

ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

VERITEK

For

PAREMOREMO PRISON VILLAGE
AND MERIDIAN ENERGY

Prepared by: Rebecca Elliot

Date audit commenced: 17 May 2021

Date audit report completed: 1 June 2021

Audit report due date: 01-Jun-21

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EXECUTIVE SUMMARY

This audit of the Paremoremo Prison Village (**Paremoremo**) Unmetered Streetlights DUML database and processes was conducted at the request of Meridian Energy Limited (**Meridian**), 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.

This ICP switched to Meridian on 1 July 2019. Genesis passed the spreadsheet they developed to Meridian to use to manage the load. This spreadsheet is used for submission.

The field audit was undertaken of the entire Paremoremo spreadsheet, consisting of 37 items of load on 26th May 2021. The field audit found seven of the 37 items of load have been changed to LED. The process of notifying change does not appear to be working and I recommend this is reviewed. The accuracy of the database was found to be within the allowable +/-5% threshold.

The submission was found to match the spreadsheet provided and the registry.

This audit confirmed compliance and makes one recommendation. The future risk rating of indicates that the next audit be completed in 36 months. I have considered this in conjunction with the size of the database and 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	Recommendation
Database accuracy	3.1	Liaise with client to ensure changes made in the field are recorded in the database.

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

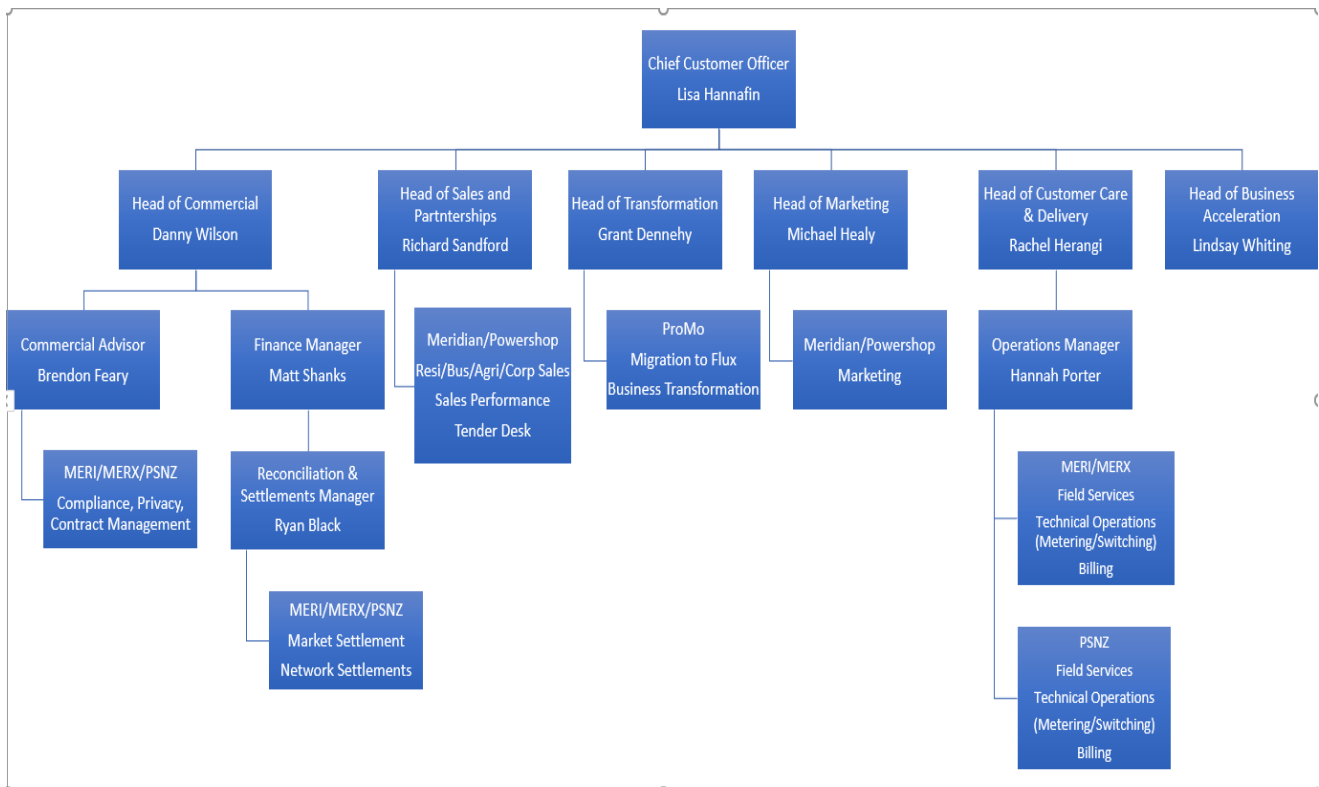
Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

Audit commentary

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

1.2. Structure of Organisation

Meridian provided a copy of their organisational structure:



1.3. Persons involved in this audit

Auditor:

Name	Title
Rebecca Elliot	Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Amy Cooper	Compliance Officer	Meridian Energy

1.4. Hardware and Software

An excel spreadsheet has been constructed to track the items of load at the Paremoremo and this 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. Meridian 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)
0000100028UN5CB	Streetlights	ALB0331	37	2,204
Total			37	2,204

I note that the volume of lights recorded in the last audit was incorrect. There have been no lights removed.

1.7. Authorisation Received

All information was provided directly by Meridian.

1.8. Scope of Audit

This audit of the Paremoremo Prison Village (Paremoremo) Unmetered Streetlights DUML database and processes was conducted at the request of Meridian Energy Limited (Meridian), 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 passed the spreadsheet they developed to Meridian to use to manage the load. This spreadsheet is used for submission.

The Prison uses their own contractor for the maintenance of these lights. Any new light connections are expected to be managed in conjunction with Meridian.

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 Paremoremo spreadsheet, consisting of all 37 items of load on 26th May 2021.

1.9. Summary of previous audit

I reviewed the last audit of the Paremoremo prison village streetlights undertaken by myself. This found one non-compliance which has been cleared and is detailed below for reference:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
DUML Audit	1.10	17.295F of part 17	Audit not completed within 12 months of Part 16A coming into effect.	Cleared

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

Meridian have requested Veritek 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. 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 ICP switched to Meridian on 1 July 2019. Genesis passed the spreadsheet they developed to Meridian to use to manage the load. This spreadsheet is used for submission.

Meridian reconciles this DUML load using the UNM profile.

The information on the Registry is matched to that recorded in the database.

The field audit confirmed that the database was within the allowable +/-5% variance threshold. Compliance is confirmed.

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 DUMML for which it is responsible is recorded in this database.

Audit observation

The field audit was undertaken of the entire database of all 37 items of load on 26th May 2021.

Audit commentary

The field audit found the no additional lights. Seven lights were found to have been changed to LED lights during the audit period. This is discussed further in **section 3.1**.

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 DUMML 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

Changes are expected to tracked in the database as required by this clause. No changes have been recorded 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 DUMML 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 DUMML 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 DUMML database is complete and accurate.

Audit observation

A 100% field audit was undertaken of the database.

Wattages for all items of load were checked against the published standardised wattage table produced by the Electricity Authority or the LED specifications

Audit commentary

Database accuracy based on the field audit

The 100% field audit found that seven of the 37 items of load had been changed from older style lights to LED lights. As the older style wattages were either 59W or 61W and these are being replaced for 54W LED lights the variance is within the +/-5% allowable threshold. I recommend below that the change management process is reviewed with the client to ensure future changes in the field are captured. Compliance is confirmed.

Lamp description and capacity accuracy

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

Change Management

The database is held by Meridian and the Paremoremo Prison Village Manager is expected to advise Meridian when any changes to items of load are made at the village. This process is not occurring based on the number of light replacements found in the field audit detailed above. I recommend that this process is reviewed with the client.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 15.2 and 15.37B(b)	Liaise with client to ensure changes made in the field are recorded in the database.	We will confirm the change management process with Dept of Corrections	[auditor comment]

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

This ICP switched to Meridian on 1 July 2019. Genesis passed the spreadsheet they developed to Meridian to use to manage the load. This spreadsheet is used for submission.

Meridian reconciles this DUML load using the UNM profile.

The information on the Registry is matched to that recorded in the database.

The field audit confirmed that the database was within the allowable +/-5% variance threshold. Compliance is confirmed.

Audit outcome

Compliant

CONCLUSION

This ICP switched to Meridian on 1 July 2019. Genesis passed the spreadsheet they developed to Meridian to use to manage the load. This spreadsheet is used for submission.

The field audit was undertaken of the entire Paremoremo spreadsheet, consisting of 37 items of load on 26th May 2021. The field audit found seven of the 37 items of load have been changed to LED. The process of notifying change does not appear to be working and I recommend this is reviewed. The accuracy of the database was found to be within the allowable +/-5% threshold.

The submission was found to match the spreadsheet provided and the registry.

This audit confirmed compliance and makes one recommendation. The future risk rating of indicates that the next audit be completed in 36 months. I have considered this in conjunction with the size of the database and agree with this recommendation.

PARTICIPANT RESPONSE