

**ELECTRICITY INDUSTRY PARTICIPATION CODE  
RECONCILIATION PARTICIPANT AUDIT REPORT**

For

**PIONEER ENERGY**

Prepared by: Ewa Glowacka  
Date audit commenced: 20 March 2019  
Date audit report completed: 30 April 2019  
Audit report due date: 30-Apr-19

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## EXECUTIVE SUMMARY

This reconciliation participant audit was performed at the request of Pioneer Energy (PION) to support their application for certification, in accordance with clauses 4 of Schedule 15.1 of The Code 2010. The relevant clauses audited are as required by the Guidelines for Reconciliation Participants Audits V 7.1 issued by the Electricity Authority.

Pioneer Energy trades both NHH and HHR customers. At the time of the audit, 1,854 ICPs were reconciled as NHH, and 275 as HHR. HHR ICP management is done by EMS on behalf of Pioneer Energy. Pioneer manages NHH ICPs meter reading (WELLS and MEPs) and submission of volumes to the reconciliation manager.

The audit found 22 non-compliances. The level of compliance has not changed since the last audit.

The main issues identified during this audit are:

- Incorrect status assigned to ICPs traded on the EDCL embedded networks
- Late CS files for switch move
- Incorrect registry information for DUML and UML ICPs
- Incorrect ORION calculation for some NHH scenarios

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Reconciliation Participant audit provides some guidance on this matter. The Future Risk Rating score is 39 which results in an indicative audit frequency of 12 months. We agree with the result.

We thank Pioneer Energy's staff for their full and complete cooperation in this audit. Their response to any request for information or clarification was answered in a timely manner and each time in depth, supporting evidence was provided

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	11.2	Incorrect or missing information for a small number of ICPs	Moderate	Low	2	Identified
Provision of information	2.2	15.35	Two breaches recorded in relation to inaccurate submission	Moderate	Low	2	Identified
Changes to registry information	3.3	10 of Schedule 11.1	Delayed updates to ICPs "active" status (34.3%), late trader's updates to registry (12.8%)	Moderate	Low	2	Identified
Changes to registry information	3.5	9 of Schedule 11.1	Registry information not updates within 5 business days of the event for a small number of ICPs	Moderate	Low	2	Identified
ANZSIC codes	3.6	9(1)(k) of Schedule 11.1	Incorrect ANZSIC code for six ICPs	Moderate	Low	2	Identified
Changes to unmetered load	3.7	9(1)(f) of Schedule 11.1	Incorrect information in "Daily Unmetered kWh" field for standard and distributed unmetered load	Moderate	Low	2	Identified
Management of "active" status	3.8	17 of Schedule 11.1	A number of ICPs have incorrectly assigned "inactive" status when they should be "active"	Moderate	Low	2	Identified
Management of "inactive" status	3.9	19 of Schedule 11.1	The status "Inactive-Reconciled elsewhere"(1,5) incorrectly assigned to 158 ICPs	Weak	Low	3	Identified
Losing trader response to switch	4.2	4 of Schedule 11.3	The event date nominated by PION was up to 12 business	Strong	Low	1	Identified

request and event dates - standard switch			days before the date of receipt of notification for 65 ICPs (ex PLEL)				
Losing trader must provide final information – standard switch	4.3	5 of Schedule 11.1	Late CS files for 19 standard switches	Weak	Low	3	Identified
Traders must use the same readings – standard switch	4.4	6A of Schedule 11.3	One RR file	Strong	Low	1	Identified
Losing trader provides information - switch move	4.8	10(1) of Schedule 11.3	Final information for 33 ICPs was provided to the registry later than 5 BD	Moderate	Low	2	Identified
Gaining trader to advise the registry manager - gaining trader switch	4.14	16 of Schedule 11.3	Switching for four ICPs was finalized late	Moderate	Low	2	Identified
Distributed unmetered load	5.4	11(1)(2)(c)(d)(2A) of Schedule 15.3	The Grey District Council database does not meet all requirements	Moderate	Low	2	Identified
Electricity conveyed	6.1	10.24(c)	Subtraction are used to determine submission information for 1002050361LC60D	Strong	Low	1	Identified
NHH meters interrogated annually	6.9	8(1) of schedule 15.2	The target of 100% was not achieved for a small number of NSPs	Strong	Low	1	Identified
NHH meters 90% read rate	6.10	9(1) of schedule 15.2	The target of 90% was not achieved	Strong	Low	1	Identified
HHR	11.4	15.8	HHRAGGR files do not	Strong	Low	1	Not

aggregates information provision to the reconciliation manager			contain electricity supplied information				required. The Code change required a line up with RN file specification. Breach risk rating excluded from total
Accuracy of submission information	12.7	15.12	Incorrect submission for NSY0331 (Jan'18, rev14)	Moderate	Low	2	Identified
Permanence of meter readings for reconciliation	12.8	4 of Schedule 15.2	Permanence of meter reading for the period Apr'17 to Jan'18 not achieved	Moderate	Low	2	Identified
Reconciliation participant to prepare information	12.9	2 of Schedule 15.3	Incorrect submissions for UML & incorrect profile	Strong	Low	1	Identified
Historical estimate process	12.11	4 of Schedule 15.3	Incorrect calculation of historical estimates for some scenarios conducted by ORION	Moderate	Low	2	Identified
Historical estimates reporting to RM	13.3	10 of Schedule 15.3	Historical estimates target not met for revision 3, and 7 for some NSPs	Moderate	Low	2	Identified
Future Risk Rating						39	

Future risk rating	0-1	1-3	4-15	16-40	41-55	56+
Indicative audit frequency	36 months	24 months	18 months	12months	6 months	3 months

## RECOMMENDATIONS

Subject	Section	Description	Recommendation
Changes to unmetered load	3.7	Incorrect information in the field "Unmetered Load Details – Trader" for 0000950091WP5EB and 0000950092WP92B	Replace wording in the field "Unmetered Load Details – Trader" for 0000950091WP5EB and



			0000950092WP92B with "DUML" or similar
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## ISSUES

Subject	Section	Description	Issue
Electricity conveyed	6.1	Subtraction is used to determine submission information for 1002050361LC60D	Incorrect design of the metering installation for 11 kV supply Auckland Hospital

## 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.

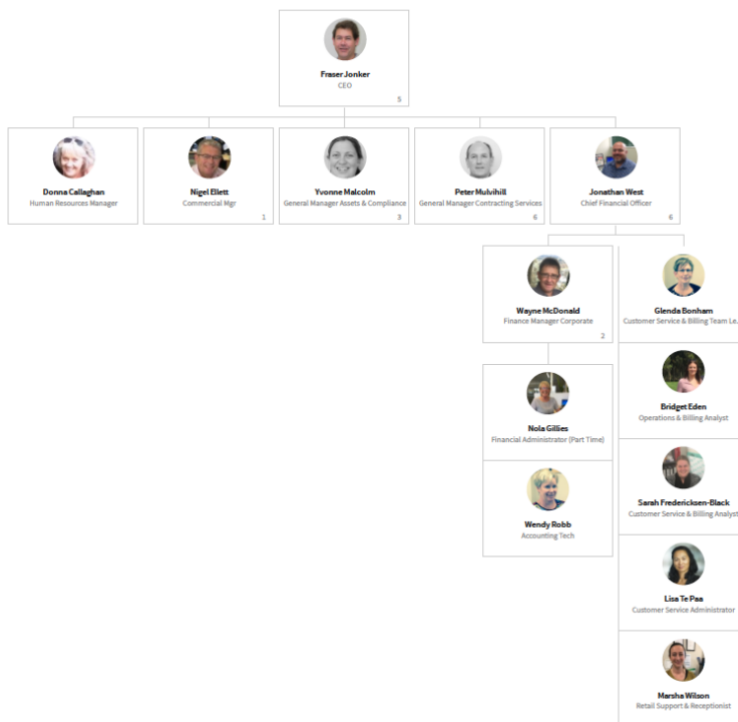
#### Audit observation

Pioneer Energy does not have any exemptions granted to exempt them from compliance with all or any of the clauses.

#### Audit commentary

Pioneer Energy did not apply for any exemptions. We checked the Electricity Authority website and confirm that there are no exemptions in place.

### 1.2. Structure of Organisation



### 1.3. Persons involved in this audit

Name	Title	Company
Sarah Fredericksen-Black	Customer service & Business Analyst	Pioneer Energy

Glenda Bonham	Customer service/Administrator/Finance	Pioneer Energy
Bridget Eden	Customer service & Business Analyst	Pioneer Energy
Jonathan West	Chief Operating Officer	Pioneer Energy
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates

#### 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

Pioneer Energy engages two agents, WELLS for the provision of NHH data, and EMS for the management of HHR ICPs.

##### Audit commentary

As a part of this audit we reviewed the WELLS and EMS audit reports. We also reviewed an agreement between Pioneer Energy and EMS. It is the same agreement as last year. On 26/03/19 Pioneer Energy renewed the Data Services Agreement (DSA) dated 1st December 2016 for a further 2 year period.

The audit report for WELLS dated 21/06/18 and EMS dated 17/05/18 were reviewed as part of this audit. Whilst the EMS and WELLS audits are older than seven months. We have received assurance from EMS that there have been no changes in their services provided to Pioneer Energy, therefore we are confident in using the report as part of this audit. We contacted the auditor of Wells, coming up a new audit in May'19), and she commented that there we no changes to WELLS's process which could negatively impact their compliance

The EDMI and AMS (HHR agent) audit report dated 28/05/18 was also reviewed.

#### 1.5. Hardware and Software

Pioneer Energy uses ORION software for the management of NHH ICPs (meter readings and reconciliation files). This software is also used to bill both NHH and HHR customers. ORION software is supported by AgilityCIS based in Auckland.

#### 1.6. Breaches or Breach Allegations

Reference	Status	Target EGR date	Severity	Code	Summary
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1807PION1	closed	3/10/18	low	Part 15 clause 15.2 (1)	Pioneer Energy Limited (PION) has failed to provide accurate and complete information to the Reconciliation Manager on BD 4 by 16:00
1808PION1	closed	4/12/18 12:00 AM	low	Clauses 11.18 and 9 to 20 of schedule 11.1	Pioneer failed to update registry information for an ICP so that the customer was not billed for 10 months. Rules: Clauses 11.18 and 9 to 20 of schedule 11.1
1811PION1	closed	13/02/19 12:00 AM	low	Part 11 Schedule 11.3 clause 10 (1) (b)	To ensure any further disruption to the customers involved in Payless's default Pioneer Energy Ltd took the switch date back to the 1st November 2018 thus breaching the switching timeframes.
1902PION1	May 2019 Compliance Meeting	8/05/19 12:00 AM	no breach	Part 15 clause 15.2	The RM identified a discrepancy in UFE within CYD0331 and CML0331 on 10th January 2019 and informed PION. PION reviewed and raised a volume dispute on 11th January 2019 and provided corrected submission data on 14th January 2019.

### 1.7. ICP Data

Metering Category	(07/03/2019)	(22/03/18)	(25/05/17)	(11/01/17)
1	1,664	1,143	1,205	8
2	240	285	298	24
3	98	124	117	15
4	49	56	46	5
5	10	11	17	0
9	11	6	10	0

Status	Number of ICPs (07/03/2019)	Number of ICPs (22/03/18)	Number of ICPs (25/05/17)
Active (2,0)	1,906	1,349	1,428
Inactive – new connection in	15	1	0

progress (1,12)			
Inactive – electrically disconnected vacant property (1,4)	19	10	5
Inactive – electrically disconnected remotely by AMI meter (1,7)	1	1	0
Inactive – electrically disconnected at pole fuse (1,8)	2	2	2
Inactive – electrically disconnected due to meter disconnected (1,9)	1	1	1
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	1	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	6	7	2
Inactive – reconciled elsewhere (1,5)	159	258	270
Decommissioned (3)	25	5	0

#### 1.8. Authorisation Received

Pioneer Energy provided a letter of authorisation to TEG & Associates permitting the collection of data from other parties for matters directly related to the audit.

#### 1.9. Scope of Audit

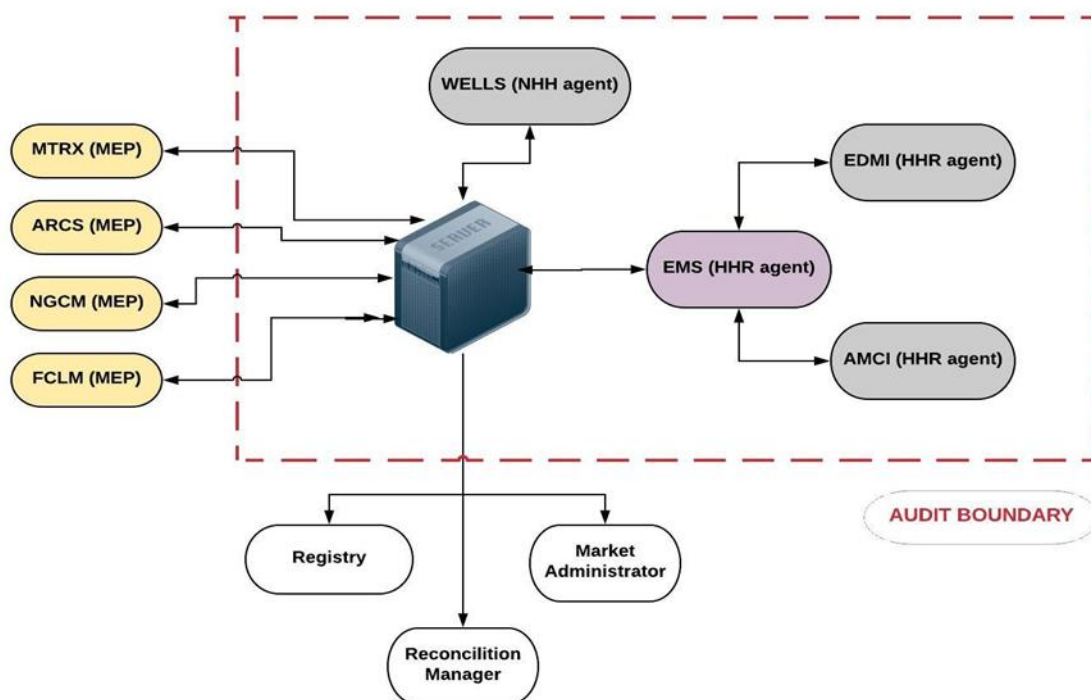
This reconciliation participant audit was performed at the request of Pioneer Energy to encompass the Authority’s request for annual audits as required by clause 2, of Schedule 15.1, of the Code to assure compliance with the Electricity Industry Participation Code 2010.

The audit was carried out on the Pioneer premises in Alexandra, on the 20 & 21 March 2019.

The audit covers the following processes under clause 15.38 of Part 15, performed by Pioneer Energy:

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Relevant to audit	Agents Involved in Performance of Tasks
(a) - Maintaining registry information and performing customer and embedded generator switching	✓	
(b) – Gathering and storing raw meter data	✓	WELLS,FCLM,MTRX,AMS – NHH meter readings EMS, AMCI, EDMI (3 ICPs)– HHR meter readings

(c)(i) - Creation and management of HHR volume information	×	
(c)(ii) - Creation and management of NHH volume information	×	
(c)(ii) - Creation and management of HHR and NHH volume information	✓	EMS – HHR ICPs EMS – DUML ICPs
(c)(iv) - Creation and management of dispatchable load information	×	
(d)(i) – Calculation and delivery of ICP days under clause 15.6	✓	EMS – HHR ICPs
(d)(ii) - delivery of electricity supplied information under clause 15.7	✓	EMS – HHR ICPs
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	✓	EMS – HHR ICPs
(e) – Provision of submission information for reconciliation	✓	EMS – HHR ICPs
(f) - Provision of metering information to the grid owner in accordance with subpart 4 of part 13	×	



### 1.10. Summary of previous audit

The previous audit was conducted by Ewa Glowacka of TEG & Associates in May 2018. The audit identified the following non-compliances:

Subject	Section	Clause	Non-Compliance	Comment
Relevant information	2.1	11.2, 15.2	Incorrect ANZSIC code for some ICPs. Incorrect information in registry for type of profile assigned to some ICPs	Still exists
Changes to registry information	3.3	10 of Schedule 11.1	Delayed updates to ICPs "active" status (60%), late trader's updates to registry (27.3%)	Still exists
Provision of information the registry manager	3.5	9(1)(j) of Schedule 11.1	The status for five ICPs (new connections) were updated to "active" late. Incorrect information for some DUML and UML ICPs	Still exists
ANZSIC codes	3.6	9(1)(k) of Schedule 11.1	10 ICPs have incorrect ANZSIC codes assigned	Still exists
Changes to unmetered load	3.7	9(1)(j) of Schedule 11.1	Incorrect code in the field "Daily kWh" is used for street lights ICPs. Incorrect information in the "Daily Unmetered kWh" field for two ICPs.	Still exists

Management of “active” status	3.8	17 of Schedule 11.1	A number of ICPs have incorrectly assigned “inactive” status when they should be “active”	Still exists
Losing trader must provide final information – standard switch	4.3	5 of Schedule 11.3	CS file sent late for 11 ICPs by one day. Incorrect type of reading in one CS file	Still exists
Traders must use the same readings – standard switch	4.4	6A of Schedule 11.3	8 RR files were sent later than 4 months	Still exists
Losing trader provides information – switch move	4.8	10(1) of Schedule 11.3	19 CS files for switch move were sent later than 5 BD	Still exists
Gaining trader to advise the registry manager - gaining trader switch	4.14	16 of Schedule 11.3	Switch for ICP 0000592189UN5AE was finalized late by one day	Still exists
Withdrawal of switch requests	4.15	17 of Schedule 11.3	NW for one ICP was late	Cleared
Distributed unmetered load	5.4	11 of Schedule 15.3	Inaccurate submission information for PowerNet database	Cleared
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHRAGGR files do not contain electricity supplied information	Still exists
Historical and forward estimates	12.11	4 of Schedule 15.3	Incorrect calculation of historical estimates for some scenarios conducted by ORION	Still exists



Historical estimates reporting to RM	13.3	10 of Schedule 15.3	Historical estimates target not met for revision 3, and 7 for most of NSPs	Still exists
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## 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

To assess compliance with these clauses we examined the process of validating information in the registry. The LIS file dated 17/03/19 was examined to identify any inaccuracies. The Event Detail (EDA) file for the period 16/03/18 to 15/02/19 was examined to determine how quickly Pioneer Energy provides information to the registry and corrects information which was identified as inaccurate.

#### Audit commentary

The LIS and Metering Installation Information (PR-255) files were analysed, the results are shown below:

Issue	Quantity	Comments
ICP Status = 002, MEP = blank, UNM Flag = N	1	1002050361LC60D (supply to Auckland Hospital), MEP uploaded data during the audit
ICP Status = 002, Generation Capacity is not blank,	21	
Highest Metering Category >2 with residential ANZSIC code assigned (000000)	1	1001263094UN29D, it was corrected before the report was finalised
ANZSIC code = blank or T994, T994000, T99, T999, T999999, T995, T995000, T997, T997000, T998, T998000	0	No evidence of this occurring
ICP with B or G Inst Type, or non-null Fuel or Gen Capacity that do not have a corresponding Injection Register	2	0000654465WP00D 0003350420ML3CE
Highest Metering Category greater than 2,	0	No evidence of this occurring

Submission Type HHR = No		
Highest Metering Category = 9, UNM Flag=N	0	No evidence of this occurring
All active ICPs with Initial Energisation Date populated during a defined period	47	
All Active ICPs (ICP Status = 2) with Shared ICP List not blank	0	No evidence of this occurring
All ICPs at ICP Status 001,12	15	
Submission Type HHR = Y, Profile does not contain HH	0	No evidence of this occurring
Submission Type HHR and Submission Type NHH both = Y	0	No evidence of this occurring
All active ICPs where Distributor has indicated UML (UML Load Details not NULL) but Retailer has none (UNM Flag = N)	0	No evidence of this occurring
All active ICPs with UNM Flag = Y	24	
All active ICPs with load in excess of 6kWh (Daily Unmetered kWh greater than 16.4 daily)	0	No evidence of this occurring
All active ICPs with load between 3-6k kWh (Daily Unmetered kWh between 8.2-16.4 daily)	0	No evidence of this occurring
All active ICPs with Engineered profile (Daily Unmetered kWh = ENG)	3	There are 3 ICPs using profile DST (0001982479TGE75, 0008801005TPE67, and 0008801015TP4CA).

We sampled three requests for ICP decommissioning. Pioneer Energy provided documents from contractors. We compared information in the documents with the information in the registry. We found that for one of them the incorrect date of “inactive- ready for decommissioning” status was entered. It was a typo. Instead 03/12/2018, it was typed 03/10/2018.

### Audit outcome

#### Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: 11.2 & 15.2 From: 16-Mar-18 To: 15-Feb-19	Incorrect or missing information for a small number of ICPs Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>

<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
B or G installation type, but no corresponding injection meter: Pioneer Energy has liaised with the Customer and local networks to gain further information. The generation on site provides back-up supply in case of grid outage. Generation is not exported to the grid and therefore a regular meter is sufficient.		May 2019	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
New customer processes are in place and documented in Promapp to communicate with new customers to gain and confirm information relating to ANZSIC codes, onsite generation and UML details.		May 2019	

## 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

The process to provide information in accordance with Part 15 was reviewed throughout the audit.

### Audit commentary

In **section 1.6**, we noted three breaches in relation to the provision of information in accordance with Part 15.

### Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 2.2 With: 15.35 From: 16-Mar-18 To: 15-Feb-19	Two breaches recorded in relation to inaccurate submissions Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>	<b>Completion date</b>	<b>Remedial action status</b>	
The first was inaccurate volume on one ICP, which was corrected within an hour of identification of the RM The second was deemed a no breach as Pioneer had relied on information in the registry.	July 2018 Feb 2019	Identified	
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>		
Documented processes are in place for the checking of submission files prior to submission including assessing volume and number of ICP discrepancies and amending prior to submission. We are in the process of building system capability to enable automated checking and exception reporting to decrease the reliance on manual processes	May 2019 May 2020		

### 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

NHH ICPs are read by WELLS and meter reads delivered via FTP. Meter readings are delivered daily.

At the time of audit we identified that Pioneer Energy received, once a month, meter readings from UTL loggers (Utility Technology). These readings were for 60 ICPs which are located within the embedded network at 28 Torrens Terraces in Wellington. Readings were sent via email, which was not password protected.

As of 18 April 2019, Pioneer Energy asked Wells to take over the provision of meter readings for all these ICPs. Wells will be providing meter register reads of FCLM meters, who is MEP service provider.

HHR ICP metering data is handled by EMS.

### **Audit commentary**

EMS receive data for some ICPs via FTP server .

NHH readings are transferred from Wells and MEPs using SFTP.

NHH reconciliation files are uploaded by Pioneer Energy via the RM portal. The same submission method is used by EMS.

The only other exchange of data, related to metering information, will relate to details when a meter change is requested. This information will be exchanged with MEPs and traders via emails. The transmission of metering data is secure using SFTP server.

### **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**

We checked the audit trail for all data gathering, validation, and correction during the audit.

### **Audit commentary**

Pioneer Energy communicate with the registry using ORION functionality. ORION has a built-in functionality to record a complete audit trail for all data gathering, validation, and processing data.

We viewed the audit trail of files downloaded from the registry. Reconciliation files are uploaded via the RM portal, which records date, time and a participant's login details.

Pioneer Energy communicates with other participants via email e.g. notification of sending RR file or any rejected switches. Emails are archived.

### **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**

We reviewed the Residential General Terms and Conditions and the Commercial General Terms and Conditions provided by Pioneer Energy.

### **Audit commentary**

Section 1 of these agreements explains that this agreement extends to the full term of the arrangement.

### **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

We reviewed the Residential General Terms and Conditions and the Commercial General Terms and Conditions provided by Pioneer Energy.

### Audit commentary

Section 10 of the Residential General Terms and Conditions is dedicated to "Access to Property". Pioneer Energy is committed to complying with the above requirements. The company will use its best endeavours to provide access to premises, but any Health & Safety requirements imposed by a customer must be taken into consideration as Pioneer Energy trades high category metering installations.

### 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 LIS file dated 07/03/19 was reviewed.

### Audit commentary



Pioneer Energy trades category 1 to 5 metering installations. We discussed with Pioneer Energy if such a possibility exists, but they do not have the knowledge. Pioneer Energy rely on ATHs, who certify metering installations, to include additional compensation factors if required. We also followed up with EMS, which reconciles HHR volumes of higher category metering installations on behalf of Pioneer Energy. According to their audit report, section 8.3 “there is one example where loss compensation is required”. The ICP mentioned in the audit report is not traded by Pioneer Energy.

### 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

Pioneer Energy provided the Residential General Terms and Conditions and Commercial General Terms and Conditions to assist in the assessment of compliance.

### Audit commentary

Section 17.5 of both Terms and Conditions states, "if we commit an Event of Default, the Electricity Authority may assign our rights and obligations under this Agreement to another electricity retailer ("Recipient Retailer").

#### **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**

We reviewed the registry files for the period covered by this audit. The process for new connections was examined.

Since the last audit Pioneer Energy gained 32 new connection ICPs. Pioneer Energy have had arrangements in place with a MEP before requesting the connection of a point of connection.

#### **Audit commentary**

We walked through 10 new connections; it was confirmed that the process was followed. As soon as Pioneer was notified about a new connection, the status was changed in the registry to "new connection in progress" (1,12) and an MEP was nominated. Once metering was installed and the installation electrically connected, the status of the ICP was changed to "active".

#### **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**

Pioneer Energy was not asked by any MEP nor did they authorise any MEP to temporarily electrically connect a point of connection.

#### **Audit commentary**

Compliance confirmed by a verbal assurance from Pioneer Energy.

#### **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 process for new connections and the connection/disconnection of existing installations was examined. The process for new connections was analysed in **section 2.9**.

The EDA file for the period 16/03/18 to 15/02/19 was analysed.

#### **Audit commentary**

We confirm that all new connections were electrically connected after PION was recorded in the registry as a proposed trader and all installations are metered. All connections were approved by networks, ICPs were issued on the request of customers.

The company provided, for review, ten examples for reconnection and disconnection. We confirm that the process is robust and well implemented.

#### **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

Pioneer Energy has agreements in place with all MEPs for each metering installation at the ICP traded by them.

Pioneer Energy has arrangements in place for line function services where they intend to trade.

### Audit commentary

Line charges for each ICP are reflected on a customer invoice. Section 14 of the Terms and Conditions describes the customers' obligation in relation to line companies.

### 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 LIS file was analysed.

### Audit commentary

Pioneer Energy have the following MEPs assigned to ICPs in the registry MEPs; AMS, ARCS, MTRX, FCLM, CTCT, TRUM, TPCO, LMGL, ELIN, TPCO, DELT, NPOW, WATA, SMCO, and BOPE.

The arrangements are finalized with AMS, FCLM, LMGL, TRUM, MTRX.

For other MEPs the company comments were as below:

- DELT confirmed that a contract was not required
- ELIN / TPCO confirmed that no contract is required for legacy meters
- SMCO is covered by the AMS agreement
- NPOW confirmed that no contract was required
- BOPE – arrangement in place

- CTCT – arrangement in place
- WATA - arrangement in place

**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 process for new connections was reviewed as per **section 2.9**.

#### Audit commentary

We reviewed 10 new connections and compliance is confirmed.

#### 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. The LIS and EDA files were examined to check the correctness of information and if the registry was notified in the timeframe specified by a relevant clause.

### Audit commentary

The process was described in section 2.9. The process is well understood and followed by the team. The most challenging area is to obtain metering information from MEPs as an installation is electrically connected. This is described in **section 3.3**.

### 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

We analysed the EDA file for the period 16/03/2018 to 15/02/2019. We reviewed the timeliness of updates. We used the extreme case methodology examining the most backdated entries to the registry.

### Audit commentary

Activity	Status code	No updates	of updates later than 5BD	Date range of updates [BD]	Comment
Status (2,0)	Active	67	23 (34.3%)	Up to 257BD	Last year's audit identified 60% late 0003332765TG417 – 257 BD; self-breach was lodged with the Authority
Status (1,12)	New connection in progress	47	0		
Status (1,4)	Electrically disconnected - vacant	9	9		
Status	Electrically	1	0		

(1,11)	disconnected at meter box switch				
Status (1,6)	Electrically disconnected – ready for decommissioning	9	6	Up to 145 BD	
Trader		304	39 (12.8%)	Up to 365	Many backdated entries are updates of ANZSIC code. Last year's audit identified 24.3% late entries

The level of compliance has improved since the last audit. The timeliness of updates to ICPs status has improved significantly. The company commented that the main reason for late updates to status “active” is late updates from electricians and MEPs of the Initial Electrical Connection Date.

### Audit outcome

#### Non-compliant

Non-compliance	Description	Completion date	Remedial action
Audit Ref: 3.3 With: 10 of Schedule 11.1 From: 16-May-17 To: 15-Mar-18	Delayed updates to ICPs “active” status (34.3%), late trader’s updates to registry (12.8%) Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. Backdating status changes have a minor impact on settlement outcomes because usually it happens within the same reconciliation month. Audit Risk Rating is recorded as low.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action</b>
Electrically disconnected ready for decommissioning – back dating of entries comprised a number of unique instances; Meter reader discovery of BTS to permanent supply during switch process, Demolition of buildings and removal/changing of meters by customers without PION involvement.		May 2019	Identified



Preventative actions taken to ensure no further issues will occur	Completion date	
Delays identified have been due to late notification by electricians and MEPs. Increased follow up and chasing of relevant parties	Ongoing	

### 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

The LIS file dated 07/03/19 was analysed. The decommissioning process was reviewed.

#### Audit commentary

We confirm that all ICPs, excluding UML, have an MEP recorded in the registry. Pioneer Energy understands that as soon as they are recorded in the registry as accepting responsibility, its responsibility will only cease when an ICP switches to another trader. Pioneer Energy provided five requests asking for the decommissioning of ICPs. We confirmed the process was followed but for some the registry was late to be updated.

#### 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 LIS file was analysed to evaluate information populated in the registry. The new connection process was examined.

## Audit commentary

The LIS file was analysed to evaluate information populated in the registry.

The new connection process was examined in detail. We analysed the EDA and LIS files to evaluate the updating of the registry in relation to new connections Pioneer Energy has a robust controls in place to ensure new connections are updated as soon as possible. A few examples are shown below:

ICP	Initial Electrical Connection Date	Status changed to "Active"	BD
0000508004CE32B	22/08/18	12/09/18	16
0000508092CED43	15/09/18	27/09/18	9
1000577880PC682	25/09/18	04/10/18	8
0000507710CEEEE	05/07/18	16/07/18	8
0000507261CE2F3	20/03/18	29/03/18	8
0000507116CE967	09/05/18	21/05/18	9

0000506741CEB03	06/06/18	15/06/18	7
0007188005RN2DB	15/03/19	12/04/19	21
0001780231TG194	03/10/18	23/10/18	14

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: 9 of Schedule 11.1  From: 16-Mar-18 To: 15-Feb-19	Registry information not updates within 5 business days of the event for a small number of ICPs  Potential impact: Low  Actual impact: Low  Audit history: Once previously  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Delays identified have been due to late notification by electricians and MEPs. Increased follow up and chasing of relevant parties		Ongoing	

### 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 LIS file was analysed to evaluate information populated in the registry.

### Audit commentary

We identified one ICP with an incorrect ANZSIC code, ICP is 1001263094UN29D. ANZSIC code of “0” (residential) is assigned but it is a category 4 metering installation, which is the connection to Retirement Village.

1001280936LC687 had ANZSIC code assigned C121400 (Wine and Other Alcoholic Beverage Manufacturing) which was changed to Q860100 (Aged Care Residential Services).

We also identified four ICP s for which incorrect codes of E301100, E301, and E302 were assigned.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: 9(1)(k) of Schedule 11.1 From: 16-Mar-18 To: 15-Feb-19	Incorrect ANZSIC code for six ICPs Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
ANZSIC codes updated for the six legacy ICP identified		May 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
ANZSIC codes are assessed as part of the customer onboarding process. A n assessment of ANZSIC codes for existing customers has been undertaken (see 3.3 audit commentary above)		May 2019	

### 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 LIS file was analysed.

### Audit commentary

On 01/02/19 Grey District Council street lights switched to Pioneer Energy ( 5 ICPs, 0000950020WPB1C, 0000950040WP4EC, 0000950090WP9AE, 0000950091WP5EB , 0000950092WP92B).

Daily kWh are recorded in the registry, which were not updated by a previous trader for a number of years. The information is incorrect as Grey DC is in the process of rolling out LED lighting. The code ENG should be used. In this field.

0000950091WP5EB and 0000950092WP92B should have, as other ICPs, word “DUML” recorded in the field “Unmetered Load Details – Trader” instead number of lights and its wattage.

We reviewed the registry information for ICPs to which a settlement type of UNM is assigned and found some information incorrect.

- 0000003000ED403 – reconciliation type SB, UML of 1.0 kWh per day is assigned which is incorrect
- 0000479017CEA33 – daily kWh is recorded as 1 kWh, it should be 0.83 kWh
- 0000075272CE0B4 - daily kWh is recorded as 1 kWh, it should be 12.56 kWh
- 0000444105WPAC1 - daily kWh is recorded as 0.15 kWh, it should be 0.36 kWh
- 0000794436NV646 - daily kWh is recorded as 0.05 kWh, it should be 0.1 kWh

### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.7 With: 9(1)(f) of Schedule 11.1  From: 01-Feb-19 To: 15-Feb-19	Incorrect information in “Daily Unmetered kWh” field for standard and distributed unmetered load  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Moderate  Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating

<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
UML in the Registry has been corrected for the ICP detailed		May 2019	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
PION will look to amend the process for ICP 000950091WP5EB and 0000950092WP92B			

Description	Recommendation	Audited comment	party	Remedial action
Incorrect information for DUML for Grey DC	Replace wording in the field "Unmetered Load Details – Trader" for 0000950091WP5EB and 0000950092WP92B with "DUML" or similar			

### 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 be 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 1 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 EDA file was reviewed.

### Audit commentary

The review showed that for some ICPs the status in the registry is incorrect or updates are backdated by many days. In **section 3.3** it was noted that 34.3% of updates of the “active” status was later than 5BD. It is an improvement on last year. Pioneer Energy changed their internal process so that as soon as Pioneer receives notification of livening from a MEP the status is updated to ‘active’ in the registry. Previously Pioneer was waiting for the MEP to update the meter details before the status was updated to “active”.

We sampled ten new connections to compare the Active Date assigned by PION with the metering installation date populated by a MEP and Initial Electrical Connection Date populated by a distributor.

We came across two instances where the date did not match. In both instances Pioneer Energy corrected the registry entry.

ICP	PION “Active” Date	Metering Installation Date	Initial Electrical Connection date	Comment
0000507601DEF19	22/09/19	12/02/19	12/02/19	PION corrected the date
0000033770EAF52	08/01/19	11/02/19	14/01/19	
0000507369DE7F8	26/08/18	11/09/18	22/08/18	
0007188005RN2DB	15/03/19	15/03/19	16/02/19	

### Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 3.8</p> <p>With: 17 of Schedule 11.1</p> <p>From: 16-Mar-18</p> <p>To: 15-Feb-19</p>	<p>A number of ICPs have incorrectly assigned “inactive” status when they should be “active”</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>	
Audit risk rating	Rationale for audit risk rating	
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them to achieve compliance. The process needs to be refined. Audit risk ratings is low, minor impact on settlement outcomes.	
Actions taken to resolve the issue	Completion date	Remedial action status
Dates corrected as per paperwork provided form MEP	Ongoing	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	

### 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 LIS and EDA files were analysed to assess compliance. The process for reconnection and connection was examined in **section 2.11**.

#### Audit commentary

Analysis of the LIS file showed 158 ICPs with the status “Inactive- Reconciled elsewhere” (1,5). All these ICPs are located on a number of the EDCL embedded networks. In the past Pioneer Energy used to trade all ICPs on these networks. It has changed over time and some ICPs switched out to other traders therefore the status “1,5” is incorrect. The status of “Active” should be assigned. It was discussed with the company. The status was assigned when Pioneer Energy was a tier 2 trader and their processes were managed by Simply Energy. It was confirmed by further analyses that volumes for these ICPs are submitted correctly.

We identified ICP 1000023002BPF97, for which “inactive-reconciled elsewhere is used”. This is Aniwhenua power station which is reconciled by Pulse on behalf of Pioneer Energy. The Authority was notified of this arrangement.

#### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.9 With: 19 of Schedule 11.1  From: 16-Mar-18 To: 15-Feb-19	The status “Inactive- Reconciled elsewhere”(1,5) incorrectly assigned to 158 ICPs  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Weak  Breach risk rating: 3



Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as weak. It was overlooked when Pioneer Energy stopped trading all ICPs on the embedded networks. The audit risk rating is low because there is no impact on settlement outcomes, volumes are submitted correctly.		
Actions taken to resolve the issue		Completion date	Remedial action status
ICP will be changed to "active" as at 1 July 2018 when PION ceased to be sole trader of this embedded network		June 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Unique instance of an embedded network change from single retailer to multiple retailers			

### 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

It is a distributor's code obligation to monitor an ICP which has had the status of "New" or "Ready" for 24 calendar months or more. It is expected that a trader be able to respond to such queries from distributors.

#### Audit commentary

Pioneer Energy has not been approached by any distributor asking for updates.

#### 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 1 or more profile codes associated with that ICP.*

#### Audit observation

The standard switch process was examined to assess compliance. We reviewed the EDA file for the period 16/03/18 to 15/02/19.

The Account Manager approaches prospective customers. As soon as a contract is signed, it is passed to the operation team which setup a new customer in ORION and the registry is notified the same day.

#### Audit commentary

846 NTTR files were sent within the period covered by this audit. Pioneer Energy gained about 700 ICPs from Payless Energy after the company defaulted.

The Switch Breach report recorded any backdated transfer switches.

#### 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 3 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 5 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

To assess compliance we analysed the EDA file for the period covered by this audit and Switch Breach Report for the same period.

### Audit commentary

The process adopted by Pioneer Energy is to reply to the registry notification the same or following day. The Switch Breach Report did not report any breaches.

Pioneer Energy's policy is always to accept the switch date which is specified in the NT file sent by a gaining trader. Usually it is the date that a notification is received. In some instances, a gaining trader asks for a backdated transfer switch, which is accepted by Pioneer.

Our calculation showed that around 90% of the event dates were no more than 5 business days after the date of notification. Pioneer Energy meets its obligation of clause 4(1)(b) of Schedule 11.3.

We identified that for 65 ICP (ex PLEL) the event date nominated by PION was up to 12 business days before the date of receipt of notification. All ICPs switched on 1/10/18. It is covered by the self-breach as per **section 1.6**.

### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: 4 of Schedule 11.3 From: 01-Nov-18 To: 16-Nov-17	The event date nominated by PION was up to 12 business days before the date of receipt of notification for 65 ICPs (ex PLEL) Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
<b>Low</b>	The controls are rated as strong. It was exceptional situation to specify a date in the past to accommodate PLEL customers. Audit risk rating is low because the impact on the settlement outcome is minor.

Actions taken to resolve the issue	Completion date	Remedial action status
Delayed switch notifications for 65 (ex PLEL customers) was done in the best interests of customers who wished to use different retailer after their PLEL relationship ceased but had automatically been transferred to PION.	Oct 2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
One off event resulting from PLEL default		

#### 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 standard switch process was examined to assess compliance. We reviewed the EDA file for the period 16/03/18 to 15/02/19 and the Switch Breach Report.

##### Audit commentary

According to the Switch Breach Report, Pioneer Energy sent CS files for 19 standard switches later than 5 business days after the event date.. It appears that there is confusion around how quickly final information should be provided to a gaining trader.

We randomly chose 11 CS files and validated information contained in them. Each file created by Gentrack is validated manually by an operator. We came across incorrect information in CS files which were corrected before sending them to the registry.

As described in the last audit, the process for handling meter readings from MEPs is not straight forward. Daily readings from MEPs are stored in a Data Warehouse which acts as a depository. Before the end of the month, readings for the last day are transferred to ORION, which means that if the switch event date is in the middle of the month, a reading must be manually transferred to ORION then a CS file is created and sent to the registry.

The process adopted by Pioneer Energy is slow and open to human error. If Pioneer Energy decides to gain more customers, it would be difficult to keep up with the transferring of data and manually checking each CS file due to problems with ORION.

The same non-compliance was identified during the last audit. It appears to be a systematic problem with ORION.

**Audit outcome**

Non-compliant

<b>Non-compliance</b>	<b>Description</b>		
Audit Ref: 4.3 With: 5 of Schedule 11.3 From: 16-Mar-18 To: 15-Feb-19	Late CS files for 19 standard switches Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Weak Breach risk rating: 3		
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>		
<b>Low</b>	The controls are rated as weak as there is a greater risk for human error in the manual process due to problems with ORION creating CS files. Audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
System issue affecting the read calculation in the CS file causing some delay as currently each file needs manual checking and correcting. System operator has been notified off the problem and is currently working on a solution. Switch breach table was being used as a measure to monitor breaches, this report allocates 10 days to finalise switch. Use of this report has been discontinued for monitoring.		May 2019	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
Automated PR040 – RSSWBRCURD daily report delivery set up. This is being monitored daily to prevent any late files		May 2019	

**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)).

vv or more, the gaining trader must, within 4 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 2 validated meter readings.

- the losing trader can choose not to accept the reading, however, must advise the gaining trader no later than 5 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

We reviewed the EDA file for the period 16/03/18 to 15/02/19 and the Switch Breach Report.

### Audit commentary

We reviewed the switching process for NHH ICPs. The CS files are uploaded to ORION and a switch event read is recorded. It is marked appropriately within the system. When the next read arrives from WELLS or a MEP, it is compared with the CS file read to check if they are within 200 kWh tolerance. If not a RR file is sent to the losing trader.

Any ICPs reconciled as HHR by a losing trader are passed to EMS and are reconciled the same way therefore they always switch on the same read.

Pioneer Energy sent 11 RR files; 8 files were accepted. RR file for 0005127190RNB8D was sent after 5 months. The reason for the late RR was a lack of access to get a read.

Pioneer Energy received 12 RR files; two files were accepted. We checked all RR files which were rejected by Pioneer Energy. They were rejected because of a difference between a gaining trader switch event reading and the switch event reading provided by Pioneer Energy differed by less than 200 kWh.

### Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 4.4 With: 6A of Schedule 11.3 From: 16-Mar-18 To: 15-Feb-19	One RR file late Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1	
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>	
<b>Low</b>	The controls are rated as strong. There was only one RR file late due to difficulty in getting a read. Audit risk rating is low because the impact on the settlement outcome is minor.	
<b>Actions taken to resolve the issue</b>	<b>Completion date</b>	<b>Remedial action status</b>
This was a one-off incident. There was difficulty in establishing an actual read as the meter was programmed to display one value but actually had two channels. Once actual read was established PION found the difference in value to the CS read was significant enough to request a late RR.		Identified
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
No further actions taken as one-off event.		

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 AMI 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 5 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 EDA file was analysed to assess if compliance with this clause was met.

### **Audit commentary**

We identified five ICPs for which Pioneer Energy received a switch event meter reading from Flick or Electric Kiwi, both HHR traders, but because they were sent later than 5 business days, they were rejected.

### **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**

There were no disputes with a losing trader in relation to a switch event read. If such a situation were to occur in the future it would be resolved in accordance with this clause

### **Audit commentary**

Pioneer Energy stated that they will not decline to accept another traders' validated meter reading or permanent estimate if they are reasonable and appropriate. The company will also provide a reasonable explanation to the other participant where it does decline to accept their validated meter reading or permanent estimate.

### **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 2 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 move process was examined to assess compliance. We reviewed the EDA file for the period 16/03/18 to 15/02/19 and the Switch Breach Report.

#### **Audit commentary**

Pioneer Energy sent 100 notifications of switch move to the registry. Some files were related to a switch event in the past. It was discussed with the company and it was confirmed that it was caused by late notification by a customer.

#### **Audit outcome**

Compliant

### **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:*
  - *confirmation of the switch event date; and*
  - *a valid switch response code; and*
  - *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—*
  - *is not earlier than the gaining trader's proposed event date, and*
  - *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 switch move process was examined. We reviewed the EDA file for the period 16/03/18 to 15/02/19 and the Switch Breach Report.

### Audit commentary

The review of the EDA file and the Switch Breach Reports showed that for 33 ICPs, CS files for switch move were sent later than 5 BD. It was discussed with the company and it became clear that there was still not a clear understanding of the different requirements for a standard and move in switch.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: 10(1) of Schedule 11.3  From: 16-Mar-18 To: 15-Feb-19	Final information for 33 ICPs was provided to the registry later than 5 BD  Potential impact: Low  Actual impact: Low  Audit history: Once previously  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. Switching process for move in needs to be updated. Audit risk rating is low because the impact on the settlement outcome is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
Switch breach table was being used as a measure to monitor breaches, this report allocates 10 days to finalise switch. Use of this report has been discontinued for monitoring.		May 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Automated PR040 – RSSWBRCURD daily report delivery set up. This is being monitored daily to prevent any late files		Ongoing	

#### 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**

The switch move process was reviewed and the EDA file examined.

#### **Audit commentary**

We randomly chose 20 ICPs and checked if Pioneer Energy accepted the switch event date from the gaining trader. We confirm that in each case Pioneer Energy accepted the date as per policy.

#### **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 process for switch move was reviewed.

#### **Audit commentary**

It was discussed during the audit. The company stated and we confirm by sampling that Pioneer Energy always provide validated meter readings in the CS file.

#### **Audit outcome**

Compliant

### 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 4 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 2 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 5 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

We analysed the EDA file for the period 16/03/17 to 15/03/18. The same process is used which was described in **section 4.4**.

### Audit commentary

Pioneer Energy sent three RR files, all of them were accepted by the losing trader.

Pioneer Energy received 19 RR files for 14 ICPs. 8 RR files were accepted and used for reconciliation purposes; two RR files were rejected. They were sent by ELKI later than 5 business days

### 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 3 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

The gaining trader switch process was reviewed. The EDA file for the period 16/03/18 to 15/02/19 and Switch Breach Report for the period covered by this audit was analysed to assess compliance.

##### Audit commentary

Pioneer Energy sent 22 NTHH. Customers are signed up by account managers who, when a contract is finalised, notify the operation team, who populates the information in ORION. NT file is sent the same day.

## Audit outcome

Compliant

### 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

The EDA file for the period 16/03/18 to 15/02/19 and Switch Breach Report for the period covered by this audit was analysed to assess compliance.

#### Audit commentary

Pioneer Energy received 66 notifications from the registry manager, to which they replied within the time frame specified by this clause.

## 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

The EDA file for the period 16/03/18 to 15/02/19 and Switch Breach Report for the period covered by this audit was analysed to assess compliance.

**Audit commentary**

The analyses of the EDA file showed that for four ICPs (1000023002BPF97, 0000402035WPA68, 0000166724TPC86, and 0000690237TPAB9) Pioneer was late to finalise the switch.

**Audit outcome**

Non-compliant

Non-compliance	Description		
Audit Ref: 4.14 With: 16 of Schedule 11.3 From: 16-Mar-18 To: 15-Feb-19	Switching for four ICPs was finalized late Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that can be made to them. The amount of inaccurate information in the registry is low. The audit risk rating is low because the impact on the settlement outcome is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
System issue affecting the generation of the CS file causing some delay as it required manual completion. System operator has been notified off the problem and is currently working on a solution. Switch breach table was being used as a measure to monitor breaches, this report allocates 10 days to finalise switch. Use of this report has been discontinued for monitoring.		May 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Automated PR040 – RSSWBRCURD daily report delivery set up. This is being monitored daily to prevent any late files		May 2019	

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 2 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 5 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 2 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

The EDA file for the period 16/03/18 to 15/02/19 and Switch Breach Report for the period covered by this audit was analysed to assess compliance.

## Audit commentary

Pioneer Energy sent 58 NW files; all files were sent within 2 calendar months after the event date of the switch. We reviewed reason codes in the files and confirm their correct application.

We sampled seven NW files for which “CX” code was used, the results are shown below:

- 0000000297DE4C3 - Customer changed their mind and advised to cancel the switch out.
- 0000156418CKCFB - Customer changed their mind and advised to cancel the switch in.
- 0000503040DE17F - Customer changed their mind and advised to cancel the switch out.
- 0000656275WT7CB - Tenant of property wanted to switch out, Our customer owned the property and wanted the power to stay with Pioneer.
- 0000656275WT7CB - As above.
- 0000656275WT7CB - As above.
- 0001150243TG97A – Customer withdrew switch as Globug could not provide them with services.

Pioneer Energy received 29 NW files; AW files were sent within 2 business days.



## Audit outcome

Compliant

### 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

Meter readings are received from MEPs and WELLS. Pioneer Energy relies on MEPs and WELLS to provide accurate readings. As it is described in relevant sections, extensive validation is conducted upon uploading readings to ORION.

#### Audit commentary

All meter readings used in the switching process are validated meter readings or permanent estimates. The cost of additional interrogation is covered in a commercial agreement between Pioneer Energy and companies providing meter readings.

## 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**

It was discussed during the audit and the comment was: “We do not currently have a process in place as Pioneer is not currently part of the scheme and is not considering being a part of this scheme any time soon.” It was also confirmed that according to Pioneer’s policy they do not try to win back customers.”

**Audit commentary**

Pioneer Energy sent five NW files with the reason code “CX” (customer request). They were customers on contract with other traders.

**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 LIS file dated 07/03/19 was reviewed.

#### Audit commentary

The review of the registry file found no SUML ICPs traded by Pioneer Energy. If the company end up with an historic update by a distributor, shared unmetered load will be reconciled using the same process as for standard unmetered load.

#### 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 LIS file dated 07/03/19 was analysed and we found 17 standard unmetered load ICPs and 9 distributed unmetered load ICPs (street lights). On 1/4/19 four DUML ICPs switched to Meridian Energy.

### Audit commentary

Examination of the LIS file found no ICPs for which unmetered load is greater than 6,000 kWh per annum.

### 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:*
  - o *the date the limit was calculated or estimated to have been exceeded*
  - o *the details of the corrective measures that the retailer proposes to take or is taking to reduce the unmetered load.*

### Audit observation

The LIS file was analysed.

### Audit commentary

Examination of the LIS file found no ICPs for which unmetered load is greater than 6,000 kWh per annum.

### 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

The LIS file dated 7/03/19 was examined to identify distributed unmetered load traded by Pioneer Energy.

##### Audit commentary

At the time of audit Pioneer was trading street lights in Clutha District Council (ICPs 0000207893DE37B, 0001982479TGE75, 0008801005TPE67, and 0008801015TP4CA), which switched out to Meridian Energy on 1/4/19, before this audit report was finalised.

On 01/02/19 Pioneer Energy gained street light ICPs located in the Grey District Council area (0000950020WPB1C, 0000950040WP4EC, 0000950090WP9AE, 0000950091WP5EB, and 0000950092WP92B).

The audit of Grey District Council was conducted on 14/05/18 by Tara Gannon of Veritek. The audit was conducted within the timeframe specified by the Code. The audit identified the following level of compliance:

Deriving submission information 11(1) of schedule 15.3	ICP identifier 11(2)(a) of schedule 15.3	Items of DUML associated with each ICP 11(2)(aa) of schedule 15.3	Location of items of load 11(2)(b) of schedule 15.3	Description of load 11(2)(c) of schedule 15.3	Capacity of load 11(2)(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
No	Yes	Yes	Yes	No	No	No	Yes	Yes

Issues identified in this audit need to be verified. Grey District Council's DUML, maintained by ElectroNet, will be audited in May this year. We spoke to ElectroNet; we were assured that all non-compliance has been addressed.

Pioneer Energy has been trading these DUML for two months. At the end of each month ElectroNet provides a report from the DUML database which is passed to EMS. EMS on behalf

of Pioneer Energy creates submission files. The process for converting the DUMML database into submission volumes by EMS was checked and found accurate.

**Audit outcome**

Non-compliant

<b>Non-compliance</b>	<b>Description</b>		
Audit Ref: 5.4 With: 11(1)(2)(c)(d)(2A) of Schedule 15.3 From: 01-Feb-19 To: 31-Mar-19	The Grey District Council database does not meet all requirements Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>		
<b>Low</b>	The controls are rated as moderate. DUMML database does not meet all requirements. It switched to PION quite recently. Audit risk ratings is low because impact on settlement outcomes is minor. A new audit will be conducted in May'19.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
Database obtained from Grey District Council. It contains information of the load and location of the streetlights, load information sent to EMS to profile using DST and submit NHHVOLS to RM		April 2019	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
Database to be re-audited for compliance in May 2019 Electronet will provide PION with the Database monthly to capture updates to load during LED roll-out.		June 2019 Ongoing	

## 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 1 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 LIS file dated 7/03/19 was analysed.

#### Audit commentary

The company trades both HHR and NHH ICPs. Most installations are metered except ICPs representing DUML and UML as per **section 3.7**.

Pioneer Energy uses the quantity of electricity measured by HHR and NHH metering installations, which is provided by MEPs, WELLS, and UTL ( the ICPs were transferred to Wells as from 18/4/19).

The review of the LIS file showed ICP 0000654465WP00D with 220 kW generation capacity. This is a back-up diesel generator for the sewerage plant in case of power outage. It is not connected to the network and there is only an import meter onsite therefore it is not treated as an installation which can export energy. According to the most recent conversation with the Authority, such an installation does not have to have "B" recorded in the "Installation Type" field.

A new 11kV Auckland hospital substation supply (1002050361LC60D) was connected 30/09/18. The MEP for the installation is AMCI and EMS collects data on behalf of Pioneer and submits it to the RM.

There has been a problem regarding how the new installation was designed. Below is a comment from AMS.

*The fact that in design of the new supply the customer did not highlight the possible issue on the old supply is unfortunate, but we are actively working to a solution and from a data perspective*

*we are aware of exactly what data to ignore from a reconciliations perspective as the new supply is perfectly metered. High voltage CTs must be relocated from the busbars to the incomers on the back-up as this will prevent any consumption being recorded when the new supplies run*

AMS has been very slow to address the problem. In the meantime, Pioneer Energy developed, in conjunction with EMS, a well-documented process to submit correct information to the RM. This process will be used until the issue is resolved.

AMCI populated information in the registry on 21/03/19, which was late by 112 business days. We note it as a technical breach. Pioneer Energy contracted the MEP to provide a “fit for purpose” metering installation.

Pioneer Energy took proactive action to make sure that correct volumes are submitted to the reconciliation manager.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.1 With: 10.24 (c)  From: 30-Sep-18 To: 31-Mar-19	Subtraction is used to determine submission information for 1002050361LC60D  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Strong  Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as strong. Incorrect design of the metering installation for 11 kV supply Auckland Hospital resulted in double submission of volumes. Action of the MEP put Pioneer in a non-compliant situation. Audit risk rating is low because there is no impact on settlement outcomes.		
Actions taken to resolve the issue		Completion date	Remedial action status
As described above - Worked with AMS and onsite parties to correct technical set-up. Adjustment of reconciliation files to provide accurate information.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
One-off incident			

Description	Issue	Remedial action
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Subtraction is used to determine submission information for 1002050361LC60D	Incorrect design of the metering installation for 11 kV supply Auckland Hospital	
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## 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

Pioneer Energy does not trade such installations.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

### 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 LIS file was reviewed to identify which profiles are used for reconciliation purposes.

#### **Audit commentary**

Pioneer Energy does not use any engineered profiles. The only profiles recorded in the registry are HHR, RPS, DST, DFP, and UML. None of these profiles requires a switch of meter registers. DST profile is used for street light submissions. EMS creates “shape files” based on off/on times derived from loggers, which are interrogated using the same systems and processes as those used for HHR data.

#### **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**

We discussed with Pioneer Energy, their obligation if an event or circumstance led it to believe a metering installation could be inaccurate, defective, or not fit for purpose.

#### **Audit commentary**

HHR meters are read by EMS on their behalf. In the event that it will be considered that a meter could be faulty Pioneer Energy will be notified. No such situation occurred in the period covered by this audit.

Pioneer Energy closely monitors NHH reads. The company provided the example of ICP 0007108821RN1AC, a meter reader reported a blank screen, which meant he was unable to take a read. The meter was replaced.

#### **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

Data collection for HHR ICPs is conducted by EMS themselves or it is provided by AMS and EDM I. The obligation of compliance lies with the agent, but it is still the responsibility of Pioneer Energy. The company does not collect metering data themselves.

### Audit commentary

Management of HHR data is outsourced to EMS. Compliance with this clause is assessed as a part of the MEPs audit. AMS (HHR agent) and EDM I were reviewed and compliance with this clause is confirmed.

### 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. NHH readings are received from Wells and MEPs. Wells reads around 750 ICPs.

#### **Audit commentary**

We sampled five meter reads from WELLS to compare with entries in ORION. As described in **section 2.3**, Pioneer Energy used to get data from UTL loggers, but reading had been transferred to Wells before this report was finalized.

In the past Pioneer Energy was a sole trader on this embedded network. From July'18 ICPs have started switching out to other traders. Before the ICPs started switching out submitted volumes to the RM were based on gate meter reads. The readings from UTL were used for billing purposes only.

Pioneer Energy do not read meters themselves but on rare occasions accepts customer reads. Customers reads are appropriately flagged in ORION.

#### **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 switch read from the CS file is used as a start read for NHH ICPs. Consecutive readings from WELLS or a customer apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation.

### Audit commentary

Compliance was confirmed by analyses of scenarios described in **section 12.11**.

### 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

When an ICP switches in, a switch event read is always received from the registry as a CS file. It is actual or estimate.

### Audit commentary

The company receives readings from Wells or MEPs. Meters are read every month.

The company developed the NHH Dashboard, which allows them to closely monitor reads. The NHH Dashboard shows all active NHH ICPs, "overdue" ICPs not read by 2 or 3 months. It is an excellent tool simplifying the management of NHH reads.

### 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

ORION creates a Meter Reading Frequency Report which has to be submitted to the Authority every month.

### Audit commentary

We reviewed the Meter Reading Frequency Report from Aug'18 to Jan'19. According to the reports Pioneer Energy did have 100% attainment for a few months for a small number of NSPs.

Month	NSP	Percentage of ICPs read
201808	CYD0331	98.97%
201809	BAL0331	99.06%
	BPD1101	98.21%
	CYD0331	98.98%
	STU0111	95.92%
201810	BASL0331	99.08%
	CYD0331	98.36%
201811	BAL0331	95.97 %
	BPD1101	98.31 %
	CML0331	95.28 %
	CYD0331	96.64 %
201812	BAL0331	98.21%
	CYD0331	99.06%
	NSY0331	95.74%
201901	CYD0331	99.01%

### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.9 With: 8(1)of Schedule 15.2  From: 01-Aug-18 To: 15-Feb-19	The target of 100% was not achieved for a small number of NSPs  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Strong  Breach risk rating: 1
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>

<b>Low</b>	The controls are recorded as strong. PION has very good monitoring processes in place but for some ICPs Wells has a problem gaining access. Audit risk rating is low because of a small number of ICPs		
<b>Actions taken to resolve the issue</b>	<b>Completion date</b>	<b>Remedial action status</b>	
Establishment of a dashboard for monitoring of sites which have not received a read in 2 months (yellow) and 3 months (red). Identified sites are contacted for information relevant to aid meter readers / identify issues and customers are requested to provide photo reads of the meter.	Ongoing	Identified	
BPD1101 was affected by biosecurity measure on farms limiting access.	Completed		
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>		
Proactive monitoring of meter reads	Ongoing		

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 4 months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every 4 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**

ORION creates a Meter Reading Frequency Report which has to be submitted to the Authority every month.

**Audit commentary**

We reviewed the Meter Reading Frequency Report from Aug'18 to Jan'19. According to the reports Pioneer Energy did have 90% attainment in the previous 6 months for a small number

of NSPs. Pioneer Energy does not exclude from the report ICPs which are exceptionally difficult to read.

Month	NSP	Percentage of ICPs read
201808	CYD0331	98.97%
201809	BSC0011	66.67 %
	MTM0331	83.33 %
201810	BSC0011	62.50%
	MTM0331	83.33%
201811	BSC0011	63.64%
	HAM0331	66.67%
	MTM0331	83.33%
201812	BSC0011	60.00%
	MTM0331	83.33%
201901	CYD0331	99.01%

### Audit outcome

#### Non-compliant

Non-compliance	Description		
Audit Ref: 6.10 With: 9(1)of Schedule 15.2  From: 01-Aug-18 To: 15-Feb-19	The target of 90% was not achieved for a small number of NSPs. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are recorded as strong. PION has very good monitoring processes in place but for some ICPs Wells has a problem gaining access. Audit risk rating is low because of the small number of ICPs		
Actions taken to resolve the issue		Completion date	Remedial action status
BSC0011 and MTM0331 relates to the refurbishment of Bayfair shopping, which commenced in March 2018. Power to the meters was turned off during the refurbishment and access was limited due to site safety requirements.		Aug 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	



Proactive monitoring of meter reads	Ongoing	
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#### 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 WELLS as an agent. The data interrogation log requirements were reviewed as part of their agent audit. Pioneer Energy used to receive metering data from UTL, this part of UTL was never, as far as we know, audited. Pioneer cancelled an arrangement with UTL, and asked Wells to read all these ICPs on their behalf.

##### Audit commentary

Compliance with this clause has been demonstrated by WELLS as part of their own audit.

##### 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

Data collection for 275 HHR ICPs is conducted by EMS themselves or it is provided by AMS or EDM I as the agent.

##### Audit commentary

Management of HHR data is outsourced to EMS. Compliance is confirmed based on a review of EMS, EDM I and AMS audit reports.

##### Audit outcome

Compliant

## 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

Data management for all HHR ICPs is managed by EMS. Compliance with this clause is assessed during their audit.

### Audit commentary

We reviewed the EMS, EDMI, and AMS audits and confirm compliance.

### Audit outcome

Compliant

## 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**

Metering data for all HHR ICPs traded by Pioneer Energy is collected remotely by EMS, AMS, and EDMI.

**Audit commentary**

Data interrogation requirements are covered in the agents audits which were reviewed.

**Audit outcome**

Compliant

## 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  $\pm 0.1\%$  ( $\pm 2$  seconds).*

#### Audit observation

Metering data for all HHR ICPs is managed by EMS.

#### Audit commentary

Compliance is confirmed based on Pioneer Energy agents audit reports. We reviewed data provided by EMS and confirm that the trading period duration is 30 minutes.

#### Audit outcome

Compliant

### 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

Pioneer Energy does not interrogate any meters themselves. Raw data for HHR ICPs is stored by EMS, which reads meters themselves or data is provided by AMS (74 ICPs), and EDMI (3 ICPs).

#### Audit commentary

Pioneer Energy keeps a copy of raw data for NHH ICPs, which are read by WELLS and MEPS. The only time that Pioneer Energy have raw meter data is when a customer provides their own read on very rare occasions.

#### 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**

Pioneer Energy only uses the HHR, RPS, PV1, DS, UML, and DFP profiles for reconciliation submissions.

**Audit commentary**

EMS used the DST profile to submit volumes for street lights. EMS reads the streetlight loggers themselves.

**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

Wells reads NHH meters on behalf of Pioneer Energy. As was described in **section 2.3** UTL used to read 60 ICPs.

#### Audit commentary

At the time of uploading data to ORION data is validated. If any errors are detected during validation, Wells is contacted and asked for a confirmation or confirm the original meter reading by carrying out another meter reading.

#### 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*
- (iii)

#### **Audit observation**

Correction of half-hour metering readings will be performed by EMS when the need arises. Pioneer Energy will be notified if and when this occurs.

#### **Audit commentary**

We contacted EMS and they confirmed that they have not performed any HHR data correction since the last audit.

#### **Audit outcome**

Compliant

### **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**

Pioneer Energy does not have any installation where error or loss compensation occurs.

#### **Audit commentary**

The EMS audit report, dated May'18, states that there is only one ICP to which a compensation factor is applied, which matches the certification record. The ICP is not traded by Pioneer. As the audit report is older than seven months we confirmed with EMS that no ICP traded by Pioneer Energy requires the application of a compensation factor.

#### **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**

The correction of metering data for HHR ICPs, if required, is performed by EMS. The correction of register reads for NHH is done using Orion by Pioneer Energy.

### **Audit commentary**

Whenever a read is changed in ORION, details such as a date and time of correction, operator identifier, a reason for correction, the difference of correction is recorded. ORION has the functionality described in the above clause.

We reviewed the EMS audit report which confirms that raw data is not overwritten in any situation.

### **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

HHR meter readings are managed by EMS.

ORION has a built-in function which allows the identification of actual and estimated readings.

#### Audit commentary

The EMS report confirmed that all estimated data is correctly identified.

We reviewed readings in ORION as a part of the review of RR and CS files (switching section). All readings are correctly labelled.

#### 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

ORION uses validated, estimated and permanent estimated readings to create NHH submission files.

EMS manages HHR readings.

#### Audit commentary

If actual data is not available, ORION estimates data for NHH ICPs using estimated daily consumption (EDC), which is updated after each read. Permanent estimates is used for ICPs switched out on an estimated reading and when a reading is not possible to obtain in situations such as house fire, meter faulty (data gone) etc.

The EMS audit report confirmed that all data is sourced from validated or estimated data.

#### 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

EMS manages HHR readings.

#### Audit commentary

As per the EMS audit report, a sample of meter interrogation data was reviewed to confirm that EMS retains the raw unrounded meter data.

NHH data from MEPs is imported daily into the Data Warehouse. NHH data is not rounded or truncated on upload.

NHH data is imported into ORION from files provided by Wells. We randomly chose three ICPs and compared readings in original files and ORION. The readings were the same.

We identified during the audit that metering data received from UTL contained decimal places. When data was imported into ORION, it was rounded up and down. This process is not being used by Pioneer Energy any more.

#### Audit outcome

Compliant

### 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

EMS managed HHR data on behalf of Pioneer Energy.

#### Audit commentary

We contacted EMS to check if any estimation of HHR data occurred since the last audit.

0000488873CE0F8 was estimated from 1/04/2018 12:01 to 3/04/2018 13:30 due to a meter error.

0267709196LC000 was estimated from 25/05/2018 05:01 to 21/06/2018 12:00 as the old meter was lost during a meter change by EDMI.

### Audit outcome

Compliant

## 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

Daily NHH readings from Wells are uploaded to ORION on an operator request. The files are uploaded to the system, which creates a report, which is analysed by an operator.

### Audit commentary

Upon data upload, ORION conducts the following data validation:

- Meter read is exceptionally High
- Meter read is exceptionally Low
- Cannot Identify an open site for this read
- Cannot Identify an open meter for this read
- This read is already in the system
- More than 1 open account or more than 1 matching meter.
- There is already a read for this meter this day (different)
- You cannot enter a read for a future date.
- Attempted import of opening read from meter read file
- This Read is Earlier Than Previously Billed Reads
- Unknown Meter Reader
- Meter not found for this Premise
- Cannot enter a substitute read on an inactive meter

An exception report is created by the software, which lists ICPs which are outside of the parameters. Each ICP is assessed individually, some of them are accepted, some of them are

sent back to WELLS. Once per month NHH data read by MEPs is uploaded to ORION. The same validation is performed.

#### **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 0 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**

HHR data is managed by EMS. The validation process is described in the EMS audit report and found to be compliant.

NHH data for some ICPs is provided by MEPs.

#### **Audit commentary**

Metering data from MEPs, provided daily, is uploaded automatically to the Data Warehouse. At month end Pioneer Energy runs a script to download all the End of Month reads from the Data Warehouse to ORION.

In the event that sites are missing an End of Month read, Pioneer Energy runs extracts to retrieve a read as close to month end as possible, they are loaded manually. ORION validates all reads as described in **section 9.5**.

#### **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

Pioneer Energy does not provide information to the grid owner.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### 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

Pioneer Energy does not provide information to the grid owner.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### **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**

Pioneer Energy does not provide information to the grid owner.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **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**

Pioneer Energy does not provide information to the grid owner.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **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 LIS files and submission files were examined. Pioneer Energy has trading notifications for all profiles.

#### Audit commentary

Pioneer Energy only uses HHR, DST, UML, PV1, and RPS profiles for reconciliation submissions.

#### 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 as a part of Historical Estimate scenarios. We also examined three NSPs with a small number of ICPs to confirm if ICP days calculation was correct.

We reviewed the ICP days file (AV-110) submitted to the reconciliation manager and GR-100 provided by the reconciliation manager.

### Audit commentary

The table shows the ICP days (NHH and HHR combined) difference between GR-100 (it was downloaded from the RM portal) and Pioneer Energy's files.

Month	Initial	R1	R3	R7	R14
Apr-17	0.18%	-0.52%	0.41%	5.19%	4.28%
May-17	0.47%	0.18%	0.40%	5.54%	5.08%
Jun-17	0.36%	0.51%	5.53%	5.48%	4.89%
Jul-17	0.68%	0.50%	0.37%	0.37%	-2.89%
Aug-17	1.14%	1.21%	0.05%	0.39%	-4.28%
Sep-17	2.73%	0.07%	0.12%	-0.54%	-5.51%
Oct-17	-0.39%	-0.04%	0.08%	-1.11%	-5.44%
Nov-17	-0.74%	0.26%	-0.12%	-1.90%	-5.96%
Dec-17	0.19%	0.34%	0.04%	-2.03%	-6.05%
Jan-18	0.47%	0.33%	-0.37%	-2.50%	-6.30%
Feb-18	0.31%	0.23%	-1.01%		
Mar-18	0.13%	-0.15%	-1.24%		
Apr-18	0.22%	-0.31%	-0.82%		
May-18	0.08%	-0.03%	-0.92%		
Jun-18	-0.18%	-0.10%	-1.21%		
Jul-18	-0.09%	-0.13%	-1.93%		
Aug-18	0.56%	0.37%	-1.39%		
Sep-18	0.05%	0.03%	-0.21%		
Oct-18	0.17%	0.14%	-0.29%		
Nov-18	0.28%	0.63%	0.24%		
Dec-18	0.32%	0.64%	-0.06%		
Jan-19	0.42%	0.09%			
Feb-19	0.38%	0.11%			
Mar-19	0.36%				

It appears that since Feb'18, Pioneer Energy ICP days are very close to ICP days reported by the registry. A question is why ICP days for revision 14 increase significantly in comparison with revision 7.

Below there are two tables for the ICPs days, separately for NHH and HHR.

### HHR ICPs

Month	Initial	R1	R3	R7	R14
Apr-17	2.24%	0.00%	0.00%	0.00%	0.00%
May-17	0.48%	0.80%	0.00%	0.00%	0.00%
Jun-17	0.00%	-0.12%	-0.01%	-0.25%	-0.25%
Jul-17	-0.01%	-0.01%	-0.01%	-0.32%	-0.32%
Aug-17	0.40%	0.09%	0.09%	-0.22%	-0.22%
Sep-17	0.00%	0.00%	-0.31%	-0.35%	-0.35%
Oct-17	0.00%	0.00%	-0.31%	-0.61%	-0.61%
Nov-17	-0.10%	-0.10%	-1.07%	-1.07%	-1.07%
Dec-17	-0.32%	-0.38%	-0.71%	-0.71%	-0.71%
Jan-18	0.02%	0.00%	0.00%	0.00%	0.00%



<b>Feb-18</b>	0.63%	0.00%	0.00%	0.00%	
<b>Mar-18</b>	0.00%	0.00%	0.00%	0.00%	
<b>Apr-18</b>	0.31%	-0.21%	-0.51%	-0.21%	
<b>May-18</b>	0.00%	0.00%	0.00%	0.00%	
<b>Jun-18</b>	0.31%	-0.31%	0.00%	0.00%	
<b>Jul-18</b>	0.00%	0.00%	0.00%	0.00%	
<b>Aug-18</b>	0.00%	0.00%	0.06%	0.06%	
<b>Sep-18</b>	-0.28%	0.04%	0.04%		
<b>Oct-18</b>	0.00%	0.00%	0.35%		
<b>Nov-18</b>	0.41%	0.35%	0.35%		
<b>Dec-18</b>	0.00%	0.36%	0.36%		
<b>Jan-19</b>	0.00%	-0.38%			
<b>Feb-19</b>	0.37%	0.37%			
<b>Mar-19</b>	0.00%				

ICP days line up quite good for HHR ICPs.

**NHH ICPs**

<b>Month</b>	<b>Initial</b>	<b>R1</b>	<b>R3</b>	<b>R7</b>	<b>R14</b>
<b>Apr-17</b>	-0.41%	-0.67%	0.52%	6.66%	5.49%
<b>May-17</b>	0.47%	0.00%	0.52%	7.12%	6.53%
<b>Jun-17</b>	0.46%	0.69%	7.13%	7.13%	6.37%
<b>Jul-17</b>	0.89%	0.65%	0.48%	0.57%	-3.64%
<b>Aug-17</b>	1.36%	1.54%	0.04%	0.57%	-5.48%
<b>Sep-17</b>	3.62%	0.10%	0.26%	-0.60%	-7.21%
<b>Oct-17</b>	-0.52%	-0.05%	0.20%	-1.28%	-7.00%
<b>Nov-17</b>	-0.95%	0.37%	0.17%	-2.16%	-7.46%
<b>Dec-17</b>	0.34%	0.56%	0.27%	-2.44%	-7.67%
<b>Jan-18</b>	0.60%	0.43%	-0.49%	-3.26%	-8.23%
<b>Feb-18</b>	0.21%	0.30%	-1.33%	-4.06%	
<b>Mar-18</b>	0.17%	-0.19%	-1.62%	-5.33%	
<b>Apr-18</b>	0.20%	-0.34%	-0.91%	-4.79%	
<b>May-18</b>	0.10%	-0.03%	-1.20%	-4.00%	
<b>Jun-18</b>	-0.34%	-0.03%	-1.57%	-4.38%	
<b>Jul-18</b>	-0.11%	-0.17%	-2.51%	-4.11%	
<b>Aug-18</b>	0.72%	0.49%	-1.83%	-3.55%	
<b>Sep-18</b>	0.15%	0.03%	-0.29%		
<b>Oct-18</b>	0.22%	0.18%	-0.47%		
<b>Nov-18</b>	0.25%	0.68%	0.23%		
<b>Dec-18</b>	0.37%	0.69%	-0.13%		
<b>Jan-19</b>	0.49%	0.17%			
<b>Feb-19</b>	0.39%	0.07%			
<b>Mar-19</b>	0.42%				

It appears that the problem is with the ICP days calculation for NHH ICPs done by ORION. One of the reasons the ICP days calculated by ORION is mostly higher than that of the registry

calculation is the incorrect status assigned to ICPs located on embedded networks (**section 3.9**). ORION does not recognize the status “inactive-reconcile elsewhere”, it treats as “active” ICPs.

### Audit outcome

Compliant

## 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.*

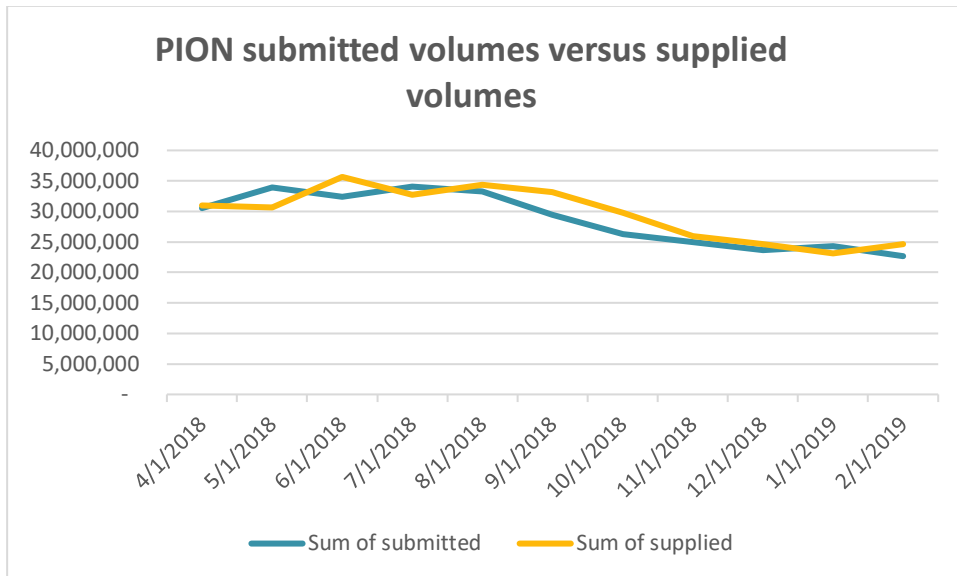
### Audit observation

As a part of the file submission process to the reconciliation manager, Pioneer Energy submits AV-120 every month, for the current month and scheduled revisions.

### Audit commentary

The table below shows a comparison between volumes submitted and supplied (billed) for the period April'18 to Feb'19.

Month	Sum submitted	of	Sum supplied	of
1/04/18	30,510,923		30,979,579	
1/05/18	33,948,117		30,611,415	
1/06/18	32,346,404		35,654,253	
1/07/18	34,065,702		32,677,675	
1/08/18	33,312,628		34,398,441	
1/09/18	29,488,316		33,176,997	
1/11/18	24,927,221		25,962,589	
1/10/18	26,299,535		29,741,923	
1/12/18	23,643,024		24,654,529	
1/01/19	24,335,243		23,120,755	
1/02/19	22,664,622		24,621,885	



### 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

Pioneer Energy provided a set of submission files (AV140) for the month Nov'18 to Feb'19. We also checked GR-090 (ICP missing) file for June'18 and Feb'19.

### Audit commentary

We compared the volumes in HHRVOLS against HHRAGGI and HHRAGGR for the months Nov'18 to Feb'19. Volumes in both files were within a few kWh.

The HHRAGGR files are prepared at ICP level based on submission information. Clause 15.8 states that the HHRAGGR should contain electricity supplied information rather than submission information. The Reconciliation Manager Functional Specification in section 3, described HHRAGGR as HHR submission information that is aggregated per ICP for the whole month.

There is a misalignment between the Code requirements and RM file specification. It is a problem well known to the Authority and is awaiting a resolution.

## Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: 15.8 From: 16-Mar-18 To: 15-Feb-19	HHRAGGR files do not contain electricity supplied information Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	Pioneer Energy submits submissions volumes as per the reconciliation manager specification.		
Actions taken to resolve the issue		Completion date	Remedial action status
To be discussed with our HHR data provider, EMS.			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

## 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

Pioneer Energy provided a set of data submitted by EMS on their behalf.

#### Audit commentary

The EMS audit report was reviewed as a part of this audit. All HHR data is adjusted using the “trading period run on” technique.

#### Audit outcome

Compliant

### 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

Pioneer Energy provided reconciliation data for Nov’18 to Jan’19. Submission information was submitted on day 4 and day13 (all relevant revisions) by EMS and Pioneer Energy.

#### Audit commentary

Data was submitted in time in the period covered by this audit.

#### Audit outcome

Compliant

### 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

EMS manages HHR ICPs submission information.

Pioneer Energy has a process in place whereby, before the submission of volumes information, it compares the registry data and data stored in ORION. This process assures that all ICPs, for which they are responsible, have volumes allocated to the correct NSP indicated by the data held in the registry.

#### Audit commentary

We compared three NSPs (Dec'18), checking if volumes were allocated to the NSP recorded in the registry.

#### 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

The LIS file was reviewed. Pioneer Energy is not a grid owner.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

### 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 LIS file was reviewed. Pioneer Energy is not embedded network owner.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

### 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 LIS file was reviewed. Pioneer Energy is not a grid owner.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

**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**

The process for the calculation of initial and subsequent submission volumes for NHH was examined. Every month, before day 13, revision files are submitted for month 3, 7, and 14. HHR ICPs are managed by EMS.

**Audit commentary**

According to the EMS audit report, data processes were checked and the auditor found them compliant.

Pioneer Energy demonstrated that if they subsequently obtain more accurate information, e.g. RR file sent by a gaining trader, they provide it to the reconciliation manager as part of the normal schedule of revision submissions. It was part of the NHH scenarios described in **section 12.11**

A review of GR-170NHH confirmed that consecutive revisions were submitted. As per section 12.12, Pioneer Energy submitted incorrect volumes for NSY0331 (Jan’18, revision 14).

**Audit outcome**

Non-compliant

Non-compliance	Description
Audit Ref: 12.7 With: 15.12 From: 10-Jan-18 To: 19-Mar-19	Incorrect submission for NSY0331 (Jan’18, rev14) Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating



<b>Low</b>	Controls are recorded as moderate because there are some improvements that can be made to them. The audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
This has been noted			Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
Future submissions, Washup files will be analysed by GXP prior to submission, in addition to current checks.			

## 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

We reviewed GR-170NHH for the period covered by this audit to assess compliance.

### Audit commentary

The analysis of rev14 for the above month is shown below. The table shows the number of NSPs for which Pioneer Energy submitted volumes for NHH ICPs.

Month	Number of NSP for which compliance was not met	Total number of NSPs
Apr-17	8	9
May-17	9	11

<b>Jun-17</b>	11	12
<b>Jul-17</b>	7	13
<b>Aug-17</b>	6	12
<b>Sep-17</b>	4	33
<b>Oct-17</b>	6	33
<b>Nov-17</b>	6	15
<b>Dec-17</b>	6	11
<b>Jan-18</b>	6	10

One of the probably reason of non-compliance with this clause is incorrect calculation of historical estimates by ORION.

### Audit outcome

Non-compliant

<b>Non-compliance</b>	<b>Description</b>		
Audit Ref: 12.8 With: 4 of Schedule 15.2  From: 16-Mar-18 To: 15-Feb-19	Permanence of meter reading for the period Apr'17 to Jan'18 not achieved Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>		
<b>Low</b>	Controls are recorded as moderate because there are some improvements that can be made to them. The audit risk rating is low because the impact on the settlement outcome is minor.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
Analyst to identify Historical Estimate discrepancies in the files and manually amend where necessary.		Ongoing	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
Job raised with our software provider to treat UML and closing estimates as Actual reads for historical estimate calculations		Dec 2019	

## 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

The process for the calculation of NHH submission information was reviewed.

The process for the calculation of HHR submission information was reviewed during the EMS audit and was found compliant.

### Audit commentary

For all metering installations category 3, and higher, ICPs are reconciled as HHR and submitted by EMS. EMS also submits HHR data for metering installations category 1 and 2 (113 ICPs)

EMS submitted “shape files” for distributed unmetered load (DUML) on behalf of Pioneer Energy. These files are prepared based on on/off times derived from loggers, which are interrogated using the same systems and processes as those used for HHR data. Pioneer Energy provides EMS wattage for each ICP and EMS creates submission files.

We identified, in the LIS file, two ICPs (0000606334WPB76 and 0000950800WP644) which, strictly speaking, are not DUML because they are single flag lights. They should be reconciled as standard unmetered load

We also identified ICP 0000001945CE5B1 which has RPS profile assigned in the registry. Volumes for this ICP are submitted using RPS and PV1 profile.

## Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.9 With: 2 of Schedule 15.3 From: 16-Mar-18 To: 15-Feb-19	Incorrect submissions for two UML ICPs and incorrect profile for one ICP. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as strong. Pioneer's process for the management of NHH reads is robust. Audit risk rating is low because there is no impact on settlement outcomes because of the small number of ICPs with low volumes.		
Actions taken to resolve the issue		Completion date	Remedial action status
Registry amended to RPS PV1 For ICP 0000001945CE5B1		May 2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
ICP 0000606334WPB76 and 0000950800WP644 will be investigated and adjusted		June 2019	

## 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

We examined AV-080 for Sept'18 to Dec'18

### Audit commentary

We confirm that historical and forward estimates are clearly identified in ORION. Historical estimates are correctly allocated in AV-080.

### 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<sub>Px</sub> 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<sub>Px</sub>.*

### Audit observation

If the seasonal adjustment file (GR-30) is not available, which is the case for day4 submissions, ORION does not create their own shape file. It will calculate a forward estimate, which will be replaced by historical estimates once a shape file provided by the reconciliation manager is available.

### Audit commentary

For the assessment of compliance with this clause we provided Pioneer Energy with a set of scenarios to validate the accuracy of the calculation of historical and forward estimation for NHH ICPs. Only six scenarios were tested and for all of the calculations were incorrect. The results of testing are shown below:

Ref	Test	Comments	Result of Audit
1	Switch in during the month with estimated switch read, actual read gained in the next month, full profile data available.	Confirm that HE is calculated for the relevant part of the month, even though the switch in read is an estimate, and calculation begins on correct day	Compliant
2	Switch in during the month with actual switch read, actual read gained in the next month, full profile data	Confirm that HE is calculated for the relevant part of the month, and calculation begins on	Compliant

	available.	correct day	
3	Status change to active during the month, read gained in the next month, full profile data available	Confirm that HE is calculated for the relevant part of the month	Compliant
4	Switch out on estimate during the month	Confirm that HE is calculated even though the reading is an estimate Confirm that HE calculation ends on the correct day.	<b>Non-compliant</b> ORION uses last actual read not closing estimate to calculate volume. Volume is under-submitted
5	Switch out on actual during the month	Confirm that HE is calculated for the relevant part of the month, and calculation ends on correct day	Compliant
6	Complete month without a read in the month	Read in the previous month and the month after, confirm correct HE for the month	No actual example found
7	Complete month with a read during the month	Confirm the two calculations for the month are correct	<b>Non-compliant</b>
8	GXP change during the month	Confirm submission against one GXP for part month then the other GXP for part month, with correct HE/FE balance on each	Compliant
10	Meter change during month	Confirm estimation is calculated for both meters, and summed correctly	Compliant
12	Two reads in the same month	Confirm usage between two reads is 'Historic' even if no profile data is available	Compliant
13	ICP days for all HE scenarios above	Confirm ICP days calculations are correct	Compliant
15	Unmetered load submission	Check that this works the same as a normal meter and is considered HE	<b>Non-compliant</b> Historical estimates currently exclude UML

			as actual load and assume that is all estimated
16	No longer any ICPs with a particular combination of GXP, loss cat code etc.	Confirm that this row is "zeroed" in subsequent submissions	No row for zero value. This change has been requested to Agility

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.11 With: 4 of Schedule 15.3  From: 16-Mar-18 To: 15-Feb-19	Incorrect calculation of historical estimates for some scenarios conducted by ORION Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	Controls are recorded as moderate because there are some improvements that can be made to them. The audit risk rating is low because the impact on the settlement outcome is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ongoing discussions with software provider			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

### 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

ORION has a built-in functionality to calculate forward estimates using daily kWh or values from the CS files if it is a new ICP. For already traded ICPs, Orion uses Estimated Daily Usage, which is updated as soon as a new read is recorded.

### Audit commentary

We reviewed the reporting in relation to forward estimate accuracy. We chose August 2018 and examined wash up files. We confirm that Pioneer Energy does meet the Code requirements of its initial submission information against subsequent revision cycle submission information.

Balancing area		Initial	R1	R3	R7	R14
BALCTHAOTPOG	BAL0331	208,131	201,351	202,178	202,216	198,148
CENTRALALPEG	BPD1101	849,352	849,292	864,700	874,752	883,834
CROMWELDUNEG	CML0331	1,362,493	1,394,895	1,438,244	1,444,581	1,443,077
CLYDE00DUNEG	CYD0331	664,828	657,361	662,257	660,521	626,534
PALMSBYOTPOG	NSY0331	242,932	242,932	209,647	210,170	181,356
CENTRALALPEG	STU0111	876,852	876,785	873,490	866,582	865,981

Balancing area		R1/initial	R3/initial	R7/initial	R14/initial
BALCTHAOTPOG	BAL0331	-3.26%	-2.86%	-2.84%	-4.80%
CENTRALALPEG	BPD1101	-0.01%	1.81%	2.99%	4.06%
CLYDE00DUNEG	CML0331	2.38%	5.56%	6.02%	5.91%
CROMWELDUNEG	CYD0331	-1.12%	-0.39%	-0.65%	-5.76%
PALMSBYOTPOG	NSY0331	0.00%	-13.70%	-13.49%	<b>-25.35%</b>
CENTRALALPEG	STU0111	-0.01%	-0.38%	-1.17%	-1.24%

Submissions for NSY0331 were discussed with Pioneer. According to GR170NHH, the company under- submitted volumes in R14 by 25%. Pioneer Energy comment was that ICP 0003752345TGEA4 was excluded incorrectly from the R14 file. The volume for this ICP was 39,346.64 kWh in the initial file. If we include 39,346.64 kWh in R14, the ratio between R14/R0 is 9.1%

NSY0331 is the NPS, from which many irrigation connections are fed. It is difficult correctly estimate volumes because consumption is very much weather dependent. Pioneer Energy created special profile for irrigation connections based on historic data.

### 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 LIS file showed that Pioneer Energy uses HHR, RPS, DST, PV1 and UML profile for submissions as recorded in the registry.

**Audit commentary**

It was discussed during the audit and the company fully understands the requirement. Compliance confirmed based on a review of the LIS file and submission files.

**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

Pioneer Energy provided submission files for Nov'18 to Jan'19. .

EMS submits files for HHR ICPs and PION for NHH ICPs and AV-120 for all ICPs.

### Audit commentary

We reviewed files and confirm that the format of submission files is compliant. We reviewed HHRVOLS and HHRAGGR in **section 11.4**. NHHVOLS were discussed in **section 12.9**.

### 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 2 decimal places.*

*If the unrounded digit to the right of the second decimal place is greater than or equal to 5, the second digit is rounded up, and*

*If the digit to the right of the second decimal place is less than 5, the second digit is unchanged.*

### Audit observation

Pioneer Energy provided submission files for Nov'18 and Jan'19.

HHR submission volumes are calculated by EMS.

NHH submission volumes are calculated by Pioneer Energy using ORION.

### Audit commentary

We reviewed the EMS audit report and HHRVOLS and HHRAGGR for month Nov'18 to Jan'19 and confirm that submission information is rounded to no more than two decimal places.

We also reviewed NHHVOLS for the same period and confirm that submission information is rounded to no more than 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

We reviewed GR-170NHH for the period covered by this audit to assess compliance.

### Audit commentary

The table below shows how many NSPs Pioneer Energy did not meet compliance for.

Month	Number of NSP for which compliance was not met R3	Number of NSP for which compliance was not met R7	Number of NSP for which compliance was not met R14	Total number of NSPs
Apr'17	8	8	8	9
May'17	9	9	9	11
June'17	11	11	11	12
July'17	12	12	7	13
Aug'17	11	11	6	12
Sept'17	31	32	4	33
Oct'17	29	32	6	33
Nov'17	14	14	6	15
Dec'17	10	10	6	11
Jan'18	9	9	6	10
Feb'18	10	0		13
Mar'18	7	1		13
Apr'18	11	1		13
May'18	10	1		13
June'18	2	2		68
July'18	2	1		67
Aug'18	2	3		67
Sept'18	2			68
Oct'18	2			68
Nov'18	4			68
Dec'18	3			67

One of the probable reasons for non-compliance with this clause is an incorrect calculation of historical estimates by ORION. It is quite evident after examining GR-170-NHH that in June'18 AgilityCIS implemented some corrections to how historical estimates are calculated in ORION. Since then the percentage of historical estimates has become more realistic. Evidence of this can be seen, for example, in June'18, when the number NSPs traded by Pioneer increased, at the same time the level of compliance for revision 3 improved.

Our comment is based on a review of the management of NHH meter reads. Pioneer Energy manages NHH readings very well.

### Audit outcome

Non-compliant

Non-compliance	Description
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<p>Audit Ref: 13.3  With: 10 of  Schedule 15.3</p> <p>From: 16-Mar-18  To: 15-Feb-19</p>	<p>Historical estimates target not met for revision 3, and 7 for some NSPs</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
<p><b>Audit risk rating</b></p>	<p><b>Rationale for audit risk rating</b></p>		
<p><b>Low</b></p>	<p>Controls are recorded as moderate because there are some improvements that can be made to them. The audit risk rating is low because the impact on the settlement outcome is minor.</p>		
<p><b>Actions taken to resolve the issue</b></p>	<p><b>Completion date</b></p>	<p><b>Remedial action status</b></p>	
<p>Pioneer Energy has been working with Orion/Agility to improve the accuracy of the historical estimates, a new report released in July 2018 has significantly improved the calculations.</p>	<p>July 2018</p>	<p>Identified</p>	
<p><b>Preventative actions taken to ensure no further issues will occur</b></p>	<p><b>Completion date</b></p>		
<p>Further work will be undertaken with Agility/Orion to correct calculation errors</p> <p>Non-compliant sites will be further investigated and corrected where possible.</p>	<p>May 2020</p> <p>Aug 2019</p>		

## CONCLUSION

### PARTICIPANT RESPONSE

Pioneer Energy values the audit process as a chance to re-evaluate and improve processes and thank TEG associates for their time and diligence to complete the audit.