

Guideline for Reconciliation Participant Audits V1.4

This guideline has been produced to promote understanding and encourage consistency in the methodology and processes surrounding reconciliation participant audits.

The general approach set out in this information guide in no way reduces the requirement upon participants to know and comply with their obligations under the Electricity Governance Rules 2003. Neither should it be interpreted as reflecting the Electricity Commission's view on the Electricity Governance Rules 2003.

ABBREVIATIONS USED IN THIS GUIDELINE

Board	Electricity Commission Board
Commission	Electricity Commission
GXP	Grid exit point
HHR	Half hour
ICP	Installation control point
MA	Market Administrator
NHH	Non half hour
NSP	Network Supply Point
Regulations	Electricity Governance Regulations 2003
Rules	Electricity Governance Rules 2003

Version	Date issued	Comments/amendments made
1.0	4 September 2007	Draft for comment
1.1	26 May 2008	Draft for Board approval
1.2	30 May 2008	With MERW changes
1.3	8 June 2008	RonB comments
1.4	19 June 2008	Inclusion of missing rules

BACKGROUND

1. The purpose of this guideline is to assist approved auditors when reviewing the compliance of participants with the obligations established in parts E, G and J of the Electricity Governance Rules 2003 (**Rules**). This guideline is designed to outline the Rules obligations for reconciliation participants and is intended to provide a structured approach for audits, which will be fair and consistent across all auditors and participants.
2. This guideline gives guidance only and does not relieve auditors from their obligations to comply with the Rules. Auditors are expected to exercise judgement in the actual application of review techniques to specific clients/participants. While the Electricity Commission (**Commission**) expects auditors to conduct audits in accordance with these guidelines, in the event of any inconsistency between the Rules and the guidelines or any other material, the Rules will prevail.

INTRODUCTION

3. A “reconciliation participant” is defined under part A of the Rules as the following:
 - a. a retailer when purchasing electricity from, or selling electricity to, the clearing manager;
 - b. a generator;
 - c. a network owner;
 - d. a distributor; and
 - e. a person who purchases or sells electricity to or from the clearing manager.
4. Some reconciliation participants require certification (by means of an audit) in accordance with rule 2 of schedule J1 of part J of the Rules. These reconciliation participants are:
 - a. retailers who purchase electricity directly from or sell electricity directly to the clearing manager;
 - b. direct purchasers;
 - c. grid owners; and
 - d. generators, including embedded generators who sell directly to the clearing manager.
5. In order to obtain certification, certified reconciliation participants will be audited for categories carried out for reconciliation purposes. These categories are outlined in rule 19 of part J of the Rules and include, but are not limited to the following:
 - a. maintaining registry information and performing customer switching and embedded generator switching;

- b. gathering and storing raw meter data;
 - c. creating and managing (including validating, estimating, storing, correcting and archiving) of volume information;
 - d. calculating ICP days;
 - e. providing submission information for reconciliation; and
 - f. providing submission information to the pricing manager in accordance with section V of part G of the Rules.
6. The audit requirements for each of the categories in rule 19 of part J of the Rules are outlined in – functions three to eight of the attached Appendix 1: Functions and Processes. Function 1 of Appendix 1 outlines important pre and post Audit processes and function 2 is more general, outlining an operational infrastructure process. Each process outlined in this guideline must be audited, unless an exemption is granted by the Commission Board (Board).
7. The list of Commission-appointed auditors can be found on the Commission’s website at <http://www.electricitycommission.govt.nz/opdev/retail/retailregisters>

RECONCILIATION PARTICIPANT AUDITS

8. Reconciliation participants must undergo audits under the following circumstances:
- a. in order to provide audit reports to the Commission
 - i. when the reconciliation participant applies for initial certification in accordance with rule 3.2 of schedule J1 of part J of the Rules (New reconciliation participants will be required to obtain this certification within 3 months of part J coming into force, while existing reconciliation participants must obtain certification within 6 months of part J coming into force pursuant to paragraph 3.3 of schedule J1 of part J);
 - ii. when the Board renews a reconciliation participant’s certification at 12-month intervals in accordance with rule 3.4.2 of schedule J1 of part J of the Rules;
 - b. in accordance with rule 8 of schedule J1 of part J of the Rules if another reconciliation participant at any time reasonably considers in good faith that the participant may no longer comply with all the relevant rules for gathering, processing or management of information.

EXPECTATIONS OF AUDITORS

9. Auditors must ensure that they have sufficient resources to enable them to perform their auditing obligations as set out in the Rules in relation to any audits they agree to carry out.
10. Approved auditors may use suitably qualified employees or subcontractors to assist them in carrying out parts of the audit tasks. However, they will be responsible for the accuracy and quality of the final audit.

11. If they are relying on the work of an internal auditor of the participant being audited, they must comply with NZICA Auditing Standard AS-604, or the requirements of the relevant Institute of Internal Auditors Guidance (Practice Advisory 1210.A1).

PROCESSES

12. These guidelines have been organised into core business processes that reconciliation participants follow to undertake the activities and obligations established in the Rules (see Table 1). For each process, the relevant Rules have been identified, and indicative review procedures described, in Appendix 1: Functions and Processes.
13. Each process has been allocated a regulation priority depending on the potential market impact of non-compliance with the underlying Rules.

Table 1

Function	Processes	Process number	Regulation priority
1. Administrative tasks	Pre-audit	1A	
	Post-audit	1B	
2. General	Operational infrastructure	2A	Low
3. Maintaining registry information and performing customer and embedded generator switching.	Performing customer and embedded generator switching	3A	Moderate
	Maintaining registry information	3B	Low
	Maintenance of unmetered load.	3C	Low
4. Gathering and storing raw meter data	Gathering raw meter data	4A	High
	Storing raw meter data	4B	Moderate
5. Creation and management (including validating, estimating, storing, correcting, and archiving) of volume information	Error handling of volume information	5A	High
	Estimation and validation of volume information	5B	High
	Storage/archive/audit trail of volume information	5C	High
6. Calculation of supporting information	Calculation of ICP days and retailer electricity supplied information	6A	High
7. Provision of submission information for reconciliation	Submission computation	7A	Moderate
	Submission format and timing	7B	Moderate

Function	Processes	Process number	Regulation priority
8. Provision of metering information to the pricing manager in accordance with section V of part G.	Provision of metering information to the pricing manager in accordance with section V of part G.	8A	Moderate

14. Table 2 sets out the Commission's expectation of the auditing method for each level of priority, and the indicative review procedures reflect the relevant priority level. Each assessment has been mapped to indicative review procedures to provide guidance on the Commission's expectation of audit coverage. Appendices 2 to 5 define the suggested review approaches.
15. A comments field has been added to each process description, setting out possible approaches to auditing the participant's obligations using the methodologies suggested for the relevant Regulation Priority level. These are suggested approaches only and should be used at the auditor's discretion.

Table 2

Regulation Priority	Auditing Method
Low	Process Walkthrough – Inquiry/Observation only.
Moderate	Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.
High	Process Walkthrough – Inquiry/Observation and Inspection of physical evidence Detailed testing for compliance.
Extreme	Process Walkthrough – Inquiry/Observation and Inspection of physical evidence. Detailed testing for compliance. Agreement to Organisational Policy.

AUDIT REPORTS

16. In most cases, a contract for the provision of audit services will be negotiated with the participant and not the Commission. Reconciliation participants will need to make audit reports and audit summaries available to the Board as part of their ongoing certification process. The quality of auditors' audit documents may be evaluated and the Commission may remove auditors from the list of approved auditors in accordance

with its Retail workstream auditor approval policy RET01 as amended or replaced from time to time.

17. The Commission expects auditors to identify the following in the audit reports prepared:
 - a. the reconciliation participant being audited;
 - b. the auditor responsible for the audit;
 - c. all persons used to perform the audit;
 - d. all persons or entities the participant uses to perform its information gathering and processing tasks with respect to the reconciliation process; and
 - e. the tasks performed by the reconciliation participant.
18. The Commission expects the audit report to comment on all matters raised in these guidelines including:
 - a. the extent to which information was made available to the auditor;
 - b. the extent to which the reconciliation participant complies with the Regulations and Rules with clear identification of any rule or regulation breaches; and
 - c. any other matters the auditor considers relevant.
19. Auditors' comments should be arranged in the order presented in the tables contained in the attached appendices and under the appropriate headings.
20. The Rules require auditors to:
 - a. provide the reconciliation participant with a draft audit report detailing the provisional findings of the audit;
 - b. provide the participant a reasonable opportunity to respond to the draft audit report;
 - c. produce, and provide a final audit report to both the Commission and the participant subject to the audit. The final audit report must include any conditions which the auditor has imposed on the participant in order for them to comply with the Rules, and the responses or action that the participant has taken in respect to those conditions;
 - d. ensure the final audit report includes a list of all persons or entities the participant uses to perform its information gathering and processing tasks with respect to the reconciliation process;
 - e. ensure the final audit report includes:
 - i. reference to any matters which are relevant to the reconciliation process;
 - ii. a summary that describes the extent to which the facilities, processes and procedures of the participant comply with the Regulations and the Rules; and

- iii. any other matters relevant to the reconciliation process.
21. The Board must publish a summary of each audit report on the Commission's website. This summary will contain the:
 - a. date of the audit report;
 - b. identity of the audited party;
 - c. scope of the audit;
 - d. outcome of the audit; and
 - e. identity of the auditor.
 22. Therefore, the Commission expects the summary referred to in paragraph 20.e.ii above to contain this information.
 23. All details of an audit report that are not published by the Board will remain confidential between the participant and the Board unless otherwise agreed between the participant and the Board.
 24. The auditor will keep all information relating to participants obtained in the course of carrying out audits confidential unless;
 - a. the disclosure of the information is required by law; or
 - b. the information is or becomes publicly available; or
 25. the auditor first consents to its disclosure.

Appendix 1: Functions and Processes

Function 1 – Administrative Tasks

Process 1A and 1B: Pre-Audit and Post-Audit

Part of the Rules	Rule ref	Description	Notes
Pre-audit			
		The Auditor is appointed by the reconciliation participant that is required to be audited.	
		The auditor agrees the scope and reporting of the audit with the reconciliation participant, including:	
		Business area to be audited	
		Rules area to be audited	
		Reason for this audit.	
		The auditor and the reconciliation participant should enter into a contract for audit services.	
		The auditor requests a copy of two previous Rules audit reports, the participant's ISO or Board approved equivalent quality certification and any supporting correspondence.	
		The auditor requests the following types of supporting information from the business:	

Part of the Rules	Rule ref	Description	Notes
		copies of their Rules audit reports and their ISO or Board-approved equivalent quality certification if other parties act for the reconciliation participant and the area of work is contained within this certification/audit;	
		information regarding the company structure and names of contractors /service providers that assist with, or are used in, the process to be audited; and	
		a list of manufacturers of hardware and software that assist or are used in the process to be audited.	
		The auditor ensures that the scope of the previous Rules audits and the quality management system are in accordance with the functions being carried out.	
		The auditor requests copies of any alleged, under investigation or closed Rule breaches that have occurred in the past twelve months and relate to the tasks set out in this audit.	
		The auditor will research the Commission web site for current reconciliation issues, submission documents, and rule breach investigations.	
		The auditor will request a letter from the reconciliation participant authorising the collection of information from other parties agreed in the audit scope, and request the necessary information for the audit.	
Post Audit			
Part J, schedule J1	para 6.1	The auditor sends a draft audit report detailing the provisional findings of the audit to the applicant;	
	para 6.2	The auditor provides the applicant a reasonable opportunity to respond to the draft audit report;	

Part of the Rules	Rule ref	Description	Notes
	para 6.3	The auditor produces a final audit report, which is provided to both the Board and the applicant who is subject to the audit. The final audit report includes any conditions that the auditor has imposed on the applicant for that applicant to satisfy in order to comply with the Rules, and the responses or action that the applicant has taken in respect to those conditions.	
	para 6.4	The final audit report includes a list of all persons or entities the applicant uses to perform its information gathering and processing tasks with respect to the reconciliation process;	
	para 6.5	The final audit report must also include references to any matters which are relevant to the reconciliation process, and a summary that describes the extent to which the facilities, processes and procedures of the applicant comply with the Regulations and the Rules;	
Part J, schedule J1	para 6.7	The Board must publish a summary of each audit report containing the:	
		6.7.1 date of the audit report;	
		6.7.2 identity of the audited party;	
		6.7.3 scope of the audit;	
		6.7.4 outcome of the audit (either compliant or non compliant); and	
		6.7.5 identity of the auditor.	
		All details of an audit report, which are not published by the Board, are to remain confidential between the applicant and the Board unless otherwise agreed between the applicant and the Board.	

Function 2 – General

Process 2A: Operational Infrastructure

The participant is responsible for the security of the metering information transmitted or transferred to other participants. This includes the maintenance of audit trails and communication logs.

Regulation Priority - Low
1. Process Walkthrough – Inquiry/Observation only.

Comments
<ol style="list-style-type: none">1. Identify the tools used for transmitting data and confirm they are all carried out electronically. Confirm the security measures on the participant's file transfer applications and assess their adequacy.2. Perform a walkthrough of the process for creating audit and communication logs. Confirm that the appropriate controls are in place to capture the information required to comply with the Rules.

Relevant Rules

Part of the Rules	Rule	Description	Notes
Part J	para 2.2	In any circumstances where participants discover any information previously disclosed by it to any person in accordance with this part J was misleading, deceptive or incorrect, the participant must immediately correct that information and disclose the corrected information to the person who originally received the incorrect information.	
Part J	para 16	Where an obligation exists to provide information in accordance with part J, participants must deliver that information to the required person within the timeframe specified in the rules, or, in the absence of any such timeframe, within any timeframe notified by the Board. Such information must be delivered in the format determined from time to time by the Board.	
Part J, schedule J2	para 10.1	Transmissions and transfers of data related to metering between reconciliation participants or their agents, for the purposes of the Rules, is carried out electronically, using systems that ensure the security and integrity of the data transmitted and received.	
Part J, schedule J2	para 11.1	A complete audit trail exists for all data gathering, validation, and processing functions.	
		The audit trail includes details of the passing of information	
		to or from the registry;	
		to or from the reconciliation manager; and	
		between reconciliation participants and their agents.	
		The audit trail applies to all archived data in accordance with rule 7 of part D.	

Part of the Rules	Rule	Description	Notes
Part J, schedule J2	para11.2	The logs of communications and processing activities form part of the audit trail including where automated processes are in operation.	
		These logs are printed and filed as hard copy or maintained as data files in a secure form, along with other archived information.	
		The logs include (at a minimum) the following:	
		11.2.1 an activity identifier;	
		11.2.2 the date and time of the activity; and	
		11.2.3 the operator identifier.	

Function 3 – Maintaining registry information and performing customer and embedded generator switching

Process 3A: Performing customer and embedded generator switching

The participant is responsible for maintaining switching information on the Registry. This includes advising the Registry of event date and switch type details, providing the appropriate validated readings or permanent estimates and facilitating switch withdrawals

Regulation Priority - Moderate
1. Process Walkthrough - Inquiry/Observation and Inspection of physical evidence.

Comments
1. Perform a walkthrough for the process of performing customer and embedded generator switching on the Registry. Confirm that appropriate controls are in place to notify the Registry of the appropriate switching information in a timely manner.

2. Obtain evidence of Registry switching notifications for customers and embedded generators. Confirm the appropriate information has been recorded within the notification.

Relevant Rules

Part of the Rules	Rule	Description	Notes
E, schedule E2	para 1.1	Within two business days after entering into an agreement with a potential customer or embedded generator with the intent to sell or purchase electricity using non half-hour metering, for each ICP, the new retailer advises the registry of the switch.	
E, schedule E2	para 1.2	Within two business days after receipt of notification from the registry in accordance with rule 5.4, for each ICP, the old retailer establishes an expected event date, which is no more than 23 business days after the date of receipt of such notification, and either:	
		1.2.1 Provides acknowledgement of switch request by:	
		1.2.1.1 Providing the expected event date to the registry; and	
		1.2.1.2 If relevant for that ICP, by providing a valid switch response code, as approved by the market administrator, to the new retailer; or	
		1.2.2 Provides final information to complete the switch by:	
		1.2.2.1 Providing confirmation of the actual event date to the registry; and	
		1.2.2.2 Providing to the new retailer confirmation of the actual event date and a switch meter read, comprising either the validated meter reading or a permanent estimate, as at the actual event date; or	
		1.2.3 Providing a request for withdrawal of the switch in accordance with rule 4.	

Part of the Rules	Rule	Description	Notes
E, schedule E2	para 1.3	If the old retailer provides information to the registry in accordance with rule 1.2.1, then within two business days after the actual event date, the old retailer:	
		1.3.1 Provides confirmation of the actual event date to the registry; and	
		1.3.2 Provides to the new retailer the confirmation of the actual event date and a switch meter read comprising either the validated meter reading or a permanent estimate as at the actual event date.	
E, schedule E2	para 1.4	The old retailer and the new retailer both use the same switch meter reading as determined by the following procedure:	
		1.4.1 Where the validated meter reading or permanent estimate provided by the old retailer differs by less than 200 kWh from a value established by the new retailer, the new retailer uses the old retailer's validated meter reading or permanent estimate as the switch meter reading; or	
		1.4.2 In the case that the retailer disputes the switch meter reading because the validated meter reading or permanent estimate provided by the old retailer differs by 200 kWh or more the retailer, within four calendar months of the actual event date, provides to the old retailer a changed switch meter reading supported by two validated meter readings.	
Part E, schedule E2	para 1.5	The old retailer and new retailer agree on a switch meter reading. Where the old retailer and new retailer are unable to agree on a switch meter reading the dispute is resolved in accordance with rule 12 of part J.	

Part of the Rules	Rule	Description	Notes
E, schedule E2	para 2	Where the retailer enters into an agreement with a potential customer or embedded generator with the intent to sell or purchase electricity at an ICP using non half-hour metering where there is no current agreement for the supply of electricity with any retailer, then, in order to facilitate an agreement to supply electricity, the following provisions apply:	
	para 2.1	Within two business days after entering into the agreement, for each ICP, the new retailer advises the registry of the switch type and the proposed event date;	
	para 2.2	Within two business days after receipt of notification from the registry in accordance with rule 2.1, for each ICP, the old retailer must confirm the proposed event date or set another expected event date (that must not precede the new retailer's proposed event date and must be no more than 23 business days after the date of such notification), and must do one of the following:	
		<p>2.2.1.1 Provide confirmation of the expected event date to the registry; and</p> <p>2.2.1.2 if relevant for that ICP, provide a valid switch response code as approved by the Board to the new retailer; or</p>	
		<p>2.2.2.1 provide confirmation of the actual event date to the registry; and</p> <p>2.2.2.2 provide for the actual event date, either the validated meter reading or permanent estimate as at the actual event date to the new retailer and if a permanent estimate is supplied, the date of the last validated meter reading at that ICP; or</p>	
	2.2.3 Provide a request for withdrawal of the switch in accordance with rule 4		

Part of the Rules	Rule	Description	Notes
	Para 2.3	When the old retailer has provided information to the registry in accordance with rule 2.2.1, then within two business days after the later of the actual event date or date of receipt of the switch request, the old retailer:	
	2.3.1	Provides confirmation of the actual event date to the registry; and	
	2.3.2	Provides the actual event date and a switch meter read comprising either the validated meter reading or a permanent estimate as at the actual event date to the new retailer;	
	para 2.4	The new retailer may elect to use the switch meter reading supplied by the old retailer or may, at its own cost, obtain its own validated meter reading or permanent estimate as the switch meter reading at an ICP. If the new retailer elects to use this new validated meter reading or permanent estimate as the switch meter reading, the new retailer notifies the old retailer of that meter reading or estimated reading and the actual event date to which it refers as follows:	
	2.4.1	If the meter reading established by the new retailer differs by less than 200 kWh from that provided by the old retailer, both retailers use the meter reading provided by the new retailer as the switch meter reading; or	
	2.4.2	If the validated meter reading or permanent estimate provided by the old retailer differs by 200 kWh or more from a value established by the new retailer, the new retailer may dispute the switch meter reading. In this case, the new retailer, within four months of the actual event date, provides to the old retailer a changed switch meter reading supported by two validated meter readings and the old retailer must either:	
		2.4.2.1 Use the switch meter reading supplied by the new retailer; or 2.4.2.2 Resolve the disagreement in accordance with the disputes procedure contained in rule 12 of part J.	

Part of the Rules	Rule	Description	Notes
Part E, schedule E2	para 3.2	Within two business days after entering into the agreement, for each ICP, the new retailer advises the registry of the expected event date and switch type.	
Part E, schedule E2	para 3.3	Within two business days after the old retailer receives information from the registry in accordance with rule 5.4.1, and if relevant for that ICP, the old retailer:	
		3.3.1 Provide to the registry a valid switch response code as approved by the Board; or	
		3.3.2 Provide a request for withdrawal of the switch in accordance with rule 4.	
Part E, schedule E2	para 3.4	The new retailer sets the expected event date, and within three business days of the actual event date, the new retailer notifies the registry of the actual event date.	
Part E, schedule E2	para 4	With regard to the most recent switch request, where the retailer has informed the registry of a switch request for an ICP, then, either the old retailer or the new retailer requests the withdrawal of that switch in accordance with rule 4 and in that case, the following provisions apply:	
		<p>4.2. For each ICP, the retailer withdrawing the switch request provides the registry with:</p> <p>4.2.1 The identity code of the retailer making the withdrawal request as determined in accordance with rule 3.1 of schedule E1; and</p> <p>4.2.2 The appropriate valid withdrawal advisory code from those codes determined in accordance with rule 4.1.</p>	

Part of the Rules	Rule	Description	Notes
		4.3. Within five business days after receiving a notification from the registry in accordance with rule 5.4.2, the retailer receiving the withdrawal will notify the registry that the switch withdrawal request is either accepted or rejected. A switch withdrawal request will not become effective until accepted by the retailer that received the withdrawal.	
		4.4. On receipt of a rejection notification from the registry, in accordance with rule 4.3, a retailer may re-submit the switch withdrawal request for an ICP in accordance with rule 4.2. All switch withdrawal requests are resolved within a maximum of 23 business days after the date of the initial switch withdrawal request; and	
		4.5. Where the retailer requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, then within two business days after receipt of notification from the registry in accordance with rule 5.4.2, the old retailer will comply with Rules 1.2.1 or 2.2.1 (whichever is appropriate) and the new retailer will comply with rule 3.4.	
Part E, schedule E2	para 5.1	The participant exchanges information in accordance with schedule E2 and uses the file formats determined and published by the Board.	
Part E, schedule E2	para 5.3	For any interrogation or validated meter reading or permanent estimate carried out in accordance with schedule E2:	
		5.3.1 The retailer carries out the interrogation or validated meter reading or permanent estimate and ensures that the interrogation is as accurate as possible or that the validated meter reading or permanent estimate is fair and reasonable; and	

Part of the Rules	Rule	Description	Notes
		5.3.2 The cost of every interrogation or validated meter reading or permanent estimate carried out in accordance with rule 1.3.2 or 2.2.2.2 is borne by the old retailer. The costs of every other interrogation or validated meter reading or permanent estimate is borne by the new retailer	

Function 3 – Maintaining registry information and performing customer and embedded generator switching

Process 3B: Maintaining Registry Information

The participant is responsible for maintaining ICP Identifier information for each point of connection it trades on in accordance with the Rules. The participant must update ICP information maintained on the Registry, including switching and status changes, in a timely manner. The participant must also ensure that appropriate line function services have been assigned to each ICP and perform discrepancy reporting on the reports submitted by the Registry.

Regulation Priority - Low
1. Process Walkthrough - Inquiry/Observation only.

Comments
1. Perform a walkthrough of the process for maintaining ICP information on the Registry. Confirm there are appropriate key controls in place for updating the Registry in a timely manner.

Relevant Rules

Part of the Rules	Rule	Description	Notes
Part E	2.1	All points of connection must be assigned an ICP identifier by the party specified in rule 2.2 as having the responsibility to do so, if such points of connection are on a local network or an embedded network at which:	
		2.1.1 a consumer purchases electricity from a retailer;	
		2.1.2 a retailer purchases electricity from an embedded generator;	
		2.1.3 a direct purchaser purchases electricity from the clearing manager; or	
		2.1.4 an embedded generator sells electricity directly to the clearing manager.	
Part E	2.2	The following participants must obtain an ICP identifier as defined in rule 1.1.1 of schedule E1, for any point of connection to any local network or embedded network:	
		2.2.1 The retailer, where the retailer has agreed to purchase electricity from, or sell electricity to, an embedded generator or consumer;	
		2.2.2 The embedded generator, where it sells electricity directly to the clearing manager; or	
		2.2.3 The direct purchaser where it is connected to a local network or an embedded network.	
Part E	11	Information set out in rule 3 of schedule E1 is provided to the registry within three business days of commencement of supply of electricity at each ICP.	

Part of the Rules	Rule	Description	Notes
Part E	12	If any of the information referred to in rule 3 of schedule E1 and provided in accordance with rule 11 changes, the retailer provides notice to the registry of that change (providing all relevant details) within three business days of the change occurring.	
Part E	16	Before notifying the registry of any information in accordance with rule 11, the retailer ensures that it, or its customer, has made any necessary arrangements for the provision of line function services in relation to the relevant ICP.	
Part E	18	The retailer is responsible for an ICP in accordance with rule 18 as follows:	
		18.1 The retailer remains responsible for all obligations in part E relating to any ICP until either:	
		18.1.1 Another retailer has taken responsibility for that ICP as notified by the registry in accordance with rule 5.4.4 of schedule E2; or	
		18.1.2 The ICP has been decommissioned, in accordance with rule 4.8 of schedule E1.	
		18.2 If an ICP is to be decommissioned, the last retailer arranges for a final interrogation to take place prior to or upon meter removal.	
Part E	19.2	By 1600 hours on the 13th business day of the reconciliation period, the participant has checked the list received from the Registry in accordance with rule 19.1 against its own records, and identified, and notified in writing to the registry, any discrepancies (giving all relevant details).	
		The participant routinely resolves the discrepancies between their own data and that held by the registry.	

Part of the Rules	Rule	Description	Notes
Part E	20	The information supplied to the registry is in such format as the Board has reasonably determined.	
Part E, schedule E1	para 3	For each ICP, the retailer provides the following information to the registry in accordance with Rules 11 and 12 of part E:	
		3.1 The code for that retailer, as approved by the market administrator;	
		3.2 The identity code for each profile at that ICP, as approved by the market administrator;	
		3.3 The code of the primary contact for the metering equipment relevant to that ICP, as approved by the market administrator;	
		3.4 The highest category of metering installation applicable to that ICP as defined in code of practice D1 (where the ICP has no metering installation, it is category 0);	
		3.5 Identification of each type of metering installation at that ICP;	
		3.6 If a metering type of UNM is assigned to that ICP, either:	
		3.6.1 The daily average kWh of unmetered load at that ICP; or	
		3.6.2 The code ENG where the load is profiled through an engineering profile in accordance with profile class 2.1;	
		3.7 Details of the type and capacity of any unmetered load at each ICP;	
3.8 The total number of meter registers used to obtain volume information at each ICP;			

Part of the Rules	Rule	Description	Notes
		3.9 A flag indicating the presence of a meter multiplier, other than unity, which is applied externally to raw meter data at each ICP; and	
		3.10 The status of the ICP, as defined in rule 4.	
Part E, schedule E1	para 4.5	The ICP status of “Active” is be managed by the relevant retailer and denotes that:	
		4.5.1 The associated electrical installation is connected to the electricity supply; and	
		4.5.2 The retailer provides submission information related to the ICP, in accordance with schedule J3, to the reconciliation manager for the purpose of compiling reconciliation information.	
Part E, schedule E1	para 4.6	Before an ICP is given the “Active” status, in accordance with rule 4.5, the retailer ensures that:	
		4.6.1 The ICP has only one customer, embedded generator, or direct purchaser;	
		4.6.2 The electricity consumed is quantified by a metering installation(s) or other Board approved method of calculation;	
Part E, schedule E1	para 4.7	The ICP status of “inactive” is managed by the relevant retailer and denotes that:	
		4.7.1 Electricity cannot flow at that ICP; or	
		4.7.2 Submission information related to the ICP is not required by the reconciliation manager for the purpose of compiling reconciliation information	

Function 3 – Maintaining registry information and performing customer and embedded generator switching.

Process 3C: Maintenance of unmetered load

The participant is responsible for managing its unmetered load, including shared unmetered load. The Rules record the obligations of the distributor and retailer regarding changes to existing unmetered load or new unmetered load. These obligations include accepting responsibility for the unmetered load and communicating changes to the relevant participants and the Registry.

Regulation Priority - Low

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| 1. Process Walkthrough – Inquiry/Observation only. |
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Comments

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| 1. Perform a walkthrough for the process of maintaining unmetered load. Confirm that appropriate controls are in place to accept and communicate changes to unmetered load to the relevant parties. |
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Relevant Rules

Part of the Rules	Rule	Description	Notes
Part E	14	The retailer adheres to the process for maintaining shared unmetered load as outlined in rules 14.1 – 14.7 of part E.	
		14.1 A distributor must only permit shared unmetered load to be connected to its network after acceptance in writing by at least one retailer with responsibility for that shared unmetered load who must nominate the ICPs across which the load is to be shared;	
		14.2 The relevant retailer with responsibility for that ICP must notify the relevant distributor as soon as practicable before it wishes to add or remove an ICP from the ICPs across which the shared unmetered load is being shared. The distributor must notify the registry of the updated list of ICPs and must notify all other affected retailers of the change;	
		14.3 If a distributor becomes aware of any change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must notify all retailers affected by that change as soon as practicable after that change occurring;	
		14.4 Each retailer must, as soon as practicable, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP in the list;	
		14.5 A retailer must not refuse to take responsibility for shared unmetered load assigned to an ICP for which it becomes responsible as a result of a switch in accordance with part E;	

Part of the Rules	Rule	Description	Notes
		14.6 A retailer must not relinquish responsibility for a share of shared unmetered load if there would then be no ICPs left across which that load could be shared; and	
		14.7 A retailer can change the status of an ICP indicated in the list of shared ICPs to inactive status, as referred to in rule 4.7 of schedule E1, without requiring the removal of this ICP from the list. The amount of electricity attributable to that ICP will become part of the UFE.	
Part J, schedule J3	5.5	The annual audit of a retailer includes an audit of the databases of distributed unmetered load to verify that the volume information is being calculated accurately and profiles have been correctly applied.	

Function 4 – Gathering and storing raw meter data

Process 4A: Gathering raw meter data

The participant is responsible for maintaining the frequency of meter readings in accordance with the Rules. Time parameters of each NHH and HHR meter read and the appropriate information contained are stipulated in the Rules and must be adhered.

Regulation Priority - High
<ol style="list-style-type: none">1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.2. Detailed testing for compliance.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough of the data collection process. Confirm there are appropriate controls for interrogating the appropriate data information. Obtain a sample of a NHH and HHR meter reads and confirm the appropriate information has been recorded.2. Select a sample of NHH readings. Identify the last day of the prior reading. Confirm the start date of the current reading is 0000hrs of the subsequent day until 2400hrs of the date of the current reading.3. Select a sample of NHH ICPs within the billing engine. Confirm that an actual read has been recorded within the last 12 months or 4 months if electricity supply has been continuous. Confirm the retailer has obtained the relevant meter reading certificates.4. Select a sample of NHH and HHR ICPs within the billing engine. Obtain the last report of an actual read. Confirm the relevant information has been recorded as a result of the interrogation of the meter.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 2	All information used to determine volume information is collected by or on behalf of a certified reconciliation participant.	
Part J, schedule J2	para 3.1	All meter readings are sourced directly from raw meter data or, where appropriate, derived and calculated from financial records.	
Part J, schedule J2	para 3.2	All validated meter readings are derived from meter readings.	
		In cases where the validated meter reading is sourced from a consumer read, another set of validated meter reads (not provided by the consumer) are used for the validation process.	
Part J, schedule J2	para 5.1	During the interrogation of each metering installation, the NHH raw meter data or the meter register value is collected.	
Part J, schedule J2	para 5.2	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.	
Part J, schedule J2	para 5.3	A validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, and used to create volume information.	
		This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.	
Part J, schedule J2	para 5.4	At least once every 12 months, a validated meter reading is obtained for every meter register for non half hour metered ICPs, at which the reconciliation participant supplies continuously for each 12 month period, and other than those ICPs for which exceptional circumstances prevent such an interrogation.	

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 5.5	<p>In relation to each GXP, for each NHH ICP at which the reconciliation participant trades continuously for each 4 months, for which consumption information is required to be reported into the reconciliation process. a validated meter reading is obtained:</p> <p>at least once every 4 months; and</p> <p>for 90% of the non half hour metered ICPs.</p>	
Part J, schedule J2	para 5.6	<p>The following information is logged as the result of each interrogation of the NHH metering:</p> <p>5.6.1 Meter reader ID;</p> <p>5.6.2 Identifier of the ICP including meter and register identification</p> <p>5.6.3 The certified reconciliation participant;</p> <p>5.6.4 The method being used for the interrogation and the device ID of equipment being used for interrogation of the meter; and</p> <p>5.6.5 Date and time.</p>	
Part J, schedule J2	para 6	Data from all half-hour metering is obtained by electronic interrogation of half hour interval meters or data loggers. This may be carried out by portable devices or remotely by the use of a recognised communications medium.	
Part J, schedule J2	para 6.1	<p>The following information is collected during each interrogation of the HHR metering:</p> <p>6.1.1 The unique identifier of the meter or data logger;</p>	

Part of the Rules	Rule ref	Description	Notes
		6.1.2 The time from the data logger at the commencement of the download unless the time is within specification and the interrogation log automatically records the time of interrogation;	
		6.1.3 The half-hour metering information for each trading period, which represents the quantity of electricity conveyed at the point of connection, including the date and time stamp or index marker for each half hour period. This may be limited to the half-hour metering information accumulated since the last interrogation; and	
		6.1.4 Events log containing, as a minimum, the events listed in rule 4.3.2 of code of practice D4.	
		6.1.5 An interrogation log is generated by the interrogation software to record details of all interrogations. The interrogation log is perused by the reconciliation participant, appropriate action taken where problems are apparent or an automated software function flags exceptions, and appropriate action is taken where problems are apparent.	
		The interrogation log forms part of the interrogation audit trail and, as a minimum, contains the following information:	
		6.1.5.1 the date of interrogation;	
		6.1.5.2 the time of commencement of interrogation;	
		6.1.5.3 the operator identification (where available);	
		6.1.5.4 the unique identifier of the meter or data logger;	

Part of the Rules	Rule ref	Description	Notes
		6.1.5.5 the clock errors outside the range specified in rule 6.2;	
		6.1.5.6 the method of interrogation; and	
		6.1.5.7 the identifier of the reading device used for interrogation (where applicable).	

Function 4 – Gathering and storing raw meter data

Process 4B: Storing raw meter data

The participant is responsible for maintaining interrogation and processing systems in accordance with the Rules including internal clock calibration. Raw meter data must be downloaded, secured, and stored in accordance with the Rules. This process also includes the methodology for altering raw meter data and the appropriate audit trail it must generate.

Regulation Priority Moderate
1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.

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| 1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence. |
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Comments
1. Perform a walkthrough for the process of storing raw and corrected meter data. Confirm that appropriate controls are in place to download, store and secure this information. Confirm also that audit trails/logs are appropriately generated from data correction/alteration and obtain evidence of these audit logs. Confirm that appropriate user access levels are in place.
2. Obtain business rules from the relevant processing and interrogation systems and confirm compliance with the Rules. Confirm that the internal clock of the data logger is compared with the calibrated clock in the interrogation device. Obtain evidence of discrepancy reports regarding this process.

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| 1. Perform a walkthrough for the process of storing raw and corrected meter data. Confirm that appropriate controls are in place to download, store and secure this information. Confirm also that audit trails/logs are appropriately generated from data correction/alteration and obtain evidence of these audit logs. Confirm that appropriate user access levels are in place. |
| 2. Obtain business rules from the relevant processing and interrogation systems and confirm compliance with the Rules. Confirm that the internal clock of the data logger is compared with the calibrated clock in the interrogation device. Obtain evidence of discrepancy reports regarding this process. |

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 6.2	The interrogation and processing system(s) have their internal clock(s) calibrated electronically against a time source:	
		with a traceable standard on a regular basis; and	
		at intervals no greater than one week and prior to the commencement of any individual interrogation or interrogation cycle; or	
		at such greater frequency as will ensure the internal clock is within 5 seconds of true time	
		<p>During each interrogation, the internal clock of the data logger is compared with the calibrated clock in the interrogation device.</p> <p>In cases where the time error is no greater than that listed in Table 1 of rule 6.2 of schedule J2, the interrogation device may automatically update (synchronise) the clock in the data logger in accordance with code of practice D4.</p>	
		<p>Where a time error greater than that listed in Table 1 is detected, correction is made to the data logger clock time and any data affected by the time error.</p> <p>Errors are recorded in the events log and downloaded as part of the interrogation.</p>	
Part J, schedule J2	para 6.3	The trading period duration, normally 30 minutes, is kept within $\pm 0.1\%$ (± 2 seconds).	
Part J, schedule J2	para 6.4	The design of the interrogation system ensures that the requirements of rule 3.4 of code of practice D3 are complied with.	

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 8.1	All raw meter data downloaded or collected is archived in accordance with rule 7 of part D.	
Part J, schedule J2	para 8.2	Procedures are in place to ensure that raw meter data cannot be accessed by unauthorised personnel.	
Part J, schedule J2	para 8.3	Meter readings cannot be modified without an audit trail being created.	
Part J, schedule J2	para 11.3	All relevant non-metering information, such as external control equipment operation logs, used in the determination of profile data is collected, and archived in accordance with rule 7 of part D.	

Function 5 – Creation and management (including validating, estimating, storing, correcting and archiving) of volume information

Process 5A: Error handling of volume information

The participant is responsible for validating volume information. If errors are discovered, the participant must correct the information using the methodologies stipulated in the Rules.

Regulation Priority High
<ol style="list-style-type: none">1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.2. Detailed testing for compliance.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough of the validation of volume data process. Confirm that appropriate controls are in place to correct this data compliant with the Rules.2. Select a sample of identified errors. Identify the correction method used for each error. Confirm that the correction method is compliant with the Rules.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 9.1	Where errors are detected during validation of non half hour meter readings, one of the following is undertaken:	
		9.1.1 confirmation of the original meter reading by carrying out another meter reading;	
		9.1.2 replacement of the original meter reading by another meter reading (despite the fact that the replacement meter reading may be at a different date); or	
		9.1.3 where 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 rule 4.2.	
Part J, schedule J2	para 9.2	Where errors are detected during validation of half-hour metering information the correction is as follows:	
		9.2.1 Where a check meter or data logger is installed at the metering installation, data from this source is substituted; or	
		9.2.2 In the absence of any check meter or data logger, data is substituted from another period. In this case, the total of all substituted intervals matches the total consumption recorded on the meter, where available, and the pattern of consumption is considered materially similar to the period in error.	
Part J, schedule J2	para 9.3	In cases where error compensation and loss compensation are carried out as part of the process of determining accurate data, the compensation process is documented and complies with audit trail requirements.	

Function 5 – Creation and management (including validating, estimating, storing, correcting and archiving) of volume information

Process 5B: Estimation and validation of volume information

Volume data must be derived in accordance of the Rules. If volume data is not available, the data must be estimated and clearly labelled. The participant must validate non half-hour (NHH) and half-hour (HHR) metering information in accordance with Rules.

Regulation Priority - High
<ol style="list-style-type: none">1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.2. Detailed testing for compliance.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough of the meter collection and validation process. Confirm the estimation and validation processes in place comply with the Rules. Confirm there are business rules in place for the appropriate frequency of HHR meter reads.2. Select a sample of NHH and HHR meter data reports. Confirm that all estimated data is clearly labelled. Confirm the report data matches the ICP information recorded in the participant’s billing system.3. Select a sample of data logger event lists. Identify events that may have affected the integrity of metering data and confirm they have been investigated.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 3.3	All estimated readings and permanent estimates are clearly identified as an estimate at source and in any exchange of metering data or volume information between participants.	
Part J, schedule J2	para 3.4	Volume information is directly derived, in accordance with schedule J2, from:	
		3.4.1 validated meter readings;	
		3.4.2 estimated readings; or	
		3.4.3 permanent estimates.	
Part J, schedule J2	para 6.5	Where data is unavailable (and reasonable endeavours have been used to ensure that estimated submission information is within the percentage specified by the Board), then the submission to the reconciliation manager is the 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.	
Part J, schedule J2	para 7.1	Each validity check for non half-hour metering information includes the following:	
		7.1.1 Confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register;	
		7.1.2 Checks for invalid dates and times;	
		7.1.3 Confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern or trend; and	

Part of the Rules	Rule ref	Description	Notes
		7.1.4 Confirmation that there is no obvious corruption of the data, including unexpected zero values.	
Part J, schedule J2	para 7.2	For half-hour metering information, the raw meter data must be obtained and checked at a frequency that will allow a further interrogation of the data logger before the data is overwritten within the data logger and before this data can be used for any purpose.	
		All data logger data must be verified for accuracy against cumulative meter readings during inspections, in accordance with rule 7 of code of practice D3.	
		Each validity check for half-hour metering information must include checks for:	
		7.2.1 Checks for missing data;	
		7.2.2 Checks for invalid dates and times;	
		7.2.3 Checks of unexpected zero values;	
		7.2.4 Comparison with expected or previous flow patterns;	
		7.2.5 Comparisons with the readings reported by meter and data logger registers where these are available; and	
		7.2.6 A review of meter and data logger event list. Any event that could have affected the integrity of metering data must be investigated.	

Function 5 – Creation and management (including validating, estimating, storing, correcting and archiving) of volume information

Process 5C: Storage, archiving and the audit trail of volume information

The participant is responsible for maintaining the appropriate information regarding alterations made to raw meter data. If data is corrected or altered, a journal must be generated containing information in accordance with the Rules. The participant must also maintain a distributed unmetered load database. This database must contain the appropriate information and audit trails in accordance with the Rules.

Regulation Priority - High
<ol style="list-style-type: none">1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.2. Detailed testing for compliance.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough for the process of journaling corrected or altered raw meter data. Confirm that appropriate controls are in place to prevent the raw meter data from being overwritten and for providing the appropriate information within the journals.2. Perform a walkthrough of the process for restoring deleted or corrupted meter data. Confirm that the appropriate access levels are in place and obtain evidence of backup and restorations logs.3. Select a sample of raw meter data that has been corrected or altered. Identify the journal associated with each of these alterations. Confirm that the raw meter data has not been overwritten and that the journal contains the appropriate information in accordance with the Rules.4. Perform a walkthrough for the process of maintaining distributed unmetered load. Identify the distributed unmetered load database and confirm that appropriate fields exist for recording alterations to data within the database.

5. Select a sample of ICPs within the distributed unmetered load database where data has been altered. For each ICP, confirm that the appropriate information has been recorded within the database in accordance with the Rules. Confirm that alterations performed have been recorded with the appropriate information and audit trail.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 11.4.1	When correcting any working data, the raw meter data is not overwritten. If the raw meter data and the working data files are one and the same, an automatic secure backup of the affected data is made and archived by the processing or data correction application.	
Part J, schedule J2	para 11.4.2	In all cases where data is corrected or altered, a journal is generated and archived with the raw meter data file. The journal contains the following:	
		11.4.2.1 the date of the correction or alteration;	
		11.4.2.2 the time of the correction or alteration;	
		11.4.2.3 the operator ID;	
		11.4.2.4 the identification of 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;	
		11.4.2.5 the technique used to arrive at the corrected data; and	
		11.4.2.6 the reason for the correction or alteration.	
Part J, schedule J3	para 5.1	An up-to-date database is maintained for each type of distributed unmetered load for which the participant is responsible.	
		The database satisfies the requirements of schedule J5 with regard to the methodology for deriving submission information.	

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J3	para 5.2	The database contains as a minimum:	
		5.2.1 the ICP identifier associated with the unmetered load;	
		5.2.2 the location of each item of load	
		5.2.3 description of load type for each item of load including any assumptions made in the assessment of its capacity; and	
		5.2.4 the capacity of each item of load in kW.	
Part J, schedule J3	para 5.3	The database tracks the time of additions and changes in a way that enables the total load in kW to be retrospectively derived for any day.	
Part J, schedule J3	para 5.4	The database incorporates an audit trail of:	
		all additions and changes identifying the before and after values for changes;	
		date and time, of the change or addition; and	
		the person making the change or addition.	

Function 6 – Calculation of supporting information

Process 6A: Calculation of supporting information

The participant is responsible for providing the Reconciliation Manager (RM) reports detailing supporting information for each Network Supply Points (NSP) it trades on. The reports are to be supplied for the prior billing month as well as revision months where changes have occurred to information effecting these reports.

Regulation Priority: High
<ol style="list-style-type: none">1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence2. Detailed testing for compliance.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough of the ICP Days submission process. Confirm that appropriate controls are in place to submit this report in a timely manner and that the calculation process is facilitated using data from the participant's own database.2. Select a sample of current billing and wash up ICP Days reports. Confirm the reports were sent within the Rule's timeframes.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J	Para 3	If the reconciliation participant purchases or sells electricity at a point of connection to the grid, then it must notify the reconciliation manager (in accordance with any procedures and any other requirements reasonably specified by the reconciliation manager) of any changes to the points of connection at which that reconciliation participant commences or ceases to trade electricity at least five business days prior to the change occurring.	
Part J	4.2.1	The participant delivers 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:	
		4.2.1.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.2.1.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	
		The ICP days information is calculated by the participant using the data contained in its own reconciliation system when it aggregates volume information for ICPs into submission information.	
	4.2.2	The participant delivers 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:	

Part of the Rules	Rule ref	Description	Notes
		4.2.2.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.2.2.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	
Part J	4.2.3	The participant (if a retailer or direct purchaser) delivers 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:	
		4.2.3.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.2.3.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	

Function 7 – Provision of submission information for reconciliation

Process 7A: Submission computation

The participant is responsible for submitting reconciliation data using validated meter readings or permanent estimates in accordance with the Rules. This includes the submission of HHR, NHH and unmetered load data. Estimation and profiling methodology of this data must also be in accordance with the Rules.

Regulation Priority - Moderate
1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.

Comments
<ol style="list-style-type: none">1. Perform a walkthrough for the process of submitting volume information. Focus the walkthrough on the processes for estimating (both forward and historic), profiling and performing wash ups of HHR, NHH and unmetered load data. Confirm that appropriate controls are in place to facilitate compliance with the Rules.2. Obtain an evidence of a HHR, NHH, and unmetered load reconciliation report. Confirm that any estimated data has been appropriately labelled as such.

Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J	17.1	The reconciliation participant provides submission information to the reconciliation manager that is adjusted for NZDT using one of the techniques set out in rule 17. (The technique will be specified by the Board in accordance with rule 16).	
Part J	para 4.1	4.1.1 By 1600 hours on the 4th business day of each reconciliation period, the reconciliation participant delivers submission information to the reconciliation manager for all NSPs at which it has purchased or sold electricity during the consumption period immediately prior to that reconciliation period (in accordance with schedule J3).	
		4.1.2 By 1600 hours on the 13th business day of each reconciliation period, the reconciliation participant delivers submission information to the reconciliation manager for all points of connection at which it has purchased or sold electricity during any consumption period being reconciled in accordance with rule 11, and in respect of which it has obtained revised submission information (in accordance with schedule J3).	
		4.1.3 When preparing and submitting submission information, the reconciliation participant allocates 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 J2).	

Part of the Rules	Rule ref	Description	Notes
Part J	Para 4.3.1	The participant (if a grid owner) delivers to the reconciliation manager for each point of connection for all of its GXPs, the following:	
		4.3.1.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.3.1.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	
Part J	Para 4.3.2	The participant (if an embedded network owner) delivers to the reconciliation manager for each NSP for which it is the embedded network owner, the following:	
		4.3.2.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.3.2.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	
Part J	Para 4.3.3	The participant (if a grid connected generator) delivers to the reconciliation manager for each of its points of connection, the following:	
		4.3.3.1 submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period; and	
		4.3.3.2 revised submission information provided in accordance with rule 4.1.2, by 1600 hours on the 13th business day of each reconciliation period.	

Part of the Rules	Rule ref	Description	Notes
Part J	para 4.4	If the reconciliation participant has submitted information and then subsequently obtained more accurate information than that which it previously submitted, they have provided 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 rule 11).	
J, schedule J2	para 4.1	Only volume information created using validated meter readings, or where such values are unavailable, permanent estimates, have permanence within the reconciliation processes (unless subsequently found to be in error).	
J, schedule J2	para 4.2	Volume information created using estimated readings is 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.	
J, schedule J2	para 4.3	Permanent estimates are only used in place of a validated meter reading when, despite having used reasonable endeavours, it has not been possible to obtain a validated meter reading.	
Part J, schedule J3	para 2.1	Where the reconciliation participant prepares submission information for each NSP for the relevant consumption periods in accordance with the Rules, such submission information includes:	
		2.1.1 half hour volume information for each ICP notified in accordance with rule 11 of part E;	
		2.1.2 non half hour volume information calculated in accordance with either rule 2.2.1, 2.2.2 or 2.2.3 (as applicable) for each ICP that has been notified in accordance with rule 11 of part E; and	

Part of the Rules	Rule ref	Description	Notes
		<p>2.1.3 unmetered load quantities for each ICP that has unmetered load associated with it derived from either 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.</p>	
<p>Part J, schedule J3</p>	<p>para 2.2</p>	<p>For each ICP that has a non half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates is allocated to consumption periods using the following techniques to create historical estimates and forward estimates.</p> <p>Each estimate being a forward estimate or an historical estimate is clearly identified as being such.</p> <p>When validated meter readings are not available for the purpose of rules 2.2.1 and 2.2.2, permanent estimates may be used in place of validated meter readings.</p>	
		<p>2.2.1 The methodology outlined in rule 2.2.1 of schedule J3 has been used when preparing historic estimates of volume information for each ICP when the relevant seasonal adjustment shape is available.</p>	
		<p>2.2.2 When a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP is the same as in rule 2.2.1, except that the relevant quantities kWhPx is 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 kWhPx.</p>	

Part of the Rules	Rule ref	Description	Notes
		<p>2.2.3 Forward estimates are only used in respect of any period for which an historical estimate cannot be calculated.</p> <p>The methodology used for calculating a forward estimate is determined by the reconciliation participant and the accuracy is within the percentage of error specified by the Board.</p>	
		<p>2.2.4 When the reconciliation participant changes the profile associated with a meter, when determining the volume information for that meter and its respective ICP, the participant uses a validated meter reading or permanent estimate on the day on which the profile change is to take effect.</p> <p>The reconciliation participant uses the volume information from that validated meter reading or permanent estimate in calculating the relevant historical estimates of each profile for that meter.</p>	

Function 7 – Provision of submission information for reconciliation

Process 7B: Submission format and timing

The participant is responsible for reporting to the market administrator information regarding the submission information made available to the reconciliation manager.

Regulation Priority - Moderate

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| <ul style="list-style-type: none">• Process Walkthrough – Inquiry/Observation and Inspection of physical evidence. |
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Comments

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| <ul style="list-style-type: none">• Perform a walkthrough for the process of submitting the GXP and balancing area consumption percentage reports. Confirm that appropriate controls are in place to calculate the appropriate percentages and to submit them in a timely manner.• Obtain an example of a GXP percentage report. Confirm it contains the appropriate information and was submitted within the timeframe recorded in the Rules.• Obtain an example of a balancing area percentage report. Confirm the percentages recorded in the report are within the thresholds set by the Rules and that it was submitted within the appropriate timeframe. |
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Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part J, schedule J2	para 5.4.1	<p>The reconciliation participant has reported to the market administrator, in relation to each GXP:</p> <p>the percentage of the ICPs from which consumption information was collected and reported into the reconciliation process in the previous 12 month period; and</p> <p>This report is submitted within 20 business days following the end of each month.</p>	
Part J, schedule J2	para 5.5.1	<p>The reconciliation participant reports to the market administrator the percentage, in relation to each GXP, of the ICPs from which consumption information was collected and reported into the reconciliation process in the previous 4 month period. The report is submitted within 20 business days following the end of each month.</p>	
Part J, schedule J2	para 10.2	<p>When reporting submission information, the number of decimal places is rounded to not more than two decimal places.</p> <p>If the un-rounded digit to the right of the second decimal place is greater than or equal to 5, the second digit is rounded up, and</p> <p>If the digit to the right of the second decimal place is less than 5, the second digit is unchanged.</p>	
Part J, schedule J3	para 3	<p>Submission information provided to the reconciliation manager is aggregated to the following level:</p>	
		<p>3.1 GXP or GIP;</p>	
		<p>3.2 network code;</p>	

Part of the Rules	Rule ref	Description	Notes
		<p>3.3 reconciliation type;</p> <p>3.4 profile;</p> <p>3.5 loss category code;</p> <p>3.6 flow direction</p> <p>3.7 dedicated NSP; and</p> <p>3.8 trading period for half hour metered ICPs and consumption period or day for all other ICPs.</p>	
Part J, schedule J3	para 4	<p>By 1200 hours on the last business day of each reconciliation period the reconciliation participant has reported to the reconciliation manager the proportion of historical estimates per balancing area contained within its non half hour submission information.</p> <p>The proportion of submission information per balancing area that is comprised of historical estimates is (unless exceptional circumstances exist):</p> <p>4.1 at least 80% when revised data is provided at the month 3 revision;</p> <p>4.2 at least 90% when revised data is provided at the month 7 revision; and</p> <p>4.3 100% when revised data is provided at the month 14 revision.</p> <p>For the purposes of this rule, “exceptional circumstances” means circumstances where access to a metering installation is not achieved despite the best endeavours of the retailer.</p>	

Function 8 – Provision of metering information to the pricing manager in accordance with section V of part G

Process 8A: Provision of metering information to the pricing manager

The participant (must provide half hour metering information to the pricing manager and the grid owner connected to the relevant local network in accordance with the Rules. The half hour metering information must be provided for unoffered generation and any electricity supplied by an intermittent generating station. It must also be loss adjusted and be supplied in a timely manner.

Regulation Priority - Moderate
1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence.

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| 1. Process Walkthrough – Inquiry/Observation and Inspection of physical evidence. |
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Comments
1. Perform a walkthrough for the process of supplying half hour metering generation information. Confirm that appropriate controls are in place to notify the appropriate parties of the metering information in a timely manner. 2. Obtain an example of a half hour metering report submitted to the pricing manager. Confirm the report was sent within the Rule's timeframe and contains the appropriate information.

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| 1. Perform a walkthrough for the process of supplying half hour metering generation information. Confirm that appropriate controls are in place to notify the appropriate parties of the metering information in a timely manner.

2. Obtain an example of a half hour metering report submitted to the pricing manager. Confirm the report was sent within the Rule's timeframe and contains the appropriate information. |
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Relevant Rules

Part of the Rules	Rule ref	Description	Notes
Part G, section V	3.2.1	The generator (and/or embedded generator) provides 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 rule 3.2.3 in relation to generating plant that is subject to a dispatch instruction (excludes unoffered generation and intermittent generation)	
Part G, section V	3.2.2	Each generator provides the pricing manager and the relevant grid owner half-hour metering information for:	
		3.2.2.1 Any unoffered generation from a generating station with a point of connection to the grid; and	
		3.2.2.2 Any electricity supplied from an intermittent generating station with a point of connection to the grid.	
		3.2.2.3 The generator provides the pricing manager and the relevant grid owner with the half-hour metering information required under rule 3.2.2 in accordance with the requirements of part J for the collection of that generator's volume information.	
		Where such half-hour metering information is not available, the generator provides the pricing manager and the relevant grid owner a reasonable estimate of such data.	
Part G, section V	3.2.3	The generator will provide the information in rules 3.2.1 and 3.2.2:	
		3.2.3.1 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;	

Part of the Rules	Rule ref	Description	Notes
		3.2.3.2 In the manner and form that the pricing manager stipulates; and	
		3.2.3.3 By 0500 hours on a trading day for each trading period of the previous trading day	
		3.2.3.4 For clarity, each generator will provide the half-hour metering information required under this rule 3.2.3 in accordance with the requirements of part J for the collection of that generator's volume information.	
Part G, section V	3.2.5	Where the generator provides half-hourly metering information to the pricing manager or a grid owner under this rule 3.2 it also, by 0730 hours of that day, publishes notice that it has given the pricing manager or relevant grid owner half-hourly metering information.	

Appendix 2: Detailed test of Compliance Definition

Detailed Test of Compliance

Sample testing is a method whereby key controls within a business process are selected and tested for effectiveness in ensuring compliance with the relevant Rules.

The sample selection method is at the discretion of the auditor; although it is expected samples will generally be selected on a Statistical (random or systematic) or Non-statistical (haphazard or judgmental) basis. Only a portion of the entire population is required to be tested to provide assurance that the key control operates as intended.

The sample size depends on how frequently the key control task is performed, (e.g., daily, monthly) and needs to be sufficient to conclude that the key control is operating effectively and as intended. All key control testing exceptions are evaluated quantitatively and qualitatively to determine if the exception represents a control deficiency.

If the conclusion is that a key control exception is not considered a deficiency, additional testing is performed to conclude that the control is operating effectively; (e.g. expand the initial sample size of 25 to 40).

Alternatively, it may be more efficient to test the process outputs for compliance with the relevant Rules. In such circumstances a sample of process outputs (such as notifications to the RM) should be selected and tested for compliance with the requirements of the Rules.

It is expected that compliance testing of process outputs would be the preferred approach where a participant has less mature or established processes.

Suggested Steps

1. Within the documented process, identify the key controls
2. Determine how frequently the key control is performed.
3. Identify the appropriate sample size (Using the table in Appendix 2 for guidance).
4. Obtain key control testing documents and complete testing.

5. Conclude to the effectiveness of the key control in terms of compliance with the Rules.

Evidence Required

The Commission reserves the right to review any evidence of a particular distributor audit. To confirm that the audit was appropriately conducted, the following evidence is required:

1. Process documentation, including identification of key controls
2. Detail of sample selection (sufficient for re-performance if required)
3. A copy of each transaction identified as an exception.
4. The unique identifier of each transaction tested
5. The date the testing commenced and was completed.

Sample

Part E, Rule 4

The distributor, within three business days of receiving a request for the creation of a new ICP, either: creates a new ICP or advises the retailer of the reasons it is unable to comply with the request.

Test Method

1. Identify the population of ICP creation requests.
2. Select a sample of ICP creation requests.
3. Run the appropriate Registry report
4. Identify the sample ICPs from the creation requests.
5. Confirm that the creation date is within 3 business days of the request.

Appendix 3: Sample Size Selection Guidance

Nature of control and frequency of performance	Recommended minimum number of Items to test
Task performed many times per day	25
Task performed daily	25
Task performed weekly	5
Task performed monthly	2
Task performed quarterly or more	2

Note: These recommended sample sizes have been taken from industry standard auditing practices. The auditor should use these figures as guidelines only and should exercise discretion when determining the sample size for their testing plan.

Appendix 4: Walkthrough process definition

Walkthrough Definition

A walkthrough involves tracing a limited number (2 to 3) of representative transactions through a process from beginning to end. The walkthrough includes the examination of the documentation and information flows from a manual as well as an automated perspective. The objective is to confirm that the auditor understands of the flow of transactions, the process documentation and the relevant controls in operation. Once completed, the walkthrough is documented and analysed for compliance.

Two types of process walkthrough exists:

Inquiry/Observation and Inspection of physical evidence.

Inquiry/Observation is used to identify how the key control is performed, who performs the key control, and what procedures are in place to determine that the key control operates effectively. The auditor then observes the end-to-end process in order to document the process.

Inspection of physical evidence is completed through verification of source documentation for evidence of control operation, e.g. verification of distributor contract documentation.

Suggested Steps

1. Ascertain the process and how compliance with the relevant Rules is managed.
2. Observe the process to gain an understanding of the key compliance controls.
3. Document the process.
4. Identify key compliance controls.

5. Follow a limited sample of transactions through the complete end-to-end process.
6. Evaluate effectiveness of process and controls in ensuring compliance with the relevant rules.

Evidence Examples

The Commission reserves the right to review any evidence of a particular distributor audit. To confirm that the audit was appropriately conducted, the following evidence is required:

Evidence can take the form of physical or hardcopy examples of key controls operating effectively. These may include screenshots, reports and appropriate examples of authorisations.

Sample

Part E, Rule 8.1

The distributor notifies the RM and the market administrator within three business days of an NSP on its network being created or decommissioned.

Test Method

1. Identify the process of NSP's being created/decommissioned.
2. Observe the process for creating/decommissioning NSP's.
3. Document the process for notifying the RM and the market administrator.
4. Confirm there are key controls in place for notifying the RM and the market administrator of the relevant information regarding the NSP.
5. Follow an example of an NSP being created/decommissioned and the RM and market administrator being advised

accordingly.

6. Confirm the existence and the operations of key controls are compliant with the Commission's regulations.

Appendix 5: Agreement to Organisational Policy Definition

Agreement to Organisational Policy Definition

Agreement to Policy is a method of identifying internal policies that stipulate appropriate business rules in order to comply with relevant Rules. A policy is a plan or course of action intended to influence and determine decisions and actions. A policy records a series of actions (business rules) to be undertaken to produce a desired outcome. The approach involves analysing the business rules to confirm that they comply with external regulation. The policy is also investigated to ascertain the appropriateness of the roles and responsibilities identified, the delegations authority in place, whether it has been appropriately approved and is regularly reviewed and compliance monitored.

Suggested Steps

1. Identify the relevant policy.
2. Confirm the policy has been appropriately approved.
3. Identify relevant business rules within the policy and confirm compliance with the Rules.

Evidence Required

A current and appropriately approved internal policy

Sample

Part E, Rule 4

The distributor, within three business days of receiving a request for the creation of a new ICP, either: creates a new ICP or advises the retailer of the reasons it is unable to comply with the request.

Test Method

1. Identify the relevant policy.

2. Confirm the policy has been appropriately approved.
3. Confirm a business rule exists that ICPs are to be created within three business days of receiving the request and if this is not possible that the retailer should be notified appropriately.
4. Confirm the appropriate resource has been identified to manage this process.