VERITEK

Electricity Industry Participation Code Audit Report

For

Genesis Energy Limited

Porirua City Council
Distributed Unmetered Load

Prepared by Tara Gannon - Veritek Ltd

Date of Audit: 28/11/17

Date Audit Report Complete: 29/12/17

Executive Summary

This audit of the Porirua City Council (PCC) DUML 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 DUML audits version 1.1, which became effective on 1 June 2017.

Genesis is the retailer for all of PCC's five streetlight ICPs. A RAMM database is held by PCC, who is Genesis Energy's customer. This database is hosted by RAMM Software Limited and is managed by PCC. Reporting from the database is available, and is provided to Wellington Electricity monthly. No data is reported to Genesis.

This audit has concentrated on the accuracy of PCC's RAMM data, which will be used in the long term to provide data to Genesis.

PCC have made improvements to the database since the 2016 audit; all lights now have an owner recorded, and most ICP data has been cleansed and updated. Some issues with missing lamp construction and wattage data remain. These are expected to be resolved by the time the LED upgrade is completed in June 2018.

Database accuracy is difficult to confirm because of the missing lamp construction and wattage data, and I found 75% of the lights checked in the field audit had accurate records.

The future risk rating of 27 indicates that the next audit be completed in 3 months. PCC is intending to complete the LED upgrades and update their entire database by June 2018. This point and Genesis's comments will be taken into consideration with the final recommendation. The matters raised are detailed below:

Porirua CC DUML Audit Page 2 of 21 December 2017

Table of Non-Compliance

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	Incorrect kW information was used to calculate submission information for some months.	Weak	Medium	6	Identified
			Submission against the wrong ICP is occurring for some Aotea subdivision lighting.				
			Under submission is occurring for NZTA lighting.				
ICP identifier	2.2	11(2)(a) of Schedule 15.3	ICP number is missing for 15 items of load.	Moderate	Low	2	Identified
Location of each item of load	2.3	11(2)(b) of Schedule 15.3	One item of load does not have sufficient location information in RAMM recorded to confirm its location.	Strong	Low	1	Identified
Description of load type	2.4	11(2)(c) & (d) of Schedule 15.3	524 items of load have missing or unknown lamp construction information, and zero lamp wattages.	Weak	Low	3	Identified
All load recorded in database	2.5	11(2A) of Schedule 15.3	Five lights were missing from the database, and 73 lights had missing wattage information in the database.	Weak	Low	3	Identified
Tracking of load changes	2.6	11(3) of Schedule 15.3	Christmas lighting is not recorded in RAMM.	Weak	Low	3	Identified
Database accuracy	3.1	15.2	The database contains some inaccurate information.	Weak	Low	3	Identified
Submission accuracy	3.2	15.2	Incorrect kW information was used to calculate submission information for some months.	Weak	Medium	6	Identified
			Submission against the wrong ICP is occurring for some Aotea subdivision lighting.				
			Under submission is occurring for NZTA lighting.				
Future Risk Rati	ing					27	

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

Table of Recommendations

Subject	Section	Recommendation	Description
Deriving submission information	2.1	Use up to date wattage information for submission	Use PCC RAMM database once it is confirmed as accurate and complete.
Description of load type	2.4	Accuracy of ballast wattages	Check the accuracy of ballast wattages once this information is available.

Persons Involved in This Audit:

Auditor:

Tara Gannon Veritek Limited Electricity Authority Approved Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Craig Young	Excellence Leader - Reconciliation	Genesis Energy
Jane Pearson	RAMM Technician	Porirua City Council
Murray Botha	Infrastructure Operational Engineer, Roading	Porirua City Council
Terry Mueller	Senior Asset Engineer, Community and City Infrastructure – Roading	Porirua City Council
Kerry Check	Connections Team Leader	Wellington Electricity

Contents

Execu	utive Summary	2
Table	of Non-Compliance	3
Table	of Recommendations	4
Perso	ns Involved in This Audit:	5
Conte	ents	6
1.	Administrative	7
1.1	List of ICPs	7
1.2	Exemptions from Obligations to Comply With Code (Section 11 of Electricity Industry Act 2010)	7
1.3	Supplier List	7
1.4	Hardware and Software	7
1.5	Breaches or Breach Allegations	8
1.6	Distributed unmetered load audits (Clauses 16A.26 & 17.295F)	8
1.7	Separate distributed unmetered load audit (Clause 16A.8(4))	8
1.8	Summary of Previous Audit	8
1.9	Scope of Audit	9
1.10	Data Transmission (Clause 20 of Schedule 15.2)	9
2.	DUML database requirements	9
2.1	Deriving Submission Information (Clause 11(1) of Schedule 15.3)	9
2.2	ICP Identifier (Clause 11(2)(a) of Schedule 15.3)	10
2.3	Location of Each Item of Load (Clause 11(2)(b) of Schedule 15.3)	11
2.4	Description of Load Type (Clause 11(2)(c) & (d) of Schedule 15.3)	12
2.5	All load recorded in database (Clause 11(2A) of Schedule 15.3)	13
2.6	Tracking of Load Changes (Clause 11(3) of Schedule 15.3)	16
2.7	Audit Trail (Clause 11(4) of Schedule 15.3)	17
3.	Accuracy of DUML database	18
3.1	Database Accuracy (Clause 15.2)	18
3.2	Volume Information Accuracy (Clause 15.2)	19
4.	Conclusions	20
5.	Genesis Comments	21

1. Administrative

1.1 List of ICPs

The following ICP is relevant to the scope of this audit:

ICP	Description	NSP	Profile	No. of items of load
0001255308UN5C4	MASTER ICP PORIRUA CITY COUNCIL- HUTT ROAD	PNI0331		3590
0001256873UNFA3	PORIRUA CITY STREETLIGHTS -NORTHERN	PNI0331		1147
1001102038UN6D0	MASTER ICP PORIRUA CC TRANSIT SH1- PUKERUA BAY	GFD0331		98
1001102039UNA95	MASTER ICP PORIRUA CC TRANSIT SH1	PNI0331		330
0000023024WE5D5	PORIRUA STREETLIGHTS AOTEA (PREVIOUSLY EMBEDDED NETWORK)	TKR0331		315
	·	TOTAL ite	ms of load	5480

1.2 Exemptions from Obligations to Comply With Code (Section 11 of Electricity Industry Act 2010)

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.

Review of current exemptions on the Electricity Authority's website confirmed that there are no exemptions in place relevant to the scope of this audit.

1.3 Supplier List

PCC, Wellington Electricity, Downer, and EMS are considered agents under this clause and Genesis clearly understands that the use of agents does not release them from their compliance obligations.

1.4 Hardware and Software

Presently, the data is stored in Wellington Electricity's Gentrack system. Wellington Electricity confirmed that this is backed up in accordance with standard industry procedures. Access to the Gentrack is secure by way of individual logins. Whilst this data is secure and is still present in the database, it is not actively managed or updated.

Genesis intends to use the RAMM data for reporting, once accuracy is confirmed. The specific module used for DUML is called "SLIMM" which stands for "Streetlighting Inventory Maintenance Management". PCC 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 Distributed unmetered load audits (Clauses 16A.26 & 17.295F)

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.

1.7 Separate distributed unmetered load audit (Clause 16A.8(4))

Retailers must ensure that DUML audits are reported in a separate audit report.

Audit Observation

Genesis have requested Veritek to undertake this streetlight audit.

Audit Commentary

The audit report for this DUML database is separate from other audit reports. Compliance is confirmed.

1.8 Summary of Previous Audit

This is the first audit of the PCC database completed for Genesis.

1.9 Scope of Audit

Genesis is the retailer for all of PCC's five streetlight ICPs. A RAMM database is held by PCC, who is Genesis Energy's customer. This database is hosted by RAMM Software Limited and is managed by PCC. Reporting from the database is available, and is provided to Wellington Electricity monthly. No data is reported to Genesis.

Wellington Electricity's database of streetlight information has not been updated since March 2015, and is not actively maintained.

This audit has concentrated on the accuracy of PCC's RAMM data, which will be used in the long term to provide data to Genesis.

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

The field audit was undertaken of 305 lights using the statistical sampling methodology. The field selection included two population groups:

- Streets where PCC roading was recorded as the lamp owner.
- Streets where an owner other than PCC roading was recorded for some lamps.

1.10 Data Transmission (Clause 20 of Schedule 15.2)

The reporting to Genesis from Wellington Electricity is conducted in a secure manner by way of a password protected spreadsheet.

No database information is reported to Genesis by PCC.

2. DUML database requirements

2.1 Deriving Submission Information (Clause 11(1) of Schedule 15.3)

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

The capacity report contains historic wattage values recorded by Wellington Electricity and is out of date and has not changed since March 2015. This is recorded as non-compliance below. The difference in wattages is difficult to quantify due to some missing model and wattage information in RAMM, and is discussed further in **section 2.4**.

Inaccurate submission due to the use outdated Wellington Electricity database is recorded as non-compliance.

Non-compliance	Description				
Audit Ref: 2.1	Incorrect kW information was used to calculate submission information for some months.				
With: 11(1) of Schedule	Submission against the wrong ICP is occurring for some Aotea subdivision lighting.				
15.3	Under submission is occurring for NZTA lig	ghting.			
	Potential impact: Medium				
	Actual impact: Unknown				
	Audit history: Twice previously				
From: entire audit period	Controls: Weak				
	Breach risk rating: 6				
Audit risk rating	Rationale for audit risk rating				
Medium	Controls are rated as weak, as they are no being reported.	t sufficient to mitiga	te the risk of incorrect data		
	The impact is unable to be confirmed, due to missing data within RAMM, but has been estimated to be medium.				
Actions tal	ken to resolve the issue	Completion date	Remedial action status		
Genesis receive information r	recently to enable billing/settlements.	12/2018	Identified		
Preventative actions taken to ensure no further issues will occur		Completion date			
Genesis has also begun a pro	ocess to rectify any issues relating to this	12/2018			

I repeat the previous audit's recommendation to use PCC's RAMM information as an input to submission, once Genesis is satisfied that the data is accurate and complete.

Subject	Recommendation	Description
Deriving submission information	Use up to date wattage information for submission	Use PCC RAMM database once it is confirmed as accurate and complete.

2.2 ICP Identifier (Clause 11(2)(a) of Schedule 15.3)

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 was recorded against each item of load.

Audit Commentary

The WE database contains the ICP identifiers for each item of load.

PCC has checked and cleansed ICP numbers contained in the RAMM database since the March 2017 audit. The RAMM database is currently missing ICP numbers for 15 items of load (0.2%), and this is recorded as non-compliance below.

Non-compliance	Des	scription				
Audit Ref: 2.2	ICP number is missing for 15 items of load	ICP number is missing for 15 items of load.				
With: Clause 11(2)(a) of	Potential impact: Low					
Schedule 15.3	Actual impact: Low					
	Audit history: None					
	Controls: Moderate					
From: entire audit period	Breach risk rating: 2					
Audit risk rating	Rationale for audit risk rating					
Low	Controls are rated as moderate as significant improvements have been made since the last audit, and almost all items of load have an ICP number recorded.					
	The impact is rated as low, as a very small	number of items of	load are affected.			
Actions tal	ken to resolve the issue	Completion date	Remedial action status			
Genesis receive information recently to enable billing/settlements.		12/2018	Identified			
Preventative actions taken to ensure no further issues will occur		Completion date				
Genesis has also begun a process to rectify any issues relating to this report.		12/2018				

2.3 Location of Each Item of Load (Clause 11(2)(b) of Schedule 15.3)

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

Audit Observation

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

The Wellington Electricity database locations were not re-checked, because the previous two audits found inaccuracy in the database locations, and the database has not been actively managed or updated during the audit period.

Audit Commentary

The Wellington Electricity database contains some inaccurate locations.

The RAMM database contains addresses, displacements and Global Positioning System (GPS) coordinates for each item of load. Users in the office and field can view these locations on a mapping system. The RAMM database contains Global Positioning System (GPS) coordinates for each item of load and users in the office and field can view these locations on a mapping system. This system is viewed as robust; however, there are 15 records with blank coordinates. 14 of these had sufficient

street address and displacement information to determine their location, one only recorded a street name. This is recorded as non-compliance below.

Non-compliance	Des	scription			
Audit Ref: 2.3 With Clause 11(2)(b) of	One item of load does not have sufficient location information in RAMM recorded confirm its location.				
Schedule 15.3	Potential impact: Low				
	Actual impact: Low				
	Audit history: Twice previously				
From: entire audit period	Controls: Strong				
	Breach risk rating: 1				
Audit risk rating	Rationale for audit risk rating				
Low	Controls are rated as strong and the impact as low, because significant improvements have been made since the last audit, and only one exception was identified.				
Actions tal	ken to resolve the issue	Completion date	Remedial action status		
Genesis receive information recently to enable billing/settlements.		12/2018	Identified		
Preventative actions taken to ensure no further issues will occur		Completion date			
Genesis has also begun a process to rectify any issues relating to this report.		12/2018			

2.4 Description of Load Type (Clause 11(2)(c) & (d) of Schedule 15.3)

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

The Wellington Electricity database wattages were not re-checked, because the previous audit found wattage inaccuracies, and the database has not been actively managed or updated during the audit period.

Audit Commentary

The RAMM database contains fields for the rated wattage and the lamp construction in its description.

Lamp construction and wattage information in RAMM was reviewed:

- For 524 lamps in the database, lamp construction was unknown or blank, and lamp wattage was zero.
- Wherever lamp construction was recorded, lamp wattage was correct.

The November 2016 audit found that some ballast wattages were incorrect. Ballast wattage
information was not provided in the RAMM extracts, so it was not possible to recheck this during
the audit. I recommend that the ballast wattages should be reviewed once this information is
available. The Electricity Authority's wattage table was provided to PCC to assist with data
cleansing.

Subject	Recommendation	Description
Description of load type	Accuracy of ballast wattages	Check the accuracy of ballast wattages once this information is available.

PCC explained that an LED upgrade is expected to be completed by the end of June 2018, and all wattages will be checked and updated as part of this process.

Missing and inaccurate data is recorded as non-compliance below.

Non-compliance	Des	scription			
Audit Ref: 2.4 With: Clause 11(2)(c) & (d)	524 items of load have missing or unknown wattages.	n lamp construction	information, and zero lamp		
of Schedule 15.3	Potential impact: Low				
	Actual impact: Unknown				
	Audit history: Three times previously				
From: entire audit period	Controls: Weak				
	Breach risk rating: 3				
Audit risk rating	Rationale for audit risk rating				
Low	Controls are rated as weak, as they are not sufficient to mitigate the risk of incomplete or inaccurate information being recorded.				
	The impact is unable to be accurately assessed, because the correct lamp information is unavailable. It is estimated to be low.				
Actions tal	ken to resolve the issue	Completion date	Remedial action status		
Genesis receive information r	recently to enable billing/settlements.	12/2018	Identified		
Preventative actions taker	n to ensure no further issues will occur	Completion date			
Genesis has also begun a process to rectify any issues relating to this report.					

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

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 305 lights from RAMM using the statistical sampling methodology.

A sample of lights from the Wellington Electricity database was not re-checked, because the previous audit found inaccuracies, and the database has not been actively managed or updated during the audit period.

Audit Commentary

The field audit findings are detailed in the table below:

Street	Database	Field	Light	Wattage	Comments
	count	count	count	recorded	
			differences	incorrectly	
ABEL GLEN	3	3	-	-	
ADVENTURE DR	10	10	-	-	
ASPIRING TERRACE	10	8	2	-	Two 70W lamps missing
AWARUA ST	20	20	-	-	
BEAUMARIS CRESCENT	9	9	-	-	
BODMIN TERRACE	11	11	-	-	
CONCLUSION STREET	32	32	-	1	The lamps for 45 and 64 Conclusion St appear transposed in the database. One lamp had missing wattage and construction information, and appears to be 70W.
DORNOCH PLACE	4	4	-	-	
EXCELLENCY TERRACE	7	7	-	-	
JOSEPH BANKS DRIVE	30	30	-	-	
LATITUDE CLOSE	8	8	-	2	Two lamps had missing wattage and construction information, and appear to be 70W.
NOHORUA STREET	4	4	-	-	
PASCOE AVE WEST (PCC Parks)	6	6	-	-	
PENSILVA CLOSE	2	2	-	-	
PLIMMERTON DRIVE	6	6	-	-	
SEA VISTA DRIVE	14	14	-	-	
SPINNAKER DRIVE	34	34	-	-	
SPINNAKER DRIVE (PCC Parks)	8	8	-	-	
SPINNAKER DRIVE NORTHSIDE	3	3	-	1	One lamp had missing wattage and construction information, and appears to be 70W.
STATE HIGHWAY NO. 1 (AIRLIE ROAD INTERSECTION)	45	45	-	45	All lamps had missing wattage and construction information. It was difficult to confirm wattages.

Street	Database count	Field count	Light count	Wattage recorded	Comments
			differences	incorrectly	
STATE HIGHWAY NO. 58 (PAUATAHANUI ROUNDABOUT)	24	24	-	24	All lamps had missing wattage and construction information. It was difficult to confirm wattages.
TE ARA ROAD	2	2	-	-	
TE MOTU ROAD	6	6	-	-	
WHITEHOUSE ROAD	7	4	3	-	Three lamps were unable to be located. Some other lamps were present, but I was unable to match the data to RAMM.
Total	305	300	5	73	

Database accuracy was difficult to assess due to missing information in RAMM, and wattages which could not be confirmed during the field audit. Approximately 75% of the lights checked had accurate records in the database.

The light count and wattage differences are recorded as non-compliance.

Non-compliance	Description			
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3	Five lights were missing from the database, and 73 lights had missing wattage information in the database. Potential impact: Low Actual impact: Unknown Audit history: Twice previously Controls: Weak			
From: entire audit period	Breach risk rating: 3			
Audit risk rating	Rationale for audit risk rating			
Low	Controls are rated as weak, as they are not sufficient to mitigate the risk of incorrect data being reported. The impact is unable to be confirmed, due to some missing data within RAMM and wattages which were unable to be confirmed in the field. It has been estimated to be low.			
Actions taken to resolve the issue		Completion date	Remedial action status	
Genesis receive information r	recently to enable billing/settlements.	12/2018	Identified	
Preventative actions taker	n to ensure no further issues will occur	Completion date		
Genesis has also begun a process to rectify any issues relating to this report.		12/2018		

2.6 Tracking of Load Changes (Clause 11(3) of Schedule 15.3)

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 RAMM database was examined.

The Wellington Electricity database has not been actively managed or updated during the audit period, so processes were not assessed.

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 production of a monthly "snapshot" report is sufficient to achieve compliance.

The processes were reviewed for new lamp connections and the tracking of load changes due to faults and maintenance.

All fault and maintenance work is conducted by Downer and the database is updated using pocket RAMM. The monthly outage patrols also involve a check of database accuracy.

New connections cannot be connected without approval from PCC, and no issues with new connections were identified during the audit.

The 2016 audit found that Christmas lighting was physically installed in Porirua but the data does not appear to be in either database. Christmas lights are treated as new connections in the database, and all will be recorded by the end of PCC's financial year.

Non-compliance	Description		
Audit Ref: 2.6	Christmas lighting is not recorded in RAMM.		
With: Clause 11(3) of	Potential impact: Low		
Schedule 15.3	Actual impact: Low		
	Audit history: Twice previously		
	Controls: Weak		
From: entire audit period	Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as weak, as they are not sufficient to mitigate the risk of incorrect Christmas light data being recorded.		
	The impact is estimated to be low.		

Porirua CC DUML Audit Page 16 of 21 December 2017

Actions taken to resolve the issue	Completion date	Remedial action status
Genesis receive information recently to enable billing/settlements.	12/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Genesis has also begun a process to rectify any issues relating to this report.	12/2018	

2.7 Audit Trail (Clause 11(4) of Schedule 15.3)

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 databases were checked for audit trails.

Audit Commentary

Gentrack contains an audit trail of all changes. RAMM also contains an audit trail of all changes.

Compliance is confirmed.

3. Accuracy of DUML database

3.1 Database Accuracy (Clause 15.2)

The Audit must verify that the information recorded in the retailer's DUML database is complete and accurate.

Audit Observation

The audit findings were used to determine if the information contained in the database is complete and accurate.

The Wellington Electricity database's accuracy was not re-checked, because the previous audit found inaccuracies, and the database has not been actively managed or updated during the audit period.

Audit Commentary

The RAMM database contains some missing and inaccurate information.

The inaccuracy primarily relates to missing lamp construction and wattage information, as discussed in **section 2.4**. Where full information was recorded, it was generally found to be accurate when compared to the Electricity Authority's wattage table and the lamps present in the field. Ballast wattage information was not provided in the RAMM extracts, so it was not possible to recheck this during the audit.

The inaccurate database information is recorded as non-compliance below.

Non-compliance	Description				
Audit Ref: 3.1	The database contains some inaccurate information.				
With: Clause 15.2	Potential impact: Low	Potential impact: Low			
	Actual impact: Unknown	Actual impact: Unknown			
	Audit history: Twice previously				
From: entire audit period	Controls: Weak				
	Breach risk rating: 3				
Audit risk rating	Rationale for audit risk rating				
Low	Controls are rated as weak, as they are not sufficient to mitigate the risk of incomplete or inaccurate information being recorded.				
	The impact is unable to be accurately assessed, because the correct lamp information is unavailable. It is estimated to be low.				
Actions taken to resolve the issue		Completion date	Remedial action status		
Genesis receive information r	recently to enable billing/settlements.	12/2018	Identified		
Preventative actions taken to ensure no further issues will occur		Completion date			
Genesis has also begun a process to rectify any issues relating to this report.		12/2018			

Porirua CC DUML Audit Page 18 of 21 December 2017

3.2 Volume Information Accuracy (Clause 15.2)

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

Audit Commentary

The capacity report contains historic wattage values recorded by Wellington Electricity and is out of date and has not changed since March 2015. This is recorded as non-compliance below. The difference in wattages is difficult to quantify due to some missing model and wattage information in RAMM, and is discussed further in **section 2.4**.

Inaccurate submission due to the use outdated Wellington Electricity database is recorded as non-compliance.

Non-compliance	Description			
Audit Ref: 3.2	Incorrect kW information was used to calculate submission information for some months.			
With: Clause 15.2	Submission against the wrong ICP is occurring for some Aotea subdivision lighting.			
	Under submission is occurring for NZTA lighting.			
	Potential impact: Medium			
From: entire audit period	Actual impact: Unknown			
	Audit history: Twice previously			
	Controls: Weak			
	Breach risk rating: 6			
Audit risk rating	Rationale for audit risk rating			
Medium	Controls are rated as weak, as they are not sufficient to mitigate the risk of incorrect data being reported.			
	The impact is unable to be confirmed, due to some missing data within RAMM but has been estimated to be medium.			
Actions taken to resolve the issue		Completion date	Remedial action status	
Genesis receive information recently to enable billing/settlements.		12/2018	Identified	
Preventative actions taken to ensure no further issues will occur		Completion date		
Genesis has also begun a process to rectify any issues relating to this report.		12/2018		

Porirua CC DUML Audit Page 19 of 21 December 2017

4. Conclusions

A RAMM database is held by PCC, who is Genesis Energy's customer. This database is hosted by RAMM Software Limited and is managed by PCC. Reporting from the database is available, and is provided to Wellington Electricity monthly. No data is reported to Genesis.

This audit has concentrated on the accuracy of PCC's RAMM data, which will be used in the long term to provide data to Genesis.

PCC have made improvements to the database since the 2016 audit; all lights now have an owner recorded, and most ICP data has been cleansed and updated. Some issues with missing lamp construction and wattage data remain. These are expected to be resolved by the time the LED upgrade is completed in June 2018.

Database accuracy is difficult to confirm because of the missing lamp construction and wattage data, and I found 75% of the lights checked in the field audit had accurate records.

The future risk rating of 27 indicates that the next audit be completed in 3 months. PCC is intending to complete the LED upgrades and update their entire database by June 2018. This point and Genesis's comments will be taken into consideration with the final recommendation.

Tonron

Tara Gannon
Veritek Limited
Electricity Authority Approved Auditor

5. Genesis Comments

Genesis Energy at the time the audit was completed was not the trader. Meridian have supplied the audit for Genesis to meet its requirements as the audit would not be completed by required date June 1st. Genesis after receiving this audit have already begun working with the database administrator to amend the outlined exceptions in this audit.