ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

VERITEK

For

DUNEDIN CITY COUNCIL
AND CONTACT ENERGY LIMITED

Prepared by: Steve Woods

Date audit commenced: 20 April 2018

Date audit report completed: 28 May 2018

Audit report due date: 01-Jun-18

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EXECUTIVE SUMMARY

This audit of the Dunedin City Council (**DCC**) DUML database and processes was conducted at the request of Contact Energy Limited (**Contact**), in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied.

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

A RAMM database is managed by DCC and monthly reporting is provided to Contact.

The database is remotely hosted by RAMM Software Ltd. The field work, asset data capture and database population is conducted by Delta contracting. The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the database reporting. The diagram below shows the audit boundary for clarity.

The field audit was undertaken of a statistical sample of 387 items of load on 20th April 2018.

The audit found four non-compliances and makes two recommendations.

Over submission is occurring by approx. 39,453 kWh per annum.

The future risk rating of 13 indicates that the next audit be completed in 12 months.

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	Net over submission by 39,453 kWh per annum	Moderate	Medium	4	Identified
Description and capacity of load	2.4	11(2)(c) and (d) of Schedule 15.3	Three ballast wattage differences in the database, with an overall wattage difference equating to 7,935 kW per annum over submission	Moderate	Low	2	Identified
All load recorded in database	2.5	11(2A) of Schedule 15.3	7 lights not recorded in the database leading to under submission by 2,481 kWh per annum	Moderate	Low	2	Identified
Database accuracy	3.1	15.2 and 15.37B(b)	The database accuracy is assessed to be 99.5% indicating an estimated over submission of 34,000 kWh per annum	Moderate	Medium	4	Identified
Volume information accuracy	3.2	15.2 and 15.37B(c)	Net over submission by 39,453 kWh per annum	Moderate	Medium	4	Identified

Future Risk Rating	**16**

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

ISSUES

Subject	Section	Description	Issue

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.

There is one exemption in place relevant to the scope of this audit:

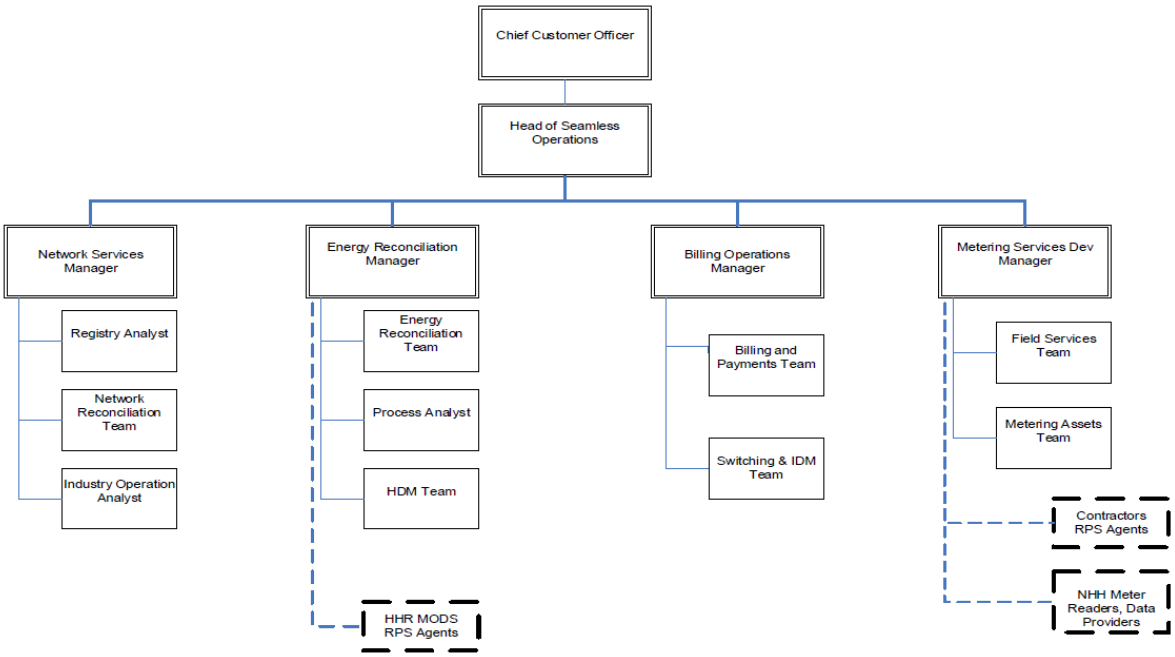
- Exemption No. 177. Exemption to clause 8(g) of schedule 15.3 of the Electricity Industry Participation Code 2010 ("Code") in respect of providing half-hour ("HHR") submission information instead of non-half-hour ("NHH") submission information for distributed unmetered load ("DUML"). This exemption expires at the close of 31 October 2023.

Audit commentary

Compliance is confirmed.

1.2. Structure of Organisation

Contact Energy 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
Bernie Cross	Energy Reconciliation Manager	Contact Energy
Simon Wilson	Systems and Information Team Leader, Transport	DCC

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".

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

1.5. Breaches or Breach Allegations

There are no breach allegations relevant to the scope of this audit.

1.6. ICP Data

ICP Number	Description	Profile	Number of items of load	Database wattage (watts)
0000203111DE93D	HWB GXP	HHR	4,602	570,405
0000201300DE692	SDN GXP	HHR	10,137	1,133,094
0001982460TGA89	DCC STREETLIGHTS	HHR	410	37,688
0001982461TG6CC	DCC STREETLIGHTS	HHR	65	4,757

1.7. Authorisation Received

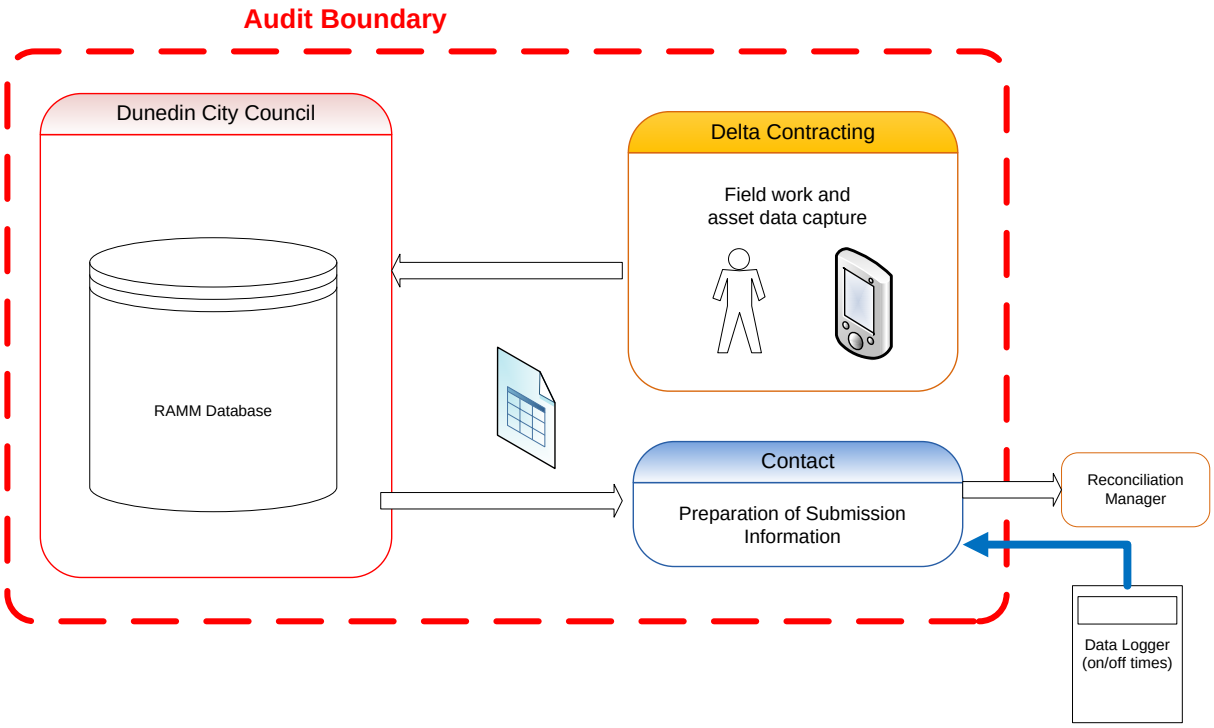
All information was provided directly by Contact.

1.8. Scope of Audit

This audit of the DCC DUML database and processes was conducted at the request of Contact, in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied.

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

The database is remotely hosted by RAMM Software Ltd. The field work, asset data capture and database population is conducted by Delta contracting. The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the database reporting. The diagram below shows the audit boundary for clarity.



The field audit was undertaken of a statistical sample of 387 items of load on 20th April 2018.

1.9. Summary of previous audit

Contact provided a copy of the last audit report undertaken by Allie Jones of Contact Energy, completed in August 2017. The tables below records the findings.

Subject	Section	Clause	Non compliance	Status
Audit trail	1.9	Clause 11(4) of schedule 15.3	Audit trail does not exist for OtagoNet spreadsheet system	Cleared
Incorrect Registry Information	2.1	Clause 9(1)(b) and 9(1)(ea) of schedule 11.1	Incorrect registry information	Cleared
Incorrect Submission Information	2.1	Clause 11(1) of schedule 15.3	Incorrect Submission Information	Still existing
Location of item of load	2.2.2	clause 11(2)(b) of schedule 15.3	Location of each item of load not recorded for 161 of Delta's data	Cleared
Description of load	2.2.3	clause 11(2)(c) of schedule 15.3	Description of load type not populated for 71 lamps in the Delta database OtagoNet could not supply a full database dump	Cleared
Incorrect Ballast	2.2.4	clause 11(2)(d) of schedule 15.3	Some incorrect ballast loss figures used	Cleared

Subject	Section	Clause	Recommendation for Improvement	Status
Incorrect ballast losses due to network chokes	2.3	clause 11(2)(d) of schedule 15.3	Contact to work with DCC in conjunction with Delta to ensure this data is reflected in RAMM	Still existing

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 3 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

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

Audit commentary

Contact reconciles this DUML load using the HHR profile, in accordance with exemption number 177 discussed in **section 1.1**.

Submissions are based on the database information, with on and off times derived from data logger information.

I checked the March 2018 extract provided by DCC against the submission totals supplied by Contact and found that submission matched the database.

Volume inaccuracy is present due to a small number of database errors, as follows:

Issue	Volume information impact (annual kWh)
248 Incandescent lights have ballast wattage recorded and incandescent lights don't have ballasts.	5,458 over submission
Six 300 watt halogen lights have ballasts recorded and halogen lights don't have ballasts.	640 over submission
43 45 watt MH Cosmo lights have a 10 watt ballast instead of 5 watts.	1,836 over submission
7 lights not recorded in the database.	2,481 under submission
The field data was 99.5% of the database data for the sample checked. This will result in estimated over submission of 34,000 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).	34,000 over submission
Net impact	**39,453 over submission**

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.2 Clause 11(1) of Schedule 15.3 From: 01-Apr-17 To: 30-Apr-18	Net over submission by 39,453 kWh per annum Potential impact: High Actual impact: Medium Audit history: Once Controls: Moderate Breach risk rating: 4
Audit risk rating	**Rationale for audit risk rating**
Medium	The controls are rated as moderate, because they are sufficient to ensure that lamp information is correctly recorded most of the time but there are still some errors. The impact is assessed to be medium, based on the kWh differences described above.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact will assist DCC in identifying and updating these incorrect values and attributes within the DUML database	Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	

2.2. ICP identifier and items of load (Clause 11(2)(a) and (aa) of Schedule 15.3)

Code reference

Clause 11(2)(a) and (aa) of Schedule 15.3

Code related audit information

The DUML database must contain:

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

Audit observation

The database was checked to confirm the correct ICP was recorded against each item of load.

Audit commentary

All items of load have an ICP recorded against them.

Audit outcome

Compliant

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

Code reference

Clause 11(2)(b) of Schedule 15.3

Code related audit information

The DUML database must contain the location of each DUML item.

Audit observation

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

Audit commentary

The database contains fields for the street address and also GPS coordinates. There are five records that do not have coordinates but in all cases the item of load can be located by the address.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

The DUML database must contain:

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

Audit observation

The database was checked to confirm it contained a field for lamp type and wattage capacity and included any ballast or gear wattage and that each item of load had a value recorded in these fields.

Audit commentary

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

I found some errors with the data as follows:

- 248 Incandescent lights have ballast wattage recorded and incandescent lights don't have ballasts. If the lamp make is correct then over submission has occurred by 5,458 kWh per annum.
- Six 300 watt halogen lights have ballasts recorded and halogen lights don't have ballasts. If the lamp make is correct then over submission has occurred by 640 kWh per annum.
- 43 45 watt MH Cosmo lights have a 10 watt ballast instead of 5 watts. If the lamp make is correct then over submission has occurred by 1,836 kWh per annum

There is a historic issue present on the Aurora network, related to additional chokes present in some fittings. It is not clear if this matter is still present and I have raised it here for visibility. Text from my previous audit is shown below. This matter was originally raised by Aurora some years ago.

"A further issue in relation to losses for DCC is that there have been additional chokes installed in some streetlights to help minimise ripple signal propagation issues. The DCC area still has some older high frequency ripple plant (1050Hz) and signal propagation issues are more prevalent than with more

modern lower frequency ripple plant. These are published in the "GIS Electrical Data Entry Manual – Street lighting. The additional chokes lead to additional losses, which are accounted for with the gear wattage figures, but newly installed lights do not have the chokes fitted so the gear wattage figures will be over-stated for these fittings. It is unknown which fittings have the chokes and which do not."

The Aurora data is no longer used and the RAMM data does not contain the additional choke information. It is not known whether the chokes exist or not and the upcoming LED rollout will resolve this matter.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.4 With: Clauses 11(2)(c) and (d) of Schedule 15.3 From: 01-Apr-17 To: 30-Apr-18	Three ballast wattage differences in the database, with an overall wattage difference equating to 7,935 kW per annum over submission Potential impact: Medium Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as moderate because they ensure most information is accurate The impact is low based on the annual kWh

Actions taken to resolve the issue	Completion date	Remedial action status
Contact will assist DCC in identifying and updating these incorrect values and attributes within the DUML database	Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	

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 387 items of load on 20th April.

Audit commentary

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

Address	Database Count	Field Count	Count differences	Wattage differences	Comments
AINSLEE PL (NORTH)	5	5	0		
ALLEN RD SOUTH (SH)	1	1	0		
ARMADALE ST (MSI)	7	7	0		
ASHLEY ST (WEST)	2	2	0		
AWA TORU DR (SH)	9	9	0		
BANK RD (WC)	4	4	0		
BARCLAY ST (NORTH)	9	9	0		
BAYFIELD RD (EAST)	1	0	-1		
BEDFORD ST (WEST)	15	15	0	2	2 LEDs recorded as 150 HPS
BEN LOMOND DR (MSI)	14	14	0		
BEN LOMOND/CARNOUSTIE PATH (MSI)	3	3	0		
BERNERA ST (WC)	4	3	-1		
BISHOPS RD (CEN)	3	3	0		
BRUCE ST (WEST)	3	3	0		
BURKES DRIVE (NORTH)	7	7	0		
CALDWELL ST (CEN)	1	1	0		
CARNOUSTIE LANE (MSI)	4	4	0		
CHAPMAN ST (CEN)	1	1	0		
CHARLOTTE ST (CEN)	4	4	0		
CHURCH ST (PC)	1	1	0		
COLLINS ST (WC)	8	9	1		
CONNELL ST (EAST)	14	12	-2		
CRANSTON ST (EAST)	8	8	0		
CUMBERLAND ST O/B - CUMBERLAND NTH RAMP (CEN)	6	6	0		

DUKES RD - WEST (TAI)	8	8	0		
EDWARD ST (GI)	2	2	0		
ELIZABETH AVE (MSI)	5	5	0		
ELLIFFE PLACE (EAST)	7	7	0		
ELM ROW - LINK (CEN)	2	2	0		
ELMWOOD DRIVE (MSI)	8	8	0		
EMERSON ST (GI)	2	2	0		
FREDERICK ST (NORTH)	17	17	0		
FULTON RD - PRIVATE DRV (NORTH)	4	4	0		
GLENBROOK DR (MSI)	3	3	0		
GLENGARRY CUL DE SAC-PRIVATE (MSI)	1	1	0		
GLENLEIGH PLACE	3	3	0		
HALL RD (PC)	14	14	0		
HART ST (WEST)	6	6	0		
HAY ST (TAI)	2	2	0		
HIGHGROVE CUL-DE-SAC (WEST)	2	2	0		
HILL ST (WAITATI) (WC)	1	1	0		
ISLAY ST (NORTH)	2	2	0		
KAMURA RD (WC)	1	1	0		
KINTYRE PLACE (MSI)	3	3	0		
LINDSAY AVE (NORTH)	2	2	0		
MAGNET ST (CEN)	11	11	0		
MAIN SOUTH RD (GI)	14	14	0		
MALCOLM ST SH1 (NORTH)	7	7	0		
MARINE PARADE - NORTH (EAST/R)	8	8	0		
MOODIE ST (EAST)	10	10	0		

OROKONUI RD (WC)	2	2	0		
OTAKI ST (EAST)	16	16	0		
PERTH ST WEST (WC)	1	1	0		
QUEENS/ROSS - PATH (CEN)	3	3	0		
ROSEHILL RD (EAST/R)	2	2	0		
ROTARY PARK CLOSE (EAST)	3	3	0		
SALMOND ST (CEN)	7	7	0		
SH 1 - RS 666-667	2	2	0		
SH 1 - RS 712/0.83-I-OFF	8	8	0		
SH 1 - RS 712/2.15-I-OFF	8	8	0		
SH 1 - RS 715/5.68-D-ON	8	8	0		
SHAND ST- LEFT (GI)	3	3	0		
SHEEN ST (CEN)	1	1	0		
SHOWGATE CRESCENT (TAI)	6	6	0		
SILVER SPRINGS BOULEVARD (TAI)	13	13	0		
SILVER SPRINGS BOULEVARD LOOP - PRIVATE (TAI)	3	3	0		
SILVER SPRINGS FUTURE ROAD B (TAI)	1	1	0		
SMILEY PLACE (MSI)	3	3	0		
SOPER RD (TAI)	5	5	0		
ST ANDREW ST SH88 (NORTH)	6	6	0		
TRENT ST - PRIVATE (TAI)	2	2	0		
VICTORIA RD (STK)	3	3	0		
WILLIS ST (CEN)	2	2	0		
Grand Total	**387**	**384**	**-3**		

The field audit was quite accurate, with a difference of only three lights and two incorrect wattages.

This clause relates to lights in the field not recorded in the database, of which there was only one on Collins street from the field audit. During my analysis, whilst identifying new areas, I discovered Hilltop

Cres was not in the database and it has six 70 watt SON fittings installed. In total under submission would have occurred of 2,481 kWh per annum.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: 01-Apr-17 To: 30-Apr-18	7 lights not recorded in the database leading to under submission by 2,481 kWh per annum Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as moderate because they ensure most information is accurate The impact is low based on the annual kWh

Actions taken to resolve the issue	Completion date	Remedial action status
Contact will assist DCC in identifying and updating these incorrect values and attributes within the DUML database	Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	

2.6. Tracking of load changes (Clause 11(3) of Schedule 15.3)

Code reference

Clause 11(3) of Schedule 15.3

Code related audit information

The DUML database must track additions and removals in a manner that allows the total load (in kW) to be retrospectively derived for any given day.

Audit observation

The process for tracking of changes in the database was examined.

Audit commentary

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

The new connection process contains the following steps:

- Application for connection
- Approval by Council
- Installation of light fittings
- Lighting circuit is livened once COC is completed
- DCC check site and add to RAMM effective from the livening date

The processes were reviewed for new lamp connections and the tracking of load changes due to faults and maintenance. Delta is the maintenance contractor for DCC region for both Delta and OtagoNet Networks. Outage patrols are conducted on a regular basis. Lamp outages are notified to DCC by residents and work requests are made to Delta personnel.

The process for the tracking of load changes is compliant.

Audit outcome

Compliant

2.7. Audit trail (Clause 11(4) of Schedule 15.3)

Code reference

Clause 11(4) of Schedule 15.3

Code related audit information

The DUML database must incorporate an audit trail of all additions and changes that identify:

- *the before and after values for changes*
- *the date and time of the change or addition*
- *the person who made the addition or change to the database*

Audit observation

The database was checked for audit trails.

Audit commentary

The database 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	Dunedin City Council Street Lights
Strata	The databases contain 15,214 items of load in the Dunedin City Council area. The processes for the management of all DCC items of load is the same. I selected the following strata: • Amenity and Parks • New • NZTA • Private Lighting • Streetlighting HWB • Streetlighting OTPO • Streetlighting SDN
Area units	I created a pivot table of the roads in each database and used a random number generator in each spreadsheet to select a total of 73 subunits.
Total items of load	387 items of load were checked.

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

Audit commentary

The database was found to contain some inaccuracies when matched to the published standardised wattage table. These are recorded as non-compliance in **section 2.4**.

The field data was 99.5% of the database data for the sample checked. This will result in estimated over submission of 34,000 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b) From: 01-Apr-17 To: 30-Apr-18	The database accuracy is assessed to be 99.5% indicating an estimated over submission of 34,000 kWh per annum Potential impact: High Actual impact: Medium Audit history: Once Controls: Moderate Breach risk rating: 4
Audit risk rating	**Rationale for audit risk rating**
Medium	The controls are rated as moderate, because they are sufficient to ensure that the database is accurate most of the time. The impact is assessed to be medium, based on the kWh differences described above.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact will assist DCC in identifying and updating these incorrect values and attributes within the DUML database	Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	

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

Code reference

Clause 15.2 and 15.37B(c)

Code related audit information

The audit must verify that:

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

Audit observation

The submission was checked for accuracy for the month the database extract was supplied. This included:

- checking the registry to confirm that the ICP has the correct profile and submission flag
- checking the database extract combined with the burn hours against the submitted figure to confirm accuracy.

Audit commentary

Contact reconciles this DUML load using the HHR profile, in accordance with exemption number 177 discussed in **section 1.1**.

Submissions are based on the database information, with on and off times derived from data logger information.

I checked the March 2018 extract provided by DCC against the submission totals supplied by Contact and found that submission matched the database.

Volume inaccuracy is present due to a small number of database errors, as follows:

Issue	Volume information impact (annual kWh)
248 Incandescent lights have ballast wattage recorded and incandescent lights don't have ballasts.	5,458 over submission
Six 300 watt halogen lights have ballasts recorded and halogen lights don't have ballasts.	640 over submission
43 45 watt MH Cosmo lights have a 10 watt ballast instead of 5 watts.	1,836 over submission
7 lights not recorded in the database.	2,481 under submission
The field data was 99.5% of the database data for the sample checked. This will result in estimated over submission of 34,000 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).	34,000 over submission
Net impact	**39,453 over submission**

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.2 Clause 15.2 and 15.37B(c) From: 01-Apr-17 To: 30-Apr-18	Net over submission by 39,453 kWh per annum Potential impact: High Actual impact: Medium Audit history: Once Controls: Moderate Breach risk rating: 4
Audit risk rating	**Rationale for audit risk rating**
Medium	The controls are rated as moderate, because they are sufficient to ensure that lamp information is correctly recorded most of the time but there are still some errors. The impact is assessed to be medium, based on the kWh differences described above.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact will assist DCC in identifying and updating these incorrect values and attributes within the DUML database	Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	

CONCLUSION

The database is remotely hosted by RAMM Software Ltd. The field work, asset data capture and database population is conducted by Delta contracting. The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the database reporting. The diagram below shows the audit boundary for clarity.

The field audit was undertaken of a statistical sample of 387 items of load on 20th April 2018.

The audit found four non-compliances and makes two recommendations.

Over submission is occurring by approx. 39,453 kWh per annum.

The future risk rating of 13 indicates that the next audit be completed in 12 months.

PARTICIPANT RESPONSE