

Electricity Industry Participation Code Reconciliation Participant Audit Report

For

Orbus Business Services Limited

Prepared by Tara Gannon – Veritek Ltd

Date of Audit: 21/06/17

Date Audit Report Complete: 07/07/17

Date Audit Report Due: 30/07/17

Executive Summary

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

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits version 7.1.

ORBS began trading in February 2017. They currently supply two ICPs, and a third ICP switched out in April 2017.

John Candy Consulting (JCC) provides reconciliation services and support. Chrissy Burrows of Momentous Consulting has provided extensive training and assisted the ORBS team to understand their obligations, and to develop and document compliant business processes. Some of these processes are still being developed and refined, particularly for tasks that ORBS has not yet completed.

Given the short period ICPs have been supplied, it was not possible to see evidence of compliance in all areas. Where examples could not be tested, I reviewed the appropriate procedure documentation and discussed the intended process with ORBS.

There were several non-compliances relating to readings:

- there are no audit trails for reads within PowerCentre
- PowerCentre records all reads as actual
- customer reads were incorrectly classified as actual for February 2017 to early May 2017, in both PowerCentre and JCC's historic estimate calculations.

AMI reads are now provided for all meters, and customer readings are not expected in the future. PowerCentre reads are only used for switching at this stage, and the reads provided in outgoing CS files were correctly classified.

ORBS terms and conditions are still in draft, and are currently undergoing review before they are finalised.

The audit found six non-compliances and makes three recommendations for improvement. One issue was identified. The matters raised are shown in the tables below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Indicative Impact	Audit History	Controls	Breach Risk Rating	Remedial Action
Audit trails	2.4	18 and 21 of Schedule 15.2	There is no audit trail for meter readings within WorkCentre.	Low	None	Weak	3	Investigating, controls over final readings are also needed.

Subject	Section	Clause	Non-compliance	Indicative Impact	Audit History	Controls	Breach Risk Rating	Remedial Action
Terms and conditions	2.8	10.4, 10.7(2), 10.7(4), 10.7(5), 10.7(6) and 11.15B	ORBS terms and conditions are draft, and have not been finalised. The draft terms and conditions adequately cover the trader default processes.	Low	None	Weak	3	Identified.
AN response codes	4.8	3 of Schedule 11.3	An incorrect AN response code was provided for one ICP with AMI metering. AA was applied instead of AD.	Low	None	Moderate	2	Identified.
Derivation of meter readings	6.6	3(1), 3(2), 3(3), 3(4) and 5 of Schedule 15.2	Customer reads were incorrectly classified as actual reads, when they were not validated against actual reads and all the checks required were not completed.	Low	None	Moderate	2	Identified.
Identification of readings	9.1	3(3) of Schedule 15.2	PowerCentre records all reads entered as actual.	Low	None	Weak	3	Cleared. I saw evidence that PowerCentre is now able to record reads as estimates.
Calculation of historic estimate	12.11	4 and 5 Schedule 15.3	Customer reads were incorrectly classified as actual reads, resulting in them being used to calculate historic estimate.	Low	None	Moderate	2	Identified.
Breach Risk Rating Score							15	
Indicative Next Audit Frequency							12 months	

Table of Recommendations

Subject	Section	Clause	Recommendation for Improvement	Remedial Action
Relevant information	2.1	15.2	Check for notification files from the Registry daily. Review the files and update data as necessary.	Cleared. Since July 2017 ORBS has completed regular checks for registry notification files, but none have been received to date.

Subject	Section	Clause	Recommendation for Improvement	Remedial Action
Inform registry of switch request	4.1	2 of Schedule 11.3	Clarify agreement dates to identify where the date of first contact is different to the date agreement is reached.	Cleared. I reviewed evidence of addition of a date of arrangement field on the application form, and clarification of the date agreement was reached for all existing contracts.
AN response codes	4.2	3 of Schedule 11.3	Update the switching – switch loss document to explain that the AD code may be applied where AMI metering is installed.	Cleared. I reviewed a copy of the updated switching – switch loss document.

Table of Issues

Subject	Section	Clause	Issue
CS file content	4.10	11 of schedule 11.3	The switch file must contain the date of the last actual reading for the meter. The code does not state whether this last actual reading must be during the period of supply. In some cases, a retailer may have received a reading for the day that the ICP switches to the new retailer, due to timing.

Persons Involved in This Audit:

Auditor:

Tara Gannon
Veritek Limited
Electricity Authority Approved Auditor

Personnel assisting in this audit were:

Name	Title	Company
Jared Lock	Operations Manager	Orbus Business Services Ltd
John Candy	Director	JC Consulting Ltd
Chrissy Burrows	Director	Momentous Consulting Ltd
Steve Bryant	Software Developer	Orbus Business Services Ltd

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1. Administrative

1.1 Summary of Previous Audit

ORBS provided a copy of their last audit, conducted in January 2017 by Rebecca Elliot of Veritek Limited.

The audit found no non-compliances and made one recommendation in relation to a code amendment. The status of this recommendation is described in the table below.

Table of Recommendations

Subject	Last Report Section	Clause	Recommendation for Improvement	Status
HHR Aggregates	5.4	15.8 of part 15	Recommend ORBS liaise with other participants to consider recommending a code change to allow the current aggregate files used in the industry to remain unchanged.	Cleared. ORBS is not completing HHR submissions. However, the code still states that HHR aggregates submissions should contain billed rather than volume information.

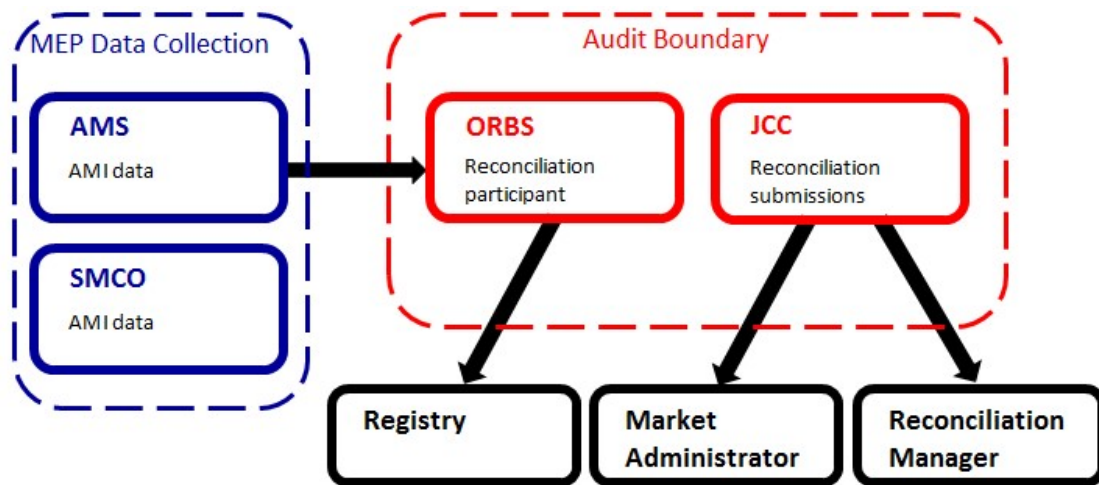
1.2 Scope of Audit

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

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits version 7.1.

ORBS switched in their first ICP effective from 7 February 2017, and currently supply two ICPs. All ICPs supplied have been AMI enabled, with submission type NHH.

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



The table below shows the tasks under clause 15.38 of part 15 for which ORBS requires certification, and the agents who assist with these tasks. This table also lists the MEPs who assist with these tasks:

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) - Gathering and storing raw meter data		AMS – NHH AMI reads Smartco - NHH AMI reads
(c)(iii) - Creation and management of HHR & NHH volume information	JCC	
(d) - Calculation of ICP days	JCC	
(da) - delivery of electricity supplied information under clause 15.7	JCC	
(e) - Provision of submission information for reconciliation	JCC	

1.3 Exemptions from obligations to comply with code (Section 11 of Electricity Industry Act 2010)

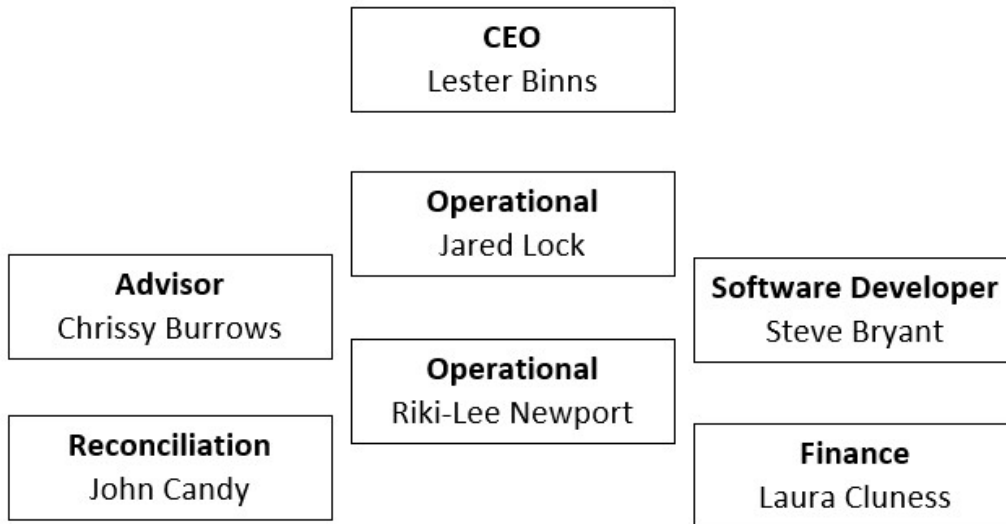
Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

ORBS has an exemption for certification until after 30 September 2017 (exemption 252).

1.4 Organisation structure

ORBS Energy

Organisational Structure



1.5 Use of agents (Clause 15.34 of Part 15)

AMS provides NHH AMI data for NGCM and SMC0 meters. AMS and Smartco's compliance with the code is examined as part of their MEP audits.

JCC prepares and submits electricity reconciliation data. JCC's agent audit report is attached as an appendix.

Momentous Consulting Limited provides business process support and advice.

1.6 Hardware and software

ORBS uses the registry interface to manage the interactions with the registry.

ORBS' WorkCentre platform is used for customer management. The PowerCentre module is used to record electricity information. The SQL database and application are hosted by CCL (Computer Concepts Limited).

Computer Concepts Limited manage backups of the database. Full data back-ups are completed hourly, and transactional data backups occur every 15 minutes. The system source code is version controlled, backed up, and hosted by Beanstalk.

All ORBS file servers are fully backed up each Saturday, with incremental backups every Monday, Tuesday, Wednesday and Thursday evening. A business recovery plan is in place, which covers applications and infrastructure.

Reconciliation processes are completed by JCC, acting as an agent.

1.7 Breaches or Breach Allegations

ORBS has no breach allegations recorded by the Electricity Authority during the audit period.

1.8 ICP data

ORBS provided a list file as at May 2017. The list file was examined by status:

ICP Status	Number of ICPs May 2017
Active	2

Both ICPs have Smartco category 1 meters installed, and are AMI enabled.

1.9 Authorisation received

ORBS provided a letter of authorisation to Veritek permitting the collection of data from other parties for matters directly related to the audit.

2. Operational infrastructure

2.1 Relevant information (Clause 10.6, 11.2, 15.2)

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 15 is:

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

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

Audit Observation

The process to find and correct incorrect information, and validate data against the registry was examined. Business process documents relating to data validation and correction were reviewed.

The list file was examined to confirm that all information was correct and not misleading, and identify any registry discrepancies.

Audit Commentary

JCC refreshes reconciliation data from the registry immediately prior to running reconciliation reports to ensure that aggregation factors, and statuses are correct. I reviewed ICP days and NHH volume submissions for February to May 2017, and confirmed that ICP days and aggregation factors reported were correct.

JCC provides a copy of reconciliation submissions to ORBS. ORBS staff check the submission data for reasonableness, and query any issues found with JCC.

ORBS' switching – business rules were reviewed and clearly state that ORBS must comply with the requirements of this rule, and correct information as soon as possible. ORBS matches its two ICP records against the registry approximately monthly, including unmetered load and generation fields. ORBS does not currently check for registry notification files, which may delay identification of changes to ICP information. I recommend that these files are reviewed.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 15.2	Check for notification files from the Registry daily. Review the files and update data as necessary.	Steve (ORBS IT) will develop a system (once we actually receive a 'NOT file' that automatically pulls the 'NOT' files from the Registry (likely to be daily) and then will run a check against the data held in 'PowerCentre' – any discrepancies will be manually verified – currently we are checking the EA SFTP, however, no 'NOT' files have been received.	Cleared.

The registry list file was reviewed, and no data issues were noted. Compliance is confirmed.

2.2 Provision of information (Clause 15.35)

If an obligation exists to provide information in accordance with Part 15, a participant must deliver that information to the required person within the timeframe specified in the Code, or, in the absence of

any such timeframe, within any timeframe notified by the Authority. Such information must be delivered in the format determined from time to time by the Authority.

Audit Observation

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

Audit Commentary

This area is discussed in a number of sections in this report, and compliance is confirmed.

2.3 Data transmission (Clause 20 Schedule 15.2)

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

The process to receive readings and transfer them to JCC was reviewed. A sample of 20 reads were checked to ensure they were transferred accurately.

Audit Commentary

AMS has provided AMI reads via SFTP for NCGM and SMCO meters during the audit period.

Until early May 2017, customer readings were provided via email for the two Smartco metered ICPs. Initial readings for the NCGM metered ICP were also customer provided. I matched a sample of ten customer reads, including all ICPs, from the source emails to the reconciliation submission workings, and PowerCentre. Read values had been recorded correctly, but were treated as actual in PowerCentre and in reconciliation submission calculations. This is recorded as non-compliance in sections **6.6** and **12.11**. Customer readings are no longer provided.

Since late May 2017, AMS has provided readings via SFTP daily. I sighted the SFTP folders and daily read files.

End of month read files are transferred securely to JCC via dropbox.

I traced a sample of four AMI readings from the source files to PowerCentre. I traced a sample of ten readings from the source files to the reconciliation submission workings, including all current ICPs. Read information was correctly recorded.

Compliance with the data transmission requirements is confirmed.

2.4 Audit trails (Clause 21 Schedule 15.2)

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

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 (clause 21(4)(c)).

Audit Observation

A complete audit trail was checked for all data gathering, validation and processing functions. I reviewed audit trails for a small sample of events. Large samples were not necessary because audit trail fields are expected to be the same for every transaction of the same type.

Audit Commentary

All agents have a unique log in to WorkCentre. All activity in WorkCentre has an audit trail including the activity identifier, date and time and an operator identifier.

Meter readings: There is no audit trail for meter readings within Work Centre. The readings held in PowerCentre are only used for switching. Reconciliation processes are completed by JCC.

Review of the JCC agent audit report confirmed that a complete audit report is available for data gathering, validation and creation of reconciliation files. The JCC audit report is attached as an appendix.

Registry notifications: a compliant audit trail is recorded within the registry.

Switching files: a compliant audit trail is recorded within the registry.

Reconciliation reports: a compliant audit trail is recorded within the allocation portal.

Non-compliance	Description
<p>With: Clause 18 and 21 of Schedule 15.2</p> <p>From/to: Feb to Jun 2017</p>	<p>There is no audit trail for meter readings within WorkCentre.</p> <p>Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach Risk Rating: 3</p>
Audit Risk Rating	Rationale for audit risk rating
<p>Low</p>	<p>Reads in WorkCentre are used only for switching activities, and only one ICP has switched out during the audit period. Access restrictions prevent unauthorised modification of meter readings. Reconciliation processes are completed by JCC.</p>

Actions taken to resolve the issue	Completion date	Remedial action Status
Steve will download the initial reads through SFTP and these will be stored in a non-editable file within a separate server. Copies of the original read files will then be transferred into PowerCentre to calculate customer's usage and billing amounts. Initial files will not be editable.	Immediately	Investigating, controls over final readings are also needed.
Preventative actions taken to ensure no further issues will occur	Completion date	
We will regularly check to ensure the validity of the initial reads that are downloaded through SFTP to ensure that no changes have been made.	Immediately	

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

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

Review of a copy of ORBS' draft terms and conditions, to assess compliance with this clause.

Audit Commentary

ORBS' general terms and conditions are still at draft stage, which is recorded as non-compliance in section 2.8. The draft terms and conditions do cover consent for the term of the arrangement, and other participants who may need to rely on that consent.

ORBS currently supplies two customers, both of which are staff members.

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

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.

Audit Observation

Review of a copy of ORBS' draft terms and conditions, to assess compliance with this clause.

Audit Commentary

ORBS' general terms and conditions are still at draft stage, which is recorded as non-compliance in section 2.8. The draft terms and conditions do cover access to metering installations for other parties.

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

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

A registry list with history was reviewed for the audit period to confirm that ORBS supplied only category 1 meters, and all meters had an MEP recorded.

Audit Commentary

ORBS deals with category one existing connections only, therefore they do not deal with determining meter locations for new connections, or installations with loss compensation.

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

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.

Audit Observation

Review of a copy of ORBS' draft terms and conditions, to assess compliance with this clause.

Audit Commentary

ORBS' general terms and conditions are still at draft stage, which is recorded as non-compliance below.

Transfer of rights and responsibilities is covered in section 5 of the draft terms and conditions. The clause gives ORBS the right to transfer the agreement to any entity, provided that the customer is advised of whom the agreement will be transferred to, that entity's contact details, and when the transfer will occur. Transfer in the event of retailer default is not expressly covered, as required by clause 11.15B. This is recorded as non-compliance below.

Non-compliance	Description	
<p>With: Clauses 10.4, 10.7(2), 10.7(4), 10.7(5), 10.7(6) and 11.15B</p> <p>From/to: February to June 2017</p>	<p>ORBS terms and conditions are draft, and have not been finalised. The draft terms and conditions do not adequately cover the trader default processes.</p> <p>Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach Risk Rating: 3</p>	
Audit Risk Rating	Rationale for audit risk rating	
Low	There are only two customers, both are staff members and understand their obligations. Section 5 of the draft agreement does cover transfer of customers.	
Actions taken to resolve the issue	Completion date	Remedial action Status
As the terms and conditions are in draft form and yet to be reviewed by ORBS – this feedback will be provided to our lawyers and the terms and conditions amended to reflect this.	31/07/2017	Identified.
Preventative actions taken to ensure no further issues will occur	Completion date	
Our terms and conditions will be updated and published prior to ORBS taking on further customers. Terms and Conditions will be reviewed on a regular basis (in particular when there are industry or code changes relative to these needing to be amended) to ensure that they still meet industry requirements.	31/07/2017	

2.9 Electrical connection of an ICP (Clause 10.32)

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

- *accept responsibility for the ICP and the obligations under Parts 10 and 11, and, under Part 15; and*
- *have an arrangement with an MEP to provide metering at the point of connection under Part 15.*

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading. ORBS intends to complete a new connection in the future, and Momentous Consulting Ltd will assist them to develop and document a compliant process before completing the new connection.

2.10 Metering certification (Clause 10.33(2))

A reconciliation participant may energise or authorise the energisation of a connection only if the reconciliation participant has accepted responsibility for the point of connection if one or more certified metering installations are in place.

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading.

2.11 Arrangements for line function services (Clause 11.16)

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

Audit Observation

A registry list file with history for the audit period was reviewed to confirm all networks ORBS traded on during the audit period. Business rules documentation was reviewed.

Audit Commentary

ORBS confirmed there are arrangements in place with all networks they currently trade on. ORBS' switching business rules document confirms that an agreement must be in place with the network prior to processing a switch. Compliance is confirmed.

2.12 Arrangements for metering equipment provision (Clause 10.36)

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

Audit Observation

A registry list file with history for the audit period was reviewed to confirm all MEPs for ORBS ICPs during the audit period. Business rules documentation was reviewed.

Audit Commentary

ORBS confirmed there are arrangements in place with the MEPs for each ICP they supply. ORBS' switching business rules document confirms that an agreement must be in place with the MEP prior to processing a switch. Compliance is confirmed.

3. Maintaining registry information

3.1 Obtaining ICP identifiers (Clause 11.3)

The following participants must obtain an ICP identifier for any point of connection, as defined in clause 11.3(3) of part 11, to any local network or embedded network:

- 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.*

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading.

3.2 Providing registry information (Clause 11.7(2))

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

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading.

3.3 Changes to registry information (Clause 10 Schedule 11.1)

If information provided by a trader to the registry about an ICP changes, the trader must notify the registry of the change no later than five business days after the change.

Audit Observation

In this Section I have examined the event detail report for the audit period to determine the overall performance for that period. There were three trader updates, and no status updates completed during the audit period.

The disconnection process is discussed in section 3.9, and the reconnection process is discussed in section 3.8.

Audit Commentary

All trader updates were processed within three business days of the event date. There were no status updates. Compliance is confirmed.

3.4 Trader responsibility for an ICP (Clause 11.18)

A trader becomes responsible for an ICP when the trader is recorded in the registry as being responsible for the ICP. The responsible trader must ensure that an MEP is recorded in the Registry.

A trader ceases to be responsible for an ICP if another trader accepts responsibility in the registry; the ICP is decommissioned. If decommissioning an ICP, the trader must ensure that a final meter interrogation takes place, and that the MEP is notified.

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

A registry list file was examined, and confirmed that all ICPs had a valid MEP.

The proposed process for the decommissioning of ICPs was examined. No ICPs have been decommissioned during the audit period.

Audit Commentary

All ICPs have a valid MEP.

ORBS has not dealt with any new connections since they commenced trading. ORBS intends to complete a new connection in the future, and Momentous Consulting Ltd will assist them to develop and document a compliant process before completing the new connection.

ORBS has not dealt with any decommissioned ICPs since they commenced trading. They intend to notify the MEP where an ICP is to be decommissioned, and to obtain the final meter interrogation reads via AMI.

Compliance is confirmed.

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

The content of files provided to the registry contains the information set out in clause 9 of schedule 11.1.

Audit Observation

An event detail report for the audit period was reviewed, which confirmed that ORBS had not completed any new connections during the audit period.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading.

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

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

Audit Observation

The process to capture and manage ANZSIC codes was examined. A Registry List was reviewed to check ANZSIC codes.

Audit Commentary

The list file was reviewed and found that all ICPs had a valid ANZSIC code recorded. All codes were as expected.

ORBS confirmed that they update the ANZSIC code to 0 for all their customers on switch in, as they only supply domestic ICPs. Compliance is confirmed.

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

Traders must populate the unmetered load details for all ICPs with unmetered load for which they are responsible.

Audit Observation

A registry list file with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with unmetered load.

Audit Commentary

ORBS has not supplied any unmetered load since they commenced trading, and do not intend to.

If an ICP is found to have unmetered load during the application process, the ICP will not be accepted. If an ICP is found to have unmetered load after switching in, ORBS will either ask the customer to switch out, or incorporate the unmetered load into submissions following industry best practice.

Compliance is confirmed.

3.8 Management of “active” status (Clause 17 Schedule 11.1)

Before being given an “Active” status the retailer is required to ensure that the ICP has only one customer, embedded generator, or direct purchaser; and that the electricity consumed is quantified by a metering installation(s) or other approved method of calculation.

Audit Observation

An event detail report for the audit period was reviewed to identify all changes to active during the audit period. The report confirmed that ORBS had not completed any new connections or reconnections during the audit period.

Processes to ensure there is only one party per ICP and that all active ICPs have an MEP were confirmed by viewing PowerCentre, reviewing business rules documents, and reviewing the registry list files provided.

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading, and do not intend to. There have been no status updates to active during the audit period. Status is checked during the application process to ensure that all ICPs switch in with an active status. ORBS understands their obligations in relation to maintaining status information on the registry.

ORBS’ system will not allow more than one party per ICP nor will it allow an ICP to be set up without both a meter and Metering Equipment Provider.

The status field is included in the registry validation process, as discussed in section 2.1.

Compliance is confirmed.

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

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

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

Audit Observation

An event detail report for the audit period was reviewed, to identify all changes to inactive during the audit period. The report confirmed that ORBS had not completed any disconnections during the audit period.

Audit Commentary

There were no status changes to inactive during the audit period, and there are no inactive ICPs.

ORBS is currently developing their processes to manage disconnection. It is intended that the registry will be updated as soon as possible after disconnection, and that disconnected properties will remain in the read cycle.

The status field is included in the registry validation process, as discussed in section 2.1.

Compliance is confirmed.

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

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

Audit Observation

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

Audit Commentary

ORBS has not dealt with any new connections since they commenced trading, and it is unlikely they will be selected as the expected retailer for any new or ready ICPs in the near future.

3.11 Change of MEP (Clause 10.22(1)(a)(i))

If the MEP for an ICP which is not also an NSP changes, the trader must notify the registry of the gaining MEP in accordance with Part 11.

Audit Observation

The process to manage a change of MEP on an existing ICP was examined. An event detail report for the audit period was reviewed, and identified no changes to MEP during the audit period.

Audit Commentary

ORBS understand their obligation to update the registry and notify the MEP where they require an MEP change. The MEP is checked before switching in the ICP to ensure that ORBS has a valid agreement in place. ORBS does not intend to carry out any MEP changes. Compliance is confirmed.

4. Performing customer and embedded network switching

I note that the switch breach reporting is in the process of being updated by Jade to align with the current code. Therefore, the switch breach report has been used to indicate non-compliance but due to inaccuracies it is not always possible to give a definitive number of the volume of late files. ORBS' switch breach report recorded no switching breaches.

ORBS runs the switch breach report each Friday, to check for any potential breaches which need to be resolved. This process will eventually be automated, so that an email is sent to management if breaches, or potential breaches occur.

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

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 of a switch no later than two business days after the arrangement comes into effect and include in its advice to the registry that the switch type is TR and 1 or more profile codes associated with that ICP.

Audit Observation

The switch gain process was examined to determine when ORBS deem all conditions to be met.

Analysis of the event detail report confirmed that ORBS requested three standard switches during the audit period. All were checked to ensure that they were requested within two business days of clearing any pre-conditions.

Audit Commentary

The process documented in the switching business rules achieves compliance. All switches were requested within two business days of clearing any pre-conditions. I recommend that the customer agreement form is amended to clarify the date that agreement is reached.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 2 of Schedule 11.3	Clarify agreement dates to identify where the date of first contact is different to the date agreement is reached.	Initial contracts have been backdated and the form has been updated to include a date field. Moving forward, clients will complete an online application through our website and therefore it will be date stamped. ORBS will then be able to monitor and identify dates in the process from receiving an application through to acceptance once all conditions have been met and event dates agreed.	Cleared.

No direct marketing is completed, and ORBS is aware of the requirements of the Fair Trading Act 1986 should they choose to complete direct marketing in the future.

Compliance is confirmed.

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

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

The losing trader must then provide acknowledgement of the switch request by providing the proposed event date to the registry and a valid switch response code; or providing a request for withdrawal.

Audit Observation

The switch response process was examined.

Analysis of the event detail report confirmed that there were no ANs sent for standard switches during the audit period.

Audit Commentary

No ANs were processed for standard switches during the audit period.

The switch loss document incorrectly states that the AD advanced metering code will not be used. This code should be used where an AMI meter is installed. A recommendation to update this document is recorded below.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 3 of Schedule 11.3	Update the switch loss document to explain that the AD code may be applied where AMI metering is installed.	Process documentation has been amended to update this after viewing the code change documentation and emails from the Authority on the correct use of codes.	Cleared.

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

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

Audit Observation

The switch response process was examined.

Analysis of the event detail report confirmed that there were no CS files sent for standard switches during the audit period.

Audit Commentary

The process documented in the switching business rules achieves compliance.

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

If the validated meter reading or permanent estimate provided by the losing trader differs by less than 200 kWh from a value established by the gaining trader for a Transfer Switch event, the gaining trader uses the losing trader's validated meter reading or permanent estimate as the switch event meter reading.

Audit Observation

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

Analysis of the event detail report confirmed that there were no read change requests sent or received for standard switches during the audit period.

Audit Commentary

The process documented in the switching business rules achieves compliance.

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

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 on the registry: and

- the gaining trader will trade electricity from a meter with a half hour submission type in the registry;*
- the gaining trader within five business days after receiving final information from the registry, 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 process for the management of read change requests was examined.

Analysis of the event detail report confirmed that there were no read change requests sent or received for standard switches during the audit period.

Audit Commentary

The process documented in the switching business rules achieves compliance.

4.6 Disputes – standard switch (Clause 7 Schedule 11.3)

A losing trader or gaining trader may notify the other that it disputes a switch event meter reading, notified under clauses 1 to 6. Such a dispute must be resolved in accordance with clause 15.29.

Audit Observation

The disputes process was discussed, and the switching business rules were reviewed.

Audit Commentary

ORBS confirms that no disputes have needed to be resolved in accordance with this clause. ORBS confirmed that the disputes process is documented, and will be moved into the switching business rules document.

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

The code requires that “for each ICP, to which a switch relates, the gaining trader must advise the registry of the switch no later than two business days after the arrangement with the customer or embedded generator comes into effect.”

Audit Observation

The switch gain process was examined to determine when ORBS deem all conditions to be met.

Analysis of the event detail report confirmed that ORBS did not request any switch moves during the audit period.

Audit Commentary

The process documented in the switching business rules achieves compliance. No late NT files were identified, compliance is confirmed.

4.8 Losing trader provides information – switch move (Clause 10 Schedule 11.3)

After receiving notification of a switch request from the registry, the losing trader must respond to the switch request within five business days.

Audit Observation

The switch response process was examined.

Analysis of the event detail report confirmed that ORBS sent one AN file for a switch move during the audit period. The AN file was reviewed for timeliness and accuracy.

Audit Commentary

The AN was sent within three business days. An incorrect response code was applied. ICP 0000185108CT521 had an advanced meter, but AA was applied instead of AD. This is recorded as non-compliance below.

Non-compliance	Description	
With: Clause 3 of Schedule 11.3 From/to: 19 April 17	An incorrect AN response code was provided for one ICP with AMI metering. AA was applied instead of AD. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach Risk Rating: 2	
Audit Risk Rating	Rationale for audit risk rating	
Low	There was only one error. The other participant could confirm AMI metering was in place for the affected ICP through other registry fields.	
Actions taken to resolve the issue	Completion date	Remedial action Status
Process Documentation has been updated and will be followed when losing a client with Advanced Metering – this wasn't a processing error, just a knowledge gap that has been rectified.	Immediately	Identified.
Preventative actions taken to ensure no further issues will occur	Completion date	
As above, process documentation has been amended and therefore this error should not occur in future.	Immediately	

I note that the process described in the switching business rules achieves compliance. The switch loss documents incorrectly states that the AD advanced metering code will not be used. This code should be used where an AMI meter is installed. A recommendation to update this document is recorded in section 4.2.

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

If the losing trader determines a different date, the losing trader must also complete the switch by providing to the registry as described in sub-clause (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 response process was examined.

The event detail report was analysed to assess compliance with the requirement to meet the setting of event dates requirement.

Audit Commentary

The process documented in the switching business rules achieves compliance.

ORBS completed one switch move, and it confirmed the event date proposed by the gaining retailer. Compliance is confirmed.

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

If the losing trader has provided information to the registry in accordance with clause 10(a), must provide a CS file containing the event date and switch event meter reading.

Audit Commentary

The switch response process was examined.

Analysis of the event detail report confirmed that there was one CS sent for a switch move during the audit period.

The switch breach history report for the audit period was reviewed to identify late CS files.

The accuracy of the content of CS file was confirmed by checking the file against ORBS' database. The content checked included:

- correct identification of meter readings and correct date of meter readings
- accuracy of meter readings
- accuracy of register content
- accuracy of average daily consumption (this is based on the most recent read to read consumption).

Audit Commentary

The process documented in the switching business rules achieves compliance.

The CS was sent on time and the data within it was accurate. Compliance is confirmed. An issue with the code requirements for CS file content is discussed below.

Clause	Issue
With: Clause 11 of schedule 11.3	The switch file must contain the date of the last actual reading for the meter. The code does not state whether this last actual reading must be during the period of supply. In some cases, a retailer may have received a reading for the day that the ICP switches to the new retailer, due to timing.

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

*As of October 9th, 2015, the gaining trader may provide an AMI switch event meter reading within five business days of the event date to the losing trader. In this instance the losing trader **MUST** use the gaining traders switch event meter reading. If no AMI switch event meter reading is available the gaining trader **MUST** use the losing traders switch event meter reading. If the validated meter reading or permanent estimate provided by the losing trader differs by less than 200 kWh from a value established by the gaining trader for a Move Switch event, the gaining trader uses the losing trader's validated meter reading or permanent estimate as the switch event meter reading.*

Audit Observation

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

Analysis of the event detail report confirmed that there were no read change requests sent or received for switch moves during the audit period.

Audit Commentary

The process documented in the switching business rules achieves compliance.

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

The gaining trader 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 to trade electricity through or assume responsibility for:

- *a half hour metering installation that is not a category 1 or 2 metering installation, that has an ICP with a submission type half hour on the registry and an AMI flag of "N"; or*
- *a half hour metering installation that has a submission flag of half hour and an AMI flag of "N" and is traded by the losing trader as non-half hour; or*
- *a non-half hour metering installation at an ICP with the losing trader trades through a half hour metering installation with an AMI flag of "N".*

Audit Observation

The event detail report and switch breach report were analysed to identify all switch files sent during the audit period. No half hour switches were identified.

Audit Commentary

ORBS did not complete any half hour switches during the audit period. ORBS does not intend to trade at category 3 or higher ICPs at this time. ORBS understands that HHR processes will need documented and reviewed before this can occur.

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

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

15(a) - provide to the registry 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 event detail report and switch breach report were analysed to identify all switch files sent during the audit period. No half hour switches were identified.

Audit Commentary

ORBS did not complete any half hour switches during the audit period.

4.14 Gaining trader to notify registry – gaining trader switch (Clause 16 Schedule 11.3)

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

Audit Observation

The event detail report and switch breach report were analysed to identify all switch files sent during the audit period. No half hour switches were identified.

Audit Commentary

ORBS did not complete any half hour switches during the audit period.

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

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

Within five business days after receiving a notification from the registry of a switch, the trader receiving the withdrawal must notify the registry 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.

On receipt of a rejection notification from the registry, a trader may re-submit the switch withdrawal request for an ICP. All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request.

If the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within two business days after receipt of notification from the registry 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.

Audit Observation

The process for the management of switch withdrawals was examined.

Analysis of the event detail report confirmed that there were no switch withdrawal files sent or received during the audit period.

Audit Commentary

The process documented in the switching business rules, switching send withdrawal, and switching receive withdrawal documents achieves compliance.

4.16 Metering information (Clause 21 Schedule 11.3)

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

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

Audit Observation

The meter reading process in relation to meter reads for switching purposes was examined. ORBS only CS file during the audit period was reviewed to ensure that read information provided was correct.

Audit Commentary

The process documented in the switching business rules achieves compliance.

I reviewed the only CS file during the audit period, and confirmed that the reads were correctly classified as actual.

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

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

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

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

- 11.15AB(4)(a)- making a counter offer to the customer; or*
- 11.15AB(4)(b)- offering an enticement to the customer.*

Audit Observation

The Electricity Registry switch save protected retailer list was examined to confirm that ORBS is not a save protected retailer.

Win-back processes were examined to determine whether they are compliant.

Audit Commentary

The process documented in the switching business rules achieves compliance, win-backs are not to be completed for save protected retailers. One switch out was completed during the audit period, and there was no withdrawal.

5. Maintenance of unmetered load

5.1 Maintaining shared unmetered load (Clause 11.14)

The trader must adhere to the process for maintaining shared unmetered load.

Audit Observation

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with unmetered load.

I reviewed processes to identify shared unmetered load.

Audit Commentary

ORBS has not supplied any unmetered load since they commenced trading, and do not intend to.

If an ICP is found to have unmetered load during the application process, the ICP will not be accepted. If an ICP is found to have unmetered load after switching in through the registry validation process discussed in section 2.1, ORBS will either ask the customer to switch out, or incorporate the unmetered load into submissions following industry best practice.

Compliance is confirmed.

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

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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with unmetered load.

Audit Commentary

ORBS has not supplied any unmetered load since they commenced trading, and do not intend to.

5.3 Unmetered threshold exceeded (Clause 10.14 (5))

If the unmetered load limit is exceeded the retailer must:

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

Audit Observation

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with unmetered load.

Audit Commentary

ORBS has not supplied any unmetered load since they commenced trading, and do not intend to.

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

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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with unmetered load.

Audit Commentary

ORBS has not supplied any unmetered load since they commenced trading, and do not intend to.

6. Gathering raw meter data

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

A trader must ensure that for each energised ICP that electricity is conveyed is in accordance with the code.

A participant is not required to quantify the electricity at a point of connection if the electricity is supplied by an embedded generator who has given the Reconciliation Manager a notification under clause 15.13 of Part 15.

Audit Observation

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with distributed generation.

Audit Commentary

In accordance with Part 10 the responsibility for the metering installations at each point of connection rests with the Metering Equipment Provider.

If an ICP is found to have generation during the application process, the ICP will not be accepted. Examination of the list file found no ICPs with generation capacity. All ICPs had an installation type of L and generation capacity of 0.

If an ICP is found to have distributed generation after switching in through the registry validation process discussed in section 2.1, ORBS will either ask the customer to switch out, or incorporate the generation load into submissions following industry best practice. Compliance is confirmed.

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

An asset owner must, for each GIP that connects to the grid, ensure that there is one or more certified metering installations for the GIP.

Audit Observation

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any GIPs.

Audit Commentary

Examination of the list file found that ORBS has not supplied any GIPs.

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

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

A registry list with history was reviewed for the audit period to confirm that ORBS has only used the RPS profile during the audit period.

Audit Commentary

Examination of the list file found that ORBS has only used the RPS profile, and control devices are not used for reconciliation purposes.

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

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

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

Audit Observation

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

Audit Commentary

ORBS understands the requirements of this clause. The process documentation for defective installations is still to be completed.

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

A reconciliation participant must obtain raw meter data used to determine volume information from the services access interface. Except when only the Metering Equipment Provider can electronically interrogate a metering installation for which it is responsible and they have an arrangement with the reconciliation participant which prevents them from interrogating the metering installation themselves.

Audit Observation

The data collection process was examined. MEP data collection processes were reviewed as part of their MEP audits.

Audit Commentary

Information used to determine volume information is provided by AMS for NGCM and SMC0 meters as MEP to ORBS. This function will be examined as part of their respective MEP audits. Compliance is confirmed.

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

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.

A sample of 20 reads were traced from read source information to reconciliation submission calculations and the PowerCentre system in section 2.3.

Audit Commentary

AMS has provided AMI reads via SFTP for NCGM and SMCO meters during the audit period.

Until early May 2017, customer readings were provided via email for the two Smartco metered ICPs. Initial readings for the NGCM metered ICP were also customer provided. I matched a sample of ten customer reads, including all ICPs, from the source emails to the reconciliation submission workings, and PowerCentre. Read values had been recorded correctly, but were treated as actual in PowerCentre and in reconciliation submission calculations although the required checks set out in clause 3(1) and 3(2) of Schedule 15.2 were not completed, and the reads were not validated against actual reads. This is recorded as non-compliance below.

Customer readings are no longer provided.

Non-compliance	Description	
<p>With: Clause 3(1), 3(2), 3(3), 3(4) and 5 of Schedule 15.2</p> <p>From/to: February to early May 2017</p>	<p>Customer reads were incorrectly classified as actual reads, when they were not validated against actual reads and all the checks required were not completed.</p> <p>Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach Risk Rating: 2</p>	
Audit Risk Rating	Rationale for audit risk rating	
Low	Three ICPs were affected for less than 3 months. The reads were taken by ORBS staff members at their own homes, and are likely to be accurate. None of the meters were identified to be faulty. AMI reads are now received for all ICPs.	
Actions taken to resolve the issue	Completion date	Remedial action Status
At the time of switch, we had an agreement with Vector AMS to provide AMI reads. Both SMCO meters were communicating however, Vector AMS had some internal issues which delayed the on-boarding of us as a new retailer. As we were unable to obtain reads through Vector AMS (and the agreement with Wells had not yet been completed), we completed customer own reads through manual reads or image verification – with a Wells agreement now completed, this service will be used for any required future manual reads.	Immediately	Identified.
Preventative actions taken to ensure no further issues will occur	Completion date	
As discussed, we now have an agreement with Wells for meter reading services – Wells will be used for any non-AMI meters or AMI meters that are non-communicating. This will ensure that all reads are accurate. With system changes, we now also have the ability to specify if the read is an 'actual read' or is classified as an 'estimate'. Future customer reads will be validated in accordance with Code, using an actual read	Immediately	

6.7 NHH meter reading application (Clause 6 Schedule 15.2)

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

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

Audit Observation

The process of the application of meter readings was examined.

- Use of correct readings for switching files is discussed in section 4.10.
- Use of read times to calculate historic estimate is discussed in section 12.11.
- A sample of 20 reads were traced from read source information to reconciliation submission calculations and the PowerCentre system in section 2.3.

Audit Commentary

Meter readings are applied from the correct time. Compliance is confirmed.

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

A validated meter reading must be 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, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

The NHH meter reading frequency guidelines published by the Electricity Authority define "Exceptional circumstances" as meaning "circumstances in which access to the relevant meter is not achieved despite the reconciliation participant's best endeavours". "Best endeavours" is defined as "Where a reconciliation participant failed to interrogate an ICP as a result of access issues, the reconciliation participant had made a minimum of three attempts to contact the customer, by using at least two methods of communication".

Audit Observation

The process to manage missed reads was examined.

I traced a sample of actual reads for each ICP through to PowerCentre and the reconciliation report workings to confirm that all three ICPs supplied by ORBS had an actual read during the period of supply.

Audit Commentary

All ICPs supplied by ORBS have an actual read during the period of supply. Compliance is confirmed.

The two ICPs ORBS currently supplies both have AMI metering, and AMI reads are received daily. ORBS intends to enter into a contract with an agent, who will provide manual readings for meters where AMI reads cannot be obtained.

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

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

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

Audit Observation

The meter reading process was examined in sections **6.5-6.6**. Meter reading frequency reports for the months of February to May 2017 were provided.

Audit Commentary

ORBS switched in its first ICP on 7 February 2017, and has not supplied any ICPs for 12 months or more.

As discussed in section **6.8**, ORBS intends to enter into an agreement with an agent who will supply manual readings where AMI reads cannot be obtained.

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

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

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

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

Audit Observation

The meter reading process was examined in sections **6.5-6.6**. Meter reading frequency reports for the months of February to May 2017 were provided.

Audit Commentary

ORBS switched in its first ICP on 7 February 2017, and had not supplied any ICPs for four months, on the date the last meter reading frequency report was issued.

As discussed in section **6.8**, ORBS intends to enter into an agreement with an agent who will supply manual readings where AMI reads cannot be obtained.

6.11 NHH meter interrogation log (Clause 10 Schedule 15.2)

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

AMS is responsible for meter interrogation for ORBS' NHH meters. Meter interrogation logs are reviewed as part of their MEP audits.

Audit Commentary

The meter interrogation log is the responsibility of AMS.

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

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

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

Audit Commentary

ORBS does not currently collect HHR data. If HHR data is collected in the future, it will be provided by the MEP.

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

The following information is collected during each interrogation of HHR metering:

- *the unique identifier (device ID) of the meter or data logger;*
- *the connection time, disconnection time and recorder time;*
- *the half-hour metering information for each trading period;*
- *events log.*

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

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

Audit Commentary

ORBS does not currently receive HHR data.

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

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

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

Audit Commentary

ORBS does not currently receive HHR data.

7. Storing raw meter data

7.1 Trading period duration (Clause 13 Schedule 15.2)

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

Audit Observation

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

Audit Commentary

ORBS does not currently receive HHR data. A sample of three meter reading files for NGCS and two meter reading files for SMCO were reviewed to confirm that ORBS receives only a midnight read for each ICP, timestamped 23:59:59.

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

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

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

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

Audit Observation

Processes to archive and store raw meter data were reviewed. Raw meter data from when ORBS began trading was reviewed, to ensure that it is retained.

Audit trails were reviewed.

Audit Commentary

I confirmed that reads are retained from the date that the customer switches in. ORBS intends to retain meter reading data for at least seven years.

Compliance with clause 18.3 of schedule 15.2 was examined, which requires that “.....meter readings cannot be modified without an audit trail being created.” Readings can be modified without an audit trail being created. This is recorded as non-compliance in section 2.4.

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

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

Audit Observation

Processes to record non-metering information were discussed.

Audit Commentary

ORBS does not deal with any non-metering information.

7.4 Data Storage Device Clock Synchronisation (Clause 2(5)&(6) of Schedule 15.2)

When electronically interrogating the meter the participant must ensure that the clock is synchronised and correct the clock and raw data where necessary.

Audit Observation

Clock synchronisation processes for MEPs were reviewed as part of their own audits.

MEPs are to advise ORBS of clock synchronisation discrepancies and adjustments. I discussed clock synchronisation events with ORBS, and found no event information was available for review.

Audit Commentary

ORBS has not received any clock synchronisation information from MEPs to date, but has only been trading since February 2017. Event logs are received and reviewed. Three logs were reviewed and found to be blank, no events had occurred.

Compliance is confirmed.

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)

If errors are detected during validation of non-half hour meter readings, one of the following must be undertaken:

- *confirmation of the original meter reading by carrying out another meter reading*
- *replacement of the original meter reading by another meter reading (even if the replacement meter reading may be at a different date)*
- *if the original meter reading cannot be confirmed or replaced by a meter reading from another interrogation, then an estimated reading is substituted and the estimated reading is marked as an estimate and it is subsequently replaced in accordance with clause 4(2).*

Audit Observation

Reconciliation process documentation was reviewed.

Correction of NHH meter readings is completed by JCC as ORBS' agent, and their audit report is attached as an appendix. No NHH corrections were made during the audit period.

Audit Commentary

Review of JCC audit report confirmed that corrections to NHH readings will be made in consultation with the participant. No issues were noted with the NHH correction process. No corrections have been required for ORBS ICPs to date. Compliance is confirmed.

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

If errors are detected during validation of half hour metering information the correction must be as follows:

- *if a check meter or data storage device is installed at the metering installation, data from this source may be substituted*
- *in the absence of any check meter or data storage device, data may be substituted from another period if the total of all substituted intervals matches the total consumption recorded on the meter, if available, and the pattern of consumption is considered materially similar to the period in error.*

Audit Observation

Reconciliation process documentation was reviewed.

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

If HHR ICPs are supplied in the future, JCC will complete corrections as ORBS' agent, and their audit report is attached as an appendix.

Audit Commentary

ORBS does not deal with HHR data, and no corrections were made during the audit period.

Review of JCC audit report confirmed that the HHR correction process is compliant. One recommendation was made, to not override valid actual data where part of a day is estimated. This does not cause any issues for ORBS, as no HHR corrections were completed.

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

If error compensation and loss compensation are carried out as part of the process of determining accurate data, the compensation process must be documented and must comply with audit trail requirements.

Audit Observation

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH. All meters are category 1.

Audit Commentary

ORBS does not deal with any loss and compensation arrangements.

8.4 Correction of HHR and NHH raw meter data (Clause 22(1) and (2) Schedule 15.2)

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:

22(2)(a) - the date of the correction or alteration

22(2)(b) - the time of the correction or alteration

22(2)(c) - the operator identifier of the reconciliation participant

22(2)(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

22(2)(e) - the technique used to arrive at the corrected data

22(2)(f) - the reason for the correction or alteration.

Audit Observation

Corrections are completed by JCC, and the agent audit report was reviewed. No corrections occurred during the audit period.

Retention of raw metering data is discussed in section 7.2.

Audit Commentary

The agent audit report for JCC confirmed compliance with this clause. No corrections occurred during the audit, so it was not possible to check a sample of corrections for ORBS.

The PowerCentre system does not contain audit trails for readings, this is raised as non-compliance in section 2.4. PowerCentre information is not used for reconciliation purposes.

Processes for retention of meter readings were found to be compliant in section 7.2.

9. Estimating and validating volume information

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

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

All reads available from February 2017 to May 2017 were reviewed for all ICPs. The only estimated readings identified were permanent estimates received from the losing retailer. All other reads were classified as actual.

Audit Commentary

Some customer reads were incorrectly classified as actual in PowerCentre and for reconciliation purposes. This is recorded as non-compliance in section 6.6.

The JCC audit report confirmed that reads are correctly identified as estimate or actual. For ORBS, some customer reads were incorrectly classified as actual. This is recorded as non-compliance in section 6.6 and 12.11.

PowerCentre does not have functionality to allow reads entered to be classified as estimates. This is recorded as non-compliance below.

Non-compliance	Description
With: Clause 3(3) of Schedule 15.2 From/to: February to June 2017	PowerCentre records all reads entered as actual. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach Risk Rating: 3
Audit Risk Rating	Rationale for audit risk rating
Low	PowerCentre is only used for switching processes. Only one ICP has switched out, and an actual read was obtained for use in the switching file. There has been no impact to date.

Actions taken to resolve the issue	Completion date	Remedial action Status
Software change now allows reads to be entered as either actual or estimate	Immediately	Cleared.
Preventative actions taken to ensure no further issues will occur	Completion date	
ORBS will monitor that estimates are recorded correctly when they occur. This can be monitored as the need to estimate is communicated between ourselves and our agent.	Immediately	

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

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

Submission data for all ICPs was reviewed for the following submissions to ensure that volumes were derived from readings as required by this clause.

- February 2017 revision 1
- February 2017 revision 3
- March 2017 revision 1; and
- April 2017 revision 1

Audit Commentary

Volume information was derived from meter readings as required by this clause. Compliance is confirmed.

In some cases, customer reads were treated as actual reads, and used to calculate historic estimate. This is recorded as non-compliance in section 6.6 and 12.11.

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

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

Audit Observation

A sample of twenty meter readings were reviewed, which confirmed that meter data used to create volumes was not rounded or truncated in PowerCentre or by JCC.

Audit Commentary

Meter data used to derive volume is not rounded or truncated by ORBS or JCC. Compliance is confirmed.

9.4 Half hour estimates (Clause 15 Schedule 15.2)

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

Reconciliation process documentation was reviewed.

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

If HHR ICPs are supplied in the future, JCC will complete corrections as ORBS' agent, and their audit report is attached as an appendix.

Audit Commentary

ORBS does not deal with HHR data, and no half hour estimates were created during the audit period.

Review of JCC audit report confirmed that the HHR estimation process is compliant, and that process ensures that the best estimate is provided.

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

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 zero values.

Audit Observation

NHH metering information validation is completed by JCC, and their audit report is attached as an appendix to this report.

Audit Commentary

Review of the JCC audit report, and discussion with ORBS, confirmed that JCC validates the read data received. The validation includes checks for invalid dates and time, consumption outside the

acceptable range and invalid data. Validation reports were reviewed by TEG & Associates as part of JCC's audit.

Compliance is confirmed.

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

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

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

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

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

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

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

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

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

Audit Observation

ORBS receives daily AMI readings for its NHH ICPs. The AMI readings are validated by JCC as discussed in section **9.5**.

Meter event logs are received and reviewed by ORBS. I reviewed the meter event log processes.

Audit Commentary

Each validity check of a meter reading obtained by electronic interrogation and each estimated reading must be at a frequency that will allow a further interrogation of the data storage device before the data is overwritten, and before the data can be used for any purpose under this Code. Both MEPs undertake some validation checks as part of their MEP function.

The Code requires "...a review of meter and data storage device event log. Any event that could have affected the integrity of metering data must be investigated." The agreements with the MEPs have not been finalised at the time of this audit, therefore I cannot confirm if this requirement has been met.

Event logs are received and reviewed. Three logs were reviewed and found to be blank, no events had occurred.

Compliance is confirmed.

10. Provision of metering information to the pricing manager in accordance with subpart 4 of Part 13 (clause 15.38(1)(f))

10.1 Generators to provide HHR metering information (Clause 13.136)

The generator (and/or embedded generator) must provide to the pricing manager and 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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with generation.

Audit Commentary

Examination of the list file found no ICPs with generation capacity. All ICPs had an installation type of L and generation capacity of 0.

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

Each generator must provide the pricing manager and 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 pricing manager and 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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with generation.

Audit Commentary

ORBS does not complete any generation activities, and does not need to provide this metering information.

10.3 Loss adjustment of HHR metering information (Clause 13.138)

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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with generation.

Audit Commentary

ORBS does not complete any generation activities, and does not need to provide this loss adjustment information.

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

If the generator provides half-hourly metering information to the pricing manager or 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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any ICPs with generation.

Audit Commentary

ORBS does not complete any generation activities, and does not need to provide this HHR metering information.

11. Provision of submission information for reconciliation

11.1 Buying and selling notifications (Clause 15.3)

Unless an embedded generator has given a notification in respect of the point of connection under clause 15.3, a trader must notify 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

A registry list was reviewed for the audit period to confirm that only the RPS profile was used.

Audit Commentary

As ORBS is only using the RPS profile trading notifications were not required. Compliance is confirmed.

11.2 Calculation of ICP days (Clause 15.6)

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.

Audit Observation

ICP days reporting is completed by JCC, and their audit report is attached as an appendix to this report.

The process for the calculation of ICP days was examined by comparing a registry list with history for the audit period, and calculating the expected active ICP days for each NSP for each available month. This was compared to the AV110 submissions, and the registry days and retailer days on the GR100 report.

The GR100 report was reviewed to determine whether there were any variances.

Audit Commentary

Review of the JCC audit report confirmed that JCC's AV110 reporting is based on the registry list file report, and it is the participant's responsibility to ensure that any discrepancies between the registry and their systems are resolved prior to reporting. The process to identify and resolve registry discrepancies is discussed in section 2.1. ORBS is aware of how JCC generates the reports, and ensures matches to the registry are completed prior to reporting.

Comparison of expected ICP days to actual ICP days confirmed that active ICP days had been calculated and aggregated correctly in the AV110 report, and matched the active ICP days on the registry exactly.

The following table shows the ICP days difference between ORBS files and the RM return file (GR100) for all available revisions. No discrepancies were found.

Month	Ri	R1	R3	R7	R14
February 2017	0.00%	0.00%	-	-	-
March 2017	0.00%	0.00%	-	-	-

Month	Ri	R1	R3	R7	R14
April 2017	0.00%	0.00%	-	-	-

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

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 billed reporting is completed by JCC, and their audit report is attached as an appendix to this report.

The process for the calculation of electricity supplied was examined by checking AV120 submissions for February, March and April 2017.

I reviewed all GR130 reports available to confirm whether the relationship between billed and submitted data appears reasonable.

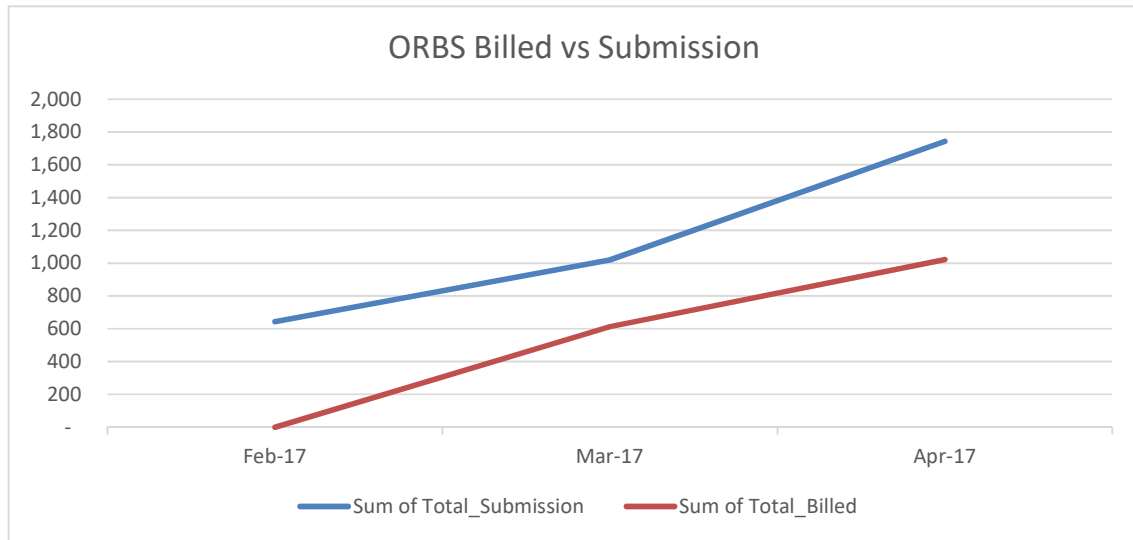
Audit Commentary

ORBS is not currently generating customer invoices, and is effectively applying a zero charge to the electricity consumed by the customer. As billed data is reported by JCC based on the initial allocation submission for the month prior.

I compared the AV120 submissions to the AV080 submissions, and also the meter readings for the month, and confirmed that they were reasonable.

The table below shows a comparison between submissions and electricity supplied information. Only two months of data were available, and I can see evidence of the one month offset between billed and submission data. The differences appear reasonable.

Comparison between Submitted Volumes and Electricity Supplied



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

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

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

If HHR ICPs are supplied in the future, JCC will complete corrections as ORBS' agent, and their audit report is attached as an appendix.

Audit Commentary

ORBS does not deal with HHR data, and no HHR aggregates information was provided to the reconciliation manager during the audit period.

Review of JCC audit report confirmed that their processes to provide HHR aggregates information to the reconciliation manager are compliant.

12. Submission computation

12.1 Daylight saving adjustment (Clause 15.36)

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

A registry list was reviewed for the audit period to confirm that all HHR meters supplied by ORBS have AMI installed, and submission type NHH.

MEP daylight savings processes will be reviewed as part of their MEP audits.

Audit Commentary

Compliance with this clause has been demonstrated by the MEPs.

ORBS does not deal with HHR data, and no daylight savings adjustments were made.

12.2 Creation of submission information (Clause 15.4)

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

Registry acknowledgement files for a typical sample of seven AV110 reports and seven AV080 reports were reviewed. The sample included reports for February, March and April 2017, and initial, one and three month revisions.

A list of breaches was obtained from the Electricity Authority. There were no breaches for late provision of submission information.

Audit Commentary

I reviewed the date and time of acknowledgement files received from the reconciliation manager for each AV080 and AV110 submission reviewed, and confirmed that all acknowledgement files were received prior to the submission due date and time.

No breaches had been recorded for late provision of submission information.

Compliance is confirmed.

12.3 Allocation of submission information (Clause 15.5)

In preparing and submitting submission information, the reconciliation participant must allocate volume information for each ICP to the NSP indicated by the data held by 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

Submissions are completed by JCC, and their audit report is attached as an appendix to this report.

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in section 2.1. The aggregation process was reviewed by comparing a registry list with history to the detailed AV080 submissions for February to May 2017, to make sure aggregation factors were applied for the correct dates.

There were no active-vacant ICPs, so it was not possible to test their treatment.

The GR170 files for all months available were compared to the AV080, to confirm zeroing occurs.

Audit Commentary

Review of the JCC audit report confirmed that submission information compliant, and inactive vacant consumption is identified and reported.

Aggregation checks showed that the AV080 aggregation factors were consistent with the values recorded on the registry.

GR170 and AV080 files were compared for February and March 2017, and found to contain the same NSPs.

12.4 Grid owner volumes information (Clause 15.9)

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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any GIPs.

Audit Commentary

Examination of the list file found that ORBS has not supplied any GIPs. ORBS is not required to report any grid connected generation.

12.5 Provision of NSP submission information (Clause 15.10)

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

ORBS is not a local or embedded network owner.

Audit Commentary

ORBS is not a local or embedded network owner, and is not required to provide NSP submission information.

12.6 Grid connected generation (Clause 15.11)

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

A registry list with history was reviewed for the audit period to confirm that ORBS has not supplied any GIPs.

Audit Commentary

Examination of the list file found that ORBS has not supplied any GIPs. ORBS is not required to report any grid connected generation.

12.7 Accuracy of submission information (Clause 15.12)

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

A typical sample of seven AV110 reports and seven AV080 reports were reviewed. The sample included reports for February, March and April 2017, and initial, one and three month revisions.

Audit Commentary

Revisions had been submitted to the reconciliation manager by the specified deadlines as expected. Compliance is confirmed.

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

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).

Volume information created using estimated readings must be subsequently replaced at the earliest opportunity by the reconciliation participant by volume information that has been created using validated meter readings or permanent estimates by, at the latest, the month 14 revision cycle.

A permanent estimate may be used in place of a validated meter reading, but only if, despite having used reasonable endeavours; the reconciliation participant has been unable to obtain a validated meter reading.

Audit Observation

Reconciliation reporting is completed by JCC, and their audit report is attached as an appendix to this report. ORBS began trading in February 2017, and no 14 month revisions were available for review.

Identification of meter readings is discussed in section 9.1.

Audit Commentary

Review of the JCC audit report confirmed that permanent estimates are applied correctly. Compliance is confirmed.

12.9 Creation of submission information (Clause 2 Schedule 15.3)

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

- *half hour volume information 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)):*
 - *half hour volume information for the ICP; or*
 - *non half hour volumes information calculated under clauses 4 to 6 (as applicable)*
 - *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 on 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)):*
 - *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
 - *for each NSP the compensation factor that is recorded in the metering installations most recent certification report (clause 2(3)(b)).*

Audit Observation

Reconciliation reporting is completed by JCC, and their audit report is attached as an appendix to this report.

The registry list with history was reviewed for the audit period to confirm that ORBS does not supply an ICPs with

- submission type HHR
- unmetered load
- a metering category higher than 1
- distributed generation
- a profile apart from RPS
- a compensation factor.

Aggregation of the AV080 submission was reviewed in section **12.3**.

Audit Commentary

JCC prepares submission information for each NSP for the relevant consumption periods in accordance with these clauses; the submission information includes NHH volume information only.

12.10 Historical estimates and forward estimates (Clause 3 Schedule 15.3)

For each ICP that has a non-half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates must be allocated to consumption periods using the following techniques to create historical estimates and forward estimates (clause 3(1)).

Each estimate that is a forward estimate or a historical estimate must clearly be identified as such (clause 3(2)).

If validated meter readings are not available for the purpose of clauses 4 and 5, permanent estimates may be used in place of validated meter readings (clause 3(3)).

Audit Observation

Review all AV080 submissions to date, to confirm that historic estimates are included and identified.

Permanence of meter readings is reviewed in section **12.8**. The methodology to create forward estimates is reviewed in section **12.11**.

Audit Commentary

I reviewed the AV080 submissions available for February, March and April 2017. I confirm that forward and historic estimates are included, and identified as such. Compliance is confirmed.

12.11 Historical estimate process (Clause 4 and 5 Schedule 15.3)

The methodology outlined in clause 4 of Schedule 15.3 must be used when preparing historic estimates of volume information for each ICP when the relevant seasonal adjustment shape is available.

If a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP must be the same as in clause 4, except that the relevant quantities kWh_{Px} must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by kWh_{Px}

Audit Observation

Historic estimate is calculated and reported by JCC, and their audit report is attached as an appendix to this report.

ORBS provided all reconciliation submissions to date, accompanied by supporting data used to calculate the submissions. I re-performed the calculations for a sample of ICPs on three different submissions. This included a check that the correct shape files had been applied.

Audit Commentary

Review of the JCC audit report confirmed that historic estimate was calculated correctly for all scenarios tested. Use of correct shape values was not specifically covered in the audit report, and has been checked as part of this audit.

I rechecked all calculations for the February and March 2017 3 month wash ups, and the calculation for ICP 0000185108CT521 which switched out in April 2017 on the April 2017 initial submission. The table below shows the scenarios tested. In addition to this, I also reviewed ICPs that were active for the whole month. The calculations are compliant for all scenarios tested.

Test	Scenario	Test expectation	Result
A	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Did not occur
B	ICP becomes Active then Inactive within a month.	Consumption is only calculated for the Active portion of the month.	Did not occur
C	ICP becomes Inactive, then Active, then Inactive again within a month.	Consumption is only calculated for the Active portion of the month.	Did not occur
D	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Did not occur
E	ICP Starts on the 1st day of a month.	Consumption is calculated to include the 1st day of responsibility.	Did not occur
F	ICP Ends on the Last Day of the month.	Consumption is calculated to include the last day of responsibility.	Did not occur
G	ICP Starts part way through a month.	Consumption is calculated to include the 1st day of responsibility.	Compliant
H	ICP Ends part way through a month.	Consumption is calculated to include the last day of responsibility.	Compliant
I & J	ICP is Lost and Won Back in a month.	Consumption is calculated for each day of responsibility.	Did not occur
K	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Did not occur
L	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Did not occur
M	ICP Starts on 1st and Ends on Last day of month.	Consumption is calculated for each day of responsibility.	Did not occur
N	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Did not occur

The incorrect classification of some customer reads as actual reads is discussed further in section 6.6, and is recorded as non-compliance below.

Non-compliance	Description		
<p>With: Clause 4 and 5 Schedule 15.3</p> <p>From/to: February to early May 2017</p>	<p>Customer reads were incorrectly classified as actual reads, resulting in them being used to calculate historic estimate.</p> <p>Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach Risk Rating: 2</p>		
Audit Risk Rating	Rationale for audit risk rating		
Low	<p>Three ICPs were affected for less than 3 months. The reads were taken by ORBS staff members at their own homes, and are likely to be accurate. None of the meters were identified to be faulty. AMI reads are now received for all ICPs.</p>		
Actions taken to resolve the issue	Completion date	Remedial Status	action
<p>This issue occurred as the MEP was unable to provide the reads. ORBS now have agreements with the relative MEPs for the ICPs, an arrangement with WELLS and are in the process of entering into agreements with other MEPs prior to taking up new ICPs. We now have the ability to specify, 'actual or estimate' within our system and therefore this information will be passed through for reconciliation purposes. ORBS intend to only accept customer reads in exceptional circumstances and these will be validated in accordance with Code ,this is ensuring that each customer read is validated against an actual read</p>	Immediately	Identified	
Preventative actions taken to ensure no further issues will occur	Completion date		
<p>We will check the reconciliation files to ensure that reads have been specified correctly and match what we have in our system (as currently reconciliation is completed by John Candy). Customer reads will be identified as such and monitored to ensure these are validated correctly.</p>	Immediately		

12.12 Forward estimate process (Clause 6 Schedule 15.3)

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

Forward estimate is calculated and reported by JCC, and their audit report is attached as an appendix to this report.

I reviewed all AV080 submissions to date, to confirm the amount of forward estimate.

Forward estimates were checked for accuracy by analysing variances between revisions over the audit period.

Audit Commentary

Forward estimate is calculated by JCC. Review of the JCC audit report confirmed that a sample of forward estimates were checked by TEG & Associates and were found to be accurate.

ORBS' forward estimate process is based on the average daily consumption for the previous read period for each meter register. If previous read period information is not available, the forward estimate consumption is based on the estimated daily consumption provided by the previous retailer in the CS file.

I reviewed all AV080 submissions to date and noted that there was no forward estimate, because the end read used to calculate the historic estimate was either on the last day of supply, or after the end of the month being reported.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within 15% and within 100,000kWh. The table below shows the target was met for all revisions.

Compliance is recorded.

Quantity of Balancing Areas with Differences Over 15% and 100,000 kWh

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
Feb 2017	0	0	-	-	2
Mar 2017	0	-	-	-	2
Apr 2017	0	-	-	-	2

Total Variation between Revisions

Month	Revision 1	Revision 3	Revision 7	Revision 14
Feb 2017	-4.7%	0.2%	-	-
Mar 2017	0.1%	-	-	-
Apr 2017	0.0%	-	-	-

12.13 Compulsory meter reading after profile change (Clause 7 Schedule 15.3)

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

A registry list with history was reviewed for the audit period to confirm that ORBS has only used the RPS profile during the audit period.

Audit Commentary

Examination of the list file found that ORBS has only used the RPS profile, and there have been no profile changes. Check In the event of a profile change, ORBS will use a validated meter reading or a permanent estimate on the day that the change is effective.

13. Submission format and timing

13.1 Market Administrator Meter Reading Reports (Clauses 8 & 9 of Schedule 15.2)

Provision of meter read frequency reports to the Authority, no later than 20 business days after the end of the month.

Audit Observation

I reviewed meter reading reports for February to April 2017 to confirm that they meet the meter reading frequency report requirements.

I reviewed processes to ensure the reports are accurate and submitted on time, and the timeliness of submission for a sample of reports.

Audit Commentary

I reviewed meter reading reports for January to March 2017, and confirmed that they met the meter reading frequency report requirements, and were submitted on time. Compliance is confirmed.

13.2 Provision of submission information to the RM (Clause 8 Schedule 15.3)

Submission information provided to the reconciliation manager must be aggregated to the following level:

- NSP code (clause 8(a))
- reconciliation type (clause 8(b))
- profile (clause 8(c))
- loss category code (clause 8(d))
- flow direction (clause 8(e))
- dedicated NSP (clause 8(f))
- trading period for half hour metered ICPs and consumption period or day for all other ICPs (clause 8(g)).

Audit Observation

Submissions are completed by JCC, and their audit report is attached as an appendix to this report.

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in section 2.1. The aggregation process was reviewed by comparing a registry list with history to the detailed AV080 submissions, to make sure aggregation factors were applied for the correct dates in section 12.3.

Audit Commentary

Review of the JCC audit report confirmed that submission information compliant. Aggregation checks showed that the AV080 aggregation factors were consistent with the values recorded on the registry.

Compliance is confirmed.

13.3 Reporting resolution (Clause 9 Schedule 15.3)

When reporting submission information, the number of decimal places must be rounded to not more than two decimal places.

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

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

Audit Observation

Aggregation of the AV080 was reviewed for five small NSPs in section 12.3. As part of these checks, I verified that the data provided for submission was correctly rounded.

Review the seven AV080 submissions available to confirm that data is rounded to two decimal places.

Audit Commentary

Review of the seven AV080 submissions confirmed that data is rounded to two decimal places. Compliance is confirmed.

13.4 Historical estimate reporting to RM (Clause 10 Schedule 15.3)

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

Historic estimate is reported to the RM by JCC. Their audit report is attached as an appendix.

ORBS began trading in February 2017, so only one three month submission was available at the time of the audit. The percentage of historic estimate was reviewed for the three month submission.

Audit Commentary

The quantity of historical estimates is contained in the submission file and is not a separate report. The table below shows that the three month target was met.

Quantity of NSPs where revision targets were met.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
February 2017	2	-	-	2

The table below shows that the percentage HE at a summary level is above the required targets.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Nov 2015	100.0%	-	-

Compliance is confirmed.

Conclusions

ORBS began trading in February 2017. They currently supply two ICPs, and a third ICP switched out in April 2017.

John Candy Consulting (JCC) provides reconciliation services and support. Chrissy Burrows of Momentous Consulting has provided extensive training and assisted the ORBS team to understand their obligations, and to develop and document compliant business processes. Some of these processes are still being developed and refined, particularly for tasks that ORBS has not yet completed.

There were several non-compliances relating to readings:

- there are no audit trails for reads within PowerCentre
- PowerCentre records all reads as actual
- customer reads were incorrectly classified as actual for February 2017 to early May 2017, in both PowerCentre and JCC's historic estimate calculations.

AMI reads are now provided for all meters, and customer readings are not expected in the future. PowerCentre reads are only used for switching at this stage, and the reads provided in outgoing CS files were correctly classified.

ORBS terms and conditions are still in draft, and are currently undergoing review before they are finalised.

The audit found six non-compliances and makes three recommendations for improvement. One issue was identified. The matters raised are shown in the tables below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Indicative Impact	Audit History	Controls	Breach Risk Rating	Remedial Action
Audit trails	2.4	18 and 21 of Schedule 15.2	There is no audit trail for meter readings within WorkCentre.	Low	None	Weak	3	Investigating, controls over final readings are also needed.
Terms and conditions	2.8	10.4, 10.7(2), 10.7(4), 10.7(5), 10.7(6) and 11.15B	ORBS terms and conditions are draft, and have not been finalised. The draft terms and conditions adequately cover the trader default processes.	Low	None	Weak	3	Identified.
AN response codes	4.8	3 of Schedule 11.3	An incorrect AN response code was provided for one ICP with AMI metering. AA was applied instead of AD.	Low	None	Moderate	2	Identified.

Subject	Section	Clause	Non-compliance	Indicative Impact	Audit History	Controls	Breach Risk Rating	Remedial Action
Derivation of meter readings	6.6	3(1), 3(2), 3(3), 3(4) and 5 of Schedule 15.2	Customer reads were incorrectly classified as actual reads, when they were not validated against actual reads and all the checks required were not completed.	Low	None	Moderate	2	Identified.
Identification of readings	9.1	3(3) of Schedule 15.2	PowerCentre records all reads entered as actual.	Low	None	Weak	3	Cleared. I saw evidence that PowerCentre is now able to record reads as estimates.
Calculation of historic estimate	12.11	4 and 5 Schedule 15.3	Customer reads were incorrectly classified as actual reads, resulting in them being used to calculate historic estimate.	Low	None	Moderate	2	Identified.
Breach Risk Rating Score							15	
Indicative Next Audit Frequency							12 months	

Table of Recommendations

Subject	Section	Clause	Recommendation for Improvement	Remedial Action
Relevant information	2.1	15.2	Check for notification files from the Registry daily. Review the files and update data as necessary.	Cleared. Since July 2017 ORBS has completed regular checks for registry notification files, but none have been received to date.
Inform registry of switch request	4.1	2 of Schedule 11.3	Clarify agreement dates to identify where the date of first contact is different to the date agreement is reached.	Cleared. I reviewed evidence of addition of a date of arrangement field on the application form, and clarification of the date agreement was reached for all existing contracts.
AN response codes	4.2	3 of Schedule 11.3	Update the switching – switch loss document to explain that the AD code may be applied where AMI metering is installed.	Cleared. I reviewed a copy of the updated switching – switch loss document.

Table of Issues

Subject	Section	Clause	Issue
CS file content	4.10	11 of schedule 11.3	The switch file must contain the date of the last actual reading for the meter. The code does not state whether this last actual reading must be during the period of supply. In some cases, a retailer may have received a reading for the day that the ICP switches to the new retailer, due to timing.

Signed by:



Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Signed by:



Jared Lock

Operations Manager

ORBS Pre Pay Limited

14. ORBS Response

The comments provided are contained within the body of the report.