ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTED UNMETERED LOAD AUDIT REPORT

For

NZTA ASHBURTON AND TRUSTPOWER LIMITED

Prepared by: Tara Gannon

Date audit commenced: 7 April 2019

Date audit report completed: 22 May 2019

Audit report due date: 1 June 2019

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EXECUTIVE SUMMARY

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

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

The audit scope is limited to NZTA ICPs 0000033381EAF01 and 0000033382EA3C1 which are currently supplied by Trustpower. These were expected to switch with the other ADC's DUML ICPs from Trustpower to Meridian effective from 01/04/19 but have not hence they are subject to a separate audit.

Trustpower met with NZTA's regional manager on 27/05/19 and confirmed that NZTA are negotiating with Meridian to switch these two ICPs so that all the DUML load in the Ashburton area is kept together.

A RAMM database is held by ADC. **Electricity Ashburton (EA Networks)** are responsible for new connections, fault, maintenance and upgrade work, and maintain the database. ADC also works with EA Networks to complete some RAMM updates, particularly where new streetlight types are entered or bulk updates occur for LED upgrades.

A monthly report from the database is provided to Trustpower, and used to calculate submissions. Trustpower submits the DUML load as NHH using the STL profile. The on and off times are derived from data logger information. The profile and submission flags are correctly recorded on the registry.

Four non-compliances were identified, and one recommendation was raised. The future risk rating of 12 indicates that the next audit be completed in 12 months. It appears likely that these ICPs will switch to Meridian prior to this, and I recommend that the next audit date is aligned with the Ashburton DC DUML.

The matters raised are detailed below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Deriving submission information	2.1	11(1) of Schedule 15.3	The database contains some inaccurate data. An incorrect kW value was applied for the April 2019 submission for ICP0000033382EA3C1 resulting in under reporting of 21.59 kWh.	Weak	Low	3	Investigating
All load recorded in database	2.5	Clause 11(2A) of Schedule 15.3	Festive and decorative lights are not recorded in the database.	Weak	Low	3	Cleared
Database accuracy	3.1	15.2 and 15.37B(b)	The database contains some inaccurate data.	Weak	Low	3	Investigating
Volume information accuracy	3.2	15.2 and 15.37B(c)	The database contains some inaccurate data. An incorrect kW value was applied for the April 2019 submission for ICP0000033382EA3C1 resulting in under reporting of 21.59 kWh.	Weak	Low	3	Investigating
Future Risk Ra	ting			•	•		12

Future risk rating	0	1-4	5-8	9-15	16-18	19+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Description	Recommendation
All load recorded in database	2.5	Festive lights	Confirm the wattages for festive and decorative lights, and update RAMM.
			Communicate on and off dates for festive and decorative lights to Meridian.

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

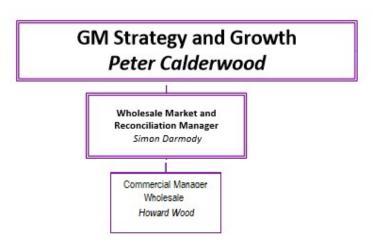
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

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:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Other personnel assisting in this audit were:

Name	Title	Company
Robbie Diederen	Reconciliation Analyst	Trustpower
Deborah Barron	Asset Management Officer – Transportation	Ashburton District Council

Name	Title	Company
Wayne Watson	Overhead Manager	Electricity Ashburton

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".

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

The audit scope is limited to NZTA ICPs 0000033381EAF01 and 0000033382EA3C1 which are currently supplied by Trustpower. ADC's DUML ICPs switched from Trustpower to Meridian effective from 01/04/19, and are subject to a separate audit.

ICP Number	Description	NSP	Profile	Number of items of load	Database wattage (watts)
0000033381EAF01	NZTA Methven	ASB0331	STL	55	6471
0000033382EA3C1	NZTA not Methven	ASB0331	STL	383	64137
0000010559EAD7C	Ashburton District Council – Streetlighting	ASB0331	DST	27	5778
0000025163EA218	Ashburton District Council – Streetlighting	ASB0331	DST	2929	181922
0000025164EAFD2	Open Spaces - Parks and Amenities	ASB0331	DST	93	7845
0000030218EA553	Methven	ASB0661	DST	27	961

The database also includes:

- metered lights connected to ICPs 0000017831EA1F0 and 0000024967EA2BF;
- a small number of lights connected to 0000029898EAE52 and 0000030904EAFEE, which are validly treated as standard unmetered load;
- 000000000EAXXX which is used to track lights which are installed but not yet live; and
- 000000000EAZZZ which is used to track lights with unknown owners.

These additional ICPs are outside of the scope of the audit except 000000000EAZZZ, which is discussed further in **section 2.2**.

1.7. Authorisation Received

All information was provided directly by Trustpower, ADC and Electricity Ashburton.

1.8. Scope of Audit

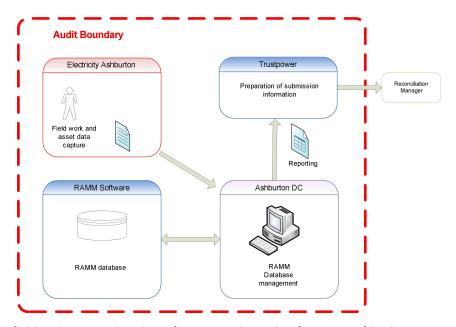
This audit of the ADC DUML database and processes was conducted at the request of Trustpower in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied. The audit was conducted in accordance with the audit guidelines for DUML audits version 1.1.

The audit scope is limited to NZTA ICPs 0000033381EAF01 and 0000033382EA3C1 which are currently supplied by Trustpower. These were expected to switch with the other ADC's DUML ICPs from Trustpower to Meridian effective from 01/04/19 but have not hence they are subject to a separate audit.

A RAMM database is held by ADC. EA Networks are responsible for new connections, fault, maintenance and upgrade work, and maintain the database. ADC also works with EA Networks to complete some RAMM updates, particularly where new streetlight types are entered or bulk updates occur for LED upgrades.

A monthly report from the database is provided to Trustpower, and used to calculate submissions. Trustpower submits the DUML load as NHH using the STL profile. The on and off times are derived from data logger information. The profile and submission flags are correctly recorded on the registry.

The scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information based on the monthly reporting. The diagram below shows the flow of information and the audit boundary for clarity.



The field audit was undertaken of a statistical sample of 25 items of load on 7-9 April 2019.

1.9. Summary of previous audit

The previous audit was completed for Trustpower in March 2018 by Rebecca Elliot of Veritek Limited. Five non-compliances were found, and two recommendations were made. The status of the non-compliances and recommendations are detailed below:

Subject	Section	Clause	Non-compliance	Status
Deriving submission	2.1	11(1) of Schedule 15.3	Under submission of 15.04 kWh per month due to the rounding of the unmetered load kW figure to the nearest whole number. Accuracy ratio is 100.21% indicating under submission of 3,178 kWh per annum. 625 items of load with the incorrect ballast applied indicating under submission of 5,901 kWh per annum. Combined value of 9,079 kWh under submitted per annum.	Still existing, there is still a difference between the database and applied kW Still existing, some database inaccuracies are present
Recording of all load	2.5	11(2A) of Schedule 15.3	2 lights not found in the field.	Still existing, some load is not recorded in the database
Tracking of load change	2.6	11(3) of Schedule 15.3	Methven festival lights are not included in reporting to Trustpower.	Still existing, recorded in section 2.5
Database accuracy	3.1	Clause 15.2 & 15.37(b)	Accuracy ratio is 100.21% indicating under submission of 3,178 kWh per annum. 625 items of load with the incorrect ballast applied indicating under submission of 5,901 kWh per annum. Combined value of 9,079 kWh under submitted.	Still existing, some database inaccuracies are present

Subject	Section	Clause	Non-compliance	Status
Volume information accuracy	3.2	Clause 15.2 & 15.37(c)	Under submission of 15.04 kWh per month due to the rounding of the unmetered load kW figure to the nearest whole number. Accuracy ratio is 100.21% indicating under submission of 3,178 kWh per annum. 625 items of load with the incorrect ballast applied indicating under submission of 5,901 kWh per annum. Combined value of 9,079 kWh under submitted per annum.	Still existing, there is still a difference between the database and applied kW Still existing, some database inaccuracies are present

Subject	Section	Recommendation	Description	Status
Data transmission	1.10	20 of schedule 15.2	Add password protection to the monthly report.	Not implemented
Tracking of load change	2.6	11(3) of schedule 15.3	Field check that the light type provided in the as builts is what is installed in the field.	Cleared

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. Compliance is confirmed.

The audit scope is limited to NZTA ICPs 0000033381EAF01 and 0000033382EA3C1 which are currently supplied by Trustpower. These were expected to switch with the other ADC's DUML ICPs from

Trustpower to Meridian effective from 01/04/19 but have not hence they are subject to a separate audit.

Trustpower met with NZTA's regional manager on 27/05/19 and confirmed that NZTA are negotiating with Meridian to switch these two ICPs so that all the DUML load in the Ashburton area is kept together.

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 Trustpower, and used to calculate submissions. Trustpower submits the DUML load as NHH using the STL profile. The on and off times are derived from data logger information. The profile and submission flags are correctly recorded on the registry.

I checked the April 2019 submission data for both ICPs against the RAMM information and on hours. I confirmed that the calculation process was correct but found that an incorrect kW value was applied for ICP 0000033382EA3C1 resulting in under submission of 21.59 kWh. This is recorded as non-compliance below.

ICP	kW applied April 2019	kW in database extract April 2019	kW difference April 2019	kWh difference April 2019
0000033382EA3C1	63.969 kW	64.024 kW	0.055 kW	21.59 kWh
0000033381EAF01	6.574 kW	6.574 kW	-	-

The review of database accuracy in **section 3.1** found that the best available estimate indicates that the database is accurate within ±5%.

Some volume inaccuracy is present as follows:

Issue	Estimated volume information impact (annual kWh)
One lamp had an incorrect gear wattages recorded, and was corrected during the audit.	Under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).
Festive and decorative lights are unmetered, but are not recorded in RAMM.	Unknown volume of under submission.

Audit outcome

Non-compliant

Non-compliance	Description			
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3	One lamp had an incorrect gear wattage recorded, and was corrected during the audit. The error resulted in under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).			
	Festive and decorative lights are unmetered, but are not recorded in RAMM.			
	An incorrect kW value was applied for ICP0000033382EA3C1 resulting in un	•		
	Potential impact: Low			
From: unknown	Actual impact: Unknown			
To: 09-Apr-19	Audit history: Once			
,	Controls: Weak			
	Breach risk rating: 3			
Audit risk rating	Rationale for audit risk rating			
Low	The controls are rated as weak, beca that database wattage is accurate.	use they are not	t sufficient to ensure	
	The impact is assessed to be low based on the wattage differences described above.			
Actions taken to resolve the issue Completion Remedial date state				
Have discussed with ADC about this issue		29 th May	Investigating	
Preventative actions to	aken 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 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 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

All NZTA items of load have GPS coordinates and street addresses recorded.

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 that it contained a field for lamp type and wattage capacity and included any ballast or gear wattage.

Audit commentary

All items of load have a lamp model, lamp wattage and gear wattage populated. The accuracy of the recorded 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 25 items of load on 7-9 April 2019.

Audit commentary

The field audit did not identify any discrepancies.

Methven festival lights and other festive lights are connected to the streetlight circuits when operating, but are not recorded in RAMM. The number and wattage of these lights is unknown. This is recorded as non-compliance in **section 2.1**, **3.1** and **3.2**.

Description	Recommendation	Audited party comment	Remedial action
Festive lights	Confirm the wattages for festive and decorative lights, and update RAMM.	Festive lights are ADC lights and not NZTA	Cleared
	Communicate on and off dates for festive and decorative lights to Trustpower.		

Audit outcome

Non-compliant

Non-compliance	Description			
Audit Ref: 2.5	Festive and decorative lights are not recorded in the database.			
With: Clause 11(2A)	Potential impact: Low			
of Schedule 15.3	Actual impact: Low			
	Audit history: None			
From: unknown	Controls: Weak	Controls: Weak		
To: 09-Apr-19	Breach risk rating: 3			
Audit risk rating	Rationale for audit risk rating			
Low	Controls are rated as weak, because festive lights are currently excluded from the database.			
	The impact is expected to be low, because only festive and decorative lights are affected.			
Actions taken to resolve the issue Completion Remedial action date status				
Festive lights are ADC li	estive lights are ADC lights and not NZTA 29 th May Cleared			

Preventative actions taken to ensure no further issues will occur	Completion date
Confirmed with ADC so they will be covered by ADC ICPs	29 th May

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 20th 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.

Database changes

Processes to track changes to the database were reviewed.

EA Networks are responsible for new connections, fault, maintenance and upgrade work, and maintain the database. ADC also works with EA Networks to complete some RAMM updates, particularly where new streetlight types are entered or bulk updates occur for LED upgrades.

EA Networks completes new connections once they are approved by ADC and EA Networks, and updates RAMM. As recommended in the last audit, a check is now completed to ensure that streetlight data is verified before RAMM is updated. ICP 0000000000EAXXX is used to track lights which are not yet livened, and once the lights become live they are moved to the correct ICP. This ICP is correctly excluded from submission data.

Outage patrols are completed by EA Networks as part of their maintenance agreement with ADC. Outages are also reported by residents within the ADC region and work orders are raised with EA Networks as required.

Festive lights

Methven festival lights are connected to the streetlight circuits in Methven during winter and at Christmas time. Festive lights are occasionally connected in other locations, including East Street in Ashburton. These lights were not connected this year.

Methven festival lights and other festive lights are not recorded in RAMM. The number and wattage of these lights is unknown, but is expected to be low. This is recorded as non-compliance in **sections 2.1**, **2.5**, **3.1** and **3.2**. ADC intends to discuss processes for these lights with Trustpower.

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	Streetlights in the Ashburton region
Strata	The database contains 93 items of load located in the Ashburton region owned by NZTA. The management process is the same for all lights, and one stratum was created.
Area units	I created a pivot table of the roads in the stratum, and I used a random number generator in a spreadsheet to select a total of two sub-units making up 6% of the total database wattage.
Total items of load	25 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 field audit found the database to be highly accurate, no lamp count or type differences were identified.

Wattage accuracy – comparison to specifications

The database was checked against the published standardised wattage table, and manufacturer's specifications where available.

I identified one lamp with a gear wattage discrepancy, which was corrected to the expected values during the audit. The error resulted in under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).

Lamp Model	Quantity	Recorded gear wattage	Expected gear wattage	Difference (W)
SON 100w	1	11	14	3

Wattage accuracy - festival and festive lights

Methven festival lights are connected to the streetlight circuits in Methven during winter and at Christmas time. Festive lights are occasionally connected in other locations, including East Street in Ashburton. These lights were not connected this year.

Methven festival lights and other festive lights are not recorded in RAMM. The number and wattage of these lights is unknown, but is expected to be low.

Audit outcome

Non-compliant

Non-compliance	Description			
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b)	One lamp had an incorrect gear wattage recorded, and was corrected during the audit. The error resulted in under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).			
	Festive and decorative lights are unmetered, but are not recorded in RAMM.			
	Potential impact: Low			
	Actual impact: Unknown			
	Audit history: Once			
From: unknown	Controls: Weak			
To: 09-Apr-19	Breach risk rating: 3			
Audit risk rating	Rationale for	audit risk rating	S	
Low	The controls are rated as weak, beca that database wattage is accurate.	use they are not	sufficient to ensure	
	The impact is assessed to be low based on the wattage differences described above.			
Actions taken to resolve the issue Completion Remedial act date status				
Discussed with ADC		29 th May	Investigating	
Preventative actions to	Preventative actions taken to ensure no further issues will occur			

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

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 Trustpower, and used to calculate submissions. Trustpower submits the DUML load as NHH using the STL profile. The on and off times are derived from data logger information. The profile and submission flags are correctly recorded on the registry.

I checked the April 2019 submission data for both ICPs against the RAMM information and on hours. I confirmed that the calculation process was correct but found that an incorrect kW value was applied for ICP 0000033382EA3C1 resulting in under submission of 21.59 kWh. This is recorded as non-compliance below.

ICP	kW applied April 2019	kW in database extract April 2019	kW difference April 2019	kWh difference April 2019
0000033382EA3C1	63.969 kW	64.024 kW	0.055 kW	21.59 kWh
0000033381EAF01	6.574 kW	6.574 kW	-	-

The review of database accuracy in **section 3.1** found that the best available estimate indicates that the database is accurate within ±5%.

Some volume inaccuracy is present as follows:

Issue	Estimated volume information impact (annual kWh)
One lamp had an incorrect gear wattages recorded, and was corrected during the audit.	Under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).
Festive and decorative lights are unmetered, but are not recorded in RAMM.	Unknown volume of under submission.

Audit outcome

Non-compliant

Non-compliance	Description			
Audit Ref: 3.2 With: Clause 11(1) of Schedule 15.3	One lamp had an incorrect gear wattage recorded, and was corrected during the audit. The error resulted in under submission of 3W or 13 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).			
	Festive and decorative lights are unmetered, but are not recorded in RAMM.			
	An incorrect kW value was applied for the April 2019 submission for ICP0000033382EA3C1 resulting in under reporting of 21.59 kWh.			
	Potential impact: Low			
From: unknown	Actual impact: Unknown			
To: 09-Apr-19	Audit history Onco			
	Controls: Weak			
	Breach risk rating: 3			
Audit risk rating	Rationale for audit risk rating			
Low	The controls are rated as weak, beca that database wattage is accurate.	use they are not	sufficient to ensure	
	The impact is assessed to be low basidescribed above.	ed on the watta	ge differences	
Actions taken to resolve the issue Completion Remedial action date status				
Discussed with ADC		29 th May	Investigating	
Preventative actions to	aken to ensure no further issues will occur	Completion date		

CONCLUSION

The audit scope is limited to NZTA ICPs 0000033381EAF01 and 0000033382EA3C1 which are currently supplied by Trustpower. These were expected to switch with the other ADC's DUML ICPs from Trustpower to Meridian effective from 01/04/19 but have not hence they are subject to a separate audit.

A RAMM database is held by ADC. **Electricity Ashburton (EA Networks)** are responsible for new connections, fault, maintenance and upgrade work, and maintain the database. ADC also works with EA Networks to complete some RAMM updates, particularly where new streetlight types are entered or bulk updates occur for LED upgrades.

A monthly report from the database is provided to Trustpower, and used to calculate submissions. Trustpower submits the DUML load as NHH using the STL profile. The on and off times are derived from data logger information. The profile and submission flags are correctly recorded on the registry.

Four non-compliances were identified, and one recommendation was raised. The future risk rating of 12 indicates that the next audit be completed in 12 months. It appears likely that these ICPs will switch to Meridian prior to this, and I recommend that the next audit date is aligned with the Ashburton DC DUML.

PARTICIPANT RESPONSE

Trustpower has reviewed this report and their comments are contained within its body.