

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

For

**WESTERN BOP PARKS AND RESERVES AND  
TRUSTPOWER LIMITED**

Prepared by: Steve Woods

Date audit commenced: 19 March 2018

Date audit report completed: 28 May 2018

Audit report due date: 1 June 2018

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## EXECUTIVE SUMMARY

This audit of the Western Bay of Plenty Parks and Reserves (WBOP P&R) 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, which became effective on 1 June 2017.

The data is contained in Trustpower's database and an email is sent each month from WBOP P&R confirming whether any changes have been made.

The database wattage and count information was found to be 100% accurate. The only issue is that the Commerce Lane carpark coordinates are inaccurate, making locating the items of load difficult. The future risk rating of 2 indicates a next audit period of 36 months.

## 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(2)(b) of Schedule 15.3	Commerce lane carpark coordinates incorrect	Moderate	Low	2	Identified
<b>Future Risk Rating</b>						<b>2</b>	

<b>Future risk rating</b>	1-3	4-6	7-8	9-17	18-26	27+
<b>Indicative audit frequency</b>	36 months	24 months	18 months	12 months	6 months	3 months

### RECOMMENDATIONS

Subject	Section	Clause	Recommendation

### 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:

**Steve Woods**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Other personnel assisting in this audit were:

Name	Title	Company
Delwyn Jeffrey	Commercial and Industrial Billing Manager	Trustpower

### 1.4. Hardware and Software

Data is contained in Trustpower's DUML database.

The database back up is in accordance with standard industry procedures. Access to the database is secure by way of password protection.

### 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)
1000525282PCC39	Western Bay of Plenty Council Parks Streetlights (TGA33)	TGA0331	11	620
1000525283PC07C	Western Bay of Plenty Council Parks Streetlights (TMI)	TMI0331	46	12,548
<b>Total</b>			<b>57</b>	<b>13,168</b>

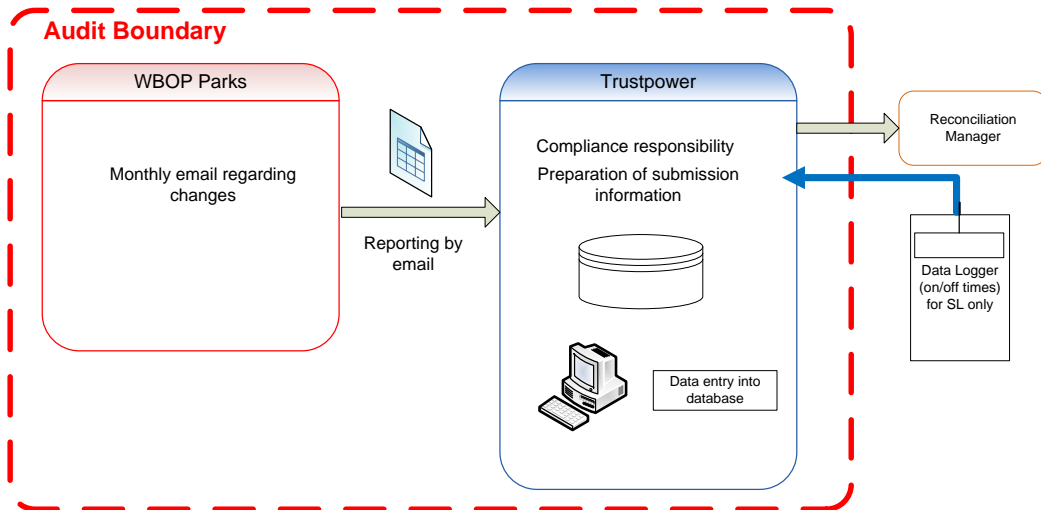
### 1.7. Authorisation Received

All information was provided directly by Trustpower.

### 1.8. Scope of Audit

The data is contained in Trustpower's database and an email is sent each month from WBOP P&R confirming whether any changes have been made.

The diagram below shows the current flow of information and the audit boundary for clarity.



The audit was conducted in accordance with the audit guidelines for DUML audits version 1.1, which became effective on 1 June 2017

## 1.9. Summary of previous audit

The previous audit was completed in May 2017 by Alan Miller of Trustpower. Three non-compliances were identified, and one recommendation was made. The statuses of the non-compliances and recommendations are described below.

Subject	Section	Clause	Non-compliance	Status
Database accuracy	3.1	15.2 and 15.37B(b)	Database missing lamps	Cleared but non-compliance exists for location of these lamps

Subject	Section	Clause	Recommendation	Status
Database accuracy	3.1	15.2 and 15.37B(b)	WBOPDC conduct database validation as soon as possible.	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

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. Compliance is confirmed.

## 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.

#### Audit commentary

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

I recalculated the submissions for April 2018 using the data logger and database information. I confirmed that the calculation method and result was correct.

#### 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 an ICP is recorded for each item of load.

#### Audit commentary

An ICP is recorded for each item of load.

#### 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 the street address and fields for X and Y coordinates.

The lights at “Commerce Lane Carpark – Jubilee Park” were difficult to identify because the coordinates are all incorrect. The coordinates show the lights in a rural Pukehina.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.3 With: Clause 11(2)(b) of Schedule 15.3 From: 10-May-17 To: 30-Apr-18	Commerce lane carpark coordinates incorrect Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are recorded as moderate because they mitigate risk most of the time. The impact on settlement and participants is minor; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will arrange to correct the co-ordinates for the Jubilee Park lights		30/06/18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
TRUS will validate new items of load as they are installed		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 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 lamp wattage and these were confirmed as correct in relation to the description.

##### **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**

A field audit of all 57 items of load recorded in the database was undertaken.

##### **Audit commentary**

The field audit found 100% accuracy.

##### **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 PowerNet 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 September 2012, the Authority sent a memo to retailers and auditors advising that tracking of load changes at a daily level was not required if the database contained an audit trail. I have interpreted this to mean that the provision of a copy of the report to Trustpower when changes occur is sufficient to achieve compliance.

WBOP DC provides a monthly update with any changes. The last change was in March 2017.

I did not identify any problems with the tracking of load changes.

#### **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 additions and changes.

#### **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% audit was undertaken to determine the database wattage.

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

##### Audit commentary

The field audit found 100% accuracy.

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

##### Audit commentary

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

I recalculated the submissions for April 2018 using the data logger and database information. I confirmed that the calculation method and result was correct.

##### Audit outcome

Compliant

## CONCLUSION

The database wattage and count information was found to be 100% accurate. The only issue is that the Commerce Lane carpark coordinates are inaccurate, making locating the items of load difficult. The audit risk rating of 2 indicates a next audit period of 36 months.

## PARTICIPANT RESPONSE

Trustpower will arrange to confirm the correct location details for the Jubilee Park lights