outbound calls and site visits are organised where necessary. If there is a small negative difference between a switch in read and subsequent reading, Prime waits for the AMI readings to “catch up” and exceed the switch read and estimates zero consumption.
4. First invoices are validated by the billing team and account manager. Subsequent invoices are validated by the billing team, including a check against the previous invoice for reasonableness. Any anomalies are investigated.

Vacant and disconnected ICPs

Vacant and disconnected ICPs remain active in Orion, with open meters. ICPs are transferred to an “occupier” customer for any vacant periods, and an “occupier (disconnected)” customer for any inactive periods. This ensures that any consumption is captured and reported.

The validation process for vacant and disconnected ICPs is the same as for any active ICP. Vacant or disconnected consumption is billed, with the invoices reviewed by the billing team.

Pre submission checks

Reconciliation submissions are also reviewed prior to submission, this process is discussed in **section 12.3**.

Audit outcome

Compliant

9.6. Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)

Code reference

Clause 17 Schedule 15.2

Code related audit information

Each validity check of electronically interrogated meter readings and estimate readings must be at a frequency that will allow a further interrogation of the data storage device before the data is overwritten within the data storage device and before this data can be used for any purpose under the Code.

Each validity check of a meter reading obtained by electronic interrogation or an estimated reading must include:

17(4)(a) - checks for missing data

17(4)(b) - checks for invalid dates and times

17(4)(c) - checks of unexpected zero values

17(4)(d) - comparison with expected or previous flow patterns

17(4)(e) - comparisons of meter readings with data on any data storage device registers that are available

17(4)(f) - a review of meter and data storage device event list. Any event that could have affected the integrity of metering data must be investigated.

Audit observation

Electronic read validation and meter event log processes were reviewed. Examples of meter events were reviewed.

Audit commentary

Prime receives AMI data for AMS, Metrix, Arc, and FCLM meters, and all other meters are read manually. Submission type is NHH for all ICPs, and data is validated as described in **section 9.5**.

Each MEP provides meter event information:

- AMS, Smartco, and Metrix provide meter event reports via SFTP (these reports rarely contain events requiring action, and are reviewed every two months) and AMS and Metrix also occasionally email events requiring field services jobs to be raised to Prime, and these are reviewed and acted upon on receipt;
- Arc email a no reads report, containing meter events requiring action by Prime which are actioned upon receipt; and
- FCLM have confirmed that they will email Prime if any meter events requiring action occur, but no events have been received from FCLM to date.

I reviewed examples of meter event reports from AMS, Smartco and Metrix, and no reads reports from Arc. I found that most events related to power outages and restoration, and non-communicating meters. I found that action had been taken by Prime where required.

Audit outcome

Compliant

10. PROVISION OF METERING INFORMATION TO THE GRID OWNER IN ACCORDANCE WITH SUBPART 4 OF PART 13 (CLAUSE 15.38(1)(F))

10.1. Generators to provide HHR metering information (Clause 13.136)

Code reference

Clause 13.136

Code related audit information

The generator (and/or embedded generator) must provide to the grid owner connected to the local network in which the embedded generator is located, half hour metering information in accordance with clause 13.138 in relation to generating plant that is subject to a dispatch instruction:

- *that injects electricity directly into a local network; or*
- *if the meter configuration is such that the electricity flows into a local network without first passing through a grid injection point or grid exit point metering installation.*

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Prime is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

10.2. Unoffered & intermittent generation provision of metering information (Clause 13.137)

Code reference

Clause 13.137

Code related audit information

Each generator must provide the relevant grid owner half-hour metering information for:

- *any unoffered generation from a generating station with a point of connection to the grid 13.137(1)(a)*
- *any electricity supplied from an intermittent generating station with a point of connection to the grid. 13.137(1)(b)*

The generator must provide the relevant grid owner with the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of that generator's volume information. (clause 13.137(2))

If such half-hour metering information is not available, the generator must provide the pricing manager and the relevant grid owner a reasonable estimate of such data. (clause 13.137(3))

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Prime is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

10.3. Loss adjustment of HHR metering information (Clause 13.138)

Code reference

Clause 13.138

Code related audit information

The generator must provide the information required by clauses 13.136 and 13.137,

13.138(1)(a)- adjusted for losses (if any) relative to the grid injection point or, for embedded generators the grid exit point, at which it offered the electricity

13.138(1)(b)- in the manner and form that the pricing manager stipulates

13.138(1)(c)- by 0500 hours on a trading day for each trading period of the previous trading day.

The generator must provide the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of the generator's volume information.

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Prime is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

10.4. Notification of the provision of HHR metering information (Clause 13.140)

Code reference

Clause 13.140

Code related audit information

If the generator provides half-hourly metering information to a grid owner under clauses 13.136 to 13.138, or 13.138A, it must also, by 0500 hours of that day, advise the relevant grid owner.

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Prime is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

Unless an embedded generator has given a notification in respect of the point of connection under clause 15.3, a trader must give notice to the reconciliation manager if it is to commence or cease trading electricity at a point of connection using a profile with a profile code other than HHR, RPS, UML, EG1, or PV1 at least five business days before commencing or ceasing trader.

The notification must comply with any procedures or requirements specified by the reconciliation manager.

Audit observation

The registry list file as at 21/11/19 and AC020 trader compliance report for 25/12/2018 to 21/11/19 were reviewed to determine compliance.

Audit commentary

Prime has only used the RPS and PV1 profiles; trading notifications are not required.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

Each retailer and direct purchaser (excluding direct consumers) must deliver a report to the reconciliation manager detailing the number of ICP days for each NSP for each submission file of submission information in respect of:

15.6(1)(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period

15.6(1)(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.

The ICP days information must be calculated using the data contained in the retailer or direct purchaser's reconciliation system when it aggregates volume information for ICPs into submission information.

Audit observation

The process for the calculation of ICP days was examined by checking 25 NSPs with a small number of ICPs to confirm the AV110 ICP days calculation was correct.

I reviewed variances for 13 months of GR100 reports and investigated a diverse sample of ten NSP level ICP days differences, to determine why the difference had occurred.

Audit commentary

ICP days continue to be reported for ICPs with inactive status. This is not compliant with clause 15.6, which requires traders to report ICP days, defined in the code as “any day when an ICP with the installation type “L” or “B” is recorded on the registry as having the status of Active”. Consumption is only reported where there are ICP days and active status in Orion, and Prime’s method ensures that if any consumption occurs during an inactive period it will be reported.

During the last audit period, Prime found that the Orion ICP days calculation was based on the date the ICP was physically created in Orion, rather than the start date entered in Orion’s front end. This affects both new connections and switches, because in either case the ICP may be created on a different day to the correct start date. Agility are still working on a permanent fix for this. Prime continue to conduct their manual check comparing the AV110 to the expected active days calculated from a date ranged registry list. Discrepancies are investigated and ICP days are manually updated as required.

The process for the calculation of ICP days was examined by checking 25 NSPs with a small number of ICPs each. The ICP days calculation was confirmed to be correct.

The following table shows the ICP days difference between Prime’s database and the RM return file (GR100) for all available revisions for 13 months.

Month	Ri	R1	R3	R4	R5	R7	R14
Oct 2018	-1.16%	-1.28%	-1.1%	-	-	-0.4%	-
Nov 2018	-	-	-1.1%	-	-	-0.3%	-
Dec 2018	-0.9%	-1.2%	-1.3%	-	-	0.0%	0.0%
Jan 2019	-2.2%	-1.2%	-0.2%	-	-	0.0%	-
Feb 2019	-1.3%	-1.4%	-0.3%	-	-	-0.1%	-
Mar 2019	-0.1%	-0.1%	-0.2%	-	-	0.1%	-
Apr 2019	0.0%	0.0%	0.0%	-	-	-	-
May 2019	-0.1%	-0.1%	0.0%	-	0.0%	-	-
Jun 2019	0.0%	0.0%	0.0%	0.0%	-	-	-
Jul 2019	-0.1%	0.0%	-0.2%	-	-	-	-
Aug 2019	0.0%	-0.1%	-	-	-	-	-
Sep 2019	0.1%	0.2%	-	-	-	-	-
Oct 2019	0.0%	-	-	-	-	-	-

I reviewed a diverse sample of ten NSP level ICP days differences which remained for R1 or later.

- Four differences were caused by an error found in Orion where the original NSP is being used and a subsequent NSP change is not being recognised resulting in the volume being submitted against the incorrect NSP. This was discovered in August 2019 and appears to have started in May 2019. Agility are working on a fix for this. NSP discrepancies are being checked and manually corrected as part of the end of month validation process.
- Three differences related to backdated status changes. Subsequent revisions reflect the correct ICP days.
- Two differences were due to a 1-day discrepancy caused when an ICP is disconnected on the registry on the day of disconnection, but submission occurs for the part day volume causing a 1-day discrepancy.
- One difference was caused by the inclusion of inactive days in the AV110 report, resulting in over submission where an ICP is inactive.

October 2018 ICP days submission issues identified in the 2019 audit were checked to determine whether corrected revision information was provided.

- The two NSPs which had inactive ICP days reported had correct revised submission information supplied.
- The four ICP days incorrectly submitted as HHR at for ISL0661, have not been corrected through the revision process. The issue occurred because the submission type field was changed in error before an ICP undergoing an upgrade with another retailer switched out. I sighted this ICP in Orion and confirmed the profile has now been corrected and this is expected to be corrected in the R14 revision.

Breach information provided by the Electricity Authority did not identify any late ICP days submissions.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 11.2</p> <p>With: Clause 15.6</p> <p>From: 01-Mar-18</p> <p>To: 21-Nov-19</p>	<p>The AV110 report includes inactive ICP days.</p> <p>The AV110 calculates the ICP days from the date the ICP was entered into Orion, which may differ from the actual start date.</p> <p>Four ICP days were reported with an incorrect submission type.</p> <p>NSP changes are not being reported correctly in Orion causing ICP day discrepancies.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate, as the checks run through the python coded database has improved the controls to identify and correct discrepancies.</p> <p>The impact is rated as low because consumption is reported where an ICP is active in Orion, and Prime's method ensures that if any consumption occurs during an inactive period it will be reported. The missed NSP changes are being checked and corrected.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Unfortunately, this will always be a compliance for us because we make submissions for inactive ICPs if there's consumption identified during the inactive period.			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Only way to prevent this will be to remove all inactive ICPs from our submission or enter the wrong inactive date in the Registry which will be another compliance issue. So we choose to report inactive consumption.</p> <p>We have also noticed the Registry shows the disconnection day as inactive. Example: If a site is disconnected at 1pm on 1/1/2020, the Registry shows last active date as 31/12/2019 which is incorrect. Because the Registry doesn't allow multiple events on the same day, this non-compliance is becoming a major issue for us.</p>			

11.3. Electricity supplied information provision to the reconciliation manager (Clause 15.7)

Code reference

Clause 15.7

Code related audit information

A retailer must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each NSP, aggregated by invoice month, for which it has provided submission information to the reconciliation manager, including revised submission information for that period as non-loss adjusted values in respect of:

15.7(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period

15.7(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.

Audit observation

The process for the calculation of as billed volumes was examined by checking five NSPs with a small number of ICPs to confirm the AV120 calculation was correct.

GR130 reports for January 2017 to July 2019 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

Audit commentary

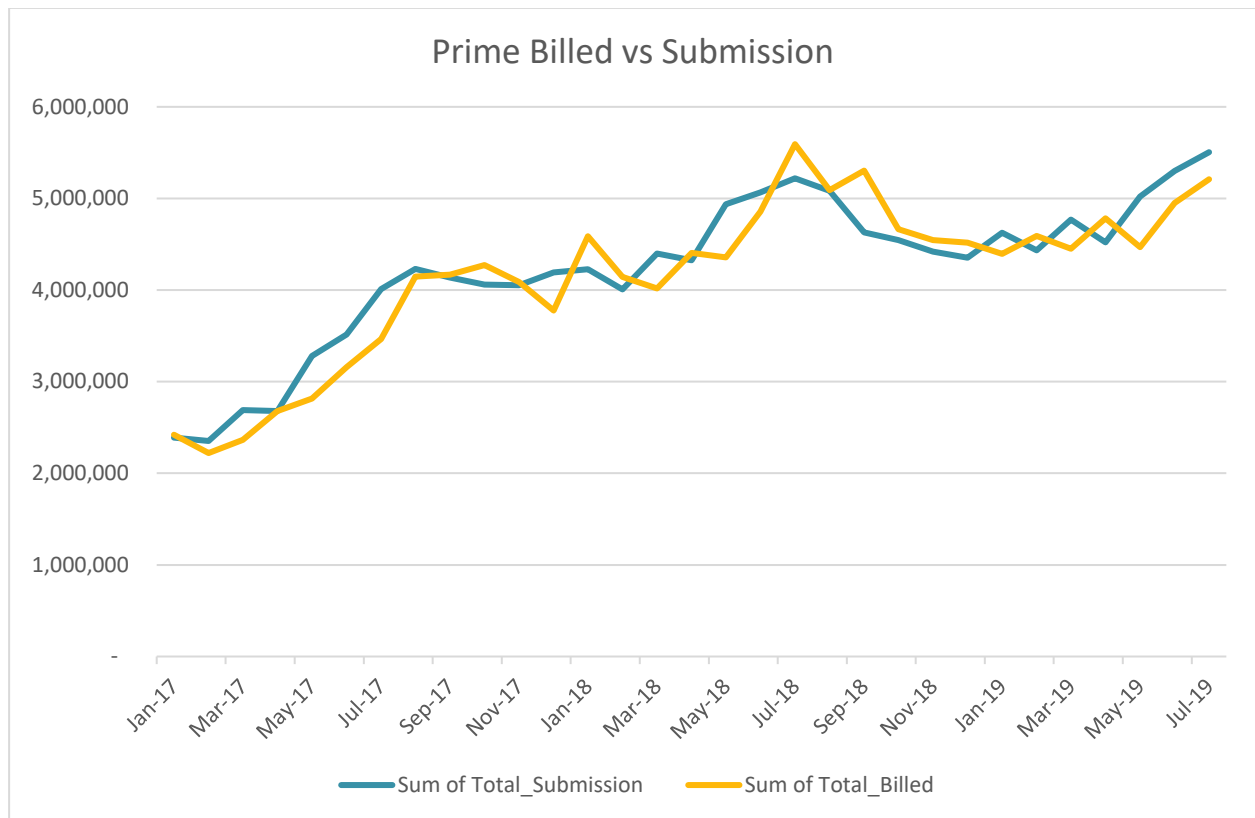
The process for the calculation of as billed volumes was examined by checking five NSPs with a small number of ICPs against Prime's invoice information for October 2019 and confirmed the values to be correct.

The previous audit recorded an issue in the October 2018 submission for FHL0331.

NSP	Submitted total	Billed total in Orion	Difference
FHL0331	3871 kWh (401 kWh + 3471 kWh)	4020 kWh (416 kWh + 3604 kWh)	149 kWh

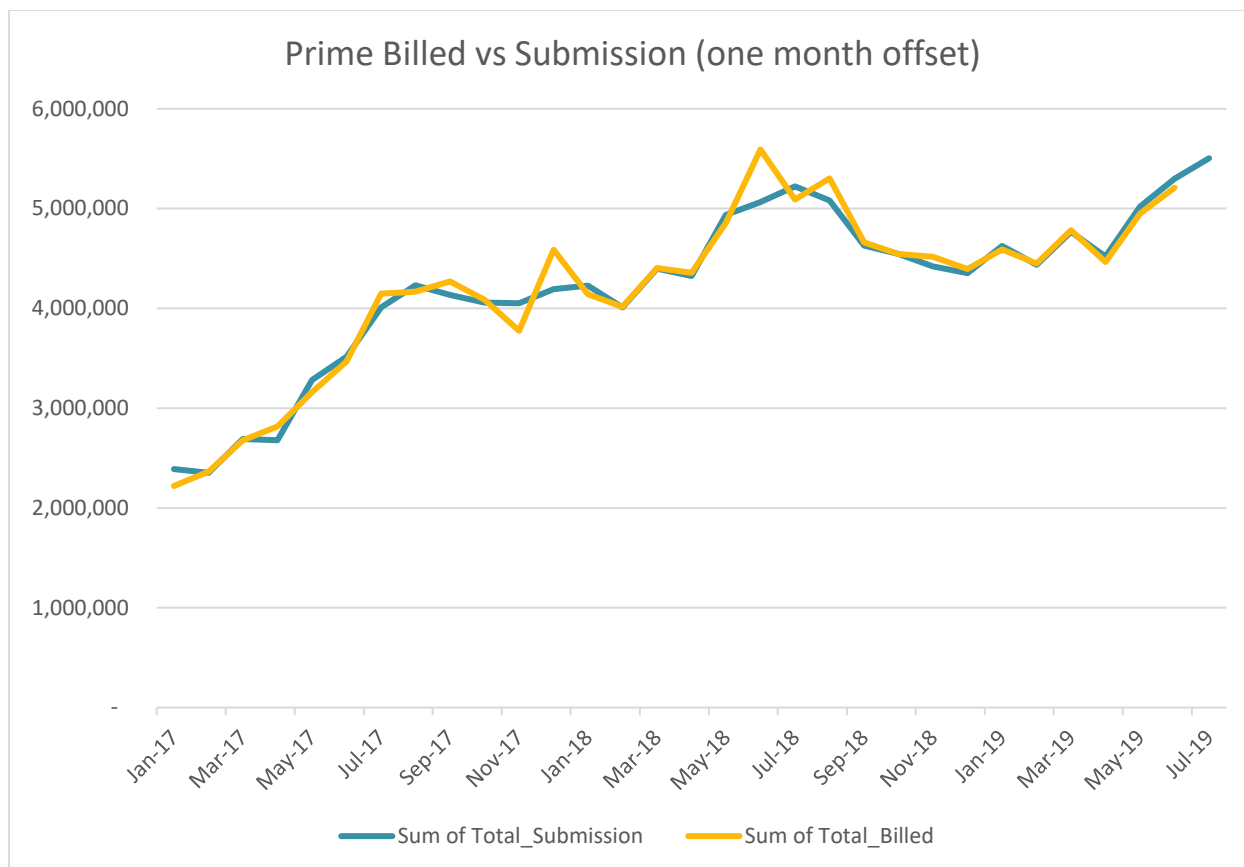
It appeared that the difference related to reversal and rebilling. This was examined post the audit and found that only current accounts were viewed in the last audit, when all accounts were considered the volumes matched.

I also checked the difference between submission and electricity supplied information for a 36-month period, and the results are shown in the chart below. The total difference is 0.4% for the year ended July 2019 (billed lower than submission), and 0.6% for the two years ended July 2019 (billed lower than submission).



Due to Prime’s billing cycle, billed consumption always relates to the month before the submission consumption. Prime bills customers up to the end of the month, at the beginning of the month after consumption has occurred. This results in misalignment between billed and submitted data, for example 1st-28th February normalised consumption is compared to 1st-31st January billed consumption (which is invoiced in early February). Once the billing and submission periods are aligned, the close relationship between billed and submitted data is visible.

There are some peaks and troughs in the data, which were investigated by Prime following the 2019 audit and found to relate to corrections which were processed for reconciliation but not billed to the customer.



Audit outcome

Compliant

11.4. HHR aggregates information provision to the reconciliation manager (Clause 15.8)

Code reference

Clause 15.8

Code related audit information

A retailer or direct purchaser (excluding direct consumers) must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each half hourly metered ICP for which it has provided submission information to the reconciliation manager, including:

15.8(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period

15.8(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

The reconciliation participant must provide submission information to the reconciliation manager that is adjusted for NZDT using 1 of the techniques set out in clause 15.36(3) specified by the Authority.

Audit observation

Review of a registry list for 21/11/19 confirmed that Prime has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with this clause was not assessed, because Prime does not deal with HHR readings.

Audit outcome

Not applicable

12.2. Creation of submission information (Clause 15.4)

Code reference

Clause 15.4

Code related audit information

By 1600 hours on the 4th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all NSPs for which the reconciliation participant is recorded in the registry as having traded electricity during the consumption period immediately before that reconciliation period (in accordance with Schedule 15.3).

By 1600 hours on the 13th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all points of connection for which the reconciliation participant is recorded in the registry as having traded electricity during any consumption period being reconciled in accordance with clauses 15.27 and 15.28, and in respect of which it has obtained revised submission information (in accordance with Schedule 15.3).

Audit observation

Prime prepares NHH submissions using Orion. Processes to ensure that submissions are accurate were reviewed.

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late.

Audit commentary

Prime prepares reconciliation submissions using reconciliation consumption generated by Orion. Further information on calculation of historic estimate is recorded in **section 12.11**, and aggregation of the AV080 report is checked in **section 12.3**. The EA confirmed that one minor alleged breach occurred during the audit period for late provision of submission information:

Breach no	Breach of	Description	Outcome
1904PREL1 27/06/2019	Part 15 clause 15.4 (1)	Prime Energy Limited (PRME) failed to submit data to the reconciliation manager by 16:00 on 7th February 2018 BD 4 in breach of Part 15.4 (1) of the Code. PRME submitted the data late at 16:02 on the 7th February 2018 (BD4).	Early closure

A sample of NHH ICPs were checked to make sure they are handled correctly, including vacant, disconnected, unmetered, and distributed generation ICPs.

Vacant consumption

Active vacant ICPs remain active in Orion and continue to be read and have volumes submitted. ICPs are transferred to an “occupier” customer in Orion for any vacant periods.

Three ICPs with vacant consumption were checked, and consumption was correctly submitted.

Inactive consumption

Inactive ICPs remain active in Orion and continue to be read and have volumes submitted. ICPs are transferred to an “occupier (disconnected)” customer for any inactive periods.

Prime provided a list of three ICPs with inactive status which had consumption recorded. All were found to have consumption occur prior to disconnection and the consumption was correctly reported.

Unmetered consumption

Submission information for five ICPs with unmetered volumes were reviewed, and correct consumption was submitted.

Distributed generation

Submission information for all three ICPs with distributed generation were reviewed, and correct consumption was submitted.

The 2019 audit found ICP 0007146643RNB87 had generation incorrectly reported with flow direction X and profile RPS from January 2019-February 2019, and RPS profile was recorded on the registry. A backdated profile correction has been processed on the registry, and volumes have been provided with the correct profile and flow direction through the revision process.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.2 With: Clause 15.4 From: 07-Feb-18 To: 07-Feb-18	Prime Energy Limited (PRME) failed to submit data to the reconciliation manager by 16:00 on 7th February 2018 BD 4 in breach of Part 15.4 (1) of the Code. PRME submitted the data late at 16:02 on the 7th February 2018 (BD4). Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong as submissions are now submitted on day 3 to avoid any possibility of being late. The audit risk rating is low as this was only two minutes late and had no material impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
The actual breach occurred Feb 2018 but it was recorded by EA in June 2019. The submission was late by only 2mins.			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
The delay was cause by RM portal overload. We had since changed our internal KPI to 12:00pm on Day 4. And now we moved our KPI to Day 3. We haven't had a late submission since Feb 2018.		201803	

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

In preparing and submitting submission information, the reconciliation participant must allocate volume information for each ICP to the NSP indicated by the data held in the registry for the relevant consumption period at the time the reconciliation participant assembles the submission information. Volume information must be derived in accordance with Schedule 15.2.

However, if, in relation to a point of connection at which the reconciliation participant trades electricity, a notification given by an embedded generator under clause 15.13 for an embedded generating station is in force, the reconciliation participant is not required to comply with the above in relation to electricity generated by the embedded generating station.

Audit observation

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in **section 2.1**.

The process to ensure that AV080 submissions are accurate was discussed, and reports used in the process were viewed.

The process for aggregating the AV080 was examined by checking the total submitted against detailed ICP level information for the same period, and five NSPs with a small number of ICPs.

The GR170 to AV080 files for seven revision submissions were compared, to confirm zeroing occurs.

Audit commentary

The process for the calculation of NHH volumes was examined by checking the total submitted against detailed ICP level information for the same period, and five NSPs with a small number of ICPs. NHH volume calculation was confirmed to be correct.

GR170 and AV080 files for seven revision submissions were compared, and found to contain the same NSPs, confirming that zeroing is occurring as required.

AV080 submissions are reviewed by Prime prior to being submitted, including:

- review of ICP level differences more than ± 2000 kWh and $\pm 10\%$ compared to the previous month for initial submissions, and previous submissions for the same month for revision submission; and
- review of the aggregation factors against a date ranged registry list.

Other consumption validation checks are discussed in **section 9.5**.

Audit outcome

Compliant

12.4. Grid owner volumes information (Clause 15.9)

Code reference

Clause 15.9

Code related audit information

The participant (if a grid owner) must deliver to the reconciliation manager for each point of connection for all of its GXPs, the following:

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.9(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.9(b))*

Audit observation

Review of the NSP table confirmed that Prime is not a grid owner.

Audit commentary

Prime is not a grid owner.

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

The participant (if a local or embedded network owner) must provide to the reconciliation manager for each NSP for which the participant has given a notification under clause 25(1) Schedule 11.1 (which relates to the creation, decommissioning, and transfer of NSPs) the following:

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.10(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.10(b))*

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Prime does not own any local or embedded networks and is not required to provide NSP submission information.

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

The participant (if a grid connected generator) must deliver to the reconciliation manager for each of its points of connection, the following:

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.11(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.11(b))*

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Prime is not a grid connected generator.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

If the reconciliation participant has submitted information and then subsequently obtained more accurate information, the participant must provide the most accurate information available to the reconciliation manager or participant, as the case may be, at the next available opportunity for submission (in accordance with clauses 15.20A, 15.27, and 15.28).

Audit observation

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late. Corrections were reviewed in **section 8.1**.

Audit commentary

Corrections were processed as required and are discussed in **section 8.1**. Review of alleged breaches confirmed that one reconciliation submission was made late as recorded in **section 12.2**.

Some inaccurate submission information was identified during the audit:

Historic estimate

The checks undertaken across 14 months of submissions found similar issues to those identified in the last audit.

- Evidence of some large fluctuations between revisions, but I note that all of these occurred prior to the last site audit. Prime have adopted the last audit's recommendation and now have additional resource to address this and have refined their validation processes to better investigate and resolve this. I investigated the ten most recent balancing area differences of more than 30% and 2,000 kWh and found that they all occurred prior to the new reporting and resource starting. The largest variance is detailed in **section 12.12**. I expect the fluctuations to reduce and examination of recent months indicate this is the case.
- Forward Estimates are still evident at R14:

Month	Forward estimate
Jun-18	13,470.85
Jul-18	21,338.46
Aug-18	10.47
Total	34,819.78

This is due to the same issue identified in the last audit where Prime identified ICPs that were missing from submissions in their pre submission reconciliation and the missing ICP was manually added. Due to a misunderstanding, in some cases only the total estimate field was updated instead of the total estimate and historic estimate. From December 2019, manual adjustments are no longer being carried out and Orion now makes such estimates permanent. Historic estimates are expected to improve by the end of 2020 when subsequent revisions occur.

- NSP changes are not being calculated correctly in Orion as NSP changes are not flowing through as expected, resulting in the volume not being submitted against the correct NSP. The issue was discovered in August 2019. Agility are working on a fix for this. In the interim, NSP discrepancies are being checked and manually corrected as part of the end of month validation process.

2019 audit issues

The submission accuracy issues identified in the 2019 audit were re-checked:

2019 accuracy issue	2020 finding
<p>Unexpected large volume fluctuations between revisions</p> <p>The 2019 audit found some large fluctuations in total volumes submitted when the historic estimate percentage was close to 100% for TTS0011TENCE (due to a NSP data entry error) and PRM0331ELECG (due to a misread). A recommendation was raised to investigate differences between revisions, and Prime intended to enhance their validation checks to ensure that large fluctuations between revisions are identified and investigated prior to submission.</p>	<p>Still existing - As detailed above, a new staff member has been appointed in December 2019 and reporting has been created in the python scripted database to address variances between revisions.</p>
<p>Incorrect classification of permanent estimates</p> <p>The closing estimate read type is not treated as actual in Orion. In late 2017, Prime updated their processes to record permanent estimate readings as “actual” with a reference that indicates they are estimates to ensure that they are used by the reconciliation process. Some closing estimates have been incorrectly classified for switched ICPs, resulting in forward estimate remaining. Prime intends to update the read types for the affected ICPs.</p>	<p>Cleared - This has been fixed and no evidence of this occurring was found.</p>
<p>Pre submission corrections</p> <p>Where Prime identifies ICPs that are missing from submissions in their pre submission reconciliation, the missing ICP is manually added. Due to a misunderstanding, in some cases only the total estimate field was updated instead of the total estimate and historic estimate.</p>	<p>Still existing - Manual adjustments were being carried out until December 2019. Orion now makes such estimates permanent. This is expected to improve HE by the end of 2020 when subsequent revisions occur.</p>
<p>Distributed generation</p> <p>The 2019 audit found ICP 0007146643RNB87 had generation incorrectly reported with flow direction X and profile RPS from January 2019-February 2019, and RPS profile was recorded on the registry.</p>	<p>Cleared - A backdated profile correction has been processed on the registry, and volumes have been provided with the correct profile and flow direction through the revision process.</p>
<p>Inactive ICP days</p> <p>The 2018 and 2019 audits recorded that inactive ICP days were included in AV110 submissions.</p>	<p>Still existing, as discussed in section 11.2.</p>

2019 accuracy issue	2020 finding
<p>HHR ICP days for NHH ICPs</p> <p>The 2019 audit recorded that some ICP days were submitted as HHR.</p>	<p>Technically still existing, but only as it hasn't been washed up - I sighted this ICP in Orion and confirmed the profile has now been corrected and this is expected to be corrected in the R14 revision. This is discussed in section 11.2.</p>
<p>Billed submissions</p> <p>The 2018 and 2019 audits recorded that billed information was sometimes not recorded against the correct period, where reversals and rebills had occurred.</p>	<p>Cleared, as discussed in section 11.3.</p>

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.7 With: Clause 15.12 From: 15-Feb-19 To: 31-Dec-19	Some submission information was incorrect. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as resource and controls have been actioned as detailed in Prime's last audit response. The impact is assessed to be low as volume differences have decreased and Prime recent revision reports do not show such dramatic variances in volumes between revisions.		
Actions taken to resolve the issue		Completion date	Remedial action status
We implemented a lot of additional validation reports in Nov 2019 which has improved performances in many areas of the business.		201911	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
It takes a while for new processes to show results but we are glad that our new processes show improvements in many areas & helped clear some non-compliances. Overtime we are confidence that the new validations we are working on will surely show more improvements.		2020	

12.8. Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)

Code reference

Clause 4 Schedule 15.2

Code related audit information

Only volume information created using validated meter readings, or if such values are unavailable, permanent estimates, has permanence within the reconciliation processes (unless subsequently found to be in error).

The relevant reconciliation participant must, at the earliest opportunity, and no later than the month 14 revision cycle, replace volume information created using estimated readings with volume information created using validated meter readings.

If, despite having used reasonable endeavours for at least 12 months, a reconciliation participant has been unable to obtain a validated meter reading, the reconciliation participant must replace volume information created using an estimated reading with volume information created using a permanent estimate in place of a validated meter reading.

Audit observation

NHH volumes 14-month revisions were reviewed for June to August 2018 to identify any forward estimate still existing.

Audit commentary

Review of the 14-month revisions for June to August 2018 showed that not all estimated meter readings had been replaced with validated meter readings. This is recorded as non-compliance below.

Month	Forward estimate
Jun-18	13,470.85
Jul-18	21,338.46
Aug-18	10.47
Total	34,819.78

I checked ten ICPs with forward estimate remaining and found it was caused by:

- **Manual amendments not processed correctly in nine instances.** Where Prime identifies ICPs that are missing from submissions in their pre submission reconciliation, the missing ICP and associated consumption is manually added. Due to a misunderstanding, in some cases only the total estimate field was updated instead of the total estimate and historic estimate. From December 2019, manual adjustments are no longer being carried out and Orion now makes such estimates permanent. Historic estimates are expected to improve by the end of 2020 when subsequent revisions occur.
- **Not treating estimated switch out reads as permanent estimates in one instance.** The closing estimate read type is not treated as actual in Orion. The closing estimate was expected to be corrected to be a permanent estimate at R14, but this was missed resulting in 6.25 kWh remaining as FE.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.8 With: Clause 4 of Schedule 15.2 From: Jun-18, Jul-18 and Aug-18 r14	Some estimates were not replaced by revision 14. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate and have been improved during the audit period but there is still room for errors to occur. Total forward estimate for the three months reviewed was 34,819 kWh. This was not true forward estimate, because most of the forward estimate was caused by incorrect classification of the historic estimate.		
Actions taken to resolve the issue		Completion date	Remedial action status
This has been another big project for us & we are pleased to say this has been put into action. The most recent 14month revision for 201812 was 100% HE		201912/202001	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have already implemented our new HE process and it already shows improvement. Revision for 201812 was submitted this month with 100% HE. We will be monitoring this over next few months.		202001	

12.9. Reconciliation participants to prepare information (Clause 2 Schedule 15.3)

Code reference

Clause 2 Schedule 15.3

Code related audit information

If a reconciliation participant prepares submission information for each NSP for the relevant consumption periods in accordance with the Code, such submission information for each ICP must comprise the following:

- *half hour volume information for the total metered quantity of electricity for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a)) for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):*
 - a) *any half hour volume information for the ICP; or*
 - b) *any non half hour volumes information calculated under clauses 4 to 6 (as applicable).*

- c) *unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in the period, the distributed unmetered load database, or other sources of relevant information. (clause 2(1)(c))*
- *to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
 - a) *the certification of the control device is recorded in the registry; or*
 - b) *the metering installation in which the control device is location has interim certification.*
- *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
 - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
 - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report. (clause 2(3)(b))*

Audit observation

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

Compliance with this clause was assessed:

- all Prime's ICPs have metering category 1 or 2 and are submitted as NHH,
- unmetered load submissions were checked in **section 12.2** and found to be correct,
- no profiles requiring a certified control device are used,
- no loss or compensation arrangements are required; and
- aggregation of the AV080 reports is compliant.

Audit outcome

Compliant

12.10. Historical estimates and forward estimates (Clause 3 Schedule 15.3)

Code reference

Clause 3 Schedule 15.3

Code related audit information

For each ICP that has a non-half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates must be allocated to consumption periods using the following techniques to create historical estimates and forward estimates. (clause 3(1))

Each estimate that is a forward estimate or a historical estimate must clearly be identified as such. (clause 3(2))

If validated meter readings are not available for the purpose of clauses 4 and 5, permanent estimates may be used in place of validated meter readings. (clause 3(3))

Audit observation

Review nine AV080 submissions for revisions 3 to 14, to confirm that historic estimates are included and identified.

Permanence of meter readings is reviewed in **section 12.8**. The methodology to create forward estimates is reviewed in **section 12.12**.

Audit commentary

I reviewed nine AV080 submissions for a diverse sample of months and revisions and confirm that forward and historic estimates are included and identified as such.

Audit outcome

Compliant

12.11. Historical estimate process (Clause 4 and 5 Schedule 15.3)

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

The methodology outlined in clause 4 of Schedule 15.3 must be used when preparing historic estimates of volume information for each ICP when the relevant seasonal adjustment shape is available.

If a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP must be the same as in clause 4, except that the relevant quantities kWh_{Px} must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by kWh_{Px} .

Audit observation

To assist with determining compliance of the Historical Estimate (HE) processes, Prime were supplied with a list of scenarios, and for some individual ICPs a manual HE calculation was conducted and compared to the result from Orion.

Audit commentary

In all cases, the calculated figure matched the total consumption for the ICP. Because in most cases, Prime ICPs are read as at the last day of the month, consumption between readings usually matches the consumption in the reconciliation period, minimising the risk of errors.

The table below shows that all scenarios which occurred during the audit period are calculating as expected and correct SASV (seasonal adjusted shape values) are applied.

Test	Scenario	Test Expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant

Test	Scenario	Test Expectation	Result
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Has not occurred
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Has not occurred
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Has not occurred
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Non-compliant
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Compliant, customer reads are not treated as validated reads
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Compliant, customer provided photo reads are not treated as validated reads
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

NSP changes are not being calculated correctly in Orion as NSP changes are not flowing through as expected resulting in the volume not being submitted against the correct NSP. The issue was discovered in August 2019. Agility are working on a fix for this. In the interim, NSP discrepancies are being checked and manually corrected as part of the end of month validation process. This is discussed in **sections 11.3** and **12.7**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.11 With: Clause 4 & 5 of Schedule 15.2 From: 01-May-19 To: 29-Nov-19	Scenario L calculating incorrectly. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate Prime have validations in place to identify NSP discrepancies and correct these until Orion is fixed. The impact is assessed to be low as corrections are flowing through revisions.		
Actions taken to resolve the issue		Completion date	Remedial action status
The GXP split works well for AMI meters but it failed for Legacy meters. Our validation process checks all GXP splits are data is calculated for Legacy meters using the scenarios test template & in Python.		202001	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This was fixed previously but due to additional fields being added, this stopped working. Our systems IT is already working on this fix and we are hoping to have this change implemented in Production in couple of months. Once the change is in place, we will continue the scenario test every quarter to ensure the GXP split is calculated correctly.		202006/07	

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

Forward estimates may be used only in respect of any period for which an historical estimate cannot be calculated.

The methodology used for calculating a forward estimate may be determined by the reconciliation participant, only if it ensures that the accuracy is within the percentage of error specified by the Authority.

Audit observation

The process to create forward estimates was reviewed.

Forward estimates were checked for accuracy by analysing the GR170 file for variances between revisions for 14 months.

Audit commentary

Prime attempts to gain end of month readings for each ICP supplied. In the event that an end of month reading cannot be obtained, forward estimate is created using the end of month read estimated for billing, which is based on the average daily consumption for the meter. Where no historical information is available, a “forward default” estimate of 25 units per day is used.

Before making submissions Prime reviews any ICPs with differences between revisions over $\pm 10\%$ and/or $\pm 2000\text{kWh}$. With the addition of a new team member and new reporting, these thresholds are expected to be reduced to improve submission accuracy.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within $\pm 15\%$ and within $\pm 100,000\text{kWh}$. The target was met for all but one balancing area of the revisions reviewed.

Quantity of balancing areas with differences over 15% and 100,000 kWh

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
Jun 2018	-	-	-	-	77
Jul 2018	-	-	-	-	76
Aug 2018	-	-	-	-	77
Sep 2018	-	-	-		77
Oct 2018	-	-	-		78
Nov 2018	-	-	-		79
Dec 2018	-	-	-		79
Jan 2019	-	-	-		79
Feb 2019	-	-	-		80
Mar 2019	1	1	1		80
April 2019	-	-			79
May 2019	-	-			80

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
June 2019	-	-			81
July 2019	-	-			82

The total variation between revisions at an aggregate level is shown below.

Month	Revision 1	Revision 3	Revision 7	Revision 14
Jun 2018	0.70%	0.11%	0.26%	-0.26%
Jul 2018	0.03%	-1.38%	-1.19%	-1.81%
Aug 2018	0.51%	0.10%	-0.09%	-0.02%
Sep 2018	0.35%	1.00%	1.01%	
Oct 2018	1.11%	1.71%	1.88%	
Nov 2018	-0.37%	1.44%	1.27%	
Dec 2018	0.14%	0.97%	1.10%	
Jan 2019	1.08%	1.20%	1.11%	
Feb 2019	-0.38%	-0.18%	-0.21%	
Mar 2019	6.02%	6.41%	6.17%	
April 2019	-0.29%	-0.12%		
May 2019	-0.36%	-0.61%		
June 2019	-0.45%	-1.14%		
July 2019	-0.60%	-0.39%		

I investigated the balancing area difference over the threshold, and the nine most recent balancing area differences of more than 30% and 2,000 kWh to confirm the reasons for the differences:

- All of the differences occurred prior to the refinement of the validation checks being put in place. This includes the one NSP which exceeded the threshold. This was due to an incorrect read being imported and not an incorrect FE calculation:

Balancing area	Month	kWh submitted for revision			
		0	1	3	7
BA1WESTPOCOG	Mar 19	351,808.49	66,437.72 88.25% HE	66,154.62 100% HE	66,238.04 100% HE

This is recorded as non-compliance in **section 12.7**.

Audit outcome

Compliant

12.13. Compulsory meter reading after profile change (Clause 7 Schedule 15.3)

Code reference

Clause 7 Schedule 15.3

Code related audit information

If the reconciliation participant changes the profile associated with a meter, it must, when determining the volume information for that meter and its respective ICP, use a validated meter reading or permanent estimate on the day on which the profile change is to take effect.

The reconciliation participant must use the volume information from that validated meter reading or permanent estimate in calculating the relevant historical estimates of each profile for that meter.

Audit observation

The registry list as at 21/11/19 and event detail report for 01/01/19 to 19/11/19 were reviewed to identify any ICPs which have had profile changes. Each profile change was checked to determine whether there was an actual or permanent estimate read on profile change date.

Audit commentary

Prime has only used the RPS and PV1 profiles.

Three ICPs had changes from RPS to RPS PV1 profiles upon addition of distributed generation. All had an actual read recorded on the date of the profile change

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

13.1. Provision of submission information to the RM (Clause 8 Schedule 15.3)

Code reference

Clause 8 Schedule 15.3

Code related audit information

For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:

- *Half hour submission information; or*
- *Non half hour submission information; or*
- *A combination of half hour submission information and non half hour submission information*

However, a reconciliation participant may instead use a profile if:

- *The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and*
- *The approved profile allows the reconciliation participant to provide half hour submission information from a non half hour metering installation; and*
- *The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.*

Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *trading period*

The non half hour submission information that a reconciliation participant submits must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *consumption period or day*

Audit observation

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in **section 2.1**.

Aggregation of NHH volumes is discussed in **section 12.3**.

Audit commentary

Submission information is provided to the reconciliation manager in the appropriate format and is aggregated to the following level:

- NSP code,
- reconciliation type,
- profile,
- loss category code,
- flow direction,
- dedicated NSP; and
- consumption period.

Aggregation factors for each ICP are checked against a registry list for the period prior to each AV080 and AV110 submission.

Compliance is recorded in **section 12.3** for AV080 NHH volumes aggregation.

Audit outcome

Compliant

13.2. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 Schedule 15.3

Code related audit information

When reporting submission information, the number of decimal places must be rounded to not more than two decimal places.

If the unrounded digit to the right of the second decimal place is greater than or equal to five the second digit is rounded up, and

If the digit to the right of the second decimal place is less than five, the second digit is unchanged.

Audit observation

I reviewed the rounding of data on the AV080 reports as part of the aggregation checks.

Audit commentary

Review of nine AV080 reports confirmed that submission information is appropriately rounded to two decimal places.

Audit outcome

Compliant

13.3. Historical estimate reporting to RM (Clause 10 Schedule 15.3)

Code reference

Clause 10 Schedule 15.3

Code related audit information

By 1600 hours on the 13th business day of each reconciliation period the reconciliation participant must report to the reconciliation manager the proportion of historical estimates per NSP contained within its non half hour submission information.

The proportion of submission information per NSP that is comprised of historical estimates must (unless exceptional circumstances exist) be:

- *at least 80% for revised data provided at the month 3 revision (clause 10(3)(a))*
- *at least 90% for revised data provided at the month 7 revision (clause 10(3)(b))*
- *100% for revised data provided at the month 14 revision. (clause 10(3)(c))*

Audit observation

The timeliness of submissions of historic estimate was reviewed in **section 12.2**.

I reviewed nine months of AV080 reports to determine whether historic estimate requirements were met.

Audit commentary

The quantity of historical estimates is contained in the submission file and is not a separate report. The proportion of HE in the revision files was checked for nine separate months, and the table below shows that compliance has not been achieved in all instances.

I checked all NSPs with forward estimate remaining at revision 14 for June to August 2018 and found it was caused by:

- **Manual amendments not processed correctly in nine instances.** Where Prime identifies ICPs that are missing from submissions in their pre submission reconciliation, the missing ICP and associated consumption is manually added. Due to a misunderstanding, in some cases only the total estimate field was updated instead of the total estimate and historic estimate. From December 2019, manual adjustments are no longer being carried out and Orion now makes such estimates permanent. Historic estimates are expected to improve by the end of 2020 when subsequent revisions occur.
- **Not treating estimated switch out reads as permanent estimates in one instance.** The closing estimate read type is not treated as actual in Orion. The closing estimate was expected to be corrected to be a permanent estimate at R14, but this was missed resulting in 6.25 kWh remaining as FE.

Quantity of NSPs where revision targets were met

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jun 2018			109	115
Jul 2018			111	114
Aug 2018			116	117

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jan 2019		119		119
Feb 2019		119		120
Mar 2019		120		120
Jun 2019	119			120
Jul 2019	120			122
Aug 2019	117			120

The table below shows that the percentage HE at a summary level for all NSPs is at or above the required targets for revisions 3 and 7, and at or below the targets for revision 14.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Jun 2018	-	-	99.73%
Jul 2018	-	-	99.59%
Aug 2018	-	-	100.00%
Jan 2019	-	98.98%	-
Feb 2019	-	99.05%	-
Mar 2019	-	99.07%	-
Jun 2019	98.73%	-	-
Jul 2019	98.39%	-	-
Aug 2019	97.97%	-	-

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 13.3</p> <p>With: Clause 10 of Schedule 15.3</p> <p>From: Jun-Aug 18 (r14), Feb 19 (r7) and Jun-Aug 19 (r3)</p>	<p>Historic estimate thresholds were not met for some revisions.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate as they were sufficient to ensure that most NSPs are close to the target values, but there is room for errors to occur.</p> <p>The impact is assessed to be low. Most of the forward estimate was caused by incorrect classification of the historic estimates and this is expected to be corrected going forward.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
We have implemented processes to ensure permanent estimates are created for sites not reads for 12months. We make all endeavours to gain actual reads however the access isn't always resolved, especially for earthquake damaged & construction sites.		202001/02	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have already implemented our new HE process and it already shows improvement. Revision for 201812 was submitted this month with 100% HE. We will be monitoring this over next few months.		202001	

CONCLUSION

Prime has continued to make improvements to resolve the issues identified in the last audit. The benefit of these will be more evident in the next audit as revisions are processed. Specifically, they have:

- deployed improved validation reporting with greater detail to identify and resolve discrepancies earlier,
- appointed an additional staff member to review and improve overall accuracy; and
- timeliness of registry updates has continued to improve year on year.

Some areas of improvement were identified:

- the accuracy of average daily consumption figures recorded in the CS files,
- if an actual read is sent in a CS file the last read date needs to align with this; and
- NSP changes are not working correctly in Orion which is a known issue, and these are being checked while Agility are working on a fix for this in Orion.

The team at Prime have a high level of expertise and I have every confidence that they will continue to improve the level of compliance.

The audit found 17 non-compliance issues and makes one recommendation. The breach risk rating total is 35, which gives an indicative next audit due date of 12 months. I have considered this in conjunction with Prime's comments and agree with this recommendation.

PARTICIPANT RESPONSE

Over the past years, we have noticed that different Distributors have different pricing methodology which creates a lot of unnecessary workload for retailers. Is there anything EA can do to streamline the pricing methodologies? There are also so many different tariffs amongst the networks and unfortunately; the MEPs no longer supply meters to meet these tariff requirements, and the retailers must find ways to breakup up the consumption data into these tariffs. Example: POCO offers Weekday Day, Weekday Night & Weekend tariffs but the MEPs cannot configure the meters to report this consumption. And every Network have different hours set to Day & Night. Hope something can be done about this soon because it's not feasible for retailers/traders to setup different systems for different Distributors.

Moving to our progress over the last few months; we invested a lot of our resources in designing additional reports & programs to validate our submissions, and data against the Registry info. It's great to see our hard work led to an overall performance improvement. We are pleased the percentages show improvements in all areas but there is still a long way to go.

We are aware that some of our non-compliance are still existing from previous audits and we might never be able to clear these. Example: Late NWs. Any switch withdrawals for a backdated switch will almost always result in a non-compliance because it is measured from the CS event date & not the CS completion date (Input Date). The withdrawal should be measured against the Input date. We don't hesitate to initiate or accept withdrawals outside the 60 business days. Withdrawals are an opportunity to correct an error, and data correction is very important to us. We are glad to hear the Registry Switch Breach Report is under review and a fix is coming soon. We are looking forward to this.

Our focus this year will be on 14months HE, split NSP, ANZSIC codes, CS file average consumption, DUMML, and improving our Registry update performance. We have implemented the ANZSIC code validation process already, so we are expecting few backdated updates on the Registry. Our team is also working on the new Registry Compliance Report which we found very useful. Thank you to the person who came up with this new report because prior to this, it was very difficult to measure our performance in this area. We will utilise this report to improve our performance moving forward. Our IT team have already made some changes on the NSP split so we are currently at testing stage. They are also working on the average daily consumption, so once both jobs have passed testing, we will release them to production. Our DUMML databases are also due to be audited next year so we will be working on that as well.

I hope the EA gives us enough time till the next audit to allow for this change to take place & revision files to reflect the improvements.

It's a big year ahead of us and we are looking forward to making a positive difference.