

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

For

**SOUTH TARANAKI DISTRICT COUNCIL AND  
GENESIS ENERGY LIMITED**

Prepared by: Tara Gannon

Date audit commenced: 20 March 2019

Date audit report completed: 29 April 2019

Audit report due date: 31 May 2019

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## EXECUTIVE SUMMARY

This audit of the **South Taranaki District Council (STDC)** DUMML database and processes was conducted at the request of **Genesis Energy Limited (Genesis)** 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.

A RAMM database is held by STDC, who is Genesis' customer. Opus manage the database. NPE Tech are responsible for fault, maintenance, and upgrade work for streetlights, and maintain the database.

A monthly report from the database is provided to Genesis, and used to calculate submissions. Genesis submits the DUMML load as NHH using the NST profile. On hours are derived using data logger information for ICPs 1000543587PC9EC and 1000543529PC268, and data from the Astronomical Society for the remaining ICPs.

Four non-compliances were identified, and no recommendations are raised. The future risk rating of seven indicates that the next audit be completed in 18 months. Genesis intends to work with the Council to resolve the issues identified and I recommend that the next audit is completed in at least 18 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
Deriving submission information	2.1	11(1) of Schedule 15.3)	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.	Moderate	Low	2	Investigating
Description and capacity of load	2.4	11(2)(c) and (d) of Schedule 15.3	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.	Moderate	Low	2	Investigating
All load recorded in database	2.5	11(2A) of Schedule 15.3	One 70W SON lamp was missing from the database.	Strong	Low	1	Investigating

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Volume information accuracy	3.2	15.2 and 15.37B(c)	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.	Moderate	Low	2	Investigating
Future Risk Rating						7	

<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
		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.

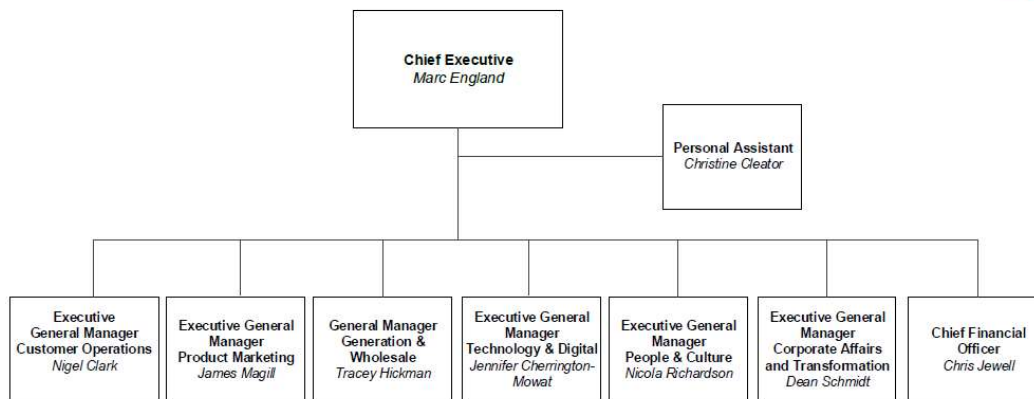
#### Audit commentary

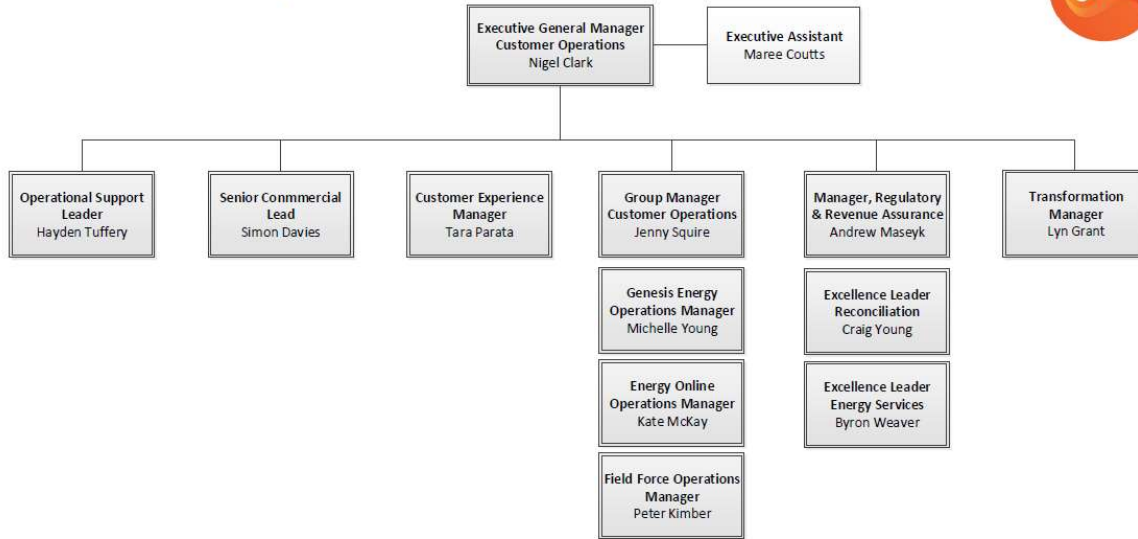
There are no exemptions in place relevant to the scope of this audit.

### 1.2. Structure of Organisation

Genesis provided a copy of their organisational structure:

Genesis Energy  
**Executive Team**





### 1.3. Persons involved in this audit

Auditor:

**Tara Gannon**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Other personnel assisting in this audit were:

Name	Title	Company
Vincent Lim	Roading Manager	South Taranaki District Council
Craig Young	Excellence Leader - Reconciliation	Genesis Energy
Grace Hawken	Technical Specialist - Reconciliation Team	Genesis Energy

### 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 “Roothing Asset and Maintenance Management”.

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)
1000543586PC5A9	South Taranaki District Council NZTA (HAW)	HWA0331	NST	235	25,902
1000543527PC1F3	South Taranaki District Council NZTA (HAW)	HWA0332	NST	1,318	37,734
1000543587PC9EC	NPL - South Taranaki District Council NZTA (NPL)	NPL0331	NST	129	15,030
1000543529PC268	South Taranaki District Council Streetlights (NPL)	NPL0331	NST	303	9,026
1000543528PCE2D	South Taranaki District Council Streetlights (SFD)	SFD0331	NST	300	9,025
1000543589PCA77	South Taranaki District Council NZTA (SFD)	SFD0332	NST	48	5,619
1000543590PCE8B	South Taranaki District Council NZTA (WVY)	WVY0111	NST	117	13,875
1000543526PCDB6	South Taranaki District Council Streetlights (WVY)	WVY0111	NST	345	7,989
<b>Total</b>				<b>2,795</b>	<b>124,200</b>

The database also includes metered lights connected to ICP 0042251670PC289, and two lights connected to 0042251397PC0FC which are connected to the same circuit and treated as standard un-metered load. These two ICPs are excluded from the scope of this distributed un-metered load audit.

### 1.7. Authorisation Received

All information was provided directly by Genesis and STDC.



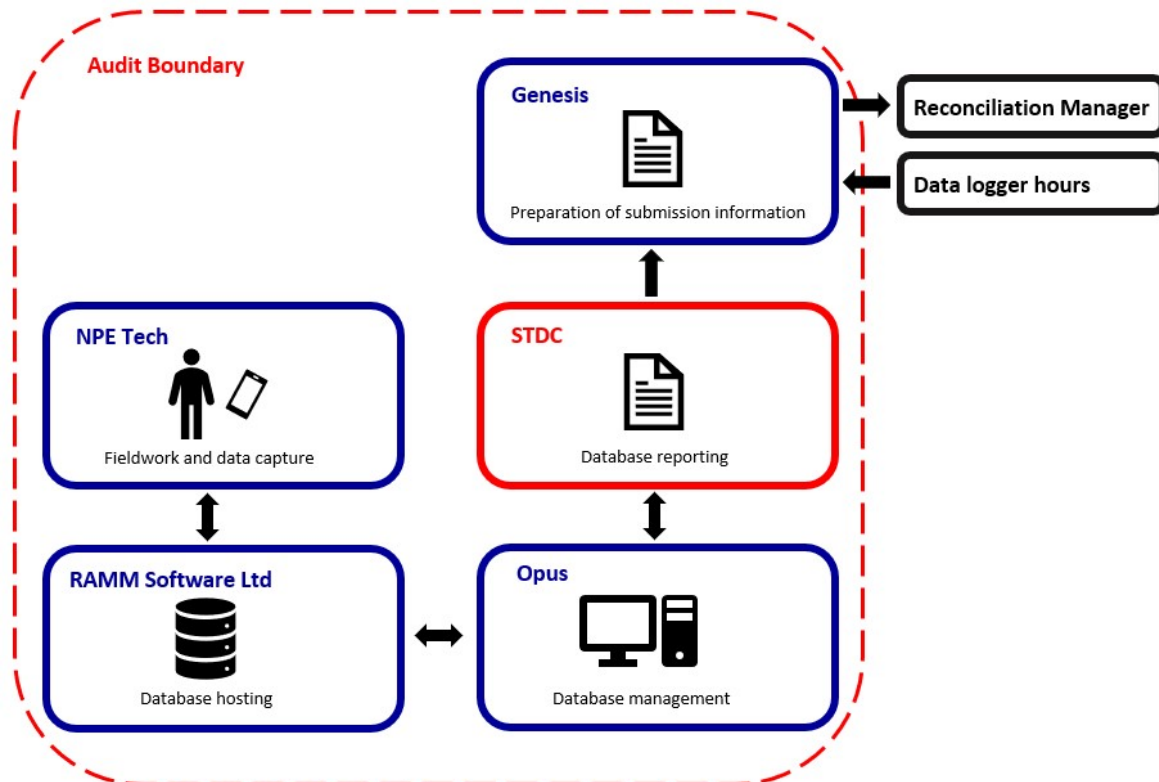
## 1.8. Scope of Audit

This audit of the STDC DUML database and processes was conducted at the request of Genesis 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.

A RAMM database is held by STDC, who is Genesis' customer. Opus manage the database. NPE Tech are responsible for fault, maintenance, and upgrade work for streetlights, and maintain the database.

A monthly report from the database is provided to Genesis, and used to calculate submissions. Genesis submits the DUML load as NHH using the NST profile. On hours are derived using data logger information for ICPs 1000543587PC9EC and 1000543529PC268, and data from the Astronomical Society for the remaining ICPs.

The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the spreadsheet reporting from RAMM. The diagram below shows the 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.

The field audit was undertaken of a statistical sample of 243 items of load on 20 March 2019.

## 1.9. Summary of previous audit

The previous audit was completed in March 2018 by Tara Gannon of Veritek Limited. Four non-compliances were identified, and one recommendation was made. The statuses of the non-compliances and recommendation are described below.

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.	Cleared
All load recorded in database	2.5	11(2A) of Schedule 15.3	For the sample of 202 lamps checked, eight lamps could not be located.	Still existing
Database accuracy	3.1	15.2	For the sample of 202 lamps checked, eight lamps had incorrect model information recorded, and eight lamps could not be located.	Still existing
Volume information accuracy	3.2	15.2	The database used to prepare submissions contains some inaccurate information.	Cleared

Subject	Section	Clause	Recommendation	Status
Description of load type	3.1	15.2 and 15.37B(b)	Correct the Cree LEDway model names to clarify that they do not reflect the lamp wattage.	Not implemented

#### 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

Genesis 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. 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

This clause requires that the distributed unmetered load database must satisfy the requirements of schedule 15.5 regarding the methodology for deriving submission information.

A monthly report from the database is provided to Genesis, and used to calculate submissions. Genesis submits the DUML load as NHH using the NST profile. On hours are derived using data logger information for ICPs 1000543587PC9EC and 1000543529PC268, and data from the Astronomical Society for the remaining ICPs.

I checked the February 2019 submission data for all eight ICPs, and compliance is confirmed.

The review of database accuracy in **section 3.1** found that the best available estimate indicates that the database is accurate within  $\pm 5\%$ , and lamp and gear wattages were correctly recorded in the extracts provided to Genesis.

Review of the database content in **section 2.4** found 2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages are applied to the database extract prior to it being sent to Genesis to use for submission. Non-compliance is recorded below, because gear wattages are not up to date within RAMM.

#### Audit outcome

Compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3  From: unknown To: 20-Mar-19	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.  Potential impact: Low  Actual impact: Low  Audit history: Once  Controls: Moderate  Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	<p>The controls are rated as moderate. Although gear wattages are maintained in a separate table and applied prior to sending the database extract to Genesis, they are not recorded in the database itself.</p> <p>There is no impact on submission.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Genesis will be discussing the audit findings with the intent it is expected that the council takes measures to remedy the exceptions outlined.		01/09/2019	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis will report exceptions to the council where exceptions are identified		01/06/2019	

## 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 DUMML database must contain:*

- *each ICP identifier for which the retailer is responsible for the DUMML*
- *the items of load associated with the ICP identifier.*

### Audit observation

The database was checked to confirm whether an ICP is recorded for each item of load.

### Audit commentary

The analysis found that all items of load had an ICP number recorded.

### Audit outcome

Compliant

## 2.3. Location of each item of load (Clause 11(2)(b) of Schedule 15.3)

### Code reference

*Clause 11(2)(b) of Schedule 15.3*

### Code related audit information

*The DUMML database must contain the location of each DUMML item.*

### Audit observation

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

### Audit commentary

The database contains street names and location numbers for each item of load.

GPS coordinates are recorded for 2,237 (80%) of the 2,795 items of load. The remaining 558 items of load have street name, location number, and pole number information which allows them to be located.

### Audit outcome

Compliant

## 2.4. Description and capacity of load (Clause 11(2)(c) and (d) of Schedule 15.3)

### Code reference

*Clause 11(2)(c) and (d) of Schedule 15.3*

### Code related audit information

*The DUMML database must contain:*

- *a description of load type for each item of load and any assumptions regarding the capacity*
- *the capacity of each item in watts.*

### Audit observation

The database was checked to confirm that it contained a field for lamp type and wattage capacity and included any ballast or gear wattage.

### Audit commentary

Lamp model, lamp wattage, and gear wattage are recorded in the database.

The gear wattage field is not consistently populated in RAMM. 2,464 items of load in the raw RAMM extract have a blank gear wattage. 631 of those items are not LED lights, and are expected to have a non-zero gear wattage.

To ensure that correct gear wattage values are applied, STDC maintains a separate table of adjusted wattages including gear wattages. These adjusted wattages are applied to the RAMM report prior to it being sent to Genesis each month.

I compared the raw database extract, the extract provided to Genesis, and submission data created by Genesis for February 2019, which confirmed that this process is working as intended and the correct adjusted wattages are sent to Genesis and applied for submission.

All items of load have a lamp model, lamp wattage and adjusted wattage including gear wattage recorded in the extract provided to Genesis. The accuracy of the recorded lamp and gear wattages is discussed in **section 3.1**.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.4 With: Clause 11(2)(c) and (d) of Schedule 15.3  From: unknown To: 20-Mar-19	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate. Although gear wattages are maintained in a separate table and applied prior to sending the database extract to Genesis, they are not recorded in the database itself.  There is no impact on submission.		
Actions taken to resolve the issue		Completion date	Remedial action status
As per 2.1 - Genesis will be discussing the audit findings with the intent it is expected that the council takes measures to remedy the exceptions outlined.		01/09/2019	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis will report exceptions to the council where exceptions are identified		01/06/2019	

2.5. All load recorded in database (Clause 11(2A) of Schedule 15.3)

**Code reference**

Clause 11(2A) of Schedule 15.3

**Code related audit information**

The retailer must ensure that each item of DUMML for which it is responsible is recorded in this database.

**Audit observation**

The field audit was undertaken of a statistical sample of 243 items of load on 20 March 2019.

**Audit commentary**

As recorded in the 2018 audit, the database contains two fields titled model, and in some cases the information contained within them is inconsistent. The second model field is used to determine the lamp wattage. For this reason I have used the second model field to determine database accuracy.

The following differences were identified during the field audit.

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
NZTA Hawera					
WHAREROA ROAD	11	9	-2	2	Two L34 were recorded as 21W LED in the database. Two 150W SON were not located on the street.
STDC HAWERA					
HUNTER STREET	13	13	-	1	One 24W LED was recorded as 21W LED in the database.
OHANGAI ROAD (NORMANBY)	3	4	1	-	One 70W SON was not recorded in the database.
STDC New Plymouth, Stratford, Waverley					
GIBSON PLACE	7	6	-1	-	One 24W LED recorded in the database was not located on the street.
LEICESTER STREET	7	7	-	1	One L34 was labelled as 30W LED in the database.
NORFOLK STREET	8	8	-	1	One 21W LED was recorded as 24W LED in the database.
SCOTLAND STREET	9	9	-	1	One 24W LED was recorded as 21W LED in the database.
<b>Total</b>	<b>243</b>	<b>242</b>	<b>-2</b>	<b>6</b>	

The field audit found one 70W SON on Ohangai Road (Normanby) was missing from the database, which is recorded as non-compliance below. The other count and wattage differences are recorded as non-compliance in **section 3.1**.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: 20-Mar-19 To: 20-Mar-19	One 70W SON lamp was missing from the database. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as strong, because one missing lamp was identified for the sample of 243 lamps checked. The impact is assessed to be low, based on 83W missing from the database.		
Actions taken to resolve the issue		Completion date	Remedial action status
Genesis will be discussing the audit findings with the intent it is expected that the council takes measures to remedy the exceptions outlined.		01/09/2019	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis will report exceptions to the council where exceptions are identified		01/06/2019	

## 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 DUMML 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 “snapshot” report is sufficient to achieve compliance. The database tracks additions and removals as required by this clause.

Processes to track changes to the database were reviewed.

Fault, maintenance and upgrade work is completed by NPE Tech. The RAMM database is either updated in the field using PDAs, or paper records are provided to the NPE Tech administration staff who update the database. NPE Tech are responsible for validating any work completed in RAMM.



STDC completes reasonableness and completeness checks on the database information before submitting the data to Genesis each month. If any issues are found, they are referred to Opus and NPE Tech for investigation and correction. Opus are also responsible for monitoring NPE Tech's activities and database updates.

Outage patrols are completed by NPE Tech on a monthly cycle. Outages are also reported by residents within the STDC region and work orders are raised with NPE Tech as required.

There are very few new connections, and none have occurred during the audit period. New subdivisions are rare, and most are rural and do not have street lighting. The STDC streetlight team works closely with the planning team to identify new subdivisions that will have streetlighting and progress with them. NPE Tech are Powerco approved contractors and will normally be responsible for connecting any new streetlighting. As part of the connection process they will ensure that the lights are entered into RAMM.

STDC's LED upgrade is almost complete, and they are working through the final upgrades. NZTA lights in the region are eventually expected to be upgraded.

All known private lights are metered, and all festive lighting is connected to metered under verandah lights and excluded from the database.

#### **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 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 database has a complete audit trail.

#### **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	Streetlights in the South Taranaki region
Strata	<p>The database contains 2,795 items of load located in the South Taranaki region.</p> <p>The management process is the same for all lights. I created four strata by owner and region:</p> <ul style="list-style-type: none"><li>• NZTA Hawera</li><li>• NZTA New Plymouth, Stratford, Waverley</li><li>• STDC Hawera</li><li>• STDC New Plymouth, Stratford, Waverley.</li></ul>
Area units	I created a pivot table of the roads in each stratum, and I used a random number generator in a spreadsheet to select a total of 34 sub-units making up 8.5% of the total database wattage.
Total items of load	243 items of load were checked.

Wattages for all items of load were checked against the published standardised wattage tables produced by the Electricity Authority, and the manufacturer's specifications.

##### Audit commentary

###### Database accuracy based on the field audit

The database was found to contain some inaccuracies and missing data. The field audit found:

- three lamps were recorded in the database but missing from the field;
- one lamp was present in the field but missing from the database; and
- six lamp wattage differences.

The field data was 97.8% of the database data for the sample checked. The statistical sampling tool reported with 95% confidence the precision of the sample was 6.3%, and the true load in the field will be between 95.2% to 101.5% of the load recorded in the database. The best available estimate indicates that the database is accurate within  $\pm 5\%$ .

The total wattage recorded in the database for the sample was 10,610W. The total wattage found in the field for the sample checked was 10,366W, a difference of 244W. This will result in potential over recording of 11,900 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool). The statistical sampling tool reported with 95% confidence that there is a potential estimated submission variance range of between 25,500 kWh of over submission and 7,700 kWh of under submission per annum. Because the accuracy is within the 5% threshold compliance is recorded.

**Wattage accuracy**

The RAMM report containing adjusted wattages was checked against the published standardised wattage table, and manufacturer’s specifications where available. My assessment was based on models recorded in the second model field, which determines the wattages recorded and the RAMM extract data provided to Genesis.

No lamp wattage or gear wattage discrepancies were identified.

**Make and model accuracy**

The 2018 audit noted some inconsistencies between the information recorded in the model fields, which still remain. The second model field corresponds to the wattage recorded in the database.

The 2018 audit recommended that the Cree model information should be updated to reflect the wattage of the lamps. The information in the model 2 field in the database reflects the wattage, and the model field reflects the number of LEDs present. This information has not been updated.

Model	Model 2
20wLEDWAY	35wLED
30wLEDWAY	53wLED

**Audit outcome**

Compliant

**3.2. Volume information accuracy (Clause 15.2 and 15.37B(c))**

**Code reference**

*Clause 15.2 and 15.37B(c)*

**Code related audit information**

*The audit must verify that:*

- *volume information for the DUML is being calculated accurately*
- *profiles for DUML have been correctly applied.*

**Audit observation**

Submission data was checked for accuracy, including:

- 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**

This clause requires that the distributed unmetered load database must satisfy the requirements of schedule 15.5 regarding the methodology for deriving submission information.

A monthly report from the database is provided to Genesis, and used to calculate submissions. Genesis submits the DUML load as NHH using the NST profile. On hours are derived using data logger information for ICPs 1000543587PC9EC and 1000543529PC268, and data from the Astronomical Society for the remaining ICPs. The correct profile and submission type is recorded on the registry for each ICP.

I checked the February 2019 submission data for all eight ICPs, and compliance is confirmed.

The review of database accuracy in **section 3.1** found that the best available estimate indicates that the database is accurate within  $\pm 5\%$ , and lamp and gear wattages were correctly recorded in the extracts provided to Genesis.

Review of the database content in **section 2.4** found 2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages are applied to the database extract prior to it being sent to Genesis to use for submission. Non-compliance is recorded below, because gear wattages are not up to date within RAMM.

#### Audit outcome

Compliant

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c)  From: unknown To: 20-Mar-19	2,464 items of load do not have a gear wattage recorded in the database. Adjusted wattages (including the correct gear wattage) are applied to the monthly extract to RAMM prior to submission. All items of load in the extract have a lamp model, lamp wattage, and adjusted wattage including gear wattage recorded.  Potential impact: Low  Actual impact: Low  Audit history: Once  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are rated as moderate. Although gear wattages are maintained in a separate table and applied prior to sending the database extract to Genesis, they are not recorded in the database itself.  There is no impact on submission.		
Actions taken to resolve the issue	Completion date	Remedial action status	
As per 2.1, 2.2 - Genesis will be discussing the audit findings with the intent it is expected that the council takes measures to remedy the exceptions outlined. And will further reiterate the correction of model descriptions in that dataset.	01/09/2019	Investigating	

<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
Genesis will report exceptions to the council where exceptions are identified	01/06/2019	

**Audit outcome**

Compliant

## CONCLUSION

This audit of the **South Taranaki District Council (STDC)** DUMML database and processes was conducted at the request of **Genesis Energy Limited (Genesis)** 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.

A RAMM database is held by STDC, who is Genesis' customer. Opus manage the database. NPE Tech are responsible for fault, maintenance, and upgrade work for streetlights, and maintain the database.

A monthly report from the database is provided to Genesis, and used to calculate submissions. Genesis submits the DUMML load as NHH using the NST profile. On hours are derived using data logger information for ICPs 1000543587PC9EC and 1000543529PC268, and data from the Astronomical Society for the remaining ICPs.

Four non-compliances were identified, and no recommendations are raised. The future risk rating of seven indicates that the next audit be completed in 18 months. Genesis intends to work with the Council to resolve the issues identified and I recommend that the next audit is completed in at least 18 months.

## PARTICIPANT RESPONSE

Genesis would be seeking a 24-month revision period due to the same non-compliance being recording under 3 separate sections. Genesis will be working with the council and Opus to have the exceptions outlined in the audit rectified.