# ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTED UNMETERED LOAD AUDIT REPORT

For

# OTOROHANGA DISTRICT COUNCIL AND TRUSTPOWER

Prepared by: Rebecca Elliot

Date audit commenced: 25 March 2019

Date audit report completed: 17 May 2019

Audit report due date: 1 June 2019

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# **EXECUTIVE SUMMARY**

This audit of the Otorohanga District Council (ODC) DUML database and processes was conducted at the request of Trustpower (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.

This database is switching from traders Trustpower to Genesis effective 30<sup>th</sup> June 2019.

ODC use a RAMM database to manage this DUML load. New connection, fault and maintenance work is completed by The Lines Company contract division (TLC). Monthly reports are received by Trustpower. Trustpower use this data to upload to their own database. The ballasts in RAMM are incorrect in some instances. Trustpower apply the correct ballasts in their database. These were passed to ODC and I can confirm they have been corrected.

The field audit found a high level of accuracy and the database is confirmed to be within the acceptable accuracy threshold.

ODC have finished their LED roll out and the database is relatively static.

This audit found five non-compliances and makes three recommendations. The future risk rating of 11 indicates that the next audit be completed in 12 months. I have considered this in conjunction with Trustpower's comments and that the database is switching traders and the actions ODC have already undertaken and recommend that the next audit be in 18 months' time.

The matters raised are detailed below:

#### **AUDIT SUMMARY**

# NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breac h Risk Rating	Remedial Action
Deriving submission information	2.1	11(1) of Schedule 15.3	Ballasts being applied outside of the database and the incorrect ballasts are recorded in RAMM.	Weak	Low	3	Identified
			Decorative LED lights in two redwood trees not recorded in the database.				
			Festive lights not recorded in the database.				
Location of each item of load	2.3	11(2)(b) of Schedule 15.3	One item of load with insufficient details to locate it.	Strong	Low	1	Identified
All load recorded in database	2.5	11(2A) of Schedule 15.3	Three additional items of load found in the field.	Strong	Low	1	Investigating
			Decorative LED lights in two redwood trees not recorded in the database.				
			Festive lights not recorded in the database.				
Database accuracy	3.1	15.2 and 15.37B(b)	Incorrect ballasts recorded in RAMM.	Weak	Low	3	Cleared
Volume information accuracy	3.2	15.2 and 15.37B(c)	Decorative LED lights in two redwood trees not recorded in the database.	Weak	Low	3	Identified
			Festive lights not recorded in the database.				
Future Risk Ra	ting					11	

Future risk	0	1-4	5-8	9-15	16-18	19+
rating						

Indicative audit	36 months	24 months	18 months	12 months	6 months	3 months
frequency						

# RECOMMENDATIONS

Subject	Section	Recommendation
All load recorded in database	2.5	Determine load associated with LED lights in the redwood trees and record in the database.
Tracking of load change	2.6	ODC to liaise with NZTA to ensure changes made in the field are advised to ODC in a timely manner.
		ODC to liaise with the trader and The Lines Company to review the electrical connection of new streetlights.

# 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
Robbie Diederen	Reconciliation Analyst	Trustpower
Cameron Senior	Asset Information Engineer	Otorohonga District Council
Roger Brady	Engineering Manager	Otorohonga District Council
Sam Lyta	Senior Engineering Assistant	Otorohonga District Council

### 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". The specific module used for DUML is called RAMM Contractor.

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	Profile	Number of items of load	Database wattage (watts)
0000400332WA74B	Te Kawa	TMU0111	STL	3	66
0000400337WAA04	OPARAU/AOTEA S/LTS	TMU0111	STL	9	198
0000400341WAED6	Kawhia	TMU0111	STL	108	2,429
0001111170WMD3F	State Highway Urban	HTI0331	STL	124	19,806

ICP Number	Description	NSP	Profile	Number of items of load	Database wattage (watts)
0008807415WMBD6	Local Authority Streetlights	HTI0331	STL	372	8,199
Total				623	34,422

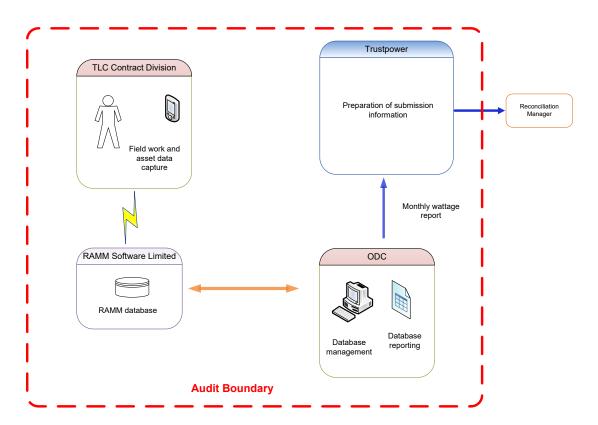
#### 1.7. Authorisation Received

All information was provided directly by Trustpower and ODC.

# 1.8. Scope of Audit

ODC use a RAMM database to manage this DUML load. New connection, fault and maintenance work is completed by The Lines Company contract division (TLC). Monthly reports are received by Trustpower.

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

The field audit was undertaken of a statistical sample of 99 items of load on 3<sup>rd</sup> April 2019.

# 1.9. Summary of previous audit

The previous audit was completed in March 2018 by Rebecca Elliot of Veritek Limited. The current status of that audit's findings is detailed below:

# **Table of Non-Compliance**

Subject	Section	Clause	Non-compliance	Status
Deriving submission information	2.1	11(1) of Schedule 15.3	The database used to prepare submissions contains some inaccurate information. The database accuracy is assessed to be 95.5% indicating an estimated over submission of 13,000 kWh per annum.  Incorrect ballasts recorded in RAMM.	Cleared
Location of each item of load	2.3	11(2)(b) of Schedule 15.3	Three items of load with insufficient details to locate them.	Still existing
Database accuracy	3.1	15.2 and 15.37B(b)	The database used to prepare submissions contains some inaccurate information. The database accuracy is assessed to be 95.5% indicating an estimated over submission of 13,000 kWh per annum.  Incorrect ballasts recorded in RAMM.	Cleared
Volume information accuracy	3.2	15.2 and 15.37B(c)	The database used to prepare submissions contains some inaccurate information. The database accuracy is assessed to be 95.5% indicating an estimated over submission of 13,000 kWh per annum.  Incorrect ballasts recorded in RAMM.	Cleared as submission is correct

# **Table of Recommendations**

Subject	Section	Clause	Recommendation for Improvement	Status
			Nil	

# 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 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.

### **Audit commentary**

Trustpower reconciles this DUML load using the STL profile. The on and off times are derived from data logger information. Trustpower receive a monthly database extract and this is used to derive submission.

I recalculated the submissions for March 2019 using the data logger and the database information. I confirmed that the calculation method was correct but found a minor difference of 189.73 kWh under submission compared to the volume in RAMM. This is because the ballasts recorded in RAMM are incorrect and Trustpower add the correct ballasts outside of the database, therefore Trustpower's submission is correct. Trustpower noted in the last audit the ballasts were going to be corrected in the RAMM database, but this not been actioned during the audit period. These were passed to ODC and I can confirm they are now correct. The incorrect ballasts are recorded as non-compliance below and in section 3.1.

The main street has festive decorative lights that are connected at Christmas. These are not recorded in the database. I expect the volume associated with these lights will be small but as these are not recorded in the database, but I can't confirm this. This is recorded as non-compliance in sections **2.5**, and **3.2**.

### **Audit outcome**

Non-compliance	Description					
Audit Ref: 2.1 With: Clause 11(1) of	Ballasts being applied outside of the database and the incorrect ballasts are recorded in RAMM.					
Schedule 15.3	Decorative LED lights in two redwood tro	ees not recorded i	n the database.			
	Festive lights not recorded in the databa	ise.				
	Potential impact: Low					
From: 01-May-18	Actual impact: Low					
To: 31-Mar-19	Audit history: None					
	Controls: Weak					
	Breach risk rating: 3					
Audit risk rating	Rationale for	audit risk rating				
Low	The controls are rated as weak as the da RAMM database resulting in a discrepan This database is switching traders and the next trader.	icy between subm	ission and the database.			
	The impact is assessed to be low as the valights will be very minor.	volumes associate	d with the LED Christmas			
Actions to	aken to resolve the issue	Completion date	Remedial action status			
ODC will make the require	ed alterations by the end of June	30 June 2019	Identified			
Preventative actions take	en to ensure no further issues will occur	Completion date				
ODC will make the require	ed alterations by the end of June	30 June 2019				

# 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**

All items of load had an ICP recorded as required by this clause.

# **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 database was checked to confirm the location is recorded for all items of load.

# **Audit commentary**

The database contains the nearest street address, pole numbers and Global Positioning System (GPS) coordinates for each item of load with the exception of one item of load which had no GPS co-ordinates or street number to locate it.

#### **Audit outcome**

Non-compliance	Description				
Audit Ref: 2.3	One item of load with insufficient details to locate it.				
With: Clause 11(2)(b) of					
Schedule 15.3	Potential impact: Low				
	Actual impact: None				
500 00 May 10	Audit history: Once				
From: 01-May-18 To: 31-Mar-19	Controls: Strong				
10: 31-Mar-19	Breach risk rating: 1				
Audit risk rating	Rationale for audit risk rating				
Low	The controls are rated as strong as the RAMM database has good controls in place to manage load location.				
	The impact is assessed to be low, as only one item of load had insufficient details to locate it.				
Actions to	aken to resolve the issue	Completion date	Remedial action status		
ODC will rectify the database by end of June		30 June19	Identified		
Preventative actions taken to ensure no further issues will occur		Completion date			
ODC will rectify the datab	Il rectify the database by end of June 30 June 19				

# 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 two fields for wattage, firstly the manufacturers rated wattage and secondly the "ballast wattage". The ballast wattage is expected to be a calculated figure which accounts for any variation from the input wattage and includes losses associated with ballasts. This was recorded for all items of load. The accuracy of the ballast wattages 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 DUML for which it is responsible is recorded in this database.

#### **Audit observation**

The field audit was undertaken of a statistical sample of 99 items of load on 3<sup>rd</sup> April 2019.

#### **Audit commentary**

The field audit discrepancies are detailed in the table below:

Street	Database count	Field count	Light count differences	Wattage recorded incorrectly	Comments
HARPERS AVE (121)	11	12	+1		1x extra 21W LED found in the field
PROGRESS DR (404)	10	11	+1		1x extra 22W LED found in the field
NGUTUNUI RD (3)	1	2	+1		1x extra 22W LED found in the field
Grand Total	99	102	3		

Three additional items of load were found in the field audit. This is recorded as non-compliance below. The database accuracy is discussed in **section 3.1**.

The Lines Company installed LED lights in two redwood trees as a gift to the community some years ago, but these lights are not recorded in the database. I recommend that ODC liaise with The Lines Company to determine the wattage associated with these lights and add them to the database.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 11(2A) of Schedule 15.3	Determine load associated with LED lights in the redwood trees and record in the database.	ODC will determine load and add to database if applicable.	Investigating

The main street has festive decorative lights that are connected at Christmas. These are not recorded in the database. I expect the volume associated with these lights will be small but as these are not recorded in the database, but I can't confirm this. This is recorded as non-compliance in sections **2.1**, and **3.2**.

#### **Audit outcome**

Non-compliance	Description				
Audit Ref: 2.5	Three additional items of load found in the field.				
With: Clause 11(2A) of	of Decorative LED lights in two redwood trees not recorded in the database.				
Schedule 15.3	Festive lights not recorded in the database.				
	Potential impact: Low				
	Actual impact: Low				
From: unknown	Audit history: None				
To: 31-Mar-19	Controls: Strong				
	Breach risk rating: 1				
Audit risk rating	Rationale for audit risk rating				
Low	The controls are rated as strong as the RAMM database has good controls in place to manage load accuracy.				
	The impact is assessed to be low, as the overall database accuracy was found to be high.				
Actions to	aken to resolve the issue	Completion date	Remedial action status		
ODC will add additional lights to database plus the redwood tree lights if applicable.		30 June 19	Investigating		
Preventative actions taken to ensure no further issues will occur		Completion date			
ODC will add additional lights if applicable.	ghts to database plus the redwood tree	30 June 19			

# 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**

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 each month is sufficient to achieve compliance.

The database tracks load changes as required by this clause.

ODC use a RAMM database to manage this DUML load. New connection, fault and maintenance work is completed by The Lines Company contract division (TLC). They use RAMM contractor to track load changes. This includes any new individual lights that are added to the streetlight circuits. All changes made during a month are included in the monthly report provided to Trustpower for submission. OCD have robust controls in place to ensure that this information is correct.

NZTA lights are included in the ODC streetlight database. ODC do not maintain these lights and there is no process in place for them to be advised of any changes made. These are updated if identified in the field but the process for the management of the NZTA lights is weak. These were included in the field audit sample and found to be accurate, but I recommend that ODC review this process with NZTA to ensure changes made are advised to them.

Recommendation	Description	Audited party comment	Remedial action
Tracking of load change	ODC to liaise with NZTA to ensure changes made in the field are advised to ODC in a timely manner.	ODC will liaise with NZTA to determine a process for any changes.	Investigating

The database is relatively static and there have been no new streetlight circuits added during the audit period. There is a small number of new lights expected to be added in the near future. I recommend that the process to ensure that these lights get added to the database for the correct date are discussed with The Lines Company. Specifically, The Lines Company is required to get the traders permission prior to the electrical connection of any new load as detailed in the code reference below:

# Clause 10.33A(4)

No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant.

Once electrically connected notification of this occurring should be advised to ODC so that they can be added to the database for the correct date.

Recommendation	Description	Audited party comment	Remedial action
Tracking of load change	ODC to liaise with the trader and The Lines Company to review the electrical connection of new streetlights.	ODC have a good process in place for new connections.	Recommendation not progressed

ODC have completed the LED roll out. No CMS system has been installed and none is planned. Outage patrols are in place but the frequency of these has been reduced to every three months due to the low failure rate of LED lights.

The main street has festive decorative lights that are connected at Christmas. These are not recorded in the database. I expect the volume associated with these lights will be small but as these are not recorded in the database but I can't confirm this. This is recorded as non-compliance in sections **2.1**, **2.5**, **3.1** and **3.2**.

#### **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 RAMM database has a complete audit trail of all additions and changes to the database information.

# **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**

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

Plan Item	Comments	
Area of interest	Otorohanga district	
Strata	The database contains items of load in the Otorohanga area.	
	The area has three distinct sub groups of urban, rural, NZTA.	
	The processes for the management of ODC items of load are the same, but I decided to place the items of load into five equal strata, as follows:  1. Kawhia Urban	
	<ol> <li>ODC Urban A-L</li> <li>ODC Urban M</li> <li>ODC Urban N-Z</li> <li>Rural</li> </ol>	
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 20 sub-units of 10% of the database wattage.	
Total items of load	99 items of load were checked.	

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

# **Audit commentary**

The field data was 102% of the database data for the sample checked. This is within the required database accuracy of  $\pm 5\%$ . The statistical sampling tool reported with 95% confidence the precision of the sample was 2.9%, and the true load in the field will be between 100.7% to 103.6% of the load recorded in the database. The sample is precise and confirms that the database is accurate.

The tool indicated that there is potentially 2,900 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool) of under submission. The statistical sampling tool reported with 95% confidence the possible impact will be between 1,000 and 5,300 kWh per annum of under submission but as the database accuracy is within the 5%+/- threshold compliance is confirmed.

Wattages for all items of load were checked against the published standardised wattage table produced by the Electricity Authority and found some of the ballasts recorded in RAMM are incorrect as detailed in the table below in red:

	Ballast applied						
Lamp Type	0	10	11	12	18	28	Grand Total
100watt SON-T	1	2		1	2		6
110watt HPS			1				1
150watt SON					35	2	37
150watt SON-T					42	1	43
160watt MV/Self ballast					1		1
21 Watt LED	211			25	2		238
22 Watt LED	233			9	10		252
250watt SON						4	4
250watt SON-T						24	24
27 Watt LED	6						6
65watt ES		2					2
70watt SON				1	1		2
70watt SON-E				4			4
70watt SON-T				3			3
<b>Grand Total</b>	452	4	1	43	93	31	623

This is because the ballasts recorded in RAMM are incorrect and Trustpower add the correct ballasts outside of the database, therefore Trustpower's submission is correct. Trustpower noted in the last audit the ballasts were going to be corrected in the RAMM database, but this not been actioned during the audit period. If the ballasts in RAMM were used for submission this would result in an estimated over submission of 2,977 kWh. These were passed to ODC and I can confirm they have been corrected. The incorrect ballasts are recorded as non-compliance below and in **section 2.1**.

# **Audit outcome**

Non-compliance	Description				
Audit Ref: 3.1	Incorrect ballasts recorded in RAMM.				
With: Clause 15.2 and	Potential impact: Low				
15.37B(b)	Actual impact: None				
	Audit history: Once previously				
From: 01-May-18	Controls: Weak				
To: 31-Mar-19	Breach risk rating: 3				
Audit risk rating	Rationale for	audit risk rating			
Low	The controls are rated as weak as the data is being manipulated outside of the RAMM database resulting in a discrepancy between submission and the database. This database is switching traders and the incorrect ballasts will be used with the next trader as they do not manipulate data outside of the database.  The impact is assessed to be low, as the differences found in the database are corrected outside of the database and therefore have no impact on submission with the current trader.				
Actions to	taken to resolve the issue Completion Remedial action status date				
ODC will update the database before 30 June 19.		30 June 19	Cleared		
Preventative actions taken to ensure no further issues will occur Completion date					
ODC will update the data	base before 30 June 19.	30 June 19			

# 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; and
- 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. Trustpower receive a monthly database extract and this is used to derive submission.

I recalculated the submissions for March 2019 using the data logger and the database information. I confirmed that the calculation method was correct but found a minor difference of 189.73 kWh under submission compared to the volume in RAMM. This is because the ballasts recorded in RAMM are incorrect and Trustpower add the correct ballasts outside of the database, therefore Trustpower's submission is correct.

The main street has festive decorative lights that are connected at Christmas. These are not recorded in the database. I expect the volume associated with these lights will be small but as these are not recorded in the database, but I can't confirm this. This is recorded as non-compliance in sections **2.5**, and **3.2**.

#### **Audit outcome**

Non-compliance	Description				
Audit Ref: 3.2	Decorative LED lights in two redwood trees not recorded in the database.				
With: Clause 15.2 and	Festive lights not recorded in the database.				
15.37B(c)	Potential impact: Low				
	Actual impact: Low				
	Audit history: None				
From: 01-May-18	Controls: Weak				
To: 31-Mar-19	Breach risk rating: 3	Breach risk rating: 3			
Audit risk rating	Rationale for	audit risk rating			
Low	The controls are rated as weak as the data is being manipulated outside of the RAMM database resulting in a discrepancy between submission and the database. This database is switching traders and the incorrect ballasts will be used with the next trader.  The impact is assessed to be low as the volumes associated with the LED Christmas lights will be very minor.				
Actions to	aken to resolve the issue	Completion date	Remedial action status		
_	ed to the database and Retailer will be livened for submission purposes.	30 June 19	Identified		
Preventative actions taken to ensure no further issues will occur Completion date					
ODC will monitor these lights and notify Retailer when livened.  Ongoing					

# CONCLUSION

This database is switching from traders Trustpower to Genesis effective 30<sup>th</sup> June 2019.

ODC use a RAMM database to manage this DUML load. New connection, fault and maintenance work is completed by The Lines Company contract division (TLC). Monthly reports are received by Trustpower. Trustpower use this data to upload to their own database. The ballasts in RAMM are incorrect in some instances. Trustpower apply the correct ballasts in their database. When this database switches from Trustpower to Genesis the ballasts recorded in RAMM will be used for submission. I recommend that these are corrected in RAMM.

The field audit found a high level of accuracy and the database is confirmed to be within the acceptable accuracy threshold.

ODC have finished their LED roll out and the database is relatively static.

This audit found five non-compliances and makes three recommendations. The future risk rating of 11 indicates that the next audit be completed in 12 months. I have considered this in conjunction with Trustpower's comments and that the database is switching traders and the actions ODC have already undertaken and recommend that the next audit be in 18 months' time.

# PARTICIPANT RESPONSE

Trustpower have reviewed this report and their comments are recorded in the body of the report. No further comments were provided.