# ELECTRICITY INDUSTRY PARTICIPATION CODE RECONCILIATION PARTICIPANT AUDIT REPORT

For

# KING COUNTRY ENERGY (KCE)

Prepared by: Ewa Glowacka

Date audit commenced: 26 August 2019

Date audit report completed: 25 October 2019

Audit report due date: 30-Aug-19

1

1057359 v7

# TABLE OF CONTENTS

Exe	cutive summary	5
Aud	it summary	6
	Non-compliances	6
	Recommendations	
	Issues 7	
1.	Administrative	8
	1.1. Exemptions from Obligations to Comply with Code (Section 11)	8
	1.2. Structure of Organisation	
	1.3. Persons involved in this audit	
	1.4. Use of Agents (Clause 15.34)	9
	1.5. Hardware and Software	
	1.6. Breaches or Breach Allegations	9
	1.7. ICP Data	9
	1.8. Authorisation Received	10
	1.9. Scope of Audit	10
	1.10. Summary of previous audit	11
2.	Operational Infrastructure	12
	2.1. Relevant information (Clause 10.6, 11.2, 15.2)	12
	2.2. Provision of information (Clause 15.35)	
	2.3. Data transmission (Clause 20 Schedule 15.2)	13
	2.4. Audit trails (Clause 21 Schedule 15.2)	13
	2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)	14
	2.6. Retailer responsibility for electricity conveyed - access to metering installations (Claus	se
	10.7(2),(4),(5) and (6))	
	2.7. Physical location of metering installations (Clause 10.35(1)&(2))	
	2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)	
	2.9. Connection of an ICP (Clause 10.32)	
	2.10. Temporary Electrical Connection of an ICP (Clause 10.33)	
	2.11. Electrical Connection of Point of Connection (Clause 10.33A)	
	2.12. Arrangements for line function services (Clause 11.16)	
	2.13. Arrangements for metering equipment provision (Clause 10.36)	18
3.	Maintaining registry information	19
	3.1. Obtaining ICP identifiers (Clause 11.3)	19
	3.2. Providing registry information (Clause 11.7(2))	19
	3.3. Changes to registry information (Clause 10 Schedule 11.1)	
	3.4. Trader responsibility for an ICP (Clause 11.18)	
	3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)	
	3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)	
	3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)	
	3.8. Management of "active" status (Clause 17 Schedule 11.1)	
	3.9. Management of "inactive" status (Clause 19 Schedule 11.1)	
	3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)	
4.	Performing customer and embedded generator switching	24
	4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)	24

2

	4.2.	Losing trader response to switch request and event dates - standard switch (Clauses 3 and Schedule 11.3)	
	4.3.	Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)2	
	4.4.	Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)	
	4.5.	Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule	
		11.3)	
	4.6.	Disputes - standard switch (Clause 7 Schedule 11.3)	
	4.7.	Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)2	
	4.8.	Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)	
	4.9.	Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)	28
	4.10.	Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)	29
	4.11.	Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)2	29
	4.12.	Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedu	le
		11.3)	30
	4.13.	Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3)	31
	4.14.	Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule	
		11.3)	
		Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3)	
		Metering information (Clause 21 Schedule 11.3)	
	4.17.	Switch saving protection (Clause 11.15AA to 11.15AB)	33
5.	Main	tenance of unmetered load	35
	5.1.	Maintaining shared unmetered load (Clause 11.14)	
	5.2.	Unmetered threshold (Clause 10.14 (2)(b))	
	5.3.	Unmetered threshold exceeded (Clause 10.14 (5))	
	5.4.	Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B)	36
6.	Gath	ering raw meter data	38
	6.1.	Electricity conveyed & notification by embedded generators (Clause 10.13, Clause 10.24 an	d
		15.13)	38
	6.2.	Responsibility for metering at GIP(Clause 10.26 (6), (7) and (8))	
	6.3.	Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3)	
	6.4.	Reporting of defective metering installations (Clause 10.43(2) and (3))	
	6.5.	Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2)4	
	6.6.	Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)	
	6.7.	NHH meter reading application (Clause 6 Schedule 15.2)	41
	6.8.		
		Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)	42
	6.9.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 42
	6.10.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 42 43
	6.10. 6.11.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 42 43 43
	6.10. 6.11. 6.12.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43
	6.10. 6.11. 6.12. 6.13.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44
	6.10. 6.11. 6.12. 6.13.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44
7.	6.10. 6.11. 6.12. 6.13. 6.14.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44 44
7.	6.10. 6.11. 6.12. 6.13. 6.14. Storir	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44 45
7.	6.10. 6.11. 6.12. 6.13. 6.14.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44 45 46
7.	6.10. 6.11. 6.12. 6.13. 6.14. Storir 7.1.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44 45 46
	6.10. 6.11. 6.12. 6.13. 6.14. Storin 7.1. 7.2. 7.3.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 43 44 45 46 46
8.	6.10. 6.11. 6.12. 6.13. 6.14. Storin 7.1. 7.2. 7.3. Creat	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 44 44 46 46 46
7. 8. inforr	6.10. 6.11. 6.12. 6.13. 6.14. Storin 7.1. 7.2. 7.3. Creat	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	42 43 44 44 45 46 46 46

	8.2. Correction of HHR metering information (Clause 19(2) Schedule 15.2)	48
	8.3. Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)	49
	8.4. Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)	49
9.	Estimating and validating volume information	51
	9.1. Identification of readings (Clause 3(3) Schedule 15.2)	51
	9.2. Derivation of volume information (Clause 3(4) Schedule 15.2)	
	9.3. Meter data used to derive volume information (Clause 3(5) Schedule 15.2)	
	9.4. Half hour estimates (Clause 15 Schedule 15.2)	52
	9.5. NHH metering information data validation (Clause 16 Schedule 15.2)	52
	9.6. Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)	53
10. (claus	Provision of metering information to the GRID OWNER in accordance with subpart 4 of Part 13 se 15.38(1)(f))	
,	10.1. Generators to provide HHR metering information (Clause 13.136)	
	10.2. Unoffered & intermittent generation provision of metering information (Clause 13.137)	
	10.3. Loss adjustment of HHR metering information (Clause 13.138)	
	10.4. Notification of the provision of HHR metering information (Clause 13.140)	
11.	Provision of submission information for reconciliation	58
	11.1. Buying and selling notifications (Clause 15.3)	
	11.2. Calculation of ICP days (Clause 15.6)	
	11.3. Electricity supplied information provision to the reconciliation manager (Clause 15.7)	
	11.4. HHR aggregates information provision to the reconciliation manager (Clause 15.8)	
12.	Submission computation	62
	12.1. Daylight saving adjustment (Clause 15.36)	62
	12.2. Creation of submission information (Clause 15.4)	
	12.3. Allocation of submission information (Clause 15.5)	
	12.4. Grid owner volumes information (Clause 15.9)	
	12.5. Provision of NSP submission information (Clause 15.10)	
	12.6. Grid connected generation (Clause 15.11)	
	12.7. Accuracy of submission information (Clause 15.12)	
	12.8. Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)	
	12.9. Reconciliation participants to prepare information (Clause 2 Schedule 15.3)	
	12.11.Historical estimates and forward estimates (Clause 3 Schedule 15.3)	
	12.12.Forward estimate process (Clause 4 and 3 Schedule 15.3)	
	12.13.Compulsory meter reading after profile change (Clause 7 Schedule 15.3)	
13.	Submission format and timing	72
	13.1. Provision of submission information to the RM (Clause 8 Schedule 15.3)	72
	13.2. Reporting resolution (Clause 9 Schedule 15.3)	
	13.3. Historical estimate reporting to RM (Clause 10 Schedule 15.3)	73
Conc	lusion	76
	Participant response	76

# **EXECUTIVE SUMMARY**

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

As of 31/07/2018 all King Country Energy ICPs, with the exception of 5 ICPs (generation), switched to Trustpower and other traders. King Country Energy is currently responsible for 5 embedded power stations. The company has no plans to trade any ICPs in the future.

During the period covered by this audit King Country Energy has been fulfilling their obligation to submit washup files for NHH ICPs. Currently King Country Energy is certified as a NHH & HHR reconciliation participant. The certification will expire on 30/10/19. The final NHH submission (rev14) will be done in September'19 for Jul'18, which is within the current certification. Going forward King Country Energy decided to apply for HHR certification as a generator only. It was discussed during the audit if the NHH ICP washup files process should be examined. King Country Energy requested that this audit covers generation ICPs only. King Country Energy has applied for certification as a generator only.

One non-compliance and one recommendation was noted in relation to incorrect information in ICPDAYS files submitted. The error was caused by the incorrect entries by The Line Company. We consider it to be a technical breach as there is no market impact.

At the request of the Authority we reviewed any activities related to NHH ICPs, which have taken place since the last audit. As was noted in the last reconciliation participant audit, as of 31/07/2018 all King Country Energy ICPs, with the exception of 5 HHR ICPs (generation), switched to Trustpower and other traders. The company was still responsible for the submission of washup data to the reconciliation manager until revision 14. King Country Energy set up a special process to meet compliance in this area. As a part of this audit, we reviewed all registry transactions since the last audit and the washup process for NHH ICPs. The last washup file was submitted in September'19.

3 non-compliances were recorded, which were cleared because the last washup file was submitted in September'19.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Reconciliation Participant audit provides some guidance on this matter. The Future Risk Rating score is 2 which results in an indicative audit frequency of 24 months. Our recommendation is 36 months.

We thank King Country Energy for their full and complete cooperation in this audit.

# **AUDIT SUMMARY**

# NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Calculation of ICP days	11.2	15.6	Incorrect allocation of ICP days in submission file (ICPDAYS) for 4 ICPs caused by tan incorrect flag of installation type recorded by The Line Company	Moderate	Low	2	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHRAGGR files do not contain electricity supplied information	Strong	Low	1	Not required. The Code change required a line up with RN file specification. Breach risk rating excluded from total
Accuracy of submission information	12.7	15.12	Revision 14 was not submitted for April'18	Moderate	Low	2	Cleared (no NHH participant anymore)
Permanence of volume information	12.8	4 of Schedule 15.3	Submission for a small number NSPs did not reach target of 100% HE	Strong	Low	1	Cleared (no NHH participant anymore)
Historical estimates reporting to RM	13.3	10 of Schedule 15.3	A small number of NSPs did not reach target of 100%	Strong	Low	1	Cleared (no NHH participant anymore)
Future Risk Rat	ing					2	
Next Audit Date 24 months							S

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

# RECOMMENDATIONS

Subject	Section	Description	Recommendation
Calculation of ICP days	11.2	Mismatch of ICP days calculated by the registry and ICP days reported in ICPDAYS submission files	Regularly review the GR100 file

# ISSUES

Subject	Section	Description	Issue
			Nil

1057359 v7

7

# 1. ADMINISTRATIVE

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

#### **Code reference**

Section 11 of Electricity Industry Act 2010.

#### **Code related audit information**

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

#### **Audit observation**

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

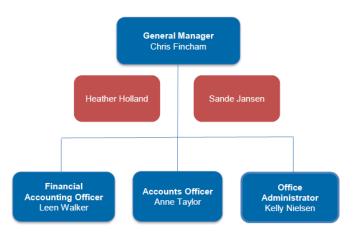
# **Audit commentary**

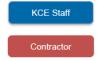
King Country Energy did not apply for any exemptions. We checked the Electricity Authority website and confirm that there are no exemptions in place.

# 1.2. Structure of Organisation

# **KCE Structure**

September 2019





# 1.3. Persons involved in this audit

Name	Title	Company	
Chris Fincham	General Manager	King Country Energy	
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates Ltd	

# 1.4. Use of Agents (Clause 15.34)

# **Code reference**

Clause 15.34

# **Code related audit information**

A reconciliation participant who uses an agent

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

#### **Audit observation**

King Country Energy uses EMS as the agent to provide half hour data collection and submission of consumption information to the reconciliation manager.

#### **Audit commentary**

As a part of this audit we reviewed the EMS audit report dated 04/07/2019.

# 1.5. Hardware and Software

Information related to this audit is stored in a specially designed spreadsheet which assists in the monitoring of compliance.

# 1.6. Breaches or Breach Allegations

No breach or breach allegations were lodged against King Country Energy since the last audit.

#### 1.7. ICP Data

Metering Category	(21/10/2019)	(2018)	(2017)
1	0	0	16,704
2	0	0	178
3	1	1	18
4	0	0	4
5	4	4	4
9		0	13

Status	Number of ICPs	Number of ICPs	Number of ICPs
	(21/10/2019)	(2018)	(2017)
Active (2,0)	5	5	16,488

Inactive – new connection in progress (1,12)	0	0	25
Inactive – electrically disconnected vacant property (1,4)	0	0	399
Inactive – electrically disconnected remotely by AMI meter (1,7)	0	0	0
Inactive – electrically disconnected at pole fuse (1,8)	0	0	38
Inactive – electrically disconnected due to meter disconnected (1,9)	0	0	1
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	0	10
Inactive – electrically disconnected ready for decommissioning (1,6)	3	29	96
Inactive – reconciled elsewhere (1,5)	0	0	0
Decommissioned (3)	2,674	2,648	2,347

# 1.8. Authorisation Received

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

# 1.9. Scope of Audit

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

The audit was carried out on the 26th August and 21 October 2019

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Relevant to audit	Agents Involved in Performance of Tasks
(a) - Maintaining registry information and performing customer and embedded generator switching	<b>✓</b>	
(b) – Gathering and storing raw meter data	<b>√</b>	EMS
(c)(I) - Creation and management of HHR volume information	✓	
(c)(ii) - Creation and management of NHH volume information	×	
(c)(iii) - Creation and management of HHR and NHH volume information	×	
(c)(iv) - Creation and management of dispatchable load information	×	
(d)(i) — Calculation and delivery of ICP days under clause 15.6	✓	EMS
(d)(ii) - delivery of electricity supplied information under clause 15.7	<b>√</b>	EMS
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	<b>√</b>	EMS
(e) — Provision of submission information for reconciliation	✓	EMS
(f) - Provision of metering information to the grid owner in accordance with subpart 4 of part 13	<b>√</b>	EMS (provision of metering information for Mangahao power station)

# 1.10. Summary of previous audit

The audit conducted on the 8 August 2018 did not identify any non-compliances in relation to embedded generation.

# 2. OPERATIONAL INFRASTRUCTURE

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

#### **Code reference**

Clause 10.6, 11.2, 15.2

#### Code related audit information

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

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

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

#### **Audit observation**

The LIS file and submission files were reviewed.

#### **Audit commentary**

The company has taken all practicable steps to ensure that information provided to others is complete and accurate.

In **section 11.2** we made mentioned of the GR100 files, which show discrepancies in the ICP days calculation between the registry and ICPDAYS files. Submission volumes provided to the RM are correct, volumes for import and export are accounted for, which is most important from the market point of view. The discrepancies are caused by the non-compliance of another party. On this basis we note that King Country Energy is complaint with clause 15.2.

# **Audit outcome**

Compliant

#### 2.2. Provision of information (Clause 15.35)

#### **Code reference**

Clause 15.35

# **Code related audit information**

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

# **Audit observation**

During the audit we asked King Country Energy if they were requested to provide any information by the Authority or participants. The company was not asked to provide information by the Authority.

# **Audit commentary**

King Country met their obligation to provide accurate submission information in the timeframe specified by the Code.

#### **Audit outcome**

#### Compliant

# 2.3. Data transmission (Clause 20 Schedule 15.2)

#### **Code reference**

Clause 20 Schedule 15.2

#### **Code related audit information**

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

#### **Audit observation**

EMS acts as the agent for King Country Energy with the transmission of data to the reconciliation and pricing manager being carried out electronically using the RM portal.

#### **Audit commentary**

The EMS audit report was reviewed, and compliance was confirmed with the above clause.

#### **Audit outcome**

Compliant

# 2.4. Audit trails (Clause 21 Schedule 15.2)

#### **Code reference**

Clause 21 Schedule 15.2

# **Code related audit information**

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

The audit trail must include details of information:

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

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

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

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

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

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

#### **Audit observation**

EMS acts as the agent on behalf of King Country Energy.

# **Audit commentary**

We reviewed the EMS audit report, which confirms compliance with the above clause.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 10.4

#### **Code related audit information**

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

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

#### **Audit observation**

King Country Energy does not have any customers. The company is responsible for generation ICPs only.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

# **Code reference**

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

#### Code related audit information

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

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

The trader must use its best endeavours to provide access:

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

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

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

#### **Audit observation**

During the audit we were assured that any access to an installation will be provided permitting Health & Safety issues.

# **Audit commentary**

Compliance confirmed based on a statement from King Country Energy.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 10.35(1)&(2)

#### **Code related audit information**

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

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

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

#### Audit observation

All metering is located at the point of connection within substations.

# **Audit commentary**

EMS, who reads these meters, is not required to apply any loss compensation factors as per their audit report.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 11.15B

# **Code related audit information**

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

the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and

15

the terms of the assigned contract to be amended on such an assignment to—

1057359 v7

- the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or
- such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii); and
- the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and
- the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and
- the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).

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

#### **Audit observation**

King Country Energy does not have any customers. The company is responsible for generation ICPs only.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

# 2.9. Connection of an ICP (Clause 10.32)

#### **Code reference**

Clause 10.32

#### Code related audit information

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

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

#### **Audit observation**

The EDA file for the period covered by this audit was reviewed.

#### **Audit commentary**

King Country Energy is responsible for generation ICPs only. There are no plans to become a trader in the future. King Country Energy has a new connection process mapped (as a trader) but the process was not used. The process of connection/reconnection is also in place, but it has not been used.

Any plans to have any generation plants taken off line and connected again will be planned well in advance.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 10.33(1)

#### Code related audit information

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

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

#### **Audit observation**

It was discussed during the audit.

# **Audit commentary**

King Country Energy has not authorised a temporary electrical connection in the period covered by this audit. Compliance confirmed based on the company's statement.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 10.33A(1)

# **Code related audit information**

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

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

#### **Audit observation**

The EDA and LIS files were checked.

#### **Audit commentary**

It was discussed during the audit and King Country Energy confirmed that no power stations were reconnected/disconnected during the period covered by this audit.

#### **Audit outcome**

#### Compliant

# 2.12. Arrangements for line function services (Clause 11.16)

# **Code reference**

Clause 11.16

#### **Code related audit information**

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

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

#### **Audit observation**

King Country Energy does not have customers as such because they are responsible for 5 generation ICPs only.

# **Audit commentary**

AccuCal is the MEP for all installations. An arrangement is in place.

#### **Audit outcome**

Compliant

# 2.13. Arrangements for metering equipment provision (Clause 10.36)

# **Code reference**

Clause 10.36

# **Code related audit information**

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

# **Audit observation**

The LIS file dated 28/8/19 was examined.

# **Audit commentary**

AccuCal is the MEP for all installations. King Country Energy provided evidence of an arrangement between the two companies.

#### **Audit outcome**

Compliant

# 3. MAINTAINING REGISTRY INFORMATION

# 3.1. Obtaining ICP identifiers (Clause 11.3)

#### **Code reference**

Clause 11.3

#### **Code related audit information**

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

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

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

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

# **Audit observation**

King Country Energy is responsible for generation ICPs only. The company has no plans to trade any ICPs in the future.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

#### **Code reference**

Clause 11.7(2)

# **Code related audit information**

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

#### **Audit observation**

King Country Energy provided the LIS file dated 28/08/19.

# **Audit commentary**

We verified information recorded in the registry, it is correct.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 10 Schedule 11.1

#### Code related audit information

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

#### **Audit observation**

The EDA file for the period of 01/09/18 to 15/08/19 was reviewed.

### **Audit commentary**

There were no changes to any ICPs information for which King Country Energy is responsible.

#### **Audit outcome**

Compliant

# 3.4. Trader responsibility for an ICP (Clause 11.18)

# **Code reference**

Clause 11.18

#### Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

#### **Audit observation**

King Country Energy is fully aware of their responsibilities. Their status is as a generator not a trader. The company has no plans to trade any ICPs in the future.

# **Audit commentary**

AccuCal is the MEP recorded for all ICPs as per the registry information.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 9 Schedule 11.1

#### Code related audit information

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

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

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

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

# **Audit observation**

The LIS file dated 28/8/2019 was reviewed.

#### **Audit commentary**

The review of the LIS file confirms that all information recorded in the registry is correct.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 9 (1(k) of Schedule 11.1

#### Code related audit information

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

#### **Audit observation**

The LIS file dated 28/8/2019 was reviewed.

#### **Audit commentary**

We confirm all 5 ICPs have the correct ANZSIC code assigned.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 9(1)(f) of Schedule 11.1

# **Code related audit information**

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

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

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

#### **Audit observation**

The LIS file was reviewed.

#### **Audit commentary**

King Country Energy is responsible for generation ICPs only. The company has no plans to trade any unmetered load ICPs in the future.

# **Audit outcome**

Not applicable

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

#### **Code reference**

Clause 17 Schedule 11.1

# **Code related audit information**

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

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

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

- the ICP has only 1 customer, embedded generator, or direct purchaser (clause 17(2)(a))
- the electricity consumed is quantified by a metering installation or a method of calculation approved by the Authority (clause 17(2)(b)).

### **Audit observation**

The LIS file was reviewed.

# **Audit commentary**

All ICPs King Country Energy are responsible for have the status "active".

#### **Audit outcome**

Compliant

# 3.9. Management of "inactive" status (Clause 19 Schedule 11.1)

#### **Code reference**

Clause 19 Schedule 11.1

#### Code related audit information

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

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

#### **Audit observation**

The LIS file was reviewed.

#### **Audit commentary**

All ICPs King Country Energy are responsible for have the status "active". No status "inactive" has been used in the period covered by this audit. Any situation requiring generation plants to be taken off line will be planned well in advance.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 15 Schedule 11.1

#### Code related audit information

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

#### **Audit observation**

King Country Energy is responsible for generation ICPs only. The company has no plans to trade any ICP in the future.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

# 4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

#### **Code reference**

Clause 2 Schedule 11.3

#### **Code related audit information**

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

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

A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and 1 or more profile codes associated with that ICP.

#### **Audit observation**

The EDA files for the period 01/08/19 to 15/10/19 were reviewed.

# **Audit commentary**

There were no NTTR files sent to the registry. King Country Energy is responsible for generation ICPs only. The company has no plans to become a retailer in the future.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clauses 3 and 4 Schedule 11.3

#### **Code related audit information**

Within 3 business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12 month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:

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

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

#### **Audit observation**

The EDA files for the period 01/08/19 to 15/10/19 were reviewed.

#### **Audit commentary**

King Country Energy did not receive any NTTR from other traders therefore no AN files were sent.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 5 Schedule 11.3

#### Code related audit information

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

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

#### **Audit observation**

The EDA files for the period 01/08/19 to 15/10/19 were reviewed.

# **Audit commentary**

As per section 4.2, no standard switches occurred in the period covered by this audit.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 6(1) and 6A Schedule 11.3

# **Code related audit information**

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

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

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within 4 calendar months of

25

1057359 v7

the registry manager giving the gaining trader written notice of having received information about the switch completion, provide to the losing trader a changed switch event meter reading supported by 2 validated meter readings.

- the losing trader can choose not to accept the reading, however, must advise the gaining trader no later than 5 business days after receiving the switch event meter reading from the gaining trader (clause 6A(a)); or
- if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 6A(b)).

### **Audit observation**

The EDA files for the period 01/08/19 to 15/10/19 were reviewed.

# **Audit commentary**

King Country Energy received 20 RR files from gaining traders. All of them were accepted. We randomly chose 5 ICPs to confirm that the readings from the RR files were used for the calculation of submission files. King Country Energy provided an extract from their system to prove it.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 6(2) and (3) Schedule 11.3

# **Code related audit information**

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

- the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b);
- the gaining trader within 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

#### **Audit commentary**

Based on our analysis of the LIS file we noted that King Country Energy did not receive RR files which contained readings from AMI meters .

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 7 Schedule 11.3

#### **Code related audit information**

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

#### **Audit observation**

We discussed this with KCE during the audit and any disputes related to the switch event read were resolved successfully using RR files

#### **Audit commentary**

There were no situations where it was not possible to resolve any dispute related to meter readings using the RR files process.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 9 Schedule 11.3

#### Code related audit information

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

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

In the event of a switch move, the gaining trader must advise the registry manager of a switch and the proposed event date no later than 2 business days after the arrangement comes into effect.

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

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

# **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

There were no NTMI files sent to the registry. King Country Energy is responsible for generation ICPs only. The company has no plans to become a retailer in the future.

# **Audit outcome**

Compliant

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

#### **Code reference**

#### Clause 10(1) Schedule 11.3

#### **Code related audit information**

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

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

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

King Country received one NTMI (0009110260WM0E7) from ID Power. The AN file was sent as a response.

This ICP was marked, by KCE, on 09/05/15 as "ready for decommissioning" and was decommissioned by The Line Company as of 17/08/13. In September this year The Line Company, on request of ID Power, reversed the ICP decommissioning status in the registry back to 17/08/13. King Country Energy was not aware that the status of the ICP was changed to "deenergised – ready for decommissioning". The AN file was sent by mistake instead of NWIN.

The fact that The Line Company re-activated a decommissioned ICP in the registry caused a lot of unnecessary problems for King Country Energy. These issues are discussed further in this report.

After an exchange of many emails between the three companies the switch was withdrawn. The Line Company created a new ICP and the old one was decommissioned on 17/10/19. The Line Company did not backdate the entry to 17/08/13, the Event Date in the registry is 16/10/19, which is incorrect.

#### **Audit outcome**

#### Compliant

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

#### **Code reference**

Clause 10(2) Schedule 11.3

#### Code related audit information

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

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

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

Such a situation did not occur.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 11 Schedule 11.3

#### Code related audit information

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

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

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

King Country Energy provided two CS files to gaining traders, ICP 0001070690WMF13 and 0009110260WM0E7 (switch was withdrawn). All information in the CS file for 0001070690WMF13 was correct.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 12 Schedule 11.3

#### **Code related audit information**

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

- if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or
- if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within 4 calendar months of the date the registry

manager gives the gaining trader written notice of having received information about the switch completion, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by 2 validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):

- advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or
- if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 12(3)(b)).

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

- the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 12(2A)(b));
- the gaining trader no later than 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading. (clause 12(2B)).

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

King Country Energy received 10 RR files from gaining traders. All of them, except the RR files for 0009110260WM0E7, were accepted. We randomly chose 5 ICPs to confirm that the readings from the RR file were used for the calculation of submission files. King Country Energy provided an extract from their system to prove it.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 14 Schedule 11.3

# **Code related audit information**

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

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

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

A gaining trader must advise the registry manager of the switch and expected event date no later than 3 business days after the arrangement comes into effect.

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

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

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

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

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

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

# **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

#### **Audit commentary**

The gaining trader switch process was not used during the period covered by this audit.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 15 Schedule 11.3

#### Code related audit information

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

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

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

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

#### **Audit commentary**

The gaining trader switch process was not used during the period covered by this audit.

# **Audit outcome**

Compliant

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

### **Code reference**

#### Clause 16 Schedule 11.3

#### **Code related audit information**

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

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

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

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

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

#### **Audit commentary**

The gaining trader switch process was not used during the period covered by this audit.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clauses 17 and 18 Schedule 11.3

#### Code related audit information

A losing trader or gaining trader may request that a switch request be withdrawn at any time until the expiry of 2 calendar months after the event date of the switch.

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

- for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):
  - the participant identifier of the trader making the withdrawal request (clause 18(c)(i));
  - o the withdrawal advisory code published by the Authority. (clause 18(c)(ii))
- within 5 business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal. (clause 18(d))
- on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c).
   All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request. (clause 18(e))
- if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within 2 business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with

clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16. (clause 18(f))

#### **Audit observation**

We reviewed the EDA file for the period 01/08/19 to 15/10/19.

# **Audit commentary**

King Country Energy received 11 NW files from gaining traders. KCE accepted only one of them because the gaining trader used an incorrect event date, it was a typo. AN files were sent, as the response, within time stipulated by the Code.

King Country Energy did not send any NW files.

#### **Audit outcome**

Not applicable

# 4.16. Metering information (Clause 21 Schedule 11.3)

#### **Code reference**

Clause 21 Schedule 11.3

#### **Code related audit information**

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

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

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

# **Audit observation**

King Country Energy is responsible for generation ICPs only. The company has no plans to trade any ICP in the future.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 11.15AA to 11.15AB

#### **Code related audit information**

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

33

1057359 v7

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**

King Country Energy did not conduct any switching activities in the audit period. Any transactions in the registry were related to ICPs switched away to Trustpower and other traders on 31/07/18.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

# 5. MAINTENANCE OF UNMETERED LOAD

#### 5.1. Maintaining shared unmetered load (Clause 11.14)

#### **Code reference**

Clause 11.14

#### **Code related audit information**

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

- 11.14(2) The distributor must give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.
- 11.14(3) A trader who receives such a notification from a distributor must give written notice to the distributor if it wishes to add or omit any ICP from the ICPs across which unmetered load is to be shared.
- 11.14(4) A distributor who receives such a notification of changes from the trader under (3) must give written notice to the registry manager and each trader responsible for any of the ICPs across which the unmetered load is shared.
- 11.14(5) If a distributor becomes aware of any change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must give written notice to all traders affected by that change as soon as practicable after that change or decommissioning.
- 11.14(6) Each trader who receives such a notification must, as soon as practicable after receiving the notification, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP.
- 11.14(7) A trader must take responsibility for shared unmetered load assigned to an ICP for which the trader becomes responsible as a result of a switch in accordance with Part 11.
- 11.14(8) A trader must not relinquish responsibility for shared unmetered load assigned to an ICP if there would then be no ICPs left across which that load could be shared.
- 11.14(9) A trader can change the status of an ICP across which the unmetered load is shared to inactive status, as referred to in clause 19 of Schedule 11.1. In that case, the trader is not required to give written notice to the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.

#### **Audit observation**

The LIS file dated 28/08/19 was reviewed. King Country Energy does not trade shared unmetered load and does not have plans to do so in the future.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

# **Audit outcome**

Not applicable

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

#### **Code reference**

Clause 10.14 (2)(b)

#### Code related audit information

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

#### **Audit observation**

The LIS file was dated 28/08/19 reviewed. King Country Energy does not trade unmetered load and does not have plans to do so in the future.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

#### **Code reference**

Clause 10.14 (5)

#### **Code related audit information**

If the unmetered load limit is exceeded the retailer must:

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

#### **Audit observation**

The LIS file was reviewed. King Country Energy does not trade unmetered load and does not have plans to do so in the future.

#### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

# **Audit outcome**

Not applicable

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

# **Code reference**

Clause 11 Schedule 15.3, Clause 15.37B

#### Code related audit information

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

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

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

# **Audit observation**

King Country Energy does not trade distributed unmetered load and does not have plans to do so in the future.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

# **Audit outcome**

Not applicable

# 6. GATHERING RAW METER DATA

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

### **Code reference**

Clause 10.13, Clause 10.24 and Clause 15.13

#### **Code related audit information**

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

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

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

- there is 1 or more metering installations
- all electricity conveyed is quantified in accordance with the Code
- it does not use subtraction to determine submission information for the purposes of Part 15.

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

#### **Audit observation**

The LIS file dated 28/08/2019 was analysed. King Country Energy is responsible for 5 HHR ICPs (generation). The company does not use subtraction to determine submission information.

# **Audit commentary**

King Country Energy uses the quantity of electricity measured by HHR metering installations, which are read by EMS.

# **Audit outcome**

Compliant

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

# **Code reference**

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

# **Code related audit information**

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

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

The participant responsible for the metering installation must:

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

# **Audit observation**

King Country Energy does not have any connections to the grid.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

#### **Code reference**

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

### Code related audit information

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

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

# **Audit observation**

King Country Energy trades ICPs using the HHR profile for reconciliation purposes. This profile does not require a switch of meter registers

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 10.43(2) and (3)

## **Code related audit information**

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

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

#### **Audit observation**

EMS acts as the agent for King Country Energy to manage 5 HHR ICPs.

# **Audit commentary**

We reviewed the agreement between King Country Energy and EMS. According to the agreement EMS will check all validation data for errors and anomalies. King Country Energy will be advised, in writing, of potential or actual errors and anomalies.

Reconciliation files are always sent by EMS to King Country Energy for approval before submitting. If any inaccuracies are noted King Country Energy, as the MEP, will be advised.

EMS advised that there were no events or circumstances which lead them to believe that any King Country Energy metering installations were defective in the period covered by this audit.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 2 Schedule 15.2

#### Code related audit information

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

- 2(2) The reconciliation participant must collect raw meter data used to determine volume information from the services interface or the metering installation or from the MEP.
- 2(3) The reconciliation participant must ensure the interrogation cycle is such that is does not exceed the maximum interrogation cycle in the registry .
- 2(4) The reconciliation participant must interrogate the meter at least once every maximum interrogation cycle.
- 2(5) When electronically interrogating the meter the participant must:
  - a) ensure the system is to within +/- 5 seconds of NZST or NZDST
  - b) compare the meter time to the system time
  - c) determine the time error of the metering installation
  - d) if the error is less than the maximum permitted error, correct the meter's clock
  - e) if the time error is greater than the maximum permitted error then:
    - i) correct the metering installation's clock
    - ii) compare the metering installation's time with the system time
    - iii) correct any affected raw meter data.
  - f) download the event log.

2(6) – The interrogation systems must record:

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

# **Audit observation**

EMS as the agent for King Country Energy collects raw meter data.

### **Audit commentary**

We reviewed the EMS audit report dated 04/07/2019. No non-compliances were identified relating to the above clause.

#### **Audit outcome**

### Compliant

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

#### **Code reference**

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

#### **Code related audit information**

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

All validated meter readings must be derived from meter readings.

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

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

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

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

# **Audit observation**

King Country Energy is not responsible for NHH installations. All HHR installations are read by EMS remotely.

# **Audit commentary**

We reviewed the EMS audit report to assess compliance in relation to this clause. No non-compliances were identified.

# **Audit outcome**

Compliant

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

# **Code reference**

Clause 6 Schedule 15.2

# Code related audit information

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

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

# **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 7(1) and (2) Schedule 15.2

### **Code related audit information**

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

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

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

### **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 8(1) and (2) Schedule 15.2

# **Code related audit information**

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

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

# **Audit observation**

King Country Energy is not responsible for NHH installations.

### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

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

# **Code reference**

Clause 9(1) and (2) Schedule 15.2

#### Code related audit information

In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each 4 months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every 4 months for 90% of the non-half hour metered ICPs.

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

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

### **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 10 Schedule 15.2

### **Code related audit information**

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

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

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

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

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

# **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

# **Audit outcome**

Not applicable

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

#### **Code reference**

Clause 11(1) Schedule 15.2

### Code related audit information

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

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

#### **Audit observation**

HHR data is collected by EMS, as the agent. There is no manual data collection.

### **Audit commentary**

This function is performed by EMS on behalf of King Country Energy. The EMS audit report dated 04/07/2019 confirms compliance.

#### **Audit outcome**

Compliant

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

### **Code reference**

Clause 11(2) Schedule 15.2

# **Code related audit information**

The following information is collected during each interrogation:

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

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

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

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

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

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

# **Audit observation**

HHR metering data is collected by EMS as the agent.

# **Audit commentary**

The EMS audit report was reviewed. The report states that the walkthrough of the data collection process confirmed that information collected during each automated interrogation of HHR metering is compliant with the above clause.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 11(3) Schedule 15.2

#### Code related audit information

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

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

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

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

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

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

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

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

### **Audit observation**

HHR metering data is collected by EMS as the agent.

### **Audit commentary**

The EMS audit report was reviewed. The report states that meter interrogation logs were examined. An interrogation log is generated to record details of all interrogations and appropriate action is taken where problems are apparent. It is part of the validation process.

## **Audit outcome**

Compliant

# 7. STORING RAW METER DATA

# 7.1. Trading period duration (Clause 13 Schedule 15.2)

### **Code reference**

Clause 13 Schedule 15.2

#### **Code related audit information**

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

#### **Audit observation**

HHR metering data is collected by EMS as the agent. The process to ensure that the trading period duration is accurate was reviewed during the EMS audit.

### **Audit commentary**

The EMS audit report states that the trading period duration, normally 30 minutes, is kept within ±10 seconds. It is managed through the clock synchronisation process.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 18 Schedule 15.2

# **Code related audit information**

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

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

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

# **Audit observation**

EMS acts as the agent responsible for interrogating metering installations on behalf of King Country Energy.

# **Audit commentary**

All data is archived in accordance with this clause for a period of more than 48 months. This was confirmed by viewing raw meter data from a prior period during the EMS audit. Audit trails are created if meter data is modified. King Country Energy confirmed, no data was modified.

### **Audit outcome**

Compliant

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

#### Code reference

Clause 21(5) Schedule 15.2

# **Code related audit information**

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

# **Audit observation**

EMS does not use non-metering information to determine profile data on behalf of King Country Energy.

# **Audit commentary**

The EMS audit report confirmed that the only non-metering information dealt with by EMS is street lighting data (on/off times) and this data is archived in accordance with this clause.

# **Audit outcome**

Compliant

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

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

### **Code reference**

Clause 19(1) Schedule 15.2

# **Code related audit information**

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

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

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

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

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

### **Audit observation**

NHH meter reads are stored in the KEGS database after the final upload from Gentrack. From this point Gentrack is "read only".

# **Audit commentary**

The only changes to metering data was a result of accepting RR files from gaining traders. NHH meter readings, as such, were not corrected due to validation failure. All meter reads were fully validated on upload in Gentrack.

As noted in the last report there was still the possibility that some RR files would be sent by other traders. This is described in relevant parts of **section 4**.

# **Audit outcome**

Compliant

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

# **Code reference**

Clause 19(2) Schedule 15.2

# **Code related audit information**

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

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

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

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

### **Audit observation**

This function is performed by EMS as required.

# **Audit commentary**

According to the agreement between EMS and King Country Energy, EMS is required to notify them whenever a problem occurs with the collection or validation of data.

It was discussed with King Country Energy who confirmed that they did not received such notification from EMS. It was also confirmed in conversation with EMS.

The EMS audit report stated that two correction were implemented. None of them related to the metering installations of King Country Energy.

### **Audit outcome**

Compliant

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

### **Code reference**

Clause 19(3) Schedule 15.2

# **Code related audit information**

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

### **Audit observation**

This function is conducted by EMS if required.

# **Audit commentary**

We checked certification of records provided by King Country Energy and confirm that no error or loss compensation has been applied to data. The EMS audit report confirmed that there were no metering installations with external compensation factors other than ration compensation.

# **Audit outcome**

Compliant

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

# **Code reference**

Clause 19(4) and (5) Schedule 15.2

# **Code related audit information**

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

49

1057359 v7

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

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

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

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

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

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

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

### **Audit observation**

This function for HHR ICPs is performed by EMS as the agent.

As per **section 8.1**, there were no corrections of NHH meter reads.

# **Audit commentary**

The EMS audit report was reviewed. According to the report raw meter data is not overwritten in any situation.

NHH meters read by King Country Energy's meter readers were archived and also imported into Gentrack. Raw meter was never overwritten. At the beginning of August'18, a snapshot of Gentrack was taken and uploaded to the KEGS database.

As described in the last audit, a monthly process adopted by King Country Energy was to have "a dry run" of NHHVOLS before a submission. If during this process they found any ICPs for which the KEGS database still calculates FE, these ICPs were analysed. In most cases it was an incorrect flag originally assigned in Gentrack. King Country Energy provided the analysis for 3 months for review.

50

### **Audit outcome**

Compliant

1057359 v7

# 9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

### **Code reference**

Clause 3(3) Schedule 15.2

### **Code related audit information**

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

#### **Audit observation**

EMS reads HHR metering installations as the agent.

# **Audit commentary**

According to the EMS audit report all estimated data is correctly identified at trading period level. No data was estimated for installations of King Country Energy.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 3(4) Schedule 15.2

# **Code related audit information**

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

### **Audit observation**

EMS calculates volume information on behalf of King Country Energy.

### **Audit commentary**

The EMS audit report was reviewed to assess compliance. According to the report all data is sourced from validated or estimated data.

# **Audit outcome**

Compliant

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

# **Code reference**

Clause 3(5) Schedule 15.2

# **Code related audit information**

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

#### **Audit observation**

EMS derives volume information on behalf of King Country Energy.

### **Audit commentary**

The EMS audit report was reviewed to assess compliance. The report stated that "when reporting submission information, the number of decimal places is rounded to two. Rounding does not occur earlier than at the time of reporting."

#### **Audit outcome**

Compliant

### 9.4. Half hour estimates (Clause 15 Schedule 15.2)

#### **Code reference**

Clause 15 Schedule 15.2

### **Code related audit information**

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

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

# **Audit observation**

This function is conducted by EMS as the agent.

# **Audit commentary**

According to the EMS audit report dated 04/07/2019 the process employed is robust and meets the "reasonable endeavours" requirement.

According to the agreement between EMS and King Country Energy, EMS is required to notify them whenever a problem occurs with the collection or validation of data.

EMS advised that, due to a meter communication issue, the data for 0001111026WMDBC for the reconciliation month of June 2019, was estimated. The fault had already been cleared, so the final data will be submitted during the next run.

# **Audit outcome**

Compliant

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

# **Code reference**

Clause 16 Schedule 15.2

# **Code related audit information**

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

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

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

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

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

### **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

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

### **Code reference**

Clause 17 Schedule 15.2

### **Code related audit information**

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

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

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

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

17(4)(c) - checks of unexpected 0 values

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

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

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

### **Audit observation**

This function is performed by EMS as the agent.

# **Audit commentary**

The process was reviewed during the EMS audit and found compliant.

"In situations where data fails validation and a logical reason cannot be found the issue is referred to the participant for further investigation into possible site-specific reasons for the anomaly. Event information reporting is in place and each event is investigated."

It was discussed with King Country Energy during the audit. The company stated that no metering data from any installation, for which they are responsible, failed validation.

# **Audit outcome**

# Compliant

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

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

### **Code reference**

Clause 13.136

### **Code related audit information**

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

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

#### **Audit observation**

EMS acts as the agent for King Country Energy to provide data for Mangahao Power Station.

# **Audit commentary**

EMS prepares HHR information on behalf of King Country Energy, for the grid owner. The EMS audit report dated 04/07/2019 confirmed compliance.

#### **Audit outcome**

Compliant

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

# Code reference

Clause 13.137

# **Code related audit information**

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

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

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

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

# **Audit observation**

EMS, the agent, will estimate metering data when HHR metering data is not available. If such a situation occurs, King Country Energy will be notified as per the agreement between the parties.

# **Audit commentary**

The EMS audit report describes the process for when HHR data is not available. According to the report EMS still continue to prepare estimated files in advance to cater for a situation where HHR metering

information may not be available. Check metering and SCADA data is often available as a backup for situations where HHR metering information may not be available.

EMS advised that, due to a meter communication issue, data the data for 0001111026WMDBC for the reconciliation month of June 20'19, due to the meter Comm issue was estimated. The fault had already been cleared, so the final data will be submitted during the next run

#### **Audit outcome**

Compliant

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

### **Code reference**

Clause 13.138

### **Code related audit information**

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

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

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

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

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

# **Audit observation**

EMS collects the data from Mangahao Power Station.

### **Audit commentary**

Any loss adjustment relative to the grid injection point is normally made within the metering installation at the time of installation and commissioning.

#### **Audit outcome**

Compliant

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

# **Code reference**

Clause 13.140

### Code related audit information

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

### **Audit observation**

EMS collects the data from Mangahao Power Station.

#### **Audit commentary**

EMS is the agent to the grid owner, and they have the data by 0500, therefore notification is not required.

# **Audit outcome**

Compliant

# 11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

### 11.1. Buying and selling notifications (Clause 15.3)

#### **Code reference**

Clause 15.3

### **Code related audit information**

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

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

### **Audit observation**

King Country Energy only uses the HHR profile for reconciliation submissions.

# **Audit commentary**

There are no plans to use any other profile than HHR. All installations are category 3 and 5 therefore metering data must be submitted as half-hourly.

#### **Audit outcome**

Compliant

# 11.2. Calculation of ICP days (Clause 15.6)

### **Code reference**

Clause 15.6

### Code related audit information

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

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

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

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

#### **Audit observation**

EMS provides ICPDAYS files on behalf of King Country Energy.

We reviewed the ICP days file (AV-110) submitted to the reconciliation manager and GR-100 provided by the reconciliation manager for the period Jan'19 to July'19.

### **Audit commentary**

The analysis of GR100 showed an incorrect allocation of ICP days for 4 ICPs (0001111026WMDBC, 0001111027WM1F9, 0001111025WM17C, and 0001111028WME27). The registry was calculating "0" ICP days and ICPDAYS files submitted by EMS was reporting the correct number of ICP days. It was discussed

with EMS and King Country Energy and we arrived at the conclusion that the reason for the discrepancies in the GR100 files was caused by an incorrect installation flag recorded in the registry by The Line Company. The Line Company recorded the flag "L" instead of "B". It was previously brought to the Line Company s' attention with a request for correction. The correction was unsuccessful because of The line Company's system.

We consider it a technical breach as there was no market impact. King Country Energy confirmed that they were correctly invoiced by the Clearing Manager for both import and export volumes.

### **Audit outcome**

# Non-compliant

Non-compliance	Description		
Audit Ref: 11.2 With: 15.6	Incorrect allocation of ICP days in submission file (ICPDAYS) for 4 ICPs caused by an incorrect flag of installation type recorded by The Line Company		
From: 01 Aug 10	Potential impact: None		
From: 01-Aug-18	Actual impact: None		
To: 15-Jul-19	Audit history: None		
	Controls: Strong		
	Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	We consider it to be a technical breach with no market impact. King Country confirmed that they were correctly invoiced by the Clearing Manager for both import and export volumes. We recommend that King Country Energy regularly review the GR100 file		
Actions taken to resolve the issue		Completion date	Remedial action status
LINE contacted and error fixed 30 Aug 2019		30 aug2019	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
3 monthly reminder in calendar to check GR100 file		20 Oct 19	

Description	Recommendation	Audited party comment	Remedial action
Mismatch of ICP days calculated by the registry and ICPs days reported in ICPDAYS submission files	Regularly review the GR100 file	LINE has been instructed to change and this was fixed 30 august 2019.	Going forward there will be a 3 monthly check of the GR100

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

#### **Code reference**

#### Clause 15.7

#### Code related audit information

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

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

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

#### **Audit observation**

Generators are not required to submit BILLED files.

### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 15.8

### **Code related audit information**

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

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

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

### **Audit observation**

EMS provides HHRAGGR files on behalf of King Country Energy.

King Country Energy provided a set of submission files (AV140) for the months Jan'19 to July'19. We compared the volumes in HHRVOLS against HHRAGGR. Volumes in both files were the same.

### **Audit commentary**

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

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

# **Audit outcome**

# Non-compliant

Non-compliance	Description		
Audit Ref: 11.4	HHRAGGR files do not contain electricity supplied information		
With: 15.8	Potential impact: None		
	Actual impact: None		
From: 01-Aug-18	Audit history: Twice previously		
To: 15-Jul-19	Controls: Moderate		
	Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	King Country Energy submits submission volumes as per the reconciliation manager specification.		
Actions taken to resolve the issue		Completion date	Remedial action status
All volume purchased is used for the operation of the power station. KCE does not retail.			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
KCE will not participate as a retailer.			

# 12. SUBMISSION COMPUTATION

# 12.1. Daylight saving adjustment (Clause 15.36)

### **Code reference**

Clause 15.36

#### Code related audit information

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

#### **Audit observation**

This function is performed by EMS as the agent.

# **Audit commentary**

According to the EMS audit report, the company uses the "trading period run on" technique for daylight saving adjustment. Compliance was confirmed.

#### **Audit outcome**

Compliant

# 12.2. Creation of submission information (Clause 15.4)

#### **Code reference**

Clause 15.4

# **Code related audit information**

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

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

# **Audit observation**

Submission files are created by EMS on behalf of King Country Energy. King Country Energy does not submit reconciliation files for NHH ICPs.

### **Audit commentary**

Every month EMS submitted submission files to the reconciliation manager. King Country Energy provided Jan'19 to July'19 files for review.

As described in **section 4.8**, The Line Company changed the status of ICP 0009110260WM0E7 from "decommissioned" to "ready for decommissioning". King Country Energy received a notification from the reconciliation manager that the volumes for Oct'19 were not submitted and that it was a breach of Schedule 15.2. Default volumes were assigned to King Country Energy.

# **Audit outcome**

### Compliant

# 12.3. Allocation of submission information (Clause 15.5)

#### **Code reference**

Clause 15.5

#### **Code related audit information**

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

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

#### **Audit observation**

EMS submits data as the agent of King Country Energy.

### **Audit commentary**

EMS submits data for 5 ICPs. We reviewed reconciliation files provided by King Country Energy. We cross checked the contents of the files with the registry information. All ICPs were allocated to the NSPs recorded in the registry.

### **Audit outcome**

Compliant

# 12.4. Grid owner volumes information (Clause 15.9)

#### **Code reference**

Clause 15.9

# **Code related audit information**

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

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

### **Audit observation**

King Country Energy is not a grid owner.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

# **Audit outcome**

Not applicable

# 12.5. Provision of NSP submission information (Clause 15.10)

#### **Code reference**

Clause 15.10

### Code related audit information

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

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

### **Audit observation**

King Country Energy does not own an embedded network.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

# 12.6. Grid connected generation (Clause 15.11)

# **Code reference**

Clause 15.11

### **Code related audit information**

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

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

### **Audit observation**

King Country Energy is not responsible for a grid connected generator.

### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

### 12.7. Accuracy of submission information (Clause 15.12)

#### **Code reference**

Clause 15.12

# **Code related audit information**

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

#### **Audit observation**

EMS (HHR) and King Country Energy (NHH) submit revision files.

### **Audit commentary**

The process was examined during the EMS audit and compliance was confirmed King Country Energy provided a set of reconciliation files for HHR ICPs (including washup) to confirm compliance.

After all NHH ICPs switched away to Trustpower and other traders, King Country has had the obligation to submit washup files for NHH ICPs.

As described in the last audit, King Country Energy set up a process to submit NHH revision files, up to revision 14. During this audit we walked through the process and found it compliant. Trustpower monitors registry files on behalf of KCE. As soon as a RR file is sent by a gaining trader it is passed to KCE and who evaluates it. Once the file is accepted a new meter read is entered into the KEGS database, which will be included in a new reconciliation file in due time. In **section 4.4** and **4.11** we recorded how many RR files were received, we sampled 10 RR files. The review of submission files showed that revision 14 was not submitted for April'18. The file was created but not submitted. It was caused by a miscommunication when the person responsible for submission was on annual leave,

The last washup files were submitted in Sept'19 for July'18.

### **Audit outcome**

Compliant

Non-compliance	Description		
Audit Ref: 12.7	Revision 14 was not submitted for April'18		
With: 15.12	Potential impact: Low		
	Actual impact: Low		
From: 19-Nov-19	Audit history: None		
To: 19-Nov-19	Controls: Strong		
	Breach risk rating:1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are recorded as strong. In most months, HE targets are met. It is not possible to resubmit R14 files. The only option would be to use a special washups process which is very expensive and in this case not worthwhile. Total volumes are correct.		
Actions taken to resolve the issue		Completion date	Remedial action status
As KCE is not applying for NHH certification we are no longer taking any further action.		Sep 19	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

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

# **Code reference**

Clause 4 Schedule 15.2

# **Code related audit information**

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

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

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

# **Audit observation**

At the beginning of August'18, KCE took a snapshot of Gentrack and uploaded it to the KEGS database. Washups files were created in the KEGS database.

# **Audit commentary**

We reviewed GR170 NHH to assess compliance. The table below shows the number of NSPs for which King Country Energy did not replace forward estimates with historical estimates or permanent estimates.

Month	Number of NSPs
June'17	1
July'17	5
Aug'17	3
Sept'17	2
Oct'17	0
Nov'17	0
Dec'17	1
Jan'18	0
Feb'18	0
Mar'18	0
Apr'18	8
May'18	0
June'18	0
July'18	0

King Country Energy provided copies of a spreadsheet for May'18 to July'18, which was used to track each individual ICP for which a losing read was historical estimates or permanent estimates. Since April 2019 no new forward estimates were identified but KCE monitored every submission.

**Audit outcome** 

Non-compliant

Non-compliance	Description			
Audit Ref: 12.8	Submissions for a small number of NSPs did not reach the target of 100% HE			
With: 4 of Schedule	Potential impact: None			
15.2	Actual impact: None			
	Audit history: Multiple times			
From: 01-Aug-18	Controls: Strong			
To: 30-Jun-19  Breach risk rating:1				
Audit risk rating	Rationale for audit risk rating			
Low	Controls are recorded as strong. In most months, HE targets are met. It is not possible to resubmit R14 files. The only option would be to use a special washups process which is very expensive and in this case not worthwhile			
Actions taken to resolve the issue		Completion date	Remedial action status	
As KCE is not applying for NHH certification we are no longer taking any further action.		Sep 19	Cleared	
Preventative actions taken to ensure no further issues will occur		Completion date		

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

# **Code reference**

Clause 2 Schedule 15.3

# **Code related audit information**

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

- half hour volume information for the total metered quantity of electricity for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a))for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):
  - a) any half hour volume information for the ICP; or
  - b) any non-half hour volumes information calculated under clauses 4 to 6 (as applicable).
  - c) unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in the period, the distributed unmetered load database, or other sources of relevant information. (clause 2(1)(c))
- to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):
  - a) the certification of the control device is recorded in the registry; or
  - b) the metering installation in which the control device is location has interim certification.

- to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3):
  - a) for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))
  - b) for each NSP the compensation factor that is recorded in the metering installations most recent certification report. (clause 2(3)(b))

#### **Audit observation**

EMS perform this function as the agent.

# **Audit commentary**

The EMS audit report did not identify any non-compliance with this clause. Every month EMS submits HHRAGGR, ICPDAYS, and HHRVOLS.

#### **Audit outcome**

Compliant

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

#### **Code reference**

Clause 3 Schedule 15.3

#### Code related audit information

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

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

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

# **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

### **Audit outcome**

Not applicable

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

# **Code reference**

Clause 4 and 5 Schedule 15.3

# **Code related audit information**

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

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

a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by  $kWh_{Px}$ .

# **Audit observation**

King Country Energy is not responsible for NHH installations.

### **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

# 12.12. Forward estimate process (Clause 6 Schedule 15.3)

### **Code reference**

Clause 6 Schedule 15.3

### Code related audit information

Forward estimates may be used only in respect of any period for which an historical estimate cannot be calculated.

The methodology used for calculating a forward estimate may be determined by the reconciliation participant, only if it ensures that the accuracy is within the percentage of error specified by the Authority.

# **Audit observation**

King Country Energy is not responsible for NHH installations.

# **Audit commentary**

This clause is not applicable. Compliance was not assessed.

#### **Audit outcome**

Not applicable

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

### **Code reference**

Clause 7 Schedule 15.3

#### Code related audit information

If the reconciliation participant changes the profile associated with a meter, it must, when determining the volume information for that meter and its respective ICP, use a validated meter reading or permanent estimate on the day on which the profile change is to take effect.

The reconciliation participant must use the volume information from that validated meter reading or permanent estimate in calculating the relevant historical estimates of each profile for that meter.

### **Audit observation**

All submissions use the HHR profile.

### **Audit commentary**

King Country Energy does not have plans to change the profile associated with submission files.

# **Audit outcome**

Compliant

# 13. SUBMISSION FORMAT AND TIMING

# 13.1. Provision of submission information to the RM (Clause 8 Schedule 15.3)

### **Code reference**

Clause 8 Schedule 15.3

#### Code related audit information

For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:

- Half hour submission information; or
- Non half hour submission information; or
- A combination of half hour submission information and non-half hour submission information

However, a reconciliation participant may instead use a profile if:

- The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and
- The approved profile allows the reconciliation participant to provide half hour submission information from a non-half hour metering installation; and
- The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.

Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:

- NSP code
- reconciliation type
- profile
- loss category code
- flow direction
- dedicated NSP
- trading period

The non-half hour submission information that a reconciliation participant submits must be aggregated to the following levels:

- NSP code
- reconciliation type
- profile
- loss category code
- flow direction
- dedicated NSP
- consumption period or day

# **Audit observation**

EMS provides submission files as the agent.

# **Audit commentary**

We reviewed files for the period Jan'19 to July'19 provided by King Country Energy to confirm compliance. The EMS audit report was reviewed which confirmed the process is compliant.

# **Audit outcome**

### Compliant

# 13.2. Reporting resolution (Clause 9 Schedule 15.3)

# **Code reference**

Clause 9 Schedule 15.3

#### Code related audit information

When reporting submission information, the number of decimal places must be rounded to not more than 2 decimal places.

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

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

#### **Audit observation**

EMS provides submission files as the agent.

#### **Audit commentary**

The EMS audit report confirmed that submission information is appropriately rounded to two decimal places.

### **Audit outcome**

Compliant

# 13.3. Historical estimate reporting to RM (Clause 10 Schedule 15.3)

# **Code reference**

Clause 10 Schedule 15.3

# **Code related audit information**

By 1600 hours on the 13th business day of each reconciliation period the reconciliation participant must report to the reconciliation manager the proportion of historical estimates per NSP contained within its non-half hour submission information.

The proportion of submission information per NSP that is comprised of historical estimates must (unless exceptional circumstances exist) be:

- at least 80% for revised data provided at the month 3 revision (clause 10(3)(a))
- at least 90% for revised data provided at the month 7 revision (clause 10(3)(b))
- 100% for revised data provided at the month 14 revision. (clause 10(3)(c))

# **Audit observation**

King Country Energy has been submitting washup files for NHH ICPs

# **Audit commentary**

We reviewed GR170NHH for the period covered by this audit. Revised data for revision 3 and revision 7 met compliance, reaching targets of 80% and 90%. The table below shows the number of NSPs which did not met compliance.

73

Month	Number of NSPs where HE for R14 is below 100%
June'17	1
July'17	5
Aug'17	3
Sept'17	2
Oct'17	0
Nov'17	0
Dec'17	1
Jan'18	0
Feb'18	0
Mar'18	0
Apr'18	8
May'18	0
June'18	0
July'18	0

# **Audit outcome**

Compliant

Non-compliance	Description		
Audit Ref: 13.3	A small number of NSPs did not reach the target of 100%		
With: 10 of Schedule	Potential impact: Low		
15.3	Actual impact: Low		
	Audit history: None		
From: 19-Nov-19	Controls: Strong		
To: 19-Nov-19	Breach risk rating:1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are recorded as strong. In most months, HE targets are met. It is not possible to resubmit R14 files. The only option would be to use a special washups process which is very expensive and in this case not worthwhile. Total volumes are correct.		
Actions taken to resolve the issue		Completion date	Remedial action status
As KCE is not applying for NHH certification we are no longer taking any further action.		Sep 19	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

# **CONCLUSION**

# PARTICIPANT RESPONSE

KCE would like to thank TEG Associates for the prompt audit. The subtleties of the outcomes of the ICPDAYS calculation was not appreciated by KCE and this issue has been corrected by the network company. KCE will continue to monitor this status in case any changes are made unintentionally.

KCE's participation in the NHH market has been a demanding but rewarding experience. When the current certification expires in Oct 2019, KCE will no longer be a NHH participant as all wash-ups will have been completed. KCE will only be an HHR generator, hence the application and audit are focused on this area only.

Additional Comment 24 Oct.

Despite the code being unclear, KCE's audit was rejected and KCE instructed to resubmit its report with the NHH component completed.

KCE would like to thank TEG Associates for rescheduling their workload to fit in this audit.