ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTED UNMETERED LOAD AUDIT REPORT



For

ACACIA COVE RETIREMENT VILLAGE AND MERCURY NZ LTD

Prepared by: Rebecca Elliot

Date audit commenced: 2 May 2022

Date audit report completed: 20 May 2022

Audit report due date: 01-Jun-22

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EXECUTIVE SUMMARY

This audit covers the Acacia Cove Retirement Village (Acacia Cove) DUML database and processes was conducted at the request of Mercury NZ Limited (Mercury) 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.

A full field audit was undertaken and confirmed the database to be accurate. Location details for the 11 items of load with insufficient details are outstanding. Mercury is following this up with the customer.

The future risk rating indicates that the next audit be completed in 24 months. I have considered this in conjunction with Mercury's comments and agree with this recommendation.

The matter raised is detailed below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Location of each item of load	2.3	11(2A) of Schedul e 15.3	11 items of load with insufficient location details because they are recorded as "scattered around".	Weak	Low	3	Investigating
Future Risk Rating							

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

RECOMMENDATIONS

Subject	Section	Recommendation
		Nil

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

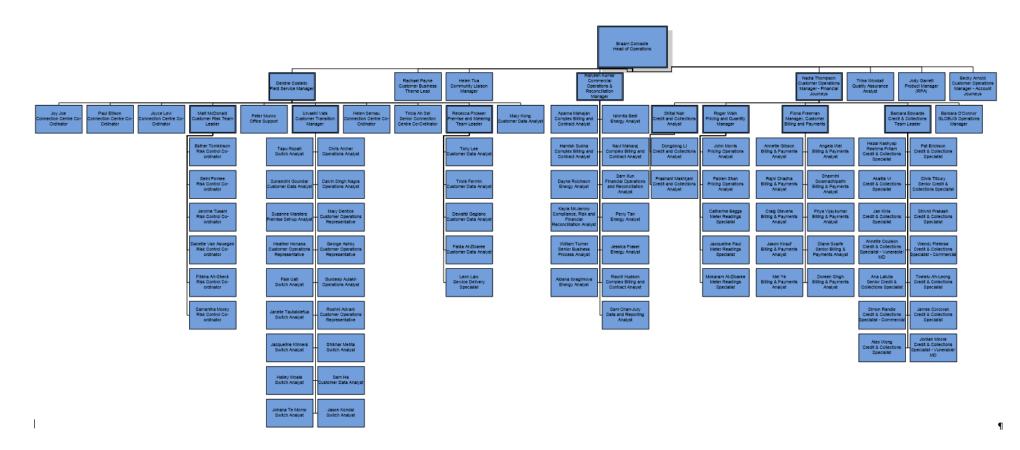
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

Audit commentary

Mercury has no exemptions in place in relation to the ICP covered by this audit report.

1.2. Structure of Organisation

Mercury provided an organisational structure:



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Chris Posa	Compliance Reconciliation Analyst	Mercury NZ Ltd

1.4. Hardware and Software

The streetlight data for Acacia Cove is held in an excel spreadsheet. This is backed up in accordance with standard industry procedures. Access to the spreadsheet is restricted by way of user log into the computer drive.

Systems used by the trader to calculate submissions are assessed as part of their reconciliation participant audits.

1.5. Breaches or Breach Allegations

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

1.6. ICP Data

ICP Number	Customer	Description	NSP	Profile	Number of items of load	Database wattage (watts)
0949731528LC8C0	ACACIA VILLAGE	Wattle Farm Rd	TAK0331	RPS	99	5,842

1.7. Authorisation Received

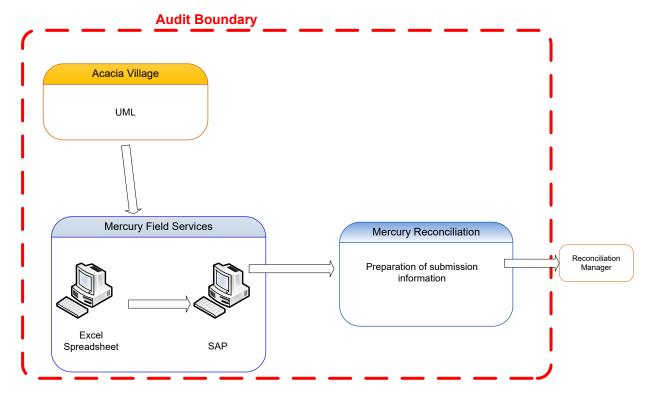
All information was provided directly by Mercury.

1.8. Scope of Audit

This audit covers the Acacia Cove Retirement Village (Acacia Cove) DUML database and processes was conducted at the request of Mercury NZ Limited (Mercury) 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.

The spreadsheet is maintained by Mercury and the customer is expected to advise Mercury of any changes that occur.



A full field audit was undertaken on 20th May 2022.

1.9. Summary of previous audit

The previous audit was completed in May 2020 by Steve Woods of Veritek Limited. One non-compliance was identified, and no recommendations were made. The current status of the non-compliance in relation to the Acacia Cove lights is detailed below.

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Location of each item of load	2.3	11(2A) of Schedule 15.3	11 items of load with insufficient location details because they are recorded as "scattered around".	Still existing

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

Mercury has requested Veritek to undertake this street lighting audit.

Audit commentary

This audit report confirms that the requirement to conduct an audit has been met for this database within the required timeframe.

Audit outcome

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

This clause requires that the distributed unmetered load database must satisfy the requirements of schedule 15.5 regarding the methodology for deriving submission information. Mercury reconciles this DUML load using the RPS profile. The daily kWh figure recorded in SAP, which is derived from the spreadsheet is used for submission. I checked the accuracy of the submission information by multiplying the daily kWh by the number of hours in the month and comparing it to the figure in the registry for the month of May 2022. This confirmed the calculation methodology was correct.

Any changes made in the database that affect total wattage are updated on the registry for the same date, therefore changes will be tracked at a daily basis.

A 100% field audit was undertaken and found the database to be 100% 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 spreadsheets were checked to confirm an ICP was recorded correctly for the load.

Audit commentary

The spreadsheet records the correct ICP relative to the load.

Audit outcome

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 DUML database must contain the location of each DUML item.

Audit observation

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

Audit commentary

As reported in the last audit, the spreadsheet contains the street name and number for most items of load with the exception of one group of 11 LED lights where the description is "scattered around". Mercury have requested locations be provided but none have been provided as yet. This is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Desc	cription				
Audit Ref: 2.3 With: 11(2)(b) of	11 items of load with insufficient locatio "scattered around".	n details because	they are recorded as			
Schedule 15.3	Potential impact: Low					
From: 01-Jun-17	Audit history: Three times previously					
To: 20-May-22	Controls: Weak					
	Breach risk rating: 3					
Audit risk rating	Rationale for	audit risk rating				
Low	The controls in place are rated as weak a despite requests from Mercury.	as the information	is not being provided			
	The impact is assessed to be low as these are included in submission, but the location details prevent confirming their existence or accuracy.					
Actions to	aken to resolve the issue	Completion date	Remedial action status			
We are liaising with Acaci items of load.	a Cove to confirm the location of the 11	July 2022	Investigating			
Preventative actions take	en to ensure no further issues will occur	Completion date				
and timely database upda	the requirements to provide accurate ates. We will remind our customer of the all continue to work with them to enance processes.	Ongoing				

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 DUML 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 spreadsheet 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

Each item of load contains the lamp type, wattage and ballast in the spreadsheet.

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

I conducted a field audit of all items of load and checked each road for additional fittings.

Audit commentary

The field audit found no additional or missing lights with the exception of the 11 items of load which have insufficient details for them to be audited. This is recorded as non-compliance in **section 2.3**.

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 spreadsheets was examined.

Audit commentary

Changes are tracked in the database and the date of change is recorded. Any changes made in the database that affect wattage are updated on the registry for the same effective date. I confirmed this by checking the registry for changes made during the audit period.

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 spreadsheets were checked for audit trails.

Audit commentary

Changes made in the database have an audit trail that meets the requirements of this clause.

Audit outcome

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

I conducted a field audit of all items of load and checked each road for additional fittings.

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

Audit commentary

The field audit found no additional or missing lights with the exception of the 11 items of load which have insufficient details for them to be audited. This is recorded as non-compliance in **section 2.3**.

The check of wattages and ballasts confirmed compliance.

An annual audit is expected to be carried out by the property owner to confirm that the database is correct. The customer is expected to advise if any changes occur so that the database can be updated accordingly, and notes of the light type, wattage and ballast and the date of change are recorded. Notes in the database indicate that Mercury are requesting updates and no changes were found that had not been notified.

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, and
- checking the expected kWh against the submitted figure to confirm accuracy.

Audit commentary

Mercury reconciles this DUML load using the RPS profile. The daily kWh figure recorded in SAP, which is derived from the spreadsheet is used for submission. I checked the accuracy of the submission information by multiplying the daily kWh by the number of hours in the month and comparing it to the figure in the registry for the month of May 2022. This confirmed the calculation methodology was correct.

Any changes made in the database that affect total wattage are updated on the registry for the same date, therefore changes will be tracked at a daily basis.

A 100% field audit was undertaken and found the database to be 100% accurate.

Audit outcome

CONCLUSION

A full field audit was undertaken and confirmed the database to be accurate. Location details for the 11 items of load with insufficient details are outstanding. Mercury is following this up with the customer.

The future risk rating indicates that the next audit be completed in 24 months. I have considered this in conjunction with Mercury's comments and agree with this recommendation.

PARTICIPANT RESPONSE

Mercury have reviewed this report and their comments are contained in the report. No further comments were provided.