

ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

The logo for Veritek features the word "VERITEK" in a blue, serif font. A vertical blue line is positioned to the left of the text, and a horizontal blue line is positioned below the text, intersecting at the letter 'V'.

For

WESTERN BAY OF PLENTY DISTRICT
COUNCIL
AND TRUSTPOWER LIMITED

Prepared by: Rebecca Elliot

Date audit commenced: 11 February 2019

Date audit report completed: 22 March 2019

Audit report due date: 01-Apr-19

TABLE OF CONTENTS

| | |
|---|----|
| Executive summary | 3 |
| Audit summary | 4 |
| Non-compliances | 4 |
| Recommendations | 5 |
| Issues 5 | |
| 1. Administrative | 6 |
| 1.1. Exemptions from Obligations to Comply with Code | 6 |
| 1.2. Structure of Organisation | 6 |
| 1.3. Persons involved in this audit..... | 7 |
| 1.4. Hardware and Software | 7 |
| 1.5. Breaches or Breach Allegations..... | 7 |
| 1.6. ICP Data | 7 |
| 1.7. Authorisation Received | 7 |
| 1.8. Scope of Audit | 8 |
| 1.9. Summary of previous audit | 9 |
| 1.10. Distributed unmetered load audits (Clause 16A.26 and 17.295F)..... | 9 |
| 2. DUML database requirements..... | 11 |
| 2.1. Deriving submission information (Clause 11(1) of Schedule 15.3) | 11 |
| 2.2. ICP identifier and items of load (Clause 11(2)(a) and (aa) of Schedule 15.3) | 12 |
| 2.3. Location of each item of load (Clause 11(2)(b) of Schedule 15.3) | 13 |
| 2.4. Description and capacity of load (Clause 11(2)(c) and (d) of Schedule 15.3) | 13 |
| 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) | 15 |
| 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 and 15.37B(b)) | 18 |
| 3.2. Volume information accuracy (Clause 15.2 and 15.37B(c)) | 20 |
| Conclusion | 22 |
| Participant response | 23 |

EXECUTIVE SUMMARY

This audit of the Western Bay of Plenty District Council (**WBOP DC**) DUMML 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 DUMML audits version 1.1.

A RAMM database is managed by Westlink on behalf of WBOP DC and monthly reporting is provided to Trustpower. The field work is carried out by Horizon.

Westlink have good processes in place to manage the database. The field audit indicates that the database accuracy is within the acceptable range of accuracy. The process to add new lights indicates that the information is slow to reach Westlink and for these to get added to RAMM. The 34 new lights identified missing from the database in the last audit (nine months ago) were checked and these lights are still to be added. When new lights are added to the database, Westlink's contract does not require them to be added until the 20th of the month following. them being advised. This will result in a further month of no submission for the new lights. I also repeat the recommendation from the last audit that Trustpower, WBOP DC work with Powerco to determine the most effective process to ensure volumes associated with new street light circuits are being reconciled.

The audit found four non-compliances and makes one recommendation. The future risk rating of 17 indicates that the next audit be completed in 12 months. I have considered this in conjunction with Trustpower's responses and I agree with this recommendation. 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 | New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh. | Weak | Low | 3 | Investigating |
| All load recorded in database | 2.5 | 11(2A) of Schedule 15.3 | One additional light found in the field audit. 34 lights electrically connected but not recorded in the database. | Weak | Low | 3 | Identified |
| Database accuracy | 3.1 | 15.2 and 15.37B(b) | New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh. | Weak | Low | 3 | Investigating |
| Volume information accuracy | 3.2 | 15.2 and 15.37B(c) | New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh. | Weak | Low | 3 | Investigating |
| Future Risk Rating | | | | | | 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 | Recommendation | Description |
|-------------------------|---------|--|---|
| Tracking of load change | 2.6 | Liaise with Powerco to determine the most effective process to ensure the volumes associated with new subdivision streetlights are reconciled. | Currently negotiating new process with Powerco/Tga CC first. Will then instruct |

ISSUES

| Subject | Section | Description | Issue |
|---------|---------|-------------|-------|
| | | Nil | |

1. ADMINISTRATIVE

1.1. Exemptions from Obligations to Comply with Code

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

Audit observation

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

Audit commentary

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

1.2. Structure of Organisation

Trustpower provided a copy of their organisational structure.



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

Other personnel assisting in this audit were:

| Name | Title | Company |
|-----------------|-------------------------|--------------|
| Paul Anderson | Asset Management Leader | Westlink BOP |
| Phillip Barnes | Maintenance Manager | Westlink BOP |
| Robbie Diederer | Reconciliation Analyst | Trustpower |

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”.

Westlink 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) |
|-----------------|----------------------------|---------|-------------------------|--------------------------|
| 0001264707UN697 | Mount Maunganui/Papamoa | STL | 76 | 10,560 |
| 1000524996PC530 | Welcome Bay/Ohauti/Hairini | STL | 21 | 2,145 |
| 1000524997PC975 | Tauranga City | STL | 4 | 417 |
| 1000524998PC6AB | North of Tauranga | STL | 910 | 80,364 |
| 1000524999PCAEE | Te Puke area | STL | 1,006 | 100,493 |
| TOTAL | | | 2,010 | 193,979 |

1.7. Authorisation Received

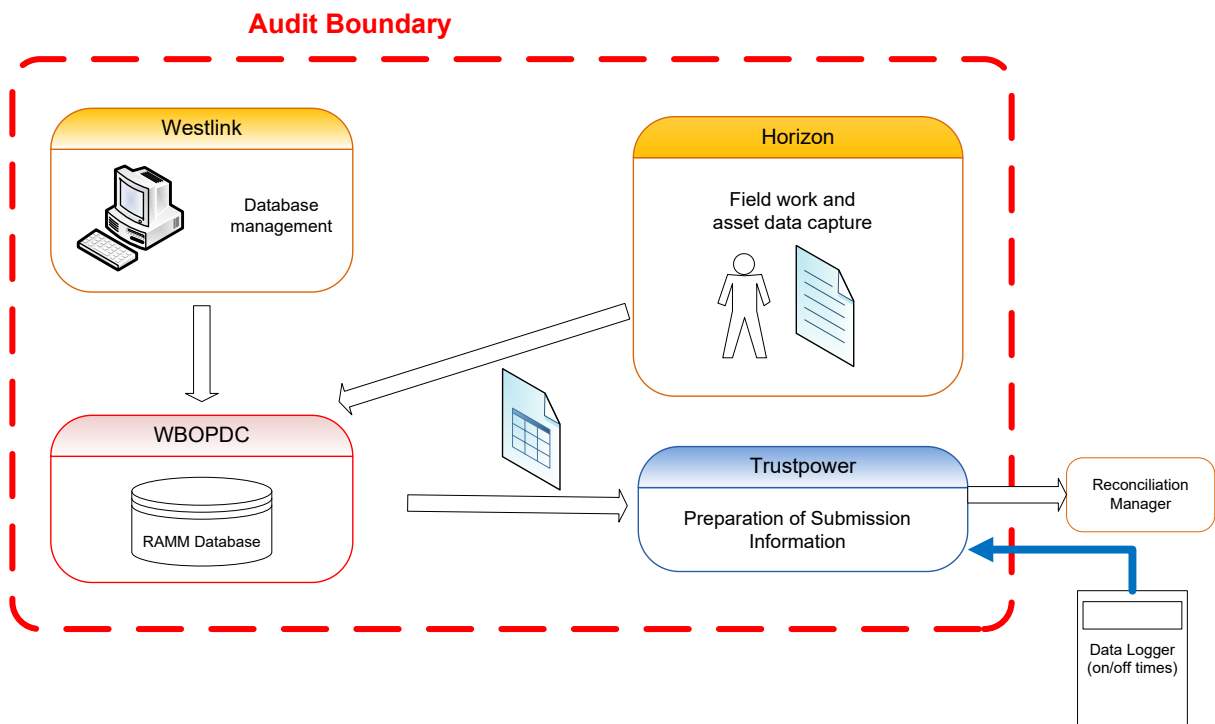
All information was provided directly by Trustpower or Westlink.

1.8. Scope of Audit

This audit of the Western Bay of Plenty District Council (**WBOPDC**) 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 database is remotely hosted by RAMM Software Ltd. The asset data capture and database population are conducted by Westlink. The field work is carried out by Horizon. 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 217 items of load 5th March 2019.

1.9. Summary of previous audit

The previous audit was completed in July 2018 by Rebecca Elliot of Veritek Limited. Six non-compliances were identified, and one recommendation was made. The statuses of the non-compliances and recommendation are described below.

Table of Non-Compliance

| Subject | Section | Clause | Non-Compliance | Status |
|---------------------------------|---------|-------------------------|--|--|
| DUML Audit | 1.10 | 17.295F of part 17 | Audit not completed within 12 month of Part 16A coming into effect. | Cleared |
| Deriving submission information | 2.1 | 11(1) of Schedule 15.3 | Under submission of an estimated 23,800 kWh per annum. | Still existing |
| All load recorded in database | 2.5 | 11(2A) of Schedule 15.3 | 38 lights electrically connected but not included in the database extract used for submission. | Still existing |
| Tracking of load change | 2.6 | 11(3) of Schedule 15.3 | New lights are not added to the database for reconciliation in the month they are vested to council. | Cleared-recorded as NC under section 3.1 |
| Database accuracy | 3.1 | 15.2 and 15.37B(b) | The database accuracy is assessed to be 102.8% indicating an estimated under submission of 23,800 kWh per annum. | Still existing |
| Volume information accuracy | 3.2 | 15.2 and 15.37B(c) | Under submission of an estimated 23,800 kWh per annum. | Still existing |

Recommendations

| Subject | Section | Description | Recommendation |
|-------------------------|---------|--|----------------|
| Tracking of load change | 2.6 | Liaise with Powerco to determine the most effective process to ensure the volumes associated with new subdivision streetlights are reconciled. | Still existing |

1.10. Distributed unmetered load audits (Clause 16A.26 and 17.295F)

Code reference

Clause 16A.26 and 17.295F

Code related audit information

Retailers must ensure that DUML database audits are completed:

1. by 1 June 2018 (for DUML that existed prior to 1 June 2017)
2. within three months of submission to the reconciliation manager (for new DUML)
3. within the timeframe specified by the Authority for DUML that has been audited since 1 June 2017.

Audit observation

Trustpower have requested Veritek to undertake this streetlight audit.

Audit commentary

This audit report confirms that the requirement to conduct an audit has been met for this database within the required timeframe.

Audit outcome

Compliant

2. DUML DATABASE REQUIREMENTS

2.1. Deriving submission information (Clause 11(1) of Schedule 15.3)

Code reference

Clause 11(1) of Schedule 15.3

Code related audit information

The retailer must ensure the:

- *DUML database is up to date*
- *methodology for deriving submission information complies with Schedule 15.5.*

Audit observation

The process for calculation of consumption was examined and the application of profiles was checked. The database was checked for accuracy.

Audit commentary

Trustpower reconciles this DUML load using the STL profile. Trustpower receive monthly wattage reports. Submissions are based on the monthly wattage report, with on and off times derived from data logger information.

I recalculated the submissions for February 2019 using the data logger and database information. I confirmed that the calculation method and result was correct.

New lights are not added to the database in the month of these being electrically connected. 34 lights identified in the previous audit have not yet been added to the database. This is discussed further in **sections 2.5** and **2.6**. This is recorded as non-compliance below.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|-----------------|------------------------|
| Audit Ref: 2.1 Clause 11(1) of Schedule 15.3 From: unknown To: 28-Feb-19 | <p>New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p> | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | <p>The controls are rated as weak as new lights are not added to RAMM within the month of being electrically connected.</p> <p>The impact is assessed to be low, based on the kWh differences described above.</p> | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| A new connection process has been tabled with Powerco & Tga City Council. This new process is intended to be given to WBOPDC to follow. | | 31 July 2019 | Investigating |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Work with Customer to follow process. | | Ongoing | |

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 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 database was 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 and all were populated.

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 and all were populated.

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 217 items of load 5th March 2019.

Audit commentary

The field audit findings for the sample of lamps was accurate with the exception of the streets detailed in the table below:

| Address | Database Count | Field Count | Count differences | Wattage differences | Comments |
|--------------------------|----------------|-------------|-------------------|---------------------|---|
| Borrell Road | 2 | 2 | | 1 | Recorded as 70W HPS light but 150W HPS found in the field |
| Princes Street | 3 | 4 | 1 | | 1x extra 70W HPS found in the field |
| Pukehina Beach Road | 4 | 5 | 1 | | 1x extra 70W HPS found in the field |
| Robinson Road | 5 | 4 | -1 | | 1x 70W HPS not found in the field |
| Taumata Place | 2 | 0 | -2 | | No lights found in Taumata Place |
| Uretara Drive Hammerhead | 9 | 8 | -1 | | 1x 29W LED not found in the field |
| GRAND TOTAL | 217 | 214 | 6 | 1 | |

This clause relates to lights found in the field but not recorded in the database. The field audit found two additional lights in the field. This is recorded as non-compliance below. The database accuracy from the field audit is discussed in **section 3.1**.

I rechecked the new lights identified in the last audit that had not been added to the database and found they were all still to be added to the reconciled load:

| Address | Database Count | Field Count | Count differences | Wattage differences | Comments |
|----------------------------|----------------|-------------|-------------------|---------------------|-----------------------------|
| New | | | | | |
| CHARLOTTE DRIVE EXTENTION | 0 | 5 | 5 | | Lights not recorded in RAMM |
| NEW ROAD (Near GANE PLACE) | 0 | 17 | 17 | | Lights not recorded in RAMM |
| NEW ROAD OMOK1 | 0 | 3 | 3 | | Lights not recorded in RAMM |
| NEW ROAD OMOK2 | 0 | 4 | 4 | | Lights not recorded in RAMM |
| PENELOPE PLACE | 0 | 6 | 6 | | Lights not recorded in RAMM |
| PIPI LANE | 0 | 3 | 3 | | Lights not recorded in RAMM |
| TOTAL | 0 | 34 | | | |

These lights are likely to have been vested to Council by now but Westlink have yet to receive any information from the council to get these lights added to the database, nine months after they were identified in the last audit. This is recorded as non-compliance.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|--|-----------------|------------------------|
| Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: unknown To: 28-Feb-19 | Two additional lights found in the field audit. 34 lights electrically connected but not recorded in the database. Potential impact: Medium Actual impact: Low Audit history: Once previously Controls: Weak Breach risk rating: 3 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are rated as weak as new lights are not added to the database as required by the code. The impact is low as the volume of missing lights identified is small. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Trustpower will verify with WBOPDC if vested. If so will instruct to notify WestLink | | 30 /4/19 | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Will try and impose new connection process | | 30/4/19 | |

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

Code reference

Clause 11(3) of Schedule 15.3

Code related audit information

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

Audit observation

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

Audit commentary

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 monthly “snapshot” report is sufficient to achieve compliance.

The database tracks additions and removals as required by this clause.

The process to add new streetlights was examined and it remains unchanged from the last audit. WBOP DC approves all new developments and the consent is provided once they are satisfied that the development will meet the required standards. Detailed “as built” are required to be provided by the developer and a walk over by council staff of the development is undertaken before the 224 certificate is issued. Once this is issued the “as built” should be sent to Westlink to upload to RAMM. This process is slow, and it can take some months before this information reaches Westlink. This was evident in this audit as I rechecked the new lights identified in the last audit and these have not yet been added to RAMM, nine months since the last audit. It is likely that these roads have been vested to council but Westlink have not received any information to progress this. When new lights are added to the database Westlink’s contract does not require them to be added until the 20th of the month following them being advised. This will result in no submission for a further month from the new lights being added.

This is recorded as non-compliance in **sections 2.1, 2.5, 3.1 and 3.2.**

The issue identified in the last audit of streetlight circuits being electrically connected before they are vested to council still exists. I repeat the last audit’s recommendation that Trustpower and WBOP DC work with the Distributor to determine the most effective process to ensure the volumes associated with these lights are reconciled.

| Description | Recommendation | Audited party comment | Remedial action |
|-------------------------|--|---|-----------------|
| Tracking of load change | Liaise with Powerco to determine the most effective process to ensure the volumes associated with new subdivision streetlights are reconciled. | Currently negotiating new process with Powerco/Tga CC first. Will then instruct | Investigating |

Horizon carries out the field maintenance for Westlink on behalf of WBOP DC and they update RAMM directly. Westlink have robust controls in their contract with Horizon and this ensures that field maintenance is captured in a timely and accurate manner. Outage patrols are in place with the whole network being checked each month. Additional to this Westlink undertake a 20% validation of all assets they are responsible for on an annual basis.

WBOP DC will be undertaking an LED light update, this is still in the planning phase and not expected to be started until the next financial year at the earliest. There are no plans to use a dimming or central management system.

There are no festive lights connected to the unmetered streetlight circuits and there are no private lights known of or identified as part of the field audit undertaken.

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 DUMML 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 DUMML database is complete and accurate.

Audit observation

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

| Plan Item | Comments |
|---------------------|---|
| Area of interest | Western BOP DC Street Lights |
| Strata | The databases contain 2,010 items of load in the Western BOP DC area. The processes for the management of all WBOPDC items of load is the same. I selected the following strata: <ul style="list-style-type: none">• New• North• South |
| 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 62 sub-units. |
| Total items of load | 283 items of load were checked. |

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

Audit commentary

A statistical sample of 283 items of load found that the field data was 99.3% of the database data for the sample checked. This is within the required database accuracy of 5%+/- . The statistical sampling tool reported with 95% confidence the precision of the sample was 8.5% and the true load in the field will be between 93.6% to 102.1% of the load recorded in the database. The sample is not sufficiently precise to be able to determine the database accuracy but indicates that the database is likely to be under reporting the kW value.

The tool indicated that there is potentially 10,600 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUMML database auditing tool) of over submission. The statistical sampling tool reported with 95% confidence that there is a potential estimated submission variance range of between 53,100 kWh of under submission and 17,200 kWh of over submission but as the accuracy is within the 5% threshold compliance is recorded.

The database was checked against the published standardised wattage table and confirmed that ballasts applied, and lamp descriptions were correct.

As discussed in **section 2.6**, new lights are not being added to the RAMM database within the month of electrical connection as they are not being provided to Westlink until some months after they have been electrically connected. When new lights are added to the database Westlink’s contract does not require them to be added until the 20th of the month following them being advised. This will result in no submission in a further month from the new lights being added if the RAMM database extract was used for submission. This delay in the tracking of load change is recorded as non-compliance below. As detailed in **section 2.5**, 34 new lights found missing from the database in the last audit have yet to be added. This equates to an estimated 4,279.5 kWh of under submission annually.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|---|-----------------|------------------------|
| Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b) From: unknown To: 28-Feb-19 | New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh. Potential impact: Medium Actual impact: Low Audit history: Once previously Controls: Weak Breach risk rating: 3 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are rated as weak as new lights are not added to RAMM within the month of being electrically connected. The impact is assessed to be low, based on the kWh differences described above. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| A new connection process has been tabled with Powerco & Tga City Council. This new process is intended to be given to WBOPDC to follow. | | 30/4/19 | Investigating |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Work with Customer to follow process | | Ongoing | |

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; and
- checking the database extract combined with the burn hours against the submitted figure to confirm accuracy.

Audit commentary

Trustpower reconciles this DUML load using the STL profile. The on and off times are derived from data logger information.

I recalculated the submissions for February 2019 using the data logger and database information. I confirmed that the calculation method and result was correct.

New lights are not added to the database in the month of these being electrically connected. 34 lights identified in the previous audit have not yet been added to the database. This is discussed further in **sections 2.5 and 2.6**. This is recorded as non-compliance below.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|---|-----------------|------------------------|
| Audit Ref: 3.2 Clause 15.2 and 15.37B(c) From: unknown To: 28-Feb-19 | New lights not added to the RAMM database within the month of electrical connection. 34 new lights not in the RAMM database equating to an estimated annual under submission of 4,279.5 kWh. Potential impact: Medium Actual impact: Low Audit history: Twice Controls: Weak Breach risk rating: 3 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are rated as weak as new lights are not added to RAMM within the month of being electrically connected. The impact is assessed to be low, based on the kWh differences described above. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| A new connection process has been tabled with Powerco & Tga City Council. This new process is intended to be given to WBOPDC to follow. | | 30/4/19 | Investigating |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Work with Customer to follow process. | | Ongoing | |

CONCLUSION

Westlink have good processes in place to manage the database. The field audit indicates that the database accuracy is within the acceptable range of accuracy. The process to add new lights indicates that the information is slow to reach Westlink and for these to get added to RAMM. The 34 new lights identified missing from the database in the last audit (nine months ago) were checked and these lights are still to be added. When new lights are added to the database, Westlink's contract does not require them to be added until the 20th of the month following, them being advised. This will result in a further month of no submission for the new lights. I also repeat the recommendation from the last audit that Trustpower, WBOP DC work with Powerco to determine the most effective process to ensure volumes associated with new street light circuits are being reconciled.

The audit found four non-compliances and makes one recommendation. The future risk rating of 17 indicates that the next audit be completed in 12 months I have considered this in conjunction with Trustpower's responses and I agree with this recommendation.

PARTICIPANT RESPONSE

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