

ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

The logo for Veritek, featuring the word "VERITEK" in a blue serif font. A vertical blue line is positioned to the left of the text, and a horizontal blue line is positioned below the text, intersecting at the letter 'V'.

For

WESTERN BAY OF PLENTY DISTRICT  
COUNCIL  
AND TRUSTPOWER LIMITED

Prepared by: Rebecca Elliot

Date audit commenced: 18 June 2018

Date audit report completed: 17 July 2018

Audit report due date: 01-Jun-18

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## TABLE OF CONTENTS

Executive summary .....	3
Audit summary .....	4
Non-compliances .....	4
Recommendations .....	5
Issues 5	
1. Administrative .....	6
1.1. Exemptions from Obligations to Comply with Code .....	6
1.2. Structure of Organisation .....	6
1.3. Persons involved in this audit.....	7
1.4. Hardware and Software .....	7
1.5. Breaches or Breach Allegations.....	7
1.6. ICP Data .....	7
1.7. Authorisation Received .....	8
1.8. Scope of Audit .....	8
1.9. Summary of previous audit .....	9
1.10. Distributed unmetered load audits (Clause 16A.26 and 17.295F).....	9
2. DUML database requirements.....	11
2.1. Deriving submission information (Clause 11(1) of Schedule 15.3) .....	11
2.2. ICP identifier and items of load (Clause 11(2)(a) and (aa) of Schedule 15.3) .....	12
2.3. Location of each item of load (Clause 11(2)(b) of Schedule 15.3) .....	13
2.4. Description and capacity of load (Clause 11(2)(c) and (d) of Schedule 15.3) .....	13
2.5. All load recorded in database (Clause 11(2A) of Schedule 15.3) .....	13
2.6. Tracking of load changes (Clause 11(3) of Schedule 15.3) .....	17
2.7. Audit trail (Clause 11(4) of Schedule 15.3).....	19
3. Accuracy of DUML database .....	20
3.1. Database accuracy (Clause 15.2 and 15.37B(b)) .....	20
3.2. Volume information accuracy (Clause 15.2 and 15.37B(c)) .....	21
Conclusion .....	23
Participant response .....	24

## EXECUTIVE SUMMARY

This audit of the Western Bay of Plenty District Council (**WBOP DC**) 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.

A RAMM database is managed by Westlink on behalf of WBOP DC and monthly reporting is provided to Trustpower. The field work is carried out by Horizon. This audit has been undertaken after the June 1<sup>st</sup>, 2018 deadline as WBOP DC were undertaking a 100% field audit which was completed at the end of May 2018.

Westlink have good processes in place to manage the database. The field audit was undertaken of a statistical sample of 318 items of load on 29th June 2018 and a small number of inaccuracies were found. These related to a small number of incorrect wattages in the existing areas, and lights in new subdivisions that are yet to be vested to council but are already electrically connected. I recommend in this audit that the new connection process for new subdivisions be reviewed.

The audit found six non-compliances and makes one recommendation.

Under submission is occurring by approximately 23,800 kWh per annum.

The future risk rating of 17 indicates that the next audit be completed in six months. The matters raised are detailed below:

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
DUML Audit	1.10	17.295F of part 17	Audit not completed within 12 month of Part 16A coming into effect.	Strong	Low	1	Cleared
Deriving submission information	2.1	11(1) of Schedule 15.3	Under submission of an estimated 23,800 kWh per annum.	Moderate	Medium	4	Investigating
All load recorded in database	2.5	11(2A) of Schedule 15.3	38 lights electrically connected but not included in the database extract used for submission.	Moderate	Low	2	Investigating
Tracking of load change	2.6	11(3) of Schedule 15.3	New lights are not added to the database for reconciliation in the month they are vested to council.	Moderate	Low	2	Investigating
Database accuracy	3.1	15.2 and 15.37B(b)	The database accuracy is assessed to be 102.8% indicating an estimated under submission of 23,800 kWh per annum.	Moderate	Medium	4	Investigating
Volume information accuracy	3.2	15.2 and 15.37B(c)	Under submission of an estimated 23,800 kWh per annum.	Moderate	Medium	4	Investigating
<b>Future Risk Rating</b>						<b>17</b>	

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

## RECOMMENDATIONS

Subject	Section	Description	Recommendation
Tracking of load change	2.6	Liaise with Powerco to determine the most effective process to ensure the volumes associated with new subdivision streetlights are reconciled.	Investigating

## 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
Alan Miller	Corporate Account Manager	Trustpower
Delwyn Jeffrey	C&I Billing Manager	Trustpower
Paul Anderson	Asset Management Leader	Westlink BOP
Phillip Barnes	Maintenance Manager	Westlink BOP
Wendy Pyne	Assurance & Compliance Specialist	Trustpower

### 1.4. Hardware and Software

The SQL database used for the management of DUML is remotely hosted by RAMM Software Ltd. The database is commonly known as “RAMM” which stands for “Roading Asset and Maintenance Management”.

Westlink confirmed that 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	Profile	Number of items of load	Database wattage (watts)
0001264707UN697	Mount Maunganui/Papamoa	STL	76	10,560
1000524996PC530	Welcome Bay/Ohauti/Hairini	STL	21	2,145
1000524997PC975	Tauranga City	STL	4	417
1000524998PC6AB	North of Tauranga	STL	903	80,161
1000524999PCAEE	Te Puke area	STL	1,006	100,493

## 1.7. Authorisation Received

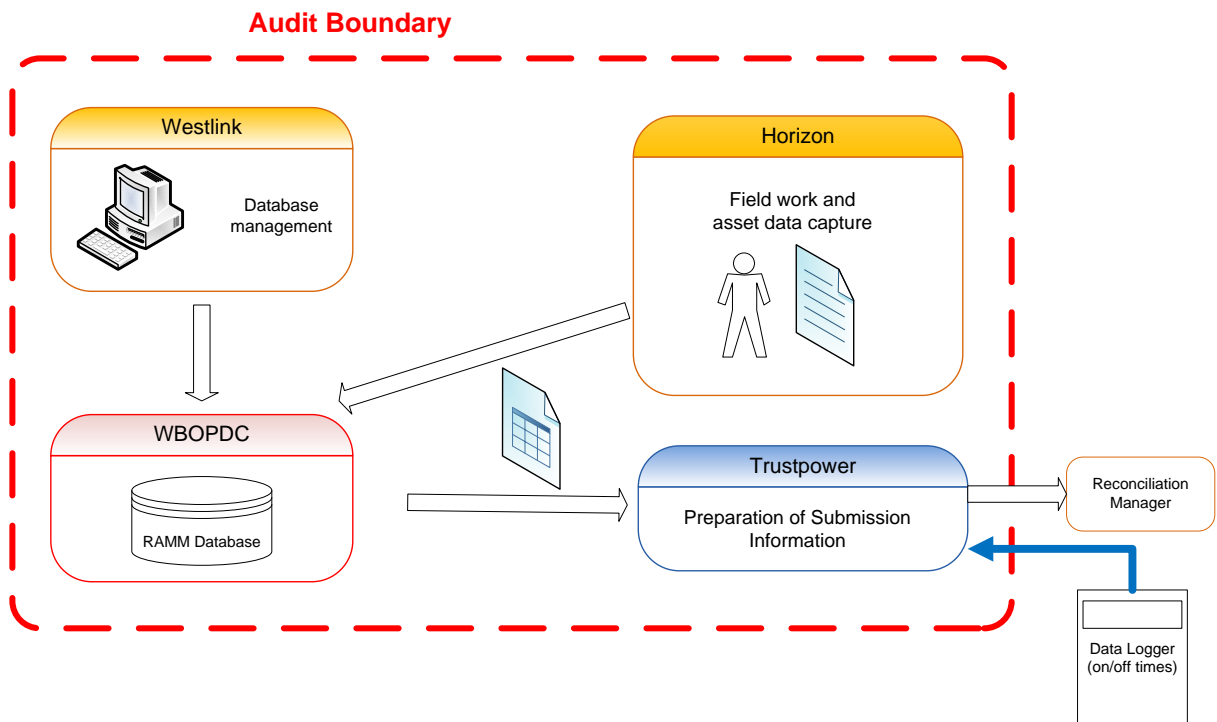
All information was provided directly by Trustpower.

## 1.8. Scope of Audit

This audit of the Western Bay of Plenty District Council (**WBOPDC**) 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 database is remotely hosted by RAMM Software Ltd. The asset data capture and database population are conducted by Westlink. The field work is carried out by Horizon. 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 diagram below shows the audit boundary for clarity.



The field audit was undertaken of a statistical sample of 318 items of load 29<sup>th</sup> June 2018.



## 1.9. Summary of previous audit

The previous audit was completed in May 2016 by Alan Miller of Trustpower. Compliance was recorded.

## 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 streetlight audit.

### Audit commentary

This audit report confirms that the requirement to conduct an audit has been met for this database. Trustpower were unable to complete this audit by the required timeframe as the database was undergoing a 100% field audit and it was decided that the audit should be completed after the full field audit had been completed.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 Clause 17.295F of part 17  From: 01-Jun-18 To: 31-Jul-18	Audit not completed within 12 month of Part 16A coming into effect.  Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as strong, as Trustpower have good controls in place to ensure DUML audits are completed within the required timeframe. The 100% field audit needed to be completed before this audit to give a true picture of the database accuracy.  The impact is assessed to be low, as this has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
Westlink was in the middle of carrying out a significant update of the database at the time that the audit was required. In order to maximise data effectiveness, Trustpower audit took place later than anticipated and this missed the June 1 <sup>st</sup> deadline.		Completed	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Work with Westlink to ensure data is accurate and .DUML audits are completed on time		By the date of the next audit	

## 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 and the application of profiles was checked. The database was checked for accuracy.

#### Audit commentary

Trustpower reconciles this DUMML load using the STL profile. Trustpower receive monthly wattage reports. Submissions are based on the monthly wattage report, with on and off times derived from data logger information.

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

As detailed in **section 3.1**, the field data was 102.9% of the database data for the sample checked. This will result in estimated under submission of 23,800 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUMML database auditing tool).

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 Clause 11(1) of Schedule 15.3  From: 01-Jun-17 To: 31-May-18	Under submission of an estimated 23,800 kWh per annum.  Potential impact: High Actual impact: Medium Audit history: Once Controls: Moderate Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
<b>Medium</b>	The controls are rated as moderate, because they are sufficient to ensure that lamp information is correctly recorded most of the time but there are still some errors.  The impact is assessed to be medium, based on the kWh differences described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
Working with Powerco to tighten living rules on new subdivisions. Discussions with customer and Powerco to determine if charging the Developer with a metered supply could resolve this issue. Additionally, Trustpower will work with Westlink to ensure future accuracy of data for vested lighting.		31/12/18	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation processes to be reviewed and updated where needed		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 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.

### **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 DUML database must contain the location of each DUML item.*

### **Audit observation**

The databases were checked to confirm the location is recorded for all items of load.

### **Audit commentary**

The database contains fields for the street address and also GPS coordinates.

### **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 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 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 the manufacturers rated wattage and the ballast wattage. The extract provided has fields for lamp and gear make and model.

### **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 a statistical sample of 318 items of load on 29th June 2018.

### Audit commentary

The field audit findings for the sample of lamps are detailed in the table below:

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
<b>New</b>					
CHARLOTTE DRIVE EXTENTION	0	5	5		All lights are electrically connected but not yet vested to council.
NEW ROAD (Near GANE PLACE)	0	17	17		All lights are electrically connected but not yet vested to council.
NEW ROAD OMOK1	0	3	3		All lights are electrically connected but not yet vested to council.
NEW ROAD OMOK2	0	4	4		All lights are electrically connected but not yet vested to council.
PENELOPE PLACE	0	6	6		All lights are electrically connected but not yet vested to council.
PIPI LANE	0	3	3		All lights are electrically connected but not yet vested to council.
<b>North</b>					
BRANSLEY GROVE	3	3			
CHARLOTTE DRIVE	2	2			
DONEGAL PLACE	3	3			
ESDAILE ROAD	2	2		1	1 x 150W HPS found in the field, recorded as 70W HPS in the database.
HADEN PLACE	4	4			
HARBOUR VIEW ROAD (OMOKOROA)	19	19			
HARBOUR VIEW ROAD (ONGARE POINT)	3	3			
HENRY ROAD	4	4			
IRWIN COURT	2	2			
KAURI POINT ROAD	2	2			
KOWHAI COURT	1	1			
LOCHHEAD ROAD	1	1			

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
LYNLEY PARK DRIVE	27	27		6	6x 70W HPS found in the field recorded as 29W LED in the database.
MANIAROA DRIVE	9	9			
MARSHALL ROAD	6	6			
MATAHIWI ROAD	6	6			
MINDEN ROAD	4	4			
MUIRFIELD CRESCENT	5	5			
NOLAN PLACE	4	4			
OLD HIGHWAY	2	2			
OMOKOROA/KAYELENE RAB	1	1			
OWEN PLACE	4	4			
PLUMMERS POINT ROAD	4	4			
RIVERLEA DRIVE	3	3			
TAUMATA ROAD	2	2			
TUAPIRO ROAD	1	1			
TURNBERRY CLOSE	9	9			
VANTAGE PLACE	3	3			
WALNUT GROVE	2	2			
<b>South</b>					
ALLANAH PLACE (TE PUKE)	3	3			
ARAWA AVENUE	10	10			
BARROW PLACE	2	2			
BLACK ROAD	5	5			
BROWN TERRACE	3	3			
CANNELL FARM DRIVE	12	12			
CLYDESBURN AVENUE	4	4			
CONWAY ROAD	11	11			
FENTON TERRACE	3	3			
FENTON TERRACE SLIP	1	1			
GEORGE STREET	2	2			
KING STREET	7	7		1	1 x 150W HPS found in the field, recorded as 70W HPS in the database.
LEE STREET	7	7			
MAKETU ROAD	14	14			
MOEHAU STREET	8	8			
NETTLINGHAM PLACE	2	2			
OLD COACH ROAD SLIP	2	2			

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
OROUA STREET	3	3			
OTIMI STREET	5	5			
PUKEHINA BEACH ROAD SLIP	1	1			
PUKEHINA STATION ROAD	1	1			
RAYMOND AVENUE	6	6			
SPENCER AVENUE	5	5			
TE MATAI ROAD	2	2			
WASHER ROAD	4	4			
WELCOME BAY ROAD	15	15			
WILLIAMS CRESCENT	4	4			
<b>GRAND TOTAL</b>	<b>283</b>	<b>318</b>	<b>38</b>	<b>8</b>	

This clause relates to lights found in the field but not recorded in the database. The field audit found 38 additional lights and nine incorrect wattages. The discrepancy in the light count relates to new lights that are electrically connected but are yet to be vested to the council. These were checked in the field at night and were confirmed to be electrically connected. These will be added to the database once the vesting process has been completed. This is recorded as non-compliance. The wattage inaccuracies are recorded as non-compliance in **sections 2.1, 3.1 and 3.2.**

#### **Audit outcome**

Non-compliant



Non-compliance	Description		
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3  From: unknown To: 28-Jun-18	38 lights electrically connected but not included in the database extract used for submission.  Potential impact: Medium  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 rated as moderate because they ensure most information is accurate.  The impact is low as the volume of lights not yet vested to the council is small.		
Actions taken to resolve the issue		Completion date	Remedial action status
New lamps will be owned by WBOPDC once the sub-division has been completed and WBOPDC take ownership. TRUS working with Powerco & customer to determine effective process		31/12/18	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation processes to be reviewed and updated where needed		Ongoing	

## 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

On 20<sup>th</sup> September 2012 the Authority sent a memo to Retailers and auditors advising that tracking of load changes at a daily level was not required as long as the database contained an audit trail. I have interpreted this to mean that the production of a monthly “snapshot” report is sufficient to achieve compliance.

The process to add new streetlights was examined. WBOP DC approves all new developments and the consent is provided once they are satisfied that the development will meet the required standards. Detailed “as built” are required to be provided by the developer and a walk over of the development is undertaken before the 224 certificate is issued. This is needed before the titles can be issued to the developer. It appears that streetlights are getting electrically connected prior to the issuing of the 224 certificate and therefore before the street lights are vested to council and included in the database extract for submission. This is recorded as non-compliance in **sections 2.1, 2.5, 3.1 and 3.2**. I recommend that WBOP DC work with the Distributor to determine the most effective process to ensure the volumes associated with these lights are reconciled.

Description	Recommendation	Audited party comment	Remedial action
Tracking of load change	Liaise with Powerco to determine the most effective process to ensure the volumes associated with new subdivision streetlights are reconciled.	Powerco and Trustpower are working on this issue currently.	Investigating

New lights are required to be added to the database by the 20<sup>th</sup> of the month following them being vested. This will result in no submission for the first month of new lights being added as Trustpower can only include them from the month they are added to the database. This is recorded as non-compliance below.

Horizon carries out the field maintenance for Westlink on behalf of WBOP DC and they update RAMM directly. Westlink have robust controls in their contract with Horizon and this ensures that field maintenance is captured in a timely and accurate manner. Outage patrols are in place with the whole network being checked each month. Additional to this Westlink undertake a 20% validation of all assets they are responsible for on an annual basis.

WBOP DC are planning to roll out LED lights, but this is some time away from being deployed.

There are no festive lights are connected to the unmetered streetlight circuits and there are no private lights known of.

**Audit outcome**

Non-compliant

Non-compliance	Description		
Audit Ref: 2.6 With: Clause 11(3) of Schedule 15.3  From: unknown To: 28-Jun-18	New lights are not added to the database for reconciliation in the month they are vested to council.  Potential impact: Medium  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 rated as moderate because they ensure most information is accurate.  The impact is low as the volume of lights not yet vested to the council is small.		
Actions taken to resolve the issue		Completion date	Remedial action status
Powerco and Trustpower are working on this issue to currently.		Dec 2018	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Processes to be reviewed and updated where needed		Ongoing	

## 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 has a complete 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

The DUMML Statistical Sampling Guideline was used to determine the database accuracy. The table below shows the survey plan.

Plan Item	Comments
Area of interest	Western BOP DC Street Lights
Strata	The databases contain 2,010 items of load in the Western BOP DC area.  The processes for the management of all WBOPDC items of load is the same. I selected the following strata: <ul style="list-style-type: none"><li>• New</li><li>• North</li><li>• South</li></ul>
Area units	I created a pivot table of the roads in each database and used a random number generator in each spreadsheet to select a total of 62 sub-units.
Total items of load	283 items of load were checked.

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

##### Audit commentary

The database was checked against the published standardised wattage table and confirmed to be correct.

The field data was 102.9% of the database data for the sample checked. This will result in estimated under submission of 23,800 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUMML database auditing tool). As detailed in **section 2.5**, this variance is due to some incorrect wattage, and new lights being electrically connected but not included in the database for reconciliation

##### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b)  From: unknown To: 31-Jul-18	The database accuracy is assessed to be 102.8% indicating an estimated under submission of 23,800 kWh per annum.  Potential impact: High  Actual impact: Medium  Audit history: None  Controls: Moderate  Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
<b>Medium</b>	The controls are rated as moderate, because they are sufficient to ensure that the database is accurate most of the time.  The impact is assessed to be medium, based on the kWh differences described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
New lamps will be owned by WBOPDC once the sub-division has been completed and WBOPDC take ownership. Database updated accordingly. Powerco and Trustpower in discussion to determine effective process. Additionally, Trustpower will work with Westlink to ensure future accuracy of data for vested lighting.		31/12/18	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Processes to be reviewed and updated where needed		Ongoing	

### 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

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 June 2018 using the data logger and database information. I confirmed that the calculation method and result was correct.

As detailed in **section 3.1**, the field data was 102.9% of the database data for the sample checked. This will result in estimated under submission of 23,800 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 Clause 15.2 and 15.37B(c) From: 01-Jun-17 To: current	Under submission of an estimated 23,800 kWh per annum Potential impact: High Actual impact: Medium Audit history: None Controls: Moderate Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
<b>Medium</b>	The controls are rated as moderate, because they are sufficient to ensure that lamp information is correctly recorded most of the time but there are still some errors. The impact is assessed to be medium, based on the kWh differences described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
New lamps will be owned by WBOPDC once the sub-division has been completed and WBOPDC take ownership. Database to be updated accordingly. Powerco and Trustpower in discussion to determine effective process. . Additionally, Trustpower will work with Westlink to ensure future accuracy of data for vested lighting.		31/12/18	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Processes to be reviewed and updated where needed		Ongoing	

## CONCLUSION

A RAMM database is managed by Westlink on behalf of WBOP DC and monthly reporting is provided to Trustpower. The field work is carried out by Horizon. This audit has been undertaken after the June 1<sup>st</sup>, 2018 deadline as WBOP DC were undertaking a 100% field audit which was completed at the end of May 2018.

Westlink have good processes in place to manage the database. The field audit was undertaken of a statistical sample of 318 items of load on 29th June 2018 and a small number of inaccuracies were found. These related to a small number of incorrect wattages in the existing areas, and lights in new subdivisions that are yet to be vested to council but are already electrically connected. I recommend in this audit that the new connection process for new subdivisions be reviewed.

The audit found six non-compliances and makes one recommendation.

Under submission is occurring by approx. 23,800 kWh per annum.

The future risk rating of 17 indicates that the next audit be completed in six months.

## PARTICIPANT RESPONSE

Trustpower has met with Westlink to discuss the results of this audit and to determine how 100% accuracy of the database can occur in future audits. We will work with closely with Westlink to resolve any administrative and process issues in advance of the next audit.

Trustpower is also meeting with Powerco to review the new connections process for streetlights in new subdivisions to ensure they are being captured and reconciled from when they are livened.