

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

For

**TAURANGA CITY COUNCIL AND
TRUSTPOWER LIMITED**

Prepared by: Steve Woods

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Date audit report completed: 24 May 2018

Audit report due date: 1 June 2018

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EXECUTIVE SUMMARY

This audit of the Tauranga City Council (TCC) DUMML 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 DUMML audits version 1.1, which became effective on 1 June 2017.

The previous audit was conducted by Trustpower and included the Parks and Reserves lighting. This is now a separate audit report because the data is in a different database.

The database used for submission is managed by TCC. The field work and asset data capture is conducted by McKay Electrical and they update the TCC RAMM database using "Pocket RAMM". Reporting is provided to Trustpower on a monthly basis.

The future risk rating of 23 indicates that the next audit be completed in six months. Non-compliance exists in relation to most of the requirements of the Code. It appears the information Trustpower is using for submission is more accurate than the RAMM database and submission totals appear to be more accurate than the database.

Tauranga City Council has commenced an improvement program to address the accuracy of the database and once this is complete, it is expected that Trustpower will use the monthly reporting for submission purposes.

The matters raised are detailed 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	The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating the database is not up to date.	Moderate	Low	2	Identified
ICP identifier	2.2	11(2)(a) and (aa) of Schedule 15.3	27 items of load do not have an ICP identifier	Weak	Low	3	Identified
Location of each item of load	2.3	11(2)(b) of Schedule 15.3	334 items of load do not have a street address or GPS coordinates recorded	Weak	Low	3	Identified
Capacity of load	2.4	11(2)(b) of Schedule	Discrepancies in the database as follows:	Weak	Low	3	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
		15.3	<ul style="list-style-type: none"> • Blank or zero wattage – 16 • Blank lamp description – 5 • Blank gear wattage – all records • Unknown lamp make and model - 14 				
All load recorded in database	2.5	11(2A) of Schedule 15.3	<p>The field audit identified 73 lamps which were not recorded in the database.</p> <p>A further 174 lamps on new streets were not recorded in the database</p>	Weak	Low	3	Identified
Tracking of load changes	2.6	11(3) of schedule 15.3	The tracking of load changes is not occurring in a timely manner for new connections	Weak	Low	3	Identified
Database accuracy	3.1	15.2 and 15.37B(b)	The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating the database is not up to date.	Weak	Low	3	Identified
Deriving submission information	3.2	15.2 and 15.37B(c)	The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating a potential estimated under submission of 215,600 kWh per annum	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Future Risk Rating						23	

Future risk rating	1-3	4-6	7-8	9-17	18-26	27+
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

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
Alan Miller	Commercial Account Manager	Trustpower
Michael Jones	Traffic Systems Engineer	TCC

1.4. Hardware and Software

The RAMM database used for the management of DUML is managed by TCC.

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)
0000001002UHFFF	Tuihana	GRE0111	43	3,100
0001264711UNDB5	Tauranga District Council Streetlights (TGA11)	TGA0111	2,337	257,101
1000559933PC0F9	Tauranga District Council Streetlights (KMO)	KMO0331	1,540	148,546
1000559934PCD33	Tauranga District Council Streetlights (TGA33)	TGA0331	4,219	497,148
1000559935PC176	Tauranga District Council Streetlights (MTM)	MTM0331	4,658	505,416
Total			12,797	1,411,312

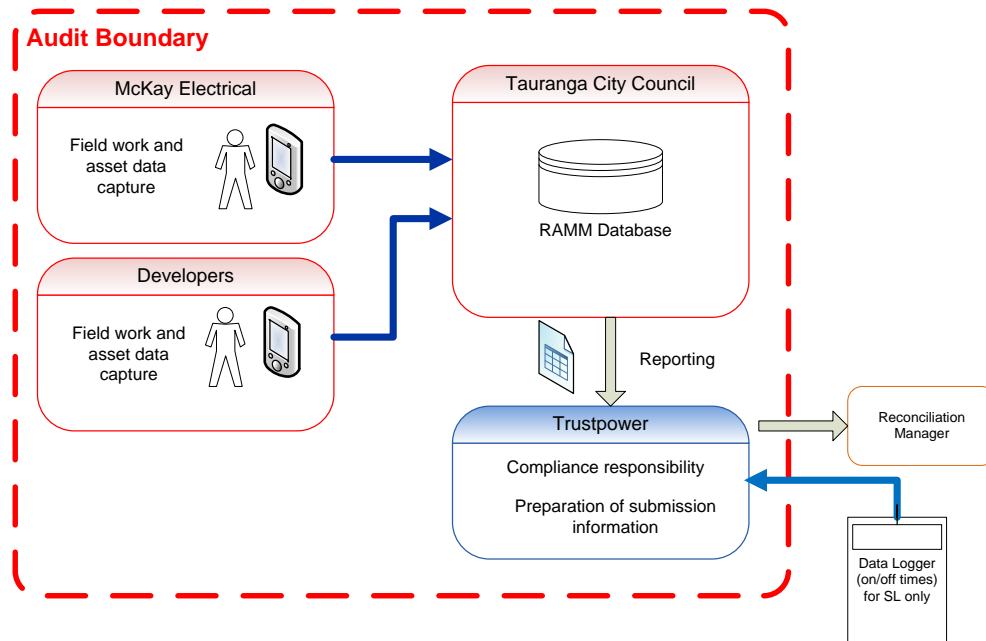
1.7. Authorisation Received

All information was provided directly by Trustpower and TCC.

1.8. Scope of Audit

The database used for submission is managed by TCC. The field work and asset data capture is conducted by McKay Electrical and they update the TCC RAMM database using “Pocket RAMM”. Reporting is provided to Trustpower on a monthly basis.

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 2016 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
ICP identifiers	2.2	11(2)(a) of schedule 15.3	ICPs not in database and only one ICP for roads for all of Tauranga	Cleared
Database Contents	2.6	11(3) of schedule 15.3.	RAMM Database not up to date. Total number of streetlights does not match totals send on monthly spreadsheet	Still existing
Tracking of load changes	2.6	11(3) of schedule 15.3.	Delays in updating database after new lights are livened.	Still existing

Subject	Section	Clause	Recommendation	Status
Description of load type	2.4	11(2)(c) of schedule 15.3	Populate gear wattage in the TAURANGA CITY COUNCIL databases	Still existing

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 was correct but the results did not match because the two data sets are different and it's likely they are both incorrect, but the Trustpower data is likely to be more accurate than that in the RAMM database. The RAMM database is approximately 5% lower than the field count and Trustpower's lamp count in their data is approximately 5% higher than the RAMM database lamp count, leading me to conclude that Trustpower's submissions may be close to accurate. It appears Trustpower is updating their database with the monthly changes where the RAMM database is not being updated.

There is some inaccurate data within the TCC database used to calculate submissions. This is recorded as non-compliance and discussed in **sections 2.5** and **3.1**.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 2.1</p> <p>With: Clause 11(1) of Schedule 15.3</p> <p>From: unknown</p> <p>To: 30-Apr-18</p>	<p>The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating the database is not up to date.</p> <p>Potential impact: High</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>Controls are rated as moderate, because although the database is inaccurate, Trustpower is taking steps to ensure submitted volumes are more than 99% accurate.</p> <p>The impact is rated as low because the impact on settlement appears to be less than 1%</p>

Actions taken to resolve the issue	Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated	31/10/18	Identified
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 RAMM 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. The previous audit recorded that there was only one ICP despite there being several NSPs. This matter is now resolved and there is an ICP per NSP.

27 records in the database have blank ICPs, which is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.2 With: Clause 11(2)(a) and (aa) of Schedule 15.3 From: unknown To: 30-Apr-18	27 items of load do not have an ICP identifier Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as weak because there does not appear to be checks conducted to identify missing data. The impact is rated as low because submission still occurs for these records.

Actions taken to resolve the issue	Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure all items of load have ICPs	31/10/18	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Maintenance and validation processes to be reviewed and updated where needed	Ongoing	

2.3. 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 RAMM database was checked to confirm the location is recorded for all items of load.

Audit commentary

The database contains fields for GPS coordinates and the nearest street address. Where this information was present it was confirmed as accurate, however there are 338 records without GPS coordinates and without a street number, which makes it difficult to locate the items of load.

This is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 2.3 With: Clause 11(2)(b) of Schedule 15.3 From: unknown To: 30-Apr-18	334 items of load do not have a street address or GPS coordinates recorded Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3	
Audit risk rating	Rationale for audit risk rating	
Low	Controls are rated as weak because there does not appear to be checks conducted to identify missing data. The impact is rated as low because only 2.5% have insufficient address information.	
Actions taken to resolve the issue	Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure locations are included in the database for all items	31/10/18	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Maintenance and validation processes to be reviewed and updated where needed	Ongoing	

2.4. 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 RAMM 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 where the data was populated. Several discrepancies were identified, as follows:

- Blank or zero wattage – 16
- Blank lamp description – 5
- Blank gear wattage – all records
- Unknown lamp make and model - 14

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.4 With: Clause 11(2)(b) of Schedule 15.3 From: unknown To: 30-Apr-18	Discrepancies in the database as follows: <ul style="list-style-type: none"> • Blank or zero wattage – 16 • Blank lamp description – 5 • Blank gear wattage – all records • Unknown lamp make and model - 14 Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3
Audit risk rating	Rationale for audit risk rating

Low	<p>Controls are rated as weak because there does not appear to be checks conducted to identify missing data.</p> <p>The impact is rated as low because of the low numbers and because Trustpower adds the ballast wattage to ensure submission is correct.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated		31/10/18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation processes to be reviewed and updated where needed		Ongoing	

2.5. 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 a statistical sample of 535 items of load recorded in the RAMM database was undertaken. The total population was divided into six strata, based on the five NSPs and one strata for new lights.

Audit commentary

The field audit findings are detailed in the table below.

Wattages for lamps found in the street but not the database were based on lamp label information where available and estimated based on physical characteristics and other surrounding lamps where unlabelled.

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
GRE0111					
HINEMARAMA CLOSE	2	2			
KORO MEWS	2	2			
TUIHANA DRIVE	19	22	+3		
KMO0331					
BAYVISTA CLOSE	3	3			

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
CURLEW CLOSE	1	1			
CURLEW CLOSE HAMMERHEAD	1	1			
ESTATES TERRACE	1	1			
GOLDEN HEIGHTS	3	3			
GUNBAR DRIVE	1	1			
HAWK PLACE	5	5			
MADDISON PLACE	4	4			
MARIRE DRIVE	2	2			
MARIRE DRIVE HAMMERHEAD	10	10			
RANGATAUA STREET	4	4			
SUNSET CRESCENT	6	6			
MTM0331					
ADDISON COURT	3	3			
BERWICK PLACE	3	3			
BUTTERWORTH CRESCENT	14	14			
CRISP DRIVE	4	4			
EPSOM ROAD	4	4			
EUPHORBIA STREET	2	2			
GLOUCESTER ROAD	43	42	-1		
GLOUCESTER ROAD (EAST)	32	38	+6		
GLOUCESTER ROAD/DENNY HULME DRIVE RAB	3	3			
GROVE AVENUE	15	15			
KAIMANAWA STREET	18	19	+1	2	2 70watt SON in database actually 27 watt LED in field

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
LAGUNA KEY HAMMERHEAD LOOP	1	4	+3		
LOGAN ROAD	2	2			
MADEIRA CLOSE	2	2			
MARDI PLACE	2	2			
MARIA TINI DRIVE	8	14	+6		
MCNAUGHTON LANE	2	2			
REDDITCH PLACE	1	1			
ST CLAIR PLACE	3	3			
SUMMERLAND CRESCENT	11	11			
SURF ROAD	1	1			
TESTACEA LANE	3	3			
New					
CONNISTON WAY	12	12			
HEBE CRESCENT	8	8			
KAPUKA STREET	4	4			
KOKIHI CLOSE	3	3			
LIVINGSTONE DRIVE	1	1			
PAERANGI PL	6	7	+1		
PENETAKA HEIGHTS	16	42	+26		
PUHIRAKE CRESCENT	6	6			
REYNOLDS PLACE	5	6	+1	1	1 x 100watt SON in database, 38 watt LED in field
TE OKUROA DRIVE	26	43	+17	23	9 x 250SON, 13 x 150SON and 1 x 45w LED all 86 watt LED in the field
TGA0111					
ALVA GLEN PLACE	9	9			
DUNROBBIN PLACE	3	3			

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
GREERTON ROAD	49	49			
HASTINGS ROAD (WEST)	5	13	+8		
KARAMU TERRACE	3	2	-1		
MITCHELL STREET	5	5			
RIVER OAKS DRIVE	8	8			
SABANA PLACE	3	3			
TWENTYTHIRD AVENUE	10	10			
WAIROI PLACE	2	2			
TGA0331					
BEAUMARIS BOULEVARD/HARLECH GLEN RAB	3	4	+1		
BERNARD STREET	3	3			
BIRCH AVENUE/CYPRESS STREET RAB	4	4			
ERICA STREET	1	1			
GLENFIELD PLACE	3	3			
HARINGTON STREET	11	11			
LONDON PLACE	1	1			
TE KOAH PLACE	8	8			
TE OKUROA DRIVE	1	1			
WILLIAMS STREET	2	2			
WINDOVER RISE	2	2			
Total	464	535	71	26	

I found 71 more lamps in the field than were recorded in the database (net difference). This is recorded as non-compliance below. The 26 lamp wattage differences are recorded as non-compliance in **section 3.1**.

I also identified 22 new roads not included in the database. These were checked at night time and I confirmed all 22 had lights on. The total light count was 174. Assuming an average of 27 watts (most are LED); the total annual under submission could be approximately 20,000 kWh. As recorded in Section

2.1, Trustpower's data appears to be largely accurate with regard to submission but non-compliance still exists for database inaccuracies.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: unknown To: 30-Apr-18	The field audit identified 73 lamps which were not recorded in the database. A further 174 lamps on new streets were not recorded in the database. Potential impact: High Actual impact: Low Audit history: Once previously Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as weak, as they are not sufficient to ensure that most database information is recorded correctly. The impact is rated as low because Trustpower's data used for submission appears to be more accurate than the database and although the error is not known, it appears to be less than 1%.		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated		31/10/18	Identified
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 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.

McKay Electrical has the maintenance contract for streetlights and data is entered directly into the RAMM database via pocket RAMM. McKay Electrical submits Service Orders immediately after the work has been completed and this is in turn checked by Tauranga City Council to validate the claims. This provides incentive to McKay Electrical to ensure all changes are recorded. However the database is not always updated.

The process for new connections has similar problems to the rest of the country. When lighting is installed it is normally livened prior to being “vested”. This can lead to a delay of some months between livening and recording of data in the databases. Tauranga City Council intends to meet with Powerco and Trustpower to develop a process to address this matter.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.6 With: Clause 11(3) of schedule 15.3 From: unknown To: 30-Apr-18	The tracking of load changes is not occurring in a timely manner for new connections. Potential impact: High Actual impact: High Audit history: Once Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as weak, because additional lights are not being recorded in a timely manner. The impact is rated as low because the impact on settlement of the late updates is estimated to be a low percentage of the overall kWh total		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated		31/10/18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation processes to be reviewed and updated where needed		Ongoing	

2.7. 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 RAMM database contains a complete audit trail of all additions and changes.

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	Tauranga City Council region
Strata	The database contains items of load in the Tauranga City area. The processes for the management of all TCC items of load are the same, but I decided to place the items of load into six strata, as follows: <ol style="list-style-type: none">1. GRE01112. KMO03313. MTM03314. New5. TGA01116. TGA0331
Area units	I created a pivot table of the roads in each area and I used a random number generator in a spreadsheet to select a total of 67 sub-units.
Total items of load	535 items of load were checked.

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

Audit commentary

The RAMM database was found to contain some inaccuracies and missing data.

The field audit found:

- 71 more lamps in the field than were recorded in the database.
- 26 lamp wattage differences.
- 22 roads not in the database

The DUMML database auditing tool provided a result indicating the field data was 105.1% of the database data.

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

Non-compliant

Non-compliance	Description		
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b) From: unknown To: 30-Apr-18	The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating the database is not up to date. Potential impact: High Actual impact: Low Audit history: Once Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as weak, because the database has a high level of inaccuracy, specifically related to new lights. The impact is rated as low because Trustpower's data used for submission appears to be more accurate than the database and although the error is not known, it appears to be less than 1%.		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated		31/10/18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation 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 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 March 2018 using the data logger and database information. I confirmed that the calculation method and result was correct.

There is some inaccurate data within the TCC database used to calculate submissions. This is recorded as non-compliance and discussed in **sections 2.5 and 3.1**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3 From: unknown To: 30-Apr-18	The database contains some incorrect and missing information. The field data was 105.1% of the database data for the sample checked, indicating a potential estimated under submission of 215,600 kWh per annum. Potential impact: High Actual impact: High Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, because although the database is inaccurate, Trustpower is taking steps to ensure submitted volumes are more than 99% accurate. The impact is rated as low because the impact on settlement appears to be less than 1%		
Actions taken to resolve the issue		Completion date	Remedial action status
TRUS will work with Tauranga City Council to ensure the database is reviewed and updated		31/10/18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Maintenance and validation processes to be reviewed and updated where needed		Ongoing	

CONCLUSION

The previous audit was conducted by Trustpower and included the Parks and Reserves lighting. This is now a separate audit report because the data is in a different database.

The database used for submission is managed by TCC. The field work and asset data capture is conducted by McKay Electrical and they update the TCC RAMM database using "Pocket RAMM". Reporting is provided to Trustpower on a monthly basis.

The future risk rating of 23 indicates that the next audit be completed in six months. Non-compliance exists in relation to most of the requirements of the Code. It appears the information Trustpower is using for submission is more accurate than the RAMM database and submission totals appear to be more accurate than the database.

Tauranga City Council has commenced an improvement program to address the accuracy of the database and once this is complete, it is expected that Trustpower will use the monthly reporting for submission purposes.

PARTICIPANT RESPONSE

Trustpower has met with Tauranga City Council to discuss the results of this audit. Tauranga City Council have undertaken an improvement programme that is expected to improve the accuracy of the database.

Trustpower and Tauranga City Council are 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.