

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT**

For

**OCEAN SHORES AND TRUSTPOWER
LIMITED**

Prepared by: Rebecca Elliot

Date audit commenced: 4 May 2021

Date audit report completed: 28 May 2021

Audit report due date: 1 June 2021

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EXECUTIVE SUMMARY

This audit of the **Ocean Shores Village** DUML database and processes was conducted at the request of **Trustpower Limited (Trustpower)** 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 data for Ocean Shores DUML load is held by Trustpower in a database. The retirement village management team are expected to update Trustpower with any light changes. These changes are infrequent, but the one recent light change found during the audit hadn't been advised to the Village management by the time of the audit. This is being corrected.

This audit found two non-compliances and makes no recommendations. Both relate to the incorrect calculation of eight items of load resulting in a very minor under submission of an estimated 692 kWh per annum. The audit risk rating indicates that the next audit be in 24 months. I have considered this in conjunction with Trustpower's responses and agree with this recommendation.

The matters raised are detailed in the table below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Deriving submission information	2.1	11(1) of Schedule 15.3	Eight items of load incorrectly calculated as single lights when they are double resulting in a minor an estimated minor under submission of 692 kWh per annum.	Moderate	Low	2	Identified
Volume information accuracy	3.2	15.2 and 15.37B(c)	Eight items of load incorrectly calculated as single lights when they are double resulting in a minor an estimated minor under submission of 692 kWh per annum.	Moderate	Low	2	Identified
Future Risk Rating						4	

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	Clause	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

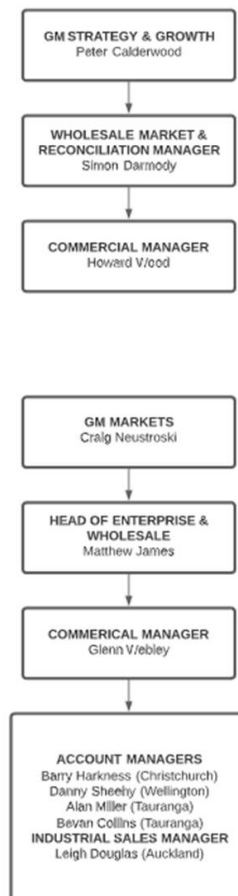
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

Audit commentary

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

1.2. Structure of Organisation

Trustpower provided a copy of their 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
Robbie Diederer	Reconciliation Analyst	Trustpower

1.4. Hardware and Software

A database managed by Trustpower records all items of load.

The database resides on the server and back up is in accordance with standard industry procedures.

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	Number of items of load	Database wattage (watts)
0001264715UNCBF	GXP: MTM0331 Oceanshores Maranui Street Mount Maunganui	MTM0331	59	3,212
Total			59	3,212

1.7. Authorisation Received

All information was provided directly by Trustpower.

1.8. Scope of Audit

The data for Ocean Shores DUML load is held by Trustpower in a database. Reporting is provided by the Manager at Ocean Shores when changes are made.

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

1.9. Summary of previous audit

The previous audit was completed in May 2018 by Steve Woods of Veritek Limited. Compliance was confirmed.

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

Trustpower have requested Veritek to undertake this DUML 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

Trustpower reconciles this DUMML load using the STL profile. The on and off times are derived from data logger information.

I recalculated the submissions for April 2021 using the data logger and database information. I confirmed that the calculation method to be correct. Eight of the lights are recorded as double lights with a total wattage of 18W. The map provided indicated these were 2x 18W and therefore should be calculated as 36W. This will be resulting in an estimated minor under submission of 692 kWh per annum. This is recorded as non-compliance below.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3 From: unknown To: 12-May-21	Eight items of load incorrectly calculated as single lights when they are double resulting in a minor an estimated minor under submission of 692 kWh per annum. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, as they are sufficient to mitigate the risk most of the time but there is room for improvement. The impact is assessed to be low as the volume of estimated minor under submission is very minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
Field audit undertaken and lamp wattages verified. Recon has been updated.		31 May 21	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Customer asked to advise Trustpower of any changes. New staff on customer site and they did not know requirements. We will continue to monitor.		Ongoing	

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

An ICP is recorded for each item of load in the database.

Audit commentary

An ICP is recorded for each item of load in the database.

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 database contains a field for street address, which was sufficient to locate all items of load.

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 a field for light type, which includes the wattage. There is a separate field for lamp wattage and total wattage, including ballast.

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

A field audit of all 59 items of load recorded in the database was undertaken on May 14th, 2021.

Audit commentary

The field audit found some minor errors and no additional lights were found. The accuracy of the database is detailed 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 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 date of the any changes made are expected to be recorded. No changes had been advised at the time of the audit, but the process is expected to comply with the code requirements.

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 an appropriate audit trail.

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% audit was undertaken to determine the database wattage.

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

The change management process was evaluated.

Audit commentary

Database accuracy based on the field audit

The field audit found one error. A 2x 18W light has recently been replaced with a bollard. The database is confirmed to be within the allowable +/- 5% threshold.

Change Management

The retirement village management team are expected to update Trustpower with any light changes. These are infrequent, and the recent light change found during the audit hadn't been advised to the Village management by the time of the audit and this is being corrected.

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 DUMML is being calculated accurately,*
- *profiles for DUMML 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 combined with the burn hours against the submitted figure to confirm accuracy.

Audit commentary

I recalculated the submissions for April 2021 using the data logger and database information. I confirmed that the calculation method to be correct. Eight of the lights are recorded as double lights with a total wattage of 18W. The map provided indicated these were 2x 18W and therefore should be calculated as 36W. This will be resulting in an estimated minor under submission of 692 kWh per annum. This is recorded as non-compliance below.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c) From: unknown To: 12-May-21	Eight items of load incorrectly calculated as single lights when they are double resulting in a minor an estimated minor under submission of 692 kWh per annum. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, as they are sufficient to mitigate the risk most of the time but there is room for improvement. The impact is assessed to be low as the volume of estimated minor under submission is very minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
Field audit undertaken and lamp wattages verified. Recon has been updated.		31 May 21	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Customer asked to advise Trustpower of any changes. New staff on customer site and they did not know requirements. We will continue to monitor.		Ongoing	

CONCLUSION

The data for Ocean Shores Retirement Village DUML load is held by Trustpower in a database. The retirement village management team are expected to update Trustpower with any light changes. These changes are infrequent, but the one recent light change found during the audit hadn't been advised to the Village management by the time of the audit. This is being corrected.

This audit found two non-compliances and makes no recommendations. Both relate to the incorrect calculation of eight items of load resulting in a very minor under submission of an estimated 692 kWh per annum. The audit risk rating indicates that the next audit be in 24 months. I have considered this in conjunction with Trustpower's responses and agree with this recommendation.

PARTICIPANT RESPONSE

Oceanshores have new maintenance staff and they were unaware of the requirements to advise Trustpower of any change. They will do in future.

Some lamps had been removed and some had been replaced. The field audit on 31 May verified this and the May reconciliation has been amended from the April reconciliation.