

ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

VERITEK

For

APARANGI RETIREMENT VILLAGE  
AND GENESIS ENERGY

Prepared by: Rebecca Elliot

Date audit commenced: 10 December 2018

Date audit report completed: 18 December 2018

Audit report due date: 01-Jun-18

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## EXECUTIVE SUMMARY

This audit of the Aparangi Retirement Village (**Aparangi**) Unmetered Streetlights DUML database and processes was conducted at the request of Genesis Energy Limited (**Genesis**), in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied.

The audit was conducted in accordance with the audit guidelines for DUML audits version 1.1.

Genesis have developed a spreadsheet to track the items of load at Aparangi Retirement Village. This information is matched to the values held on the registry which in turn is used for submission.

The field audit was undertaken of all of the lights in the Aparangi Retirement Village, consisting of 31 items of load on 10<sup>th</sup> December 2018.

The database was confirmed to be accurate and the submission was found to match the registry.

The audit found one non-compliance. This relates to the late submission of this report and is cleared as a result of this audit. The future risk rating of one indicates that the next audit be completed in 24 months but as the accuracy of the database was found to be accurate, I recommend that the next audit be in 36 months. The one matter raised are detailed below:

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
DUML Audit	1.10	17.295F of part 17	Audit not completed within 12 months of Part 16A coming into effect.	Strong	Low	1	Cleared
Future Risk Rating						1	

<b>Future risk rating</b>	0	1-4	5-8	9-15	16-18	19+
<b>Indicative audit frequency</b>	36 months	24 months	18 months	12 months	6 months	3 months

### RECOMMENDATIONS

### ISSUES

Subject	Section	Description	Issue
		Nil	

## 1. ADMINISTRATIVE

### 1.1. Exemptions from Obligations to Comply with Code

#### 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

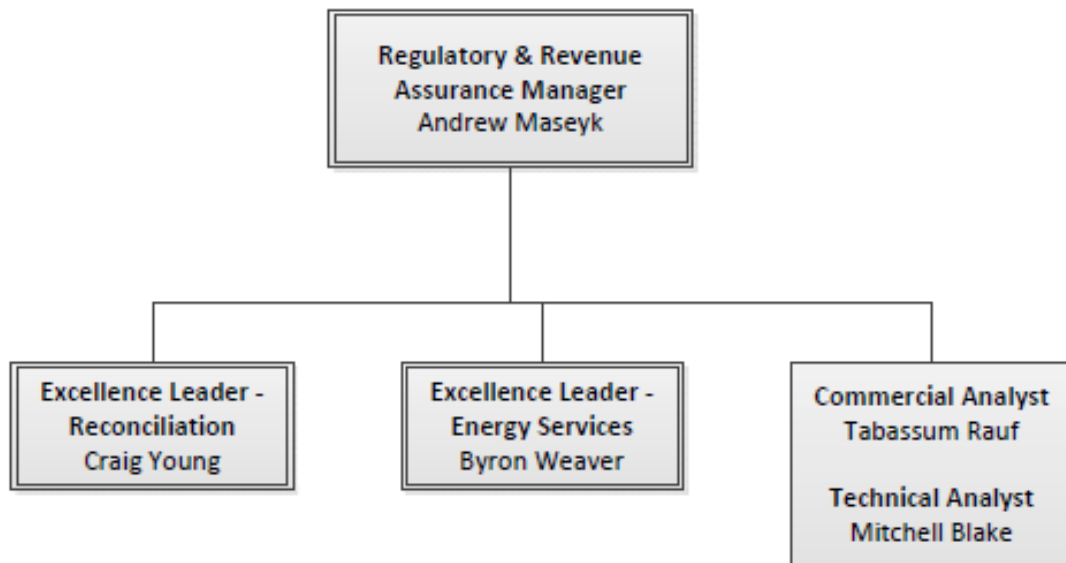
Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

#### Audit commentary

There are no exemptions in place relevant to the scope of this audit.

### 1.2. Structure of Organisation

Genesis provided a copy of their organisational structure:



### 1.3. Persons involved in this audit

Auditor:

Name	Title
Rebecca Elliot	Lead Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Craig Young	Excellence Leader – Reconciliation	Genesis Energy

### 1.4. Hardware and Software

An excel spreadsheet has been constructed to track the items of load at the Aparangi Retirement Village. The UML figure from this is recorded in the registry and is used to derive submission.

The spreadsheet is password protected and access to the directory where the spreadsheet is saved is restricted by way of user permissions. Genesis confirmed that this directory is backed up as part of the BAU processes in place.

### 1.5. Breaches or Breach Allegations

There are no breach allegations relevant to the scope of this audit.

### 1.6. ICP Data

ICP Number	Description	NSP	Number of items of load	Database wattage (watts)
0000011100WE2E2	UNM Streetlights	HLY0331	31	2210
<b>Total</b>			<b>31</b>	<b>2210</b>

### 1.7. Authorisation Received

All information was provided directly by Genesis.

## 1.8. Scope of Audit

This audit of the Aparangi Retirement Village (Aparangi) Unmetered Streetlights DUML database and processes was conducted at the request of Genesis Energy Limited (Genesis), in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied.

The audit was conducted in accordance with the audit guidelines for DUML audits version 1.1.

Genesis have developed a spreadsheet to track the items of load at Aparangi. This information is matched to the values held on the registry which in turn is used for submission.

The village uses their own contractor for the maintenance of these lights. Any new light connections will be managed in conjunction with Genesis although this is not expected.

The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the database reporting.

The field audit was undertaken of the entire Aparangi spreadsheet, consisting of 31 items of load on 10<sup>th</sup> December 2018.

## 1.9. Summary of previous audit

This is the first audit of the Aparangi Retirement village streetlights.

## 1.10. Distributed unmetered load audits (Clause 16A.26 and 17.295F)

### Code reference

*Clause 16A.26 and 17.295F*

### Code related audit information

*Retailers must ensure that DUML database audits are completed:*

- 1. by 1 June 2018 (for DUML that existed prior to 1 June 2017)*
- 2. within three months of submission to the reconciliation manager (for new DUML)*
- 3. within the timeframe specified by the Authority for DUML that has been audited since 1 June 2017.*

### Audit observation

Genesis have requested Veritek to undertake this streetlight audit.

### Audit commentary

This audit report was not completed within the require timeframe as there was no existing database to audit. Genesis have created a spreadsheet to manage this load. The audit has now been completed but the late submission of this report is recorded as non-compliance.

## Audit outcome

### Non-compliant

.Non-compliance	Description		
Audit Ref: 1.10 Clause 17.295F of part 17  From: 01-Jun-18 To: 16-Oct-18	Audit not completed within 12 months of Part 16A coming into effect.  Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as strong, as Genesis are reliant on the database provider to supply the data and in this case the delay caused this report to be late.  The impact is assessed to be low, as this has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
Genesis established a database of assets and have supplied this to the customer. Genesis has arranged any maintenance updates to be sent through to the streetlight mailbox.		01/10/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis will maintain the database on behalf of the customer.		01/10/2018	



## 2. DUML DATABASE REQUIREMENTS

### 2.1. Deriving submission information (Clause 11(1) of Schedule 15.3)

#### Code reference

*Clause 11(1) of Schedule 15.3*

#### Code related audit information

*The retailer must ensure the:*

- *DUML database is up to date*
- *methodology for deriving submission information complies with Schedule 15.5.*

#### Audit observation

The process for calculation of consumption was examined and the application of profiles was checked. The database was checked for accuracy.

#### Audit commentary

Genesis reconciles this DUML load using the UNM profile.

Genesis have created a spreadsheet in conjunction with the Aparangi Retirement Village to track all of the lamps in the village.

The information on the Registry matches to the values in the spreadsheet. I checked the submission calculation provided by Genesis against the data extract, and Registry, and it matches exactly.

A full field audit was undertaken and was confirmed to be accurate.

#### Audit outcome

Compliant

### 2.2. ICP identifier and items of load (Clause 11(2)(a) and (aa) of Schedule 15.3)

#### Code reference

*Clause 11(2)(a) and (aa) of Schedule 15.3*

#### Code related audit information

*The DUML database must contain:*

- *each ICP identifier for which the retailer is responsible for the DUML*
- *the items of load associated with the ICP identifier.*

#### Audit observation

The database was checked to confirm the correct ICP was recorded against each item of load.

#### Audit commentary

All items of load have an ICP recorded against them.

#### outcome

Compliant

### 2.3. Location of each item of load (Clause 11(2)(b) of Schedule 15.3)

#### Code reference

*Clause 11(2)(b) of Schedule 15.3*

#### Code related audit information

*The DUMML database must contain the location of each DUMML item.*

#### Audit observation

The database was checked to confirm the location is recorded for all items of load.

#### Audit commentary

The database has a field for 'Asset Location – Summary' and 'Asset Location – Address', both of which are populated for all items. There are also GPS co-ordinates for each item.

#### Audit outcome

Compliant

### 2.4. Description and capacity of load (Clause 11(2)(c) and (d) of Schedule 15.3)

#### Code reference

*Clause 11(2)(c) and (d) of Schedule 15.3*

#### Code related audit information

*The DUMML database must contain:*

- *a description of load type for each item of load and any assumptions regarding the capacity*
- *the capacity of each item in watts.*

#### Audit observation

The database was checked to confirm that it contained a field for lamp type and wattage capacity and included any ballast or gear wattage and that each item of load had a value recorded in these fields.

#### Audit commentary

The database contains a Lamp Description, Model, Gear Wattage and Lamp Wattage. These fields are populated for every item in the spreadsheet.

The accuracy of wattage and ballasts in the database is discussed in **section 3.1**.

#### Audit outcome

Compliant

## 2.5. All load recorded in database (Clause 11(2A) of Schedule 15.3)

### **Code reference**

*Clause 11(2A) of Schedule 15.3*

### **Code related audit information**

*The retailer must ensure that each item of DUML for which it is responsible is recorded in this database.*

### **Audit observation**

The field audit was undertaken of the entire database of 31 items of load on 10<sup>th</sup> December 2018.

### **Audit commentary**

The field audit found all lights were as expected.

### **Audit outcome**

Compliant

## 2.6. Tracking of load changes (Clause 11(3) of Schedule 15.3)

### **Code reference**

*Clause 11(3) of Schedule 15.3*

### **Code related audit information**

*The DUML database must track additions and removals in a manner that allows the total load (in kW) to be retrospectively derived for any given day.*

### **Audit observation**

The process for tracking of changes in the database was examined.

### **Audit commentary**

Any changes that are made during any given month take effect from the beginning of that month. The information is available which would allow for the total load in kW to be retrospectively derived for any day. On 20<sup>th</sup> September 2012, the Authority sent a memo to Retailers and auditors advising that tracking of load changes at a daily level was not required as long as the database contained an audit trail. I have interpreted this to mean that the production of a monthly “snapshot” report is sufficient to achieve compliance.

The database is held by Genesis and the Aparangi Village Manager advise Genesis when any changes to items of load are made at the village, and the spreadsheet will be updated accordingly with a log of what changes have been made to the spreadsheet including a date and name of person updating the spreadsheet.

### **Audit outcome**

Compliant

## 2.7. Audit trail (Clause 11(4) of Schedule 15.3)

### Code reference

*Clause 11(4) of Schedule 15.3*

### Code related audit information

*The DUML database must incorporate an audit trail of all additions and changes that identify:*

- *the before and after values for changes*
- *the date and time of the change or addition*
- *the person who made the addition or change to the database.*

### Audit observation

The database was checked for audit trails.

### Audit commentary

The data is contained in a spreadsheet at summary level. There is a Maintenance tab which is populated to track changes made.

**Audit outcome** Compliant

### 3. ACCURACY OF DUML DATABASE

#### 3.1. Database accuracy (Clause 15.2 and 15.37B(b))

##### Code reference

*Clause 15.2 and 15.37B(b)*

##### Code related audit information

*Audit must verify that the information recorded in the retailer's DUML database is complete and accurate.*

##### Audit observation

A 100% field audit was undertaken of the database.

Wattages were checked for alignment with the published standardised wattage table produced by the Electricity Authority.

##### Audit commentary

The 100% field audit found that all items of load could be located and the database was 100% accurate. Compliance is confirmed.

Wattages for all items of load were checked against the published standardised wattage table produced by the Electricity Authority and found to be correct.

##### Audit outcome

Compliant

#### 3.2. Volume information accuracy (Clause 15.2 and 15.37B(c))

##### Code reference

*Clause 15.2 and 15.37B(c)*

##### Code related audit information

*The audit must verify that:*

- *volume information for the DUML is being calculated accurately*
- *profiles for DUML have been correctly applied.*

##### Audit observation

The submission was checked for accuracy for the month the database extract was supplied. This included:

- checking the registry to confirm that the ICP has the correct profile and submission flag
- checking the database extract combined with the burn hours against the submitted figure to confirm accuracy.

##### Audit commentary

Genesis reconciles this DUML load using the UNM profile.

Genesis have created a spreadsheet in conjunction with the Alanadale Retirement Village to track all of the lamps in the village.

The information on the Registry matches to the values in the spreadsheet. I checked the submission calculation provided by Genesis against the data extract, and Registry, and it matches exactly.

A full field audit was undertaken and compliance is confirmed.

**Audit outcome**

Compliant

## CONCLUSION

Genesis have developed a spreadsheet to track the items of load at Aparangi Retirement Village. This information is matched to the values held on the registry which in turn is used for submission.

The field audit was undertaken of all of the lights in the Aparangi Retirement Village, consisting of 31 items of load on 10<sup>th</sup> December 2018.

The audit found one non-compliance. This relates to the late submission of this report and is cleared as a result of this audit. The future risk rating of one indicates that the next audit be completed in 24 months but as the accuracy of the database was found to be accurate, I recommend that the next audit be in 36 months.

## PARTICIPANT RESPONSE

Genesis created the database of assets to comply with the DUML guidelines. Genesis will work with the customer to manage the database on behalf with all maintenance updates to be forwarded to genesis energy's streetlight mailbox.