

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

For

**KING COUNTRY ENERGY (KCE)**

Prepared by: Ewa Glowacka

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Audit report due date: 30-Aug-18

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## 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 clauses 4 of Schedule 15.1 of The Code 2010. The relevant clauses audited are as required by the Guidelines for Reconciliation Participants Audits V 7.1 issued by the Electricity Authority.

As of 31/07/2018 all King Country Energy ICPs, with the exception of 5 HHR ICPs (generation), switched to Trustpower and other traders. King Country Energy has become a generator from the Code point of view. The company won't be trading any customers.

This audit has assessed the compliance of King Country Energy, not only as a generator, but also analysed its activities as a trader for NHH & HHR ICPs prior the transfer of ICPs. The company is still responsible for 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.

EMS acts as the agent to read HHR meters and submits volumes to the reconciliation manager.

During the audit, we identified 10 non-compliances but only 2 of them are relevant to the King Country Energy obligations after their customers switched out to other traders.

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 to conduct the audit in the next 18 months, when the washup cycle is finished.

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
Changes to registry information	3.3	10 of Schedule 11.1	Registry update of status and trader uploaded outside of 5 BD.	Moderate	Low	2	Cleared
Losing traders must provide final information	4.3	5 of Schedule 11.3	15 CS files (0.09%) out of 15,513 were sent later than 5 BD after the event date	Strong	Low	1	Cleared
Retailers must use same reading - standard switch	4.4	6(1) of Schedule 11.3	One RR file was sent late	Strong	Low	1	Cleared
Retailers must use same reading – switch move	4.8	10(1) of Schedule 11.3	Final information for 8 switch moves were provided late	Moderate	Low	2	Cleared
Gaining trader changes to switch meter reading – switch move	4.11	12 of Schedule 11.3	One RR file was sent later than 4 calendar months (by 2 months)	Moderate	Low	2	Cleared
Withdrawal of switch request	4.15	17 of Schedule 11.3	9 NW files were sent later than 2 calendar months after the event date of the switch	Moderate	Low	2	Cleared
NHH meters interrogated annually	6.9	8(1) of Schedule 15.2	Meter Frequency report was not submitted for May and June'18	Moderate	Low	2	Cleared
NHH meters 90% read rate	0	9(1) of Schedule 15.2	Meter Frequency report was not submitted for May and June'18	Moderate	Low	2	Cleared
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
Permanence of volume information	12.8	4 of Schedule 15.2	Submission for small number NSPs did not reach target of 100% HE	Strong	Low	1	
Historical estimates reporting to RM	13.3	10 of Schedule 15.3	Historical estimates threshold not met for small number of NSPs	Strong	Low	1	
Future Risk Rating						2	

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

Based on Table 1 of the Guidelines for Reconciliation Participant audit, the next audit should happen within next 24 months. Our recommendation is 18 months to coincide with final washups.

## RECOMMENDATIONS

Subject	Section	Description	Recommendation
			Nil

## ISSUES

Subject	Section	Description	Issue
			Nil

## 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

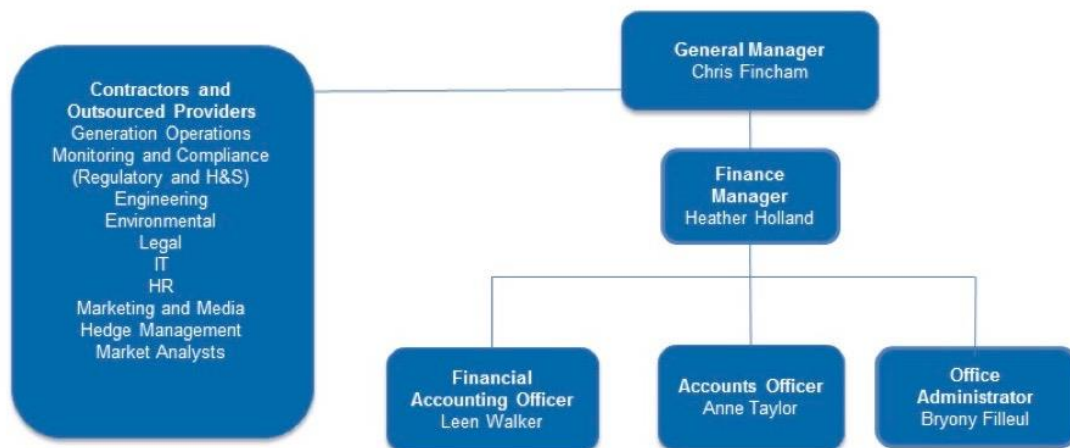
King Country Energy does not have any exemptions granted to exempt them from compliance with all or any of the clauses.

#### 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



### 1.3. Persons involved in this audit



Name	Title	Company
Chris Fincham	General Manager	King Country Energy
Craig Burnand	Director	CRB Enterprises Limited
Sande Jansen	Consultant	King Country Energy
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates

#### 1.4. Use of Agents (Clause 15.34)

##### Code reference

Clause 15.34

##### Code related audit information

*A reconciliation participant who uses an agent*

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

##### Audit observation

KCE uses EMS as the agent to read and submit data for HHR (generation) ICPs to the reconciliation manager.

##### Audit commentary

As a part of this audit we reviewed the EMS audit report dated 17/5/18.

#### 1.5. Hardware and Software

The key infrastructure required for the audited process comprises of the KEGS database.

#### 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

King Country Energy provided the LIS file dated 31/7/18. Total number of ICPs was 5.

Metering Category	(31/07/2018)	(2017)	(2016)
1	0	16,704	17,113
2	0	178	230
3	1	18	20
4	0	4	4
5	4	4	4
9	0	13	13

Status	Number of ICPs (31/07/2018)	Number of ICPs (2017)	Number of ICPs (2016)
Active (2,0)	5	16,488	17,397
Inactive – new connection in progress (1,12)	0	25	12
Inactive – electrically disconnected vacant property (1,4)	0	399	629
Inactive – electrically disconnected remotely by AMI meter (1,7)	0	0	0
Inactive – electrically disconnected at pole fuse (1,8)	0	38	50
Inactive – electrically disconnected due to meter disconnected (1,9)	0	1	1
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	10	70
Inactive – electrically disconnected ready for decommissioning (1,6)	29	96	47
Inactive – reconciled elsewhere (1,5)	0	0	1
Decommissioned (3)	2,648	2,347	2,126

#### 1.8. Authorisation Received

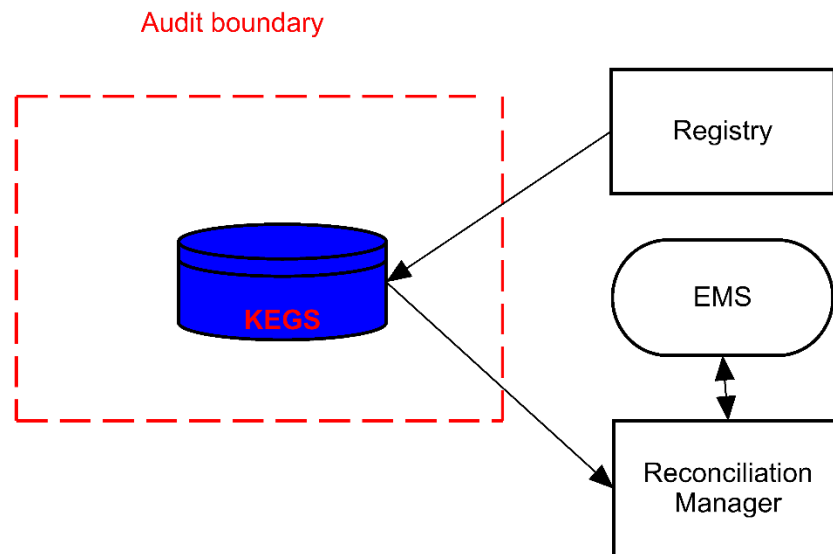
King Country Energy provided a letter of authorisation to TEG & Associates permitting the collection of data from other parties for matters directly related to the audit.

#### 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 8/9 August 2018 in King Country Energy office in Taumaranui. The audit covers the following processes under clause 15.38 of Part 15, performed by King Country Energy:

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



#### 1.10. Summary of previous audit

King Country Energy provided a copy of their previous Data Administration audit conducted in August 2017 by Ewa Glowacka (TEG & Associates Ltd). The findings of this audit were as follows:

Subject	Clause	Non-Compliance	Comment
Relevant information	11.2	In some areas information provided was not complete or accurate. Each area is described separately	Cleared
Inform registry of switch request for ICPs – standard switch	2 of Schedule 11.3	3 NTTR notifications were sent later than 2 BD after an arrangement with a customer came into effect. NT files were late by 4 BD	Cleared
Losing traders must provide final information	5 of Schedule 11.3	Sampled 6 CS files, 3 of them had incorrect date of last actual read or the switch event read for the wrong date; 3 CS files were sent late by 5 days	Cleared
Gaining trader changes to switch event meter reading	12 of Schedule 11.3	Readings from 4 RR files provided by the gaining trader were not recorded in Gentrack therefore were not passed to the KEGS database for reconciliation.	Cleared
Changes to registry information	10 of Schedule 11.1	Registry update of status and trader uploaded outside of 5 BD. Some updates were late up to 255 days	Still exists

Provision of information to the registry	9 of Schedule 11.1	Incorrect type of reconciliation for ICP 0001112128WM5C3 and incorrect details for unmetered load for 4 ICPs (security cameras)	Cleared
NHH meters interrogated annually	8 (1) of Schedule 15.2	For OKN0111 1 ICP was not read within 12 months	Cleared
NHH meters 90% rate	9 (1) of Schedule 15.2	For 3 NSPs target of 90% was not achieved	Still exists
Permanence of volume information	4 of Schedule 15.2	Submission for March'16 did not reach target of 100% HE for one NSP.	Still exists
Creation of submission information	2 of Schedule 15.3/15.2	Inaccurate information submitted to 2 UML ICPs	Cleared
Forward Estimation Process	6 of Schedule 15.3	Forward estimates do not meet +/- 15% threshold for 1 balancing area	
Historical estimates reporting to RM	10 of Schedule 15.3	Historic estimates did not achieve targets for March'16 for 3 NSPs	

## 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

King Country Energy's status change to a generator but it is still responsible for the submission of NHH ICP washups to the reconciliation manager.

#### Audit commentary

The company has taken all practicable steps to ensure that information provided to others is complete and accurate. Non-compliances identified during this audit related to prior 31/7/18 activities have been cleared because this doesn't hold much relevance as all ICPs have been switched out to other traders.

#### 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

We asked King Country Energy if they were requested to provide any information by the Authority or participants. The requests from other participants were related to switching. The company was not asked to provide information by the Authority.

#### Audit commentary

In relevant sections we describe the submission of information in accordance with Part 15. Compliance was confirmed.

#### 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

As from 31/7/18 King Country Energy is responsible for 5 HHR generation ICPs. Meters are read, and submission files created by EMS, acting as the KCE agent.

### Audit commentary

The EMS audit report was reviewed as a part of this audit and compliance is confirmed.

### 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 (clause 21(4)(c)).*

### Audit observation

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

### Audit commentary

The EMS audit report was reviewed, and compliance is confirmed.

### 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 not a trader anymore, it is a generator. This clause is not applicable.

### 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

It was discussed during the audit and 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 KCE.

### 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.

### Audit commentary

EMS, who reads these meters, is not required to apply any loss compensation factors.

### Audit outcome

Compliant

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

### Code reference

*Clause 11.15B*

### Code related audit information

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

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

- *the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*
- *the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and*
- *the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).*

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

#### **Audit observation**

This clause is not applicable.

#### **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 analysis of the EDA file showed that King Country Energy, “gained” 107 new connections in the period covered by this audit.

#### **Audit commentary**

The new connection process was to notify a network of acceptance of an ICP, change the registry status to “new connection in progress”, and nominate an MEP. An arrangement with an MEP was in place before an MEP was nominated using the registry web interface.

#### **Audit outcome**

Compliant

### **2.10. Temporary Electrical Connection of an ICP (Clause 10.33(1))**

#### **Code reference**

*Clause 10.33(1)*

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

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

- *they are recorded in the registry as being responsible for the ICP; and*
- *1 or more certified metering installations are in place at the ICP in accordance with Part 10; and*
- *for an ICP that has not previously been electrically connected, the network owner has given written approval.*

#### **Audit observation**

King Country Energy never authorised a temporary electrical connection.

#### **Audit commentary**

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:*

- *they are recorded in the registry as being responsible for the ICP; and*
- *1 or more certified metering installations are in place at the ICP in accordance with Part 10; and*
- *for an ICP that has not previously been electrically connected, the network owner has given written approval.*

#### **Audit observation**

The EDA file for the period of this audit was analysed.

#### **Audit commentary**

We randomly chose 10 new connections and walked through the new connection process. The process description for new connections is very detailed. There was an issue with the Gentrack version used by KCE that did not allow it to nominate a MEP therefore it was done using the registry web interface. We compared the date of meter installation and the date of metering installation. In all cases it was the same date.

#### **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**

This clause is not applicable.

**Audit commentary**

This clause is not applicable. Compliance was not assessed.

**Audit outcome**

Not applicable

**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**

It was discussed with King Country Energy during the audit. They had arrangements with all MEPs who provided services to them.

**Audit commentary**

AccuCal provided the MEP services for all installations for which King Country Energy is responsible.

**Audit outcome**

Compliant

### 3. MAINTAINING REGISTRY INFORMATION

#### 3.1. Obtaining ICP identifiers (Clause 11.3)

##### Code reference

*Clause 11.3*

##### Code related audit information

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

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

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

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

##### Audit observation

The analysis of the EDA file showed that King Country Energy, “gained” 107 new connections in the period covered by this audit.

##### Audit commentary

The majority of new connections (90%) were in The Line Company area.

All King Country Energy customers have unique ICPs assigned. Gentrack does not allow the assigning of duplicate ICPs.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 11.7(2)*

##### Code related audit information

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

### Audit observation

King Country Energy provided the LIS file dated 10/8/18

### Audit commentary

Information provided to the registry was 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 1/07/17 to 15/07/18 was analysed to assess compliance.

### Audit commentary

The analysis of the file is shown below.

Non-compliance was identified in the last audit. A comparison of the last two years of late updates of information in the registry, shows that only a small improvement was made. This doesn't hold much relevance as all ICPs have been switched out to other traders.

Status	Reason code	Total number of updates		No of updates later than 5BD	
		2017	2018	2017	2018
1(inactive)	8 (de-energised at pole fuse)	104	160	23 (22.1%)	74 (46.2%)
1(inactive)	4 (de-energised vacant)	18	1	7(0.4%)	0
1(inactive)	6 (ready for decommissioning)	157	238	31 (19.8%)	71 (29.8%) <sup>1</sup>
1(inactive)	7 (de-energised remotely)	1	2	1	0
1(inactive)	12 (new connection in progress)	87	108	7 (8.0%)	12 (11.0%)
2 (active)		342	382	109 (31.8%)	121 (31.6%)
Trader		468	1,373	305 (65.2%)	277 (20.2%)

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: 10 of Schedule 11.1 From: 01-Jul-17 To: 15-Jul-18	Registry update of status and trader uploaded outside of 5 BD. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Audit risk rating is recorded as low because of minor impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

### 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 responsibility. Since 31/7/18 they are responsible for 5 generation ICPs.

### Audit commentary

A MEP is recorded for all ICPs. King Country Energy's status has changed to a generator.

### 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 31/7/18 was analysed to assess compliance

### Audit commentary

We confirm the registry is correctly populated.

### 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

King Country Energy provided the LIS file dated 31/7/18.

### Audit commentary

All ICPs have correct ANZIC 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

King Country Energy provided the LIS file dated 31/7/18.

### Audit commentary

King Country Energy does not trade UML ICPs. King Country Energy is a generator, not a trader anymore.

### Audit outcome

Compliant

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

### Code reference

Clause 17 Schedule 11.1

### Code related audit information

*The ICP status of “active” is 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

King Country Energy provided the LIS file dated 31/7/18.

#### **Audit commentary**

All ICPs for which King Country Energy is responsible for have the status “active” in the registry.

#### **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**

King Country Energy provided the LIS file dated 31/7/18.

#### **Audit commentary**

All ICPs in the registry have the status “active” assigned.

#### **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**

This clause is not applicable.

#### **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 event file for the period 01/07/17 to 15/07/18 was analysed.

#### Audit commentary

According to the EDA file 346 NT files were sent. All notifications of standard switches were sent within 2 business days after the arrangement with a customer came into effect.

#### 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 must disregard every event date established by the losing trader for a customer who has been with the losing trader for less than 2 calendar months (clause 4(2) of Schedule 11.3).*

### Audit observation

The EDA file and the Switch Breach History Details for the period 01/07/17 to 15/07/18 were analysed.

### Audit commentary

King Country Energy's business rule, which was part of the Gentrack setup, was to send the AN file the same day. The AN file was created by Gentrack automatically. Since the last audit 15,336 AN files were sent to the registry for standard switches. It is a high number of AN files because King Country Energy customers were switching to other traders (TRUS 15,366) by end of July'18.

The analysis of the Switch Breach History Details file showed no breaches of late AN files were noted.

### 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 file and the Switch Breach History Details for the period 01/07/17 to 15/07/18 were analysed.

### Audit commentary

The standard switching process used by King Country Energy was to send the CS file within 5 business days after the event date. According to the Switch Breach report, 15 CS files were uploaded to the registry later than this clause requirement. Overall KCE sent 15,513 CS files for standard switches.

### Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 4.3 With: 5 of Schedule 11.3  From: 07-Jul-17 To: 27-Jun-18	15 CS files (0.09%) out of 15,513 were sent later than 5 BD after the event date  Potential impact: None  Actual impact: Low  Audit history: Once previously  Controls: Strong  Breach risk rating:1	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are rated as strong. Well managed process of providing final information. Audit risk rating is recorded as low because of minor impact on settlement outcomes	
Actions taken to resolve the issue	Completion date	Remedial action status
		Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	

#### 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 the actual event date, 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 file for the period 1/07/17 to 15/07/18 was analysed to assess compliance. KCE received 96 RR files from the gaining traders. KCE sent 208 RR files to the losing traders when the reading provided by the losing trader had differed by more than 200 kWh to the value established by King Country Energy.

#### Audit commentary

We sampled five accepted RR files to check if the event meter read provided by the gaining trader was recorded in the KEGS database. We confirm that readings were recorded in the database therefore will be using in the reconciliation process.

We identified one RR file (0030064255PC085) which was sent after 4 months of the actual event date which is non-compliant.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: 6(1) of Schedule 11.3 From: 11-Dec-17 To: 21-Dec-17	One RR file was sent late Potential impact: None Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong. Well managed process of evaluating information provided by a losing trader. Audit risk rating is recorded as low because of minor impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

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

##### Code reference

Clause 6(2) and (3) Schedule 11.3

##### Code related audit information

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

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b));*

- *the gaining trader within 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.*

#### **Audit observation**

The EDA file for the period 1/07/17 to 15/07/18 was analysed to assess compliance.

#### **Audit commentary**

King Country Energy did not switch any ICP, where the losing trader traded electricity from a non-half hour meter and they traded as HHR.

#### **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**

The event file for the period 01/07/17 to 15/07/18 was analysed.

#### **Audit commentary**

According to the EDA file, 818 NT files were sent. According to the King Country Energy process, the event date was set for the date when a customer moved in, as per a customer notification, or was planning to move in.

All notifications of switch move were sent within 2 business days after the arrangement with a customer came into effect. We confirm compliance based on analysis of the Event File (EDA and Switch Breach History Details file) for the period covered by this audit.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 10(1) Schedule 11.3*

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

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

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

#### **Audit observation**

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### **Audit commentary**

Overall KCE sent 60 RR files for switch moves. We identified 8 ICPs for which final information was not provided within 5 BDs. The most delayed ICP was by 5 BD.

#### **Audit outcome**

Non-compliant



Non-compliance	Description		
Audit Ref: 4.8 With: 10(1) of Schedule 11.3  From: 01-Jul-17 To: 15-Jul-18	Final information for 8 switch moves were provided late  Potential impact: None  Actual impact: Low  Audit history: None  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Audit risk rating is recorded as low because of minor impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

#### 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, the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):*

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

##### Audit observation

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

##### Audit commentary

King Country Energy accepted the event date proposed by the gaining trader.

##### Audit outcome

Compliant

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

##### Code reference

### Clause 11 Schedule 11.3

#### Code related audit information

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

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

#### Audit observation

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### Audit commentary

Switch moves are finalised very quickly. In most cases the CS file is sent the same day or the following day. King Country Energy prefers to finalise it quickly because there are vacant properties therefore actual read was provided.

#### 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 actual event date, 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

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### Audit commentary

King Country Energy sent 142 RR files. We identified one ICP 0009131500WM878 for which RR file was sent after six months.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.11 With: 12 od Schedule 11.3 From: 01-Aug-17 To: 17-Aug-17	One RR file was sent later than 4 calendar months (by 2 months) Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Audit risk rating is recorded as low because of minor impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

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

#### Code reference

Clause 13 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 through or assume responsibility for:

- a half hour metering installation (that is not a category 1 or 2 metering installation) at an ICP with a submission type of half hour in the registry and an AMI flag of “N”; or
- a half hour metering installation at an ICP that has a submission type of half hour in the registry and an AMI flag of “N” and is traded by the losing trader as non-half hour; or
- a non-half hour metering installation at an ICP at which the losing trader trades electricity through a half hour metering installation with an AMI flag of “N”.

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

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

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

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

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

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

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

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

#### **Audit observation**

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### **Audit commentary**

King Country Energy gained one ICP using the gaining trader switch process.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 15 Schedule 11.3*

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

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

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

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

#### **Audit observation**

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### **Audit commentary**

King Country Energy lost 49 ICPs using the gaining trader switch process. Compliance confirmed.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 16 Schedule 11.3*

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

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

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

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

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

#### **Audit observation**

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### **Audit commentary**

King Country Energy gained one ICP using this process. Compliance was met.

#### **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)); and*
  - *the withdrawal advisory code published by the Authority. (clause 18(c)(ii))*

- within 5 business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal. (clause 18(d))
- on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c). All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request. (clause 18(e))
- if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within 2 business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16. (clause 18(f))

#### Audit observation

The EDA file and Switch Breach Report for the period 01/07/17 to 15/07/18 was analysed.

#### Audit commentary

King Country Energy sent 540 NW files. We identified 9 NW files which were sent later than 2 calendar months after the event date of the switch

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.15 With: 17 of Schedule 11.3 From: 01-Jul-17 To: 15-Jul-18	9 NW files were sent later than 2 calendar months after the event date of the switch Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Audit risk rating is recorded as low because of minor impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

#### 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 switches on estimates or actual reads. To avoid possible disputes, the preferred option is an actual read. KCE pays for all the switch event reads as a part of the switching process.

##### Audit commentary

Compliance confirmed based on the company's policy in relation to the management of meter reading expenses.

##### Audit outcome

Compliant

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

##### Code reference

Clause 11.15AA to 11.15AB

##### Code related audit information

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

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

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

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

##### Audit observation

King Country Energy is not a part of the program because it does not trade any ICPs. We discussed this with KCE, the company confirmed that their policy was to contact their customers to confirm that it was a valid, authorised request.

##### Audit commentary

Compliance confirmed on the basis of the previous company's policy. There was a list of traders who are part of the program and staff were instructed not to contact their customers when a NT file is received.

**Audit outcome**

Compliant



## 5. MAINTENANCE OF UNMETERED LOAD

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

#### Code reference

Clause 11.14

#### Code related audit information

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

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

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

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

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

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

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

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

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

#### Audit observation

As of 31<sup>st</sup> August 2018, King Country Energy became a generator. The LIS was provided by the company.

#### Audit commentary

No UML ICPs are listed in the registry.

#### Audit outcome

Compliant

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

#### Code reference

Clause 10.14 (2)(b)

#### Code related audit information

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

#### Audit observation

This clause is not applicable.

#### 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*
  - o *the details of the corrective measures that the MEP proposes to take or is taking to reduce the unmetered load.*

#### Audit observation

This clause is not applicable.

#### 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**

This clause is not applicable.

**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 are 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 31/07/18 was analysed. King Country Energy is responsible 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**

This clause is not applicable.

#### **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 profile of HHR for reconciliation purposes. This profile does require a switch in meter registers.

#### **Audit commentary**

This clause is not applicable.

#### **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 (generation).

#### **Audit commentary**

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

#### Audit outcome

Compliant

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

#### Code reference

Clause 2 Schedule 15.2

#### Code related audit information

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

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

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

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

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

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

*2(6) – The interrogation systems must record:*

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

#### Audit observation

EMS collects data on behalf of King Country Energy.

#### Audit commentary

We reviewed the EMS audit report, compliance with this clause was confirmed.

#### Audit outcome

Compliant

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

### Code reference

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

### Code related audit information

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

*All validated meter readings must be derived from meter readings.*

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

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

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

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

### Audit observation

King Country Energy does not deal with NHH metering anymore, all NHH ICPs switched out. The requirements of clause 5 of Schedule 15.2 do not apply.

### Audit commentary

According to the EMS audit report, meter readings are sourced from raw meter data, and validated readings are derived from meter readings.

### 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

This clause is not applicable because KCE stopped trading NHH ICPs.

### 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

This clause is not applicable because KCE does not trade NHH ICPs.

##### Audit commentary

This clause is not applicable. Compliance was not assessed.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 8(1) and (2) Schedule 15.2*

##### Code related audit information

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

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

##### Audit observation

KCE does not trade NHH ICPs. Before ICPs were switched out, King Country Energy closely monitored compliance with this clause.

##### Audit commentary

King Country Energy provided a set of meter frequency reports for June and July'18. All ICPs were read. Reports were not submitted to the Authority for month of May and June'18.

##### Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 6.9 With: 8(1) of Schedule 15.2  From: 01-Jun-18 To: 31-Jul-18	Meter Frequency report was not submitted for May and June'18  Potential impact: None  Actual impact: Low  Audit history: Multiple times  Controls: Moderate  Breach risk rating: 2	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Outstanding reports will be provided to the Authority. Audit risk rating is recorded as low because of no impact on settlement outcomes	
Actions taken to resolve the issue	Completion date	Remedial action status
		Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	

#### 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 month, 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

KCE does not trade NHH ICPs. Before ICPs were switched out, King Country Energy closely monitored compliance with this clause.

##### Audit commentary

King Country Energy provided a set of meter frequency reports for June and July'18. All ICPs were read. Reports were not submitted to the Authority for month of May and June'18.

##### Audit outcome

## Non-compliant

Non-compliance	Description		
Audit Ref: 6.10 With: 9(1) of Schedule 15.2 From: 01-Jun-17 To: 15-Jul-18	Meter Frequency report was not submitted for May and June'18 Potential impact: None Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate because there are some improvements that could be made to them, but this won't happen as all ICPs have been switched out to other traders. Outstanding reports will be provided to the Authority. Audit risk rating is recorded as low because of no impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

## 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

KCE does not trade NHH ICPs anymore. In the past readings were provided by MEPs or King Country Energy's meter readers.

### Audit commentary

All historic information in relation to this clause is archived in Gentrack.

## Audit outcome

Compliant

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

#### Code reference

*Clause 11(1) Schedule 15.2*

#### Code related audit information

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

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

#### Audit observation

Data collection for HHR ICPs is conducted by EMS themselves. The obligation of compliance lies with the agent, but it is still the responsibility of King Country Energy.

#### Audit commentary

Management of HHR data is outsourced to EMS. Compliance is confirmed based on a review of the EMS audit report.

## Audit outcome

Compliant

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

#### Code reference

*Clause 11(2) Schedule 15.2*

#### Code related audit information

*The following information is collected during each interrogation:*

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

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

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

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

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

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

#### Audit observation

Data management for all HHR ICPs is managed by EMS.

#### Audit commentary

Data management for all HHR ICPs is managed by EMS. Compliance with this clause was thoroughly examined during the EMS audit and compliance was confirmed.

#### Audit outcome

Compliant

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

#### Code reference

Clause 11(3) Schedule 15.2

#### Code related audit information

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

- 11(3)(a)- the date of interrogation*
- 11(3)(b)- the time of commencement of interrogation*
- 11(3)(c)- the operator identification (if available)*
- 11(3)(d)- the unique identifier of the meter or data storage device*
- 11(3)(e)- the clock errors outside the range specified in Table 1 of clause 2*
- 11(3)(f)- the method of interrogation*
- 11(3)(g)- the identifier of the reading device used for interrogation (if applicable).*

#### Audit observation

Data management for all HHR ICPs is managed by EMS.

#### Audit commentary

Data management for all HHR ICPs is managed by EMS. According to the EMS audit report

*An interrogation log is generated to record details of all interrogations, and appropriate action is taken where problems are apparent. The interrogation log contains the following information:*

- *date of interrogation*
- *time of commencement of interrogation*
- *operator identification (this records which machine made the interrogation request and whether it was a manual or scheduled task)*
- *unique identifier of the data storage device*
- *time errors outside the range specified in table 1 of clause 2*
- *method of interrogation (there is only one method used by EMS, but manual data from agents will be loaded as "imported" or "portable reader")*
- *identifier of the reading device used for interrogation*

#### 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

Data management for all HHR ICPs is managed by EMS.

#### Audit commentary

Data management for all HHR ICPs is managed by EMS. Compliance is confirmed based on EMS's audit report.

#### 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

King Country Energy does not interrogate meters themselves. EMS, as their agent, interrogates HHR meters and archives data.

#### Audit commentary

Meter reads for previously traded NHH ICPs are archived by MEPs. Meter reads conducted by KCE's meter readers are archived and additionally they are stored in Gentrack which is "read only". The company has access to Gentrack if the need arises.

#### 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**

King Country Energy only uses the HHR and RPS profiles for reconciliation submissions. No external control equipment is used.

**Audit commentary**

Compliance was not assessed because this clause is not applicable to the King Country Energy's operation.

**Audit outcome**

Not applicable

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

*19(1)(a) - confirmation of the original meter reading by carrying out another meter reading*

*19(1)(b) - replacement of the original meter reading by another meter reading (even if the replacement meter reading may be at a different date)*

*19(1)(c) - if the original meter reading cannot be confirmed or replaced by a meter reading from another interrogation, then an estimated reading is substituted, and the estimated reading is marked as an estimate and it is subsequently replaced in accordance with clause 4(2).*

#### Audit observation

NHH meter reads are stored in the KEGS database after the final upload from Gentrack. From now on Gentrack is “read only”.

#### Audit commentary

All meter reads were fully validated on upload in Gentrack. The process was described in the previous audit reports. King Country Energy won't be carrying out any additional meter reads for NHH ICPs because all of them switched out.

Before the majority of ICPs switched to Trustpower, the switch event reads were agreed on. There is still the possibility that some RR files will be sent by other traders. Trustpower monitors the registry for KCE and any RR files are passed to them and entered manually into the KEGS database.

King Country Energy set up a robust process for dealing with RR files. We walked through the process and we confirm compliance. More details are in section 8.4.

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

*19(2)(a) - if a check meter or data storage device is installed at the metering installation, data from this source may be substituted*

*19(2)(b) - in the absence of any check meter or data storage device, data may be substituted from another period if the total of all substituted intervals matches the total consumption*



*recorded on the meter, if available, and the pattern of consumption is considered materially similar to the period in error.*

#### **Audit observation**

Correction of half-hour metering readings will be performed by EMS when the need arises. KCE will be notified if and when this occurs as per the agreement between parties.

#### **Audit commentary**

EMS confirmed that they did not do any HHR data correction due to any kind of meter incident.

#### **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**

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

#### **Audit observation**

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

#### **Audit commentary**

The EMS audit report states that there is only one ICP to which a compensation factor is applied which matches the certification record. The ICP is not traded by King Country Energy.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 22(1) and (2) Schedule 15.2*

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

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

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

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

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

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

*22(2)(d) - the half-hour metering data or the non-half hour metering data corrected or altered, and the total difference in volume of such corrected or altered data*

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

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

#### Audit observation

The correction of metering data for HHR ICPs, if required, is performed by EMS.

King Country Energy is responsible for NHH meter data.

#### Audit commentary

We reviewed the EMS audit report which confirms that their system and processes meet compliance with this clause. Raw meter data is not overwritten in any situation.

Raw meter data read remotely is archived by MEPS. NHH meters read by King Country Energy's meter readers was 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. No new data is imported into Gentrack, it is "read only" access.

King Country Energy is responsible for submission of washups files on day 13 for all NHH ICPs, which were their responsibility in the past. According to clause 4 of Schedule 15.2 (section 12.8), which says

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

A monthly process adopted by King Country Energy is to have "a dry run" of NHHVOLS before a submission. If during this process they find any ICPs for which the KEGS database still calculates FE, these ICPs are analysed. In most cases it is an incorrect flag originally assigned in Gentrack. The KEGS database has a built-in functionality which recognises which reads can be "converted" to permanent estimates.

Every month, a separate spreadsheet is created by the KEGS database, which identifies ICPs, which need to be analysed. We went through the spreadsheet for July'17. The problems identified were incorrect flags or an ICP was decommissioned earlier in the month but ICPs days were incorrectly calculated. Another examples are when a last read has a flag FM (Final Manual) or AE (Automated Estimate) or FE (Final Estimate). After checking the registry, the flag DLR (Date of Last Responsibility) is assigned, which is recognized by the KEGS database as a final read or permanent estimates.

Any changes are journaled. The number of ICPs which need to be looked at is small. For example, for July'17, which is rev 14, only 12 ICPs had to have their flag changed.

We found the process robust and documented.

#### Audit outcome

Compliant

## 9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

#### Code reference

*Clause 3(3) Schedule 15.2*

#### Code related audit information

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

#### Audit observation

EMS submits data on behalf of King Country Energy.

#### Audit commentary

Compliance for HHR readings was confirmed based on a review of the EMS audit report.

#### 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

For HHR ICPs EMS derives volumes from validated HHR readings read by them. The KEGS database uses both validated and estimated readings to create submission files. It also uses permanent estimates when appropriate.

#### Audit commentary

Compliance of the HHR operation was based on a review of the EMS audit report.

As of 31/07/18 King Country Energy does not trade NHH ICPs. Volumes are derived from historic validated meter readings, estimated readings and readings from RR files provided by gaining traders.

#### 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**

HHR data is managed by EMS as King Country Energy's agent. NHH reads are always whole numbers.

#### **Audit commentary**

Compliance confirmed based on visual observation and a review of the EMS audit report.

#### **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 for half hour meters is performed by EMS (agent).

#### **Audit commentary**

King Country Energy is always notified if estimation has to be done. Such situation has not occurred. Compliance is based on a review of the EMS audit report.

#### **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 does not trade NHH ICPs anymore but is still responsible for the submission of revision files. The data validation of meter reads for NHH ICPs is extensively described in the previous audits.

### Audit commentary

King Country Energy does not receive any NHH meter reads anymore. They are “locked” in the KEGS database after the final upload from Gentrack. King Country Energy still receives a small number of RR from gaining traders other than Trustpower, these reads are validated against stored readings. We examined the process and found it compliant.

### Audit outcome

Compliant

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

### Code reference

Clause 17 Schedule 15.2

### Code related audit information

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

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

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

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

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

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

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

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

### Audit observation

HHR meters are interrogated by EMS. King Country does not receive any NHH reads from MEPs

### Audit commentary

EMS conduct extensive data validation. Compliance confirmed based on a review of the EMS audit report.

### Audit outcome

Compliant

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

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

#### Code reference

Clause 13.136

#### Code related audit information

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

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

#### Audit observation

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. Information is provided daily. The EMS audit report, dated 17<sup>th</sup> May 2018, 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 pricing manager and the relevant grid owner half-hour metering information for:*

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

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

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

#### Audit observation

EMS, as 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 parties.

#### Audit commentary

The EMS audit report describes the process for when HHR data is not available. It will prepare estimated files in advance to cater for a situation where HHR metering information may not be available. Checking metering and SCADA data which is often available as a backup for situations where HHR metering information may not be available.

#### **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, as the agent, 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 the pricing manager or a grid owner under clauses 13.136 to 13.138, or 13.138A, it must also, by 0500 hours of that day, advise the relevant grid owner.*

#### **Audit observation**

EMS, as the agent, collects the data from King Country Energy generator.

#### **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 HHR and RPS profiles for reconciliation submissions.

#### Audit commentary

King Country only uses HHR and RPS profiles for reconciliation submissions. The RPS profile is used only for submitting revision files for NHH ICPs. We reviewed files submitted in August'18.

#### 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

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

#### Audit commentary

The results of the analysis are shown below:

Month	Ri	R1	R3	R7	R14
Apr'17	-0.04%	0.04%	0.23%	0.02%	
May'17	0.15%	0.20%	0.13%	0.01%	
June'17	0.30%	0.28%	-0.12%	0.00%	
July'17	0.21%	0.17%	0.22%	0.22%	
Aug'17	-0.13%	-0.11%	0.15%	0.15%	
Sept'17	-0.14%	0.00%	0.00%	0.06%	
Oct'17	-0.01%	0.00%	-0.01%		
Nov'17	-0.03%	0.00%	0.00%		
Dec'17	-0.02%	-0.02%	0.00%		
Jan'18	-0.02%	0.04%	0.03%		
Feb'18	0.07%	0.15%			
Mar'18	0.06%	0.04%			
Apr'18	-0.04%				
May'18	0.02%				
June'18	-0.12%				

The difference between registry ICP days and the KEGS database is minimal.

#### Audit outcome

Compliant

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

#### Code reference

Clause 15.7

#### Code related audit information

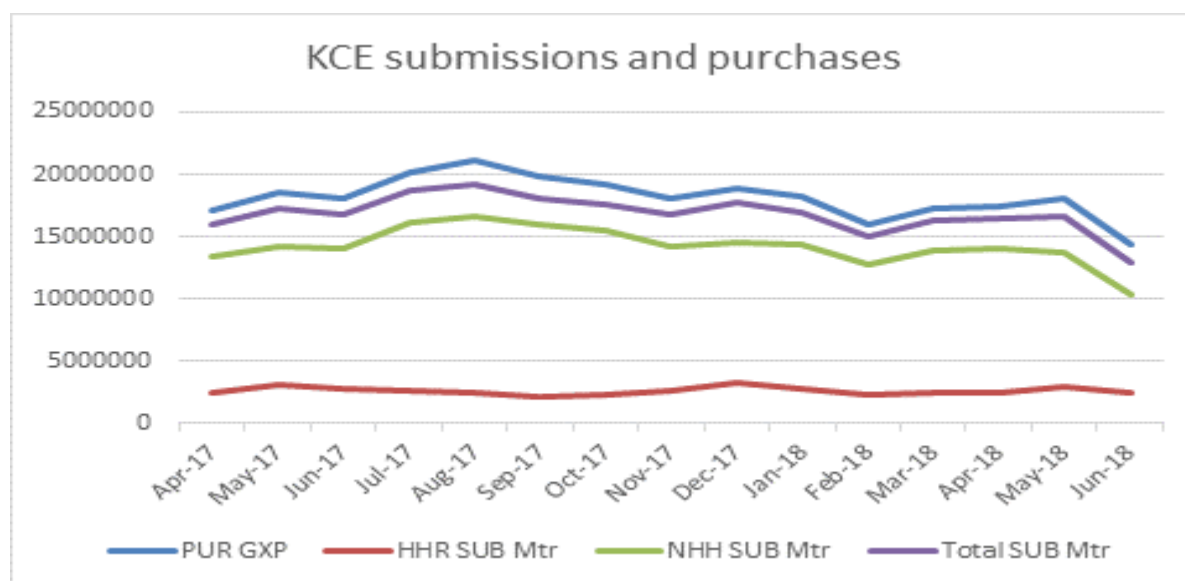
*A retailer must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each NSP, aggregated by invoice month, for which it has provided submission information to the reconciliation manager, including revised submission information for that period as non-loss adjusted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

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

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

#### Audit observation

King Country Energy submits AV-120 monthly. We confirm it submits for all revisions. The table below shows a comparison between volumes submitted and supplied (billed).



#### Audit commentary

Compliance confirmed based on a review of processes and a sample of submission files.

#### Audit outcome

Compliant

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

#### Code reference

Clause 15.8

#### Code related audit information

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

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

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

#### Audit observation

King Country Energy provided a set of submission files (AV140) for the month May'18 to July'18. We compared the volumes in HHRVOLS against HHRAGGI and HHRAGGR for these months. Volumes in both files were the same.

#### Audit commentary

The HHRAGGR files are prepared at ICP level based on submission information. Clause 15.8 states that the HHRAGGR should contain electricity supplied information rather than submission information. The

Reconciliation Manager Functional Specification in section 3, described HHRAGGR as HHR submission information that is aggregated per ICP for the whole month.

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

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: 15.8 From: 01-Jul-17 To: 15-Jul-18	HHRAGGR files do not contain electricity supplied information Potential impact: None Actual impact: None Audit history: Once previously Controls: Strong Breach risk rating: 1		
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
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

## 12. SUBMISSION COMPUTATION

### 12.1. Daylight saving adjustment (Clause 15.36)

#### Code reference

Clause 15.36

#### Code related audit information

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

#### Audit observation

This function for half hour meters is performed by EMS (agent).

#### Audit commentary

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

#### 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

King Country Energy provided reconciliation data for May’18 to July’18. HHR submission information was submitted on day 4 and day 13 (all relevant revisions) by EMS and NHH by KCE.

#### Audit commentary

The NHH submission files have been created using the KEGS database. The process of the creation of submission information is well documented. The King Country Energy’s operator follows the “KCE DA Checklist” every month. It is the same process which has been used by the company for a number of years. It is a robust process. In Aug’18, King Country Energy submitted NNHVOLS and ICPDAYS files on day 4 for the last time. From now on only revision files will be submitted on day 13.

Compliance of the creation of submission for HRR ICPs is based on a review of the EMS audit report.

#### 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

The process of the creation of submission volumes for NHH ICPs is well documented. EMS submits volumes for HHR ICPs.

#### Audit commentary

Before any reconciliation run, the registry file is imported to the KEGS database. At the beginning of August'18, King Country Energy, as a part of the monthly process, took a final snapshot of Gentrack and uploaded it to the KEGS dbase. Gentrack is still accessible but as "read-only". Any changes to metering data will be done in the KEGS database.

#### 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

This clause is not applicable.

#### 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

This clause is not applicable.

### 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

This clause is not applicable.

### 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**

We reviewed the EMS audit report and the agreement between EMS and KCE, and compliance is confirmed.

King Country Energy set up a process to submit NHH revision files for the next 14 months. 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.

#### **Audit outcome**

Compliant

### **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).*

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

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

#### **Audit observation**

At the beginning of August'18, KCE took a snapshot of Gentrack and uploaded it to the KEGS database. Any new meter reads will come from gaining traders in the form of RR Files.

#### **Audit commentary**

We reviewed GR170 NHH to assess compliance. The results are shown below, for a small number of NSPs the target of 100% was not met.



Month	Number of NSPs where HE for R14 is below 100%
Mar'16	1
Apr'16	2
May'16	2
June'16	0
Juy'16	1
Aug'16	2
Sept'16	1
Oct'16	0
Nov'16	0
Dec'16	0
Jan'17	0
Feb'17	0
Mar'17	1
Apr'17	0
May'17	1

#### Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 12.8</p> <p>With: 4 of Schedule 15.2</p> <p>From: 01-Jul-17</p> <p>To: 15-Jul-18</p>	<p>Submissions for a small number of NSPs did not reach the target of 100% HE</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
<b>Low</b>	Controls are recorded as strong. In most months, HE targets are met. After the switch of all NHH ICPs KCE implemented a stringent process to evaluate situations where the target of 100 % permanent estimates is not met and action is taken

Actions taken to resolve the issue	Completion date	Remedial action status
KCE is constantly checking its data and investigating issues as they are discovered. Our controls are strong, so no immediate action required.	n/a	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
KCE is reviewing data quality for all wash-ups. We have not reduced resource, but instead put all resource on to wash-ups as initial submissions are no longer required.	Oct 2019	

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

### Code reference

Clause 2 Schedule 15.3

### Code related audit information

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

- *half hour volume information for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a))*
- *for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):*
  - a) *half hour volume information for the ICP; or*
  - b) *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, as the agent, prepares information for HHR ICPs. At the time of this audit, King Country Energy traded 5 ICPs of category 3 and 5 installations.

### Audit commentary

The EMS audit report was reviewed, and compliance was confirmed. NHH submission will be created by KCE based on historic meter readings and corrections sent by gaining traders.

## 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 still responsible for the submission of washups for previously traded NHH ICPs. The submission will be submitted on day 13 only.

#### Audit commentary

A final snapshot of Gentrack information was uploaded to the KEGS dbase. From now on, every month, GR-030 will be uploaded to the KEGS database. The only expected changes to metering information will come from RR files sent from gaining traders. We reviewed the process of entering information to the database and we found it compliant. We are satisfied that any changes to metering information will be reflected in revision files.

## Audit outcome

Compliant

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

#### Code reference

*Clause 4 and 5 Schedule 15.3*

#### Code related audit information

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

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

#### Audit observation

As of 1/8/18, King Country Energy trades only HHR generation ICPs. All NHH ICPs switched to other traders.

#### Audit commentary

KCE will only be submitting volumes on day 13, when GR-030 is available. King Country Energy won't be using their own shape files based on historical information.

#### Audit outcome

Compliant

### 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

As of 1/8/18, King Country Energy trades only HHR generation ICPs. All NHH ICPs switched to other traders.

#### Audit commentary

King Country Energy won't be using the forward estimate process to determine submission volumes. We reviewed the reporting in relation to forward estimate accuracy. We chose May'17 and examined the wash up files.

Balancing area	initial	R1	R3	R7	R14	R1/initial	R3/initial	R7/initial	R14/initial
NORTHLINEG	6,213,718	6,449,303	6,165,295	6,191,277	6,471,517	4%	-1%	0%	4%
CENTRALLINEG	3,885,877	4,058,528	4,187,004	4,250,627	4,126,684	4%	8%	9%	6%
BASEASTPOCOG	817,949	771,693	720,161	706,435	714,646	-6%	-12%	-14%	-13%
TAUPROTHAWKG	673,754	699,305	618,421	614,895	614,883	4%	-8%	-9%	-9%
OKN0111LINEG	670,775	683,254	692,430	724,223	722,978	2%	3%	8%	8%
TMU0111WAIPG	447,876	425,257	380,226	383,599	400,204	-5%	-15%	-14%	-11%
CBG0111WAIPG	350,834	362,825	343,753	346,927	348,161	3%	-2%	-1%	-1%
WAIKATOWAIG	177,736	189,530	191,226	190,635	192,142	7%	8%	7%	8%
MEP0111TIKLE	132,152	132,931	135,068	132,150	130,436	1%	2%	0%	-1%
BA2EASTPOCOG	116,817	120,890	100,943	101,819	103,793	3%	-14%	-13%	-11%
BA3WESTPOCOG	103,379	104,117	88,107	88,623	91,680	1%	-15%	-14%	-11%

Compliance was met.

#### Audit outcome

Compliant

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

### Code reference

Clause 7 Schedule 15.3

### Code related audit information

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

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

### Audit observation

King Country Energy is aware of the Code requirements. At the time of audit only HHR profiles were used.

### Audit commentary

As of 31/07/18, King Country Energy trades only HHR generation ICPs.

### 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

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

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

#### Audit observation

We examined reconciliation files (May'18 to July'18) provided to the reconciliation manager by EMS on behalf of King Country Energy.

#### Audit commentary

All files were aggregated to the level required by this clause. Compliance is confirmed.

#### 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 submits HHR volumes as the agent.

NHH submission volumes are calculated by King Country Energy using the KEGS dbase.

#### Audit commentary

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

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

## Audit outcome

Compliant

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

#### Code reference

Clause 10 Schedule 15.3

#### Code related audit information

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

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

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

#### Audit observation

After the switch of NHH ICPs to other traders (finalised on 31/07/18), King Country's obligation is submitting washup files on the 13<sup>th</sup> business day of each reconciliation period for NHH ICPs, which were their responsibility before the switch. Volumes are submitted as NHHVOLS, which contains historical estimates (HE). The company won't be submitting volumes file for NHH ICPs on day 4.

#### Audit commentary

We analysed GR170NHH and the conclusion was that HE threshold was not met for a small number of NSPs.

Month	R3	R7	R14
Mar'16	1	1	1
Apr'16	1	2	2
May'16	1	0	2
June'16	3	0	0
Juy'16	4	1	1
Aug'16	5	1	2
Sept'16	2	2	1
Oct'16	3	2	0
Nov'16	2	2	0

<b>Dec'16</b>	2	2	0
<b>Jan'17</b>	2	0	0
<b>Feb'17</b>	0	0	0
<b>Mar'17</b>	0	0	1
<b>Apr'17</b>	0	0	0
<b>May'17</b>	0	0	1
<b>June'17</b>	0	2	
<b>July'17</b>	0	0	
<b>Aug'17</b>	0	0	
<b>Sept'17</b>	0	0	
<b>Oct'17</b>	1	0	
<b>Nov'17</b>	0	0	
<b>Dec'17</b>	1	0	
<b>Jan'18</b>	0		
<b>Feb'18</b>	0		
<b>Mar'18</b>	1		

#### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 13.3 With: From: 01-May-17 To: 15-Jul-18	Historical estimates threshold not met for a small number of NSPs Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating



Low	Controls are recorded as strong. The company was reading NHH meters very often. Especially before the switch of all NHH ICPs, the frequency of meters was increased significantly. Audit risk rating is assigned as low because historical estimates column in NHHVOLS are not used for reconciliation		
Actions taken to resolve the issue		Completion date	Remedial action status
KCE will continue its usual Control processes in monitoring the quality of the data for the next 14 months. No immediate action required from us.		n/a	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As our controls are already strong we will continue with our current processes until end of R14 for Jul 2018 reconciliation month.		Oct 2019	

## CONCLUSION

### PARTICIPANT RESPONSE

KCE would like to thank the auditor for understanding the changes to the business and working through with KCE the key steps of the customer migration to Trustpower.

While we have lost the customer service team, the same team that has been working on RM submissions are still with KCE. This has ensured we are able to continue with our QA processes.

The switching team finished with KCE after the migration, but part of the team is available for KCE for queries as they are working for Trustpower.

