

ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT



For

KAWAKAWA COMMUNITY LIGHTING
AND MANAWA ENERGY
NZBN:9429038917912

Supervising Auditor: Tara Gannon

Supporting Auditor: Brett Piskulic

Date audit commenced: 2 October 2023

Date audit report completed: 1 November 2023

Audit report due date: 1 December 2023

TABLE OF CONTENTS

Executive summary	3
Audit summary	4
Non-compliances	4
Recommendations	4
Issues	4
1. Administrative	5
1.1. Exemptions from Obligations to Comply with Code	5
1.2. Structure of Organisation	5
1.3. Persons involved in this audit.....	5
1.4. Hardware and Software	6
1.5. Breaches or Breach Allegations.....	6
1.6. ICP Data	6
1.7. Authorisation Received	6
1.8. Scope of Audit	6
1.9. Summary of previous audit	7
Table of Non-Compliance.....	7
Table of Recommendations	7
1.10. Distributed unmetered load audits (Clause 16A.26 and 17.295F).....	8
2. DUML database requirements.....	9
2.1. Deriving submission information (Clause 11(1) of Schedule 15.3)	9
2.2. ICP identifier and items of load (Clause 11(2)(a) and (aa) of Schedule 15.3)	9
2.3. Location of each item of load (Clause 11(2)(b) of Schedule 15.3)	10
2.4. Description and capacity of load (Clause 11(2)(c) and (d) of Schedule 15.3)	10
2.5. All load recorded in database (Clause 11(2A) of Schedule 15.3)	11
2.6. Tracking of load changes (Clause 11(3) of Schedule 15.3)	11
2.7. Audit trail (Clause 11(4) of Schedule 15.3).....	11
3. Accuracy of DUML database	13
3.1. Database accuracy (Clause 15.2 and 15.37B(b))	13
3.2. Volume information accuracy (Clause 15.2 and 15.37B(c))	13
Conclusion	15
Participant response	16

EXECUTIVE SUMMARY

This audit of the **Kawakawa Community Lighting** DUML database and processes was conducted at the request of **Manawa Energy Limited (Manawa Energy)**, 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 database is held by Manawa Energy in the form of a spreadsheet. The Kawakawa Business Association arranges any required maintenance, removals or additions and notifies Manawa Energy via email of any changes to be recorded in the database. Since the last audit all 17 light fittings have been upgraded to 35W LED Batten fittings which is expected to lead to improved reliability.

The field audit was undertaken of all 17 items of load on 13th October 2023. No discrepancies were found, and all items of load were recorded in the database.

The audit found no areas of non-compliance and makes no recommendations.

The future risk rating of zero indicates that the next audit be completed in 36 months, and I agree with this recommendation.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			Nil				
Future Risk Rating						0	

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	Description	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

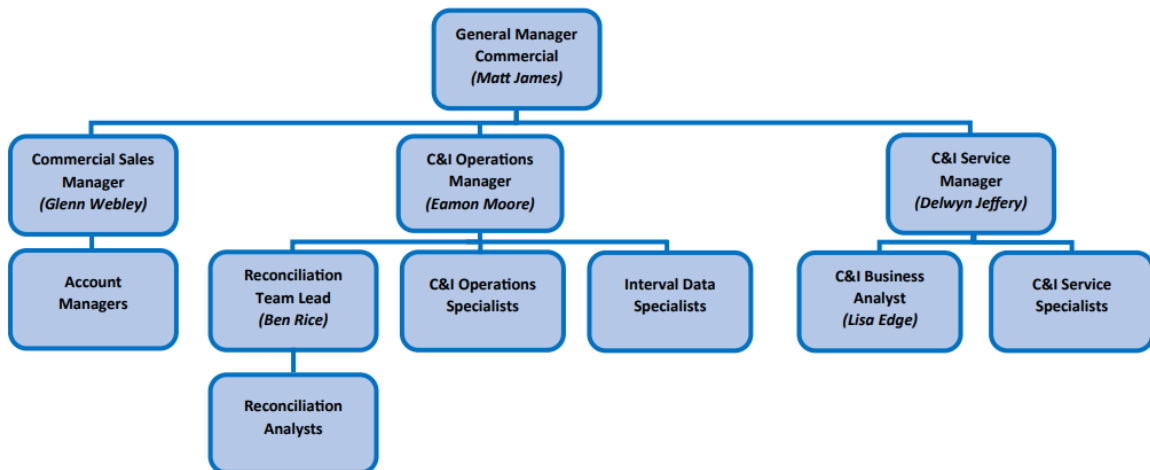
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

Audit commentary

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

1.2. Structure of Organisation

Manawa Energy provided the relevant organisational structure:



1.3. Persons involved in this audit

Auditors:

Name	Company	Title
Tara Gannon	Provera	Supervising Auditor
Brett Piskulic	Provera	Supporting Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Jamie Watts	Commercial and Industrial Operations Specialist	Manawa Energy
Richard Dooley	President	Kawakawa Business Association

1.4. Hardware and Software

The streetlight data 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	Description	NSP	Profile	Number of items of load	Database wattage (watts)
0000911250TE0FB	KAWAKAWA COMMUNITY LIGHTING x 18 RECORDS	KOE1101	STL	17	595

1.7. Authorisation Received

All information was provided directly by Manawa Energy and the Kawakawa Business Association.

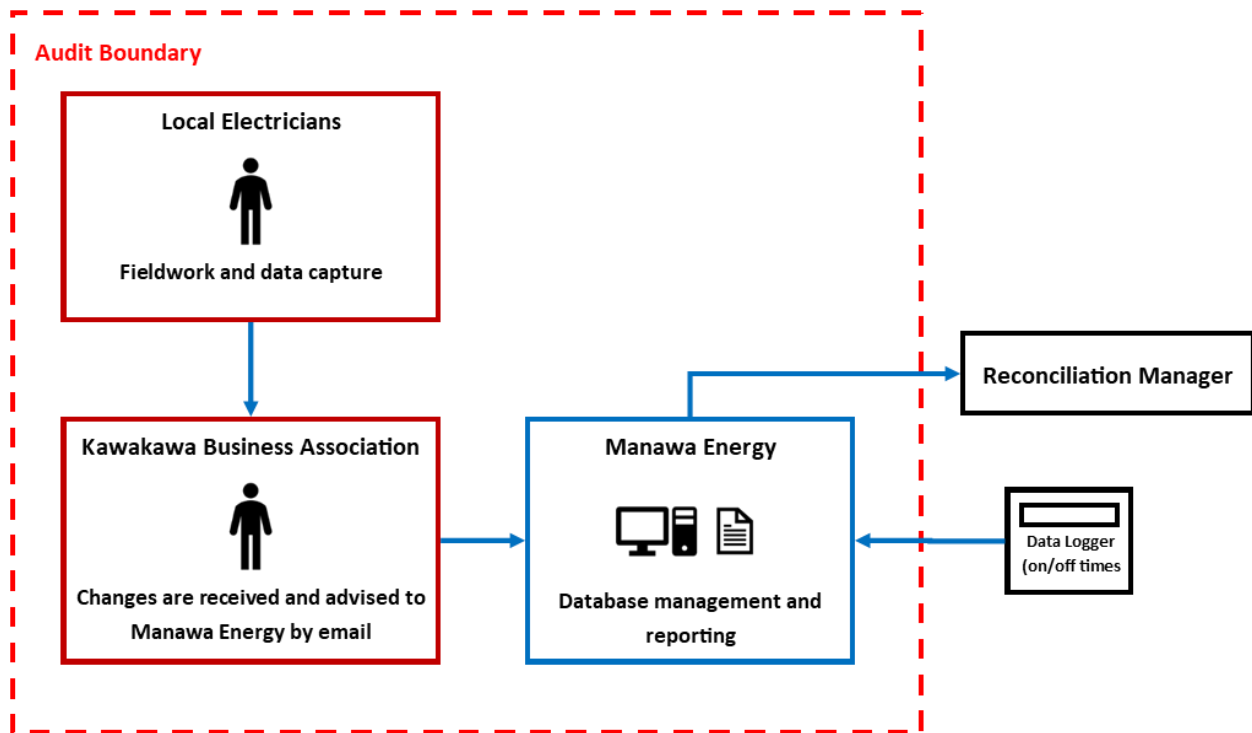
1.8. Scope of Audit

This audit of the Kawakawa Community Lighting DUMML database and processes was conducted at the request of Manawa Energy, 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 DUMML audits version 1.1.

Kawakawa Community Lighting is located on the Top Energy network. The Kawakawa Business Association arranges any required maintenance, removals or additions and notifies Manawa Energy via email of any changes to be recorded in the database. The database is used by Manawa Energy to calculate submission information.

The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the monthly reporting. The diagram below shows the flow of information and the audit boundary for clarity.



The field audit was undertaken of all items of load on 13th October 2023.

1.9. Summary of previous audit

The previous audit was completed in December 2021 by Steve Woods of Veritek Limited. The current status of that audit’s findings is detailed below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Deriving submission information	2.1	11(1) of Schedule 15.3	Database wattage is estimated as 11 watts higher than the wattage installed in the field resulting in an over submission of 46.98 kWh per annum.	Cleared
All load recorded in database	2.5	11(2A) and (d) of Schedule 15.3	Two additional items of load found in the field sample.	Cleared
Database accuracy	3.1	15.2 and 15.37B(b)	Database wattage is estimated as 11 watts higher than the wattage installed in the field resulting in an over submission of 46.98 kWh per annum.	Cleared
Volume information accuracy	3.2	15.2 and 15.37B(c)	Database wattage is estimated as 11 watts higher than the wattage installed in the field resulting in an over submission of 46.98 kWh per annum.	Cleared

Table of Recommendations

Subject	Section	Recommendation for Improvement	Status
		Nil	

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

Manawa Energy have requested Provera to undertake this streetlight 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

Compliant

2. DUMML 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:

- *DUMML 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.

Audit commentary

Manawa Energy reconciles this DUMML load using the STL profile, and on hours are determined using data logger information.

I compared the submission volumes for August 2023 with the load recorded in the database extract provided for this audit in October. The database volumes matched the volumes submitted by Manawa Energy.

The field audit of all 17 items of load found that all items of load were recorded in the database and there were no discrepancies.

On 18 June 2019, the Electricity Authority issued a memo confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed, and
- wash up volumes must take into account where historical corrections have been made to the DUMML load and volumes.

The database records the dates of changes to the database and the Manawa Energy process ensures that the monthly submission data takes account of any changes made on a daily basis.

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 DUMML database must contain:

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

Audit observation

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

Audit commentary

There is one ICP for the items of load in the database and all 17 items of load are correctly recorded against this ICP.

Audit 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 items of load are lights located under the verandas of businesses on the main street of Kawakawa. The street address and business name are recorded correctly for all 17 lights.

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.

Audit commentary

The database contains four fields which record the wattage, number of and type of fittings at each address. These fields were all correctly populated.

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 all 17 items of load on 13th October 2023.

Audit commentary

The field audit found that all items of load were recorded in the database and there were no discrepancies.

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

The Kawakawa Business Association arranges any required maintenance, removals or additions with local electricians. Details of any changes are reported to Manawa Energy to be recorded in the database.

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 database contains a complete audit trail of all changes to the database information.

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 field audit of all load items was conducted to determine the database accuracy.

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

Audit commentary

Field Audit Findings

The field audit conducted on 13th October 2023 found that all items of load were recorded in the database and there were no discrepancies.

Wattage and ballast accuracy findings

All 17 light fittings have been upgraded to 35W LED batten fittings, the total wattage is correctly recorded as 35W and there is no ballast or gear wattage to be added.

Change management process findings

The Kawakawa Business Association arranges any required maintenance, removals or additions with local electricians and notifies Manawa Energy via email of any changes to be recorded in the database.

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 all ICPs have the correct profile and submission flag, and
- checking the database extract combined with the burn hours against the submitted figure to confirm accuracy.

Audit commentary

Manawa Energy reconciles this DUML load using the STL profile, and on hours are determined using data logger information.

I compared the submission volumes for August 2023 with the load recorded in the database extract provided for this audit in October. The database volumes matched the volumes submitted by Manawa Energy.

The field audit of all 17 items of load found that all items of load were recorded in the database and there were no discrepancies.

On 18 June 2019, the Electricity Authority issued a memo confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed, and
- wash up volumes must take into account where historical corrections have been made to the DUML load and volumes.

The database records the dates of changes to the database and the Manawa Energy process ensures that the monthly submission data takes account of any changes made on a daily basis.

Audit outcome

Compliant

CONCLUSION

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

The database is held by Manawa Energy in the form of a spreadsheet. The Kawakawa Business Association arranges any required maintenance, removals or additions and notifies Manawa Energy via email of any changes to be recorded in the database. Since the last audit all 17 light fittings have been upgraded to 35W LED Batten fittings which is expected to lead to improved reliability.

The field audit was undertaken of all 17 items of load on 13th October 2023. No discrepancies were found, and all items of load were recorded in the database.

The audit found no areas of non-compliance and makes no recommendations.

The future risk rating of zero indicates that the next audit be completed in 36 months, and I agree with this recommendation.

PARTICIPANT RESPONSE

Manawa is supportive of a 36-month audit period for this DUML database; there is a clear process in place between the customer and us which is effective in managing this database and maintaining its accuracy. As the lamps in this DUML database have already been upgraded to LEDs, further large changes to the equipment in this database are not expected within the next 36 months either.

Thank you, Brett and Provera, for undertaking this audit and producing this report.