

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

For

**RNZAF WOODBOURNE DUML  
AND MERIDIAN**

Prepared by: Rebecca Elliot

Date audit commenced: 30 March 2020

Date audit report completed: 28 April 2020

Audit report due date: 1 June 2020

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## EXECUTIVE SUMMARY

This audit of the RNZAF Woodbourne (Woodbourne) DUML database and processes was conducted at the request of Meridian Energy (Meridian) 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 largely conducted in accordance with the audit guidelines for DUML audits version 1.1. A field audit was not undertaken due to the restrictions imposed by the Covid-19 lockdown; therefore, all changes made to the database since the last audit in 2017 were examined.

This database switched into Meridian on 1/07/19.

An EAM database is managed by Marlborough Lines on behalf of RNZAF Woodbourne in relation to this load, with monthly reporting sent to Meridian. The field work, asset data capture, and database population is conducted by Marlborough Lines' staff.

The database accuracy has improved since the last audit. In this audit I found only two incorrect wattages recorded in the database. The wattages provided to Meridian in the monthly wattage report are correct, therefore this has no impact on reconciliation.

Examination of the EAM database found that when changes are made, only the record present at the time the report is run is recorded, not the historical information showing dates of changes is provided. This does not meet the database requirements.

The audit found five non-compliances and makes one recommendation. The future risk rating of 14 indicates that the next audit be completed in 12 months. Due to the small number of lights associated with this database and there is no submission inaccuracy I recommend that the next audit be in 18 months time.

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 | Two incorrect wattage values recorded in the database. These are reported correctly in the monthly wattage report sent to Meridian therefore this has no impact on submission.<br><br>The monthly wattage report provided does not track changes at a daily basis and is provided as a snapshot. | Weak     | Low               | 3                  | Identified      |
| Tracking of load change         | 2.6     | 11(3) of Schedule 15.3 | Changes not tracked.   | Weak     | Low               | 3                  | Investigating   |
| Audit trails                    | 2.7     | 11(4) of Schedule 15.3 | Audit trail not visible.   | Weak     | Low               | 3                  | Investigating   |
| Database accuracy               | 3.1     | 15.2 and 15.37B(b)     | Two incorrect wattage values recorded in the database, but these are reported correctly in the monthly wattage report, therefore this has no impact on submission.   | Moderate | Low               | 2                  | Cleared         |
| Volume information accuracy     | 3.2     | 15.2 and 15.37B(c)     | Two incorrect wattage values recorded in the database. These are reported correctly in the monthly wattage report sent to Meridian therefore this has no impact on submission.<br><br>The monthly wattage report provided does not track changes at a daily basis and is provided as a snapshot. | Weak     | Low               | 3                  | Identified      |
| Future Risk Rating              |         |                        |  |          |                   | 14                 |                 |

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

## RECOMMENDATIONS

| <b>Subject</b>    | <b>Section</b> | <b>Recommendation</b>                          |
|-------------------|----------------|--|
| Database accuracy | 3.1            | Apply wattage values from within the database. |

## ISSUES

| <b>Subject</b> | <b>Section</b> | <b>Description</b> | <b>Issue</b> |
|----------------|----------------|--------------------|--------------|
|                |                | 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

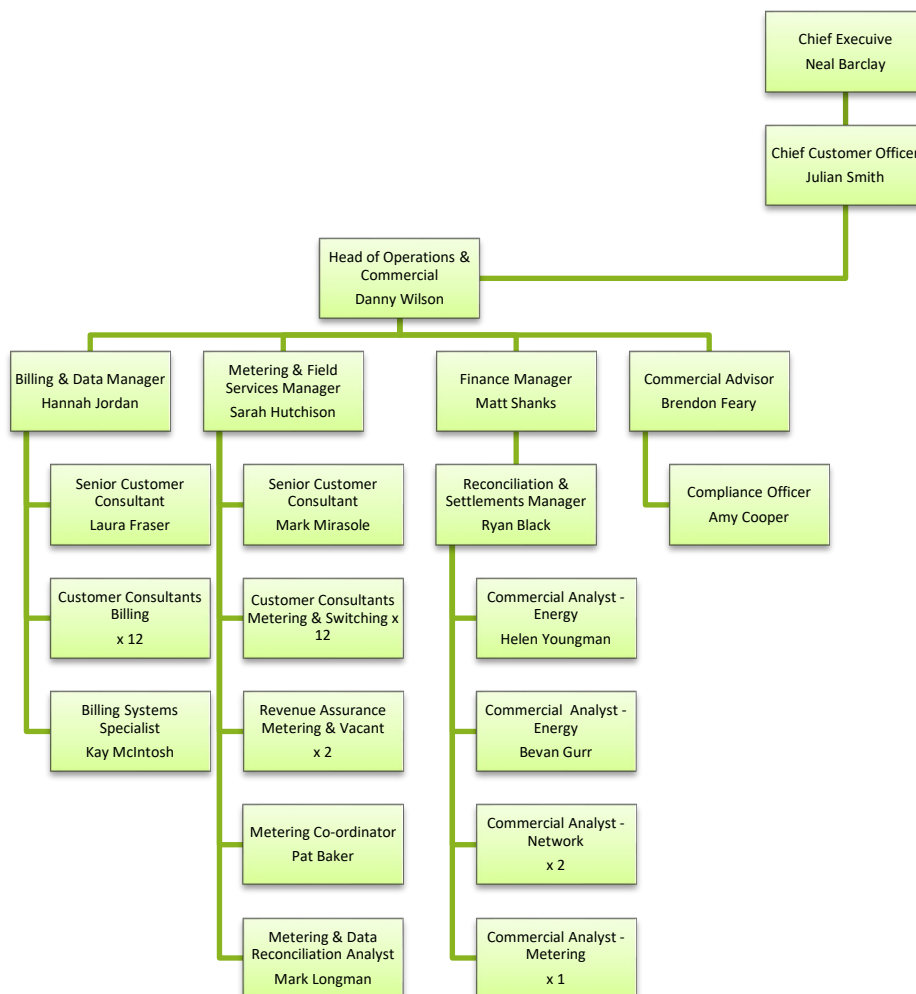
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

#### Audit commentary

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

### 1.2. Structure of Organisation

Meridian 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           |
|----------------|---------------------|-------------------|
| Amy Cooper     | Compliance Officer  | Meridian          |
| Helen Youngman | Energy Data Analyst | Meridian          |
| Sally King     | Asset Records Clerk | Marlborough Lines |

### 1.4. Hardware and Software

The database used by Marlborough Lines is commonly known as “Info EAM”. This has been used since October 2015.

Marlborough Lines confirmed that the database back-up is in accordance with standard industry procedures, which includes servers at two locations with backup tapes rotated between the different premises. Access to the database is secure by way of password protection.

Systems used by the trader and EMS as their agent to calculate submissions were assessed as part of their reconciliation participant and agent audits.

### 1.5. Breaches or Breach Allegations

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

### 1.6. ICP Data

| ICP Number      | Description                                 | NSP     | Profile | Number of items of load | Database wattage (watts) |
|-----------------|---|---------|---------|-------------------------|--------------------------|
| 0004450017ML9D6 | STREETLIGHTS<br>UNMETERED<br>STREETLIGHTING | BLN0331 | DST     | 48                      | 3,419                    |

### 1.7. Authorisation Received

All information was provided directly by Meridian and Marlborough Lines.

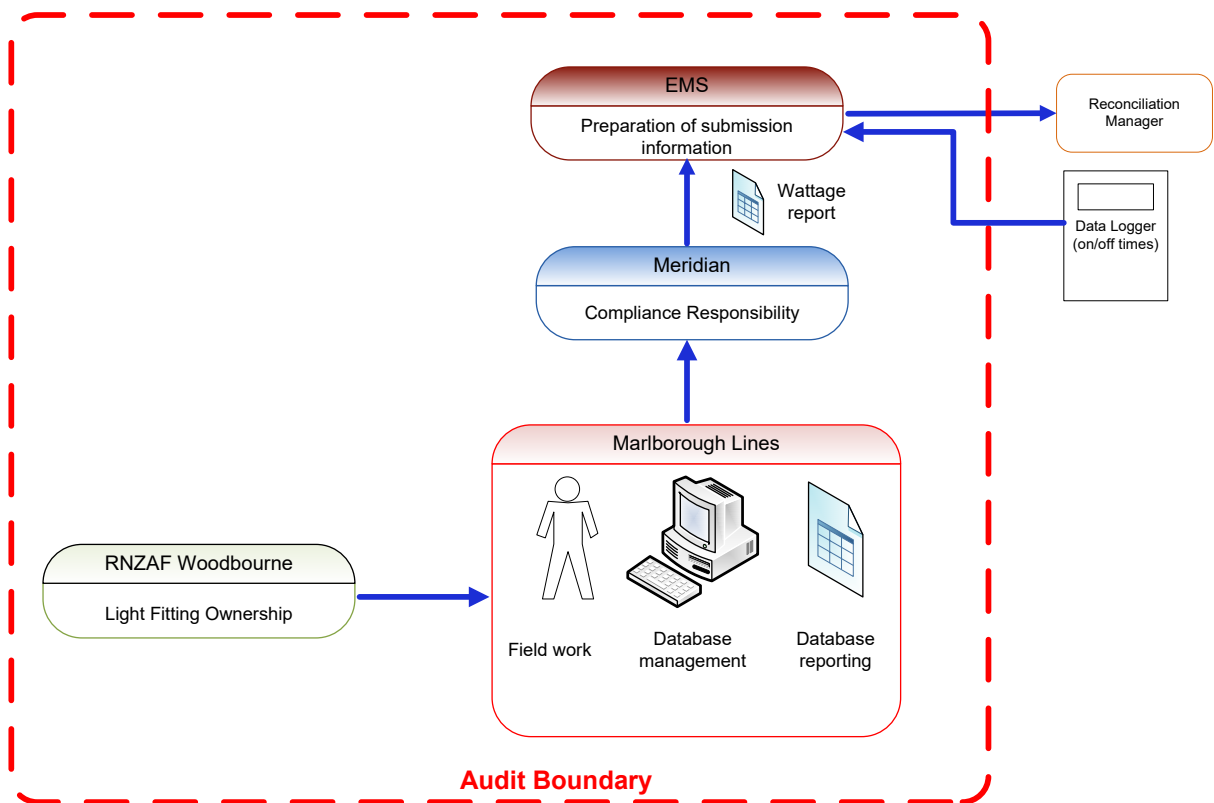
## 1.8. Scope of Audit

This audit of the RNZAF Woodbourne database and Marlborough Lines processes was conducted at the request of Meridian, 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 largely conducted in accordance with the audit guidelines for DUML audits version 1.1. A field audit was not undertaken due to the restrictions imposed by the Covid-19 lockdown; therefore, all changes made to the database since the last audit in 2017 were examined.

Marlborough Lines manage the installation, maintenance and database management of the DUML for RNZAF Woodbourne. Reporting is provided to Meridian on a monthly basis. 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.





## 1.9. Summary of previous audit

The previous audit was completed in August 2017 by Rebecca Elliot of Veritek Limited when the database was with Contact Energy. The current statuses of that audit's findings are detailed below:

### Table of Non-Compliance

| Subject                         | Section | Clause                             | Non-compliance   | Status   |
|---------------------------------|---------|------------------------------------|--|--|
| Deriving submission information | 2.1     | 11(1) of Schedule 15.3             | Incorrect methodology being used to derive submission.                 | This non-compliance applied to the previous trader.<br>Still existing in relation to this clause but for a different reason. |
| ICP Identifier                  | 2.2     | 11(2)(a) and (aa) of Schedule 15.3 | ICP identifier not recorded against each item of load in the database. | Cleared  |
| Location of each item of load   | 2.3     | 11(2)(b) of Schedule 15.3          | Three items of load with insufficient details recorded to locate them. | Cleared  |
| Database accuracy               | 3.1     | 15.2 and 15.37B(b)                 | 45 Incorrect lamp capacities.  | Still existing but greatly improved.   |
| Volume information accuracy     | 3.2     | 15.2 and 15.37B(c)                 | Incorrect values used to derive submission.                            | Still existing for this clause but for a different reason.   |

## 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

Meridian 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

Meridian reconciles this DUML load using the DST profile. Submission is based on a monthly database report derived from the Marlborough Lines EAM database and the “burn time” which is sourced from data loggers. Meridian supplies EMS with the capacity information and EMS calculates the kWh figure for the ICP and includes this in the relevant AV080 file. This process was audited during Meridian’s reconciliation participant audit and EMS’ agent audit.

The capacities supplied to EMS for February 2020 were checked and confirmed to be correct.

The database accuracy check identified two lights with the incorrect circuit wattage recorded (i.e. total wattage). The circuit wattages recorded in EAM are not used. The nominal lamp wattage is used and Marlborough Lines add the ballasts to this outside of the database as part of the monthly wattage report sent to Meridian. The values used in the monthly report were confirmed to be correct, so this has no impact on submission accuracy. This is recorded as non-compliance below and in **sections 3.1** and **3.2**.

On 18 June 2019, the Electricity Authority issued a memo confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed, and
- wash up volumes must take into account where historical corrections have been made to the DUML load and volumes.

The current monthly report is provided as a snapshot and this practice is non-compliant. The database contains a “Commission date”. When a wattage is changed in the database due to a physical change or a correction, only the record present at the time the report is run is recorded, not the historical information showing dates of changes is provided. It is unknown whether the database is capable of tracking this or not.

#### Audit outcome

Non-compliant

| Non-compliance  | Description   |                 |                        |
|---|---|-----------------|------------------------|
| Audit Ref: 2.1<br>With: Clause 11(1) of Schedule 15.3<br><br>From: 17-Aug-17<br>To: 31-Mar-20   | Two incorrect wattage values recorded in the database. These are reported correctly in the monthly wattage report sent to Meridian therefore this has no impact on submission.<br><br>The monthly wattage report provided does not track changes at a daily basis and is provided as a snapshot.<br><br>Potential impact: None<br><br>Actual impact: None<br><br>Audit history: Once<br><br>Controls: Weak<br><br>Breach risk rating: 3 |                 |                        |
| Audit risk rating   | Rationale for audit risk rating   |                 |                        |
| <b>Low</b>  | The controls are rated as weak as whilst the processes for updating the database are robust it was not proven that the database is able to meet the requirements of the code.<br><br>The impact is assessed to be low/none as this database is relatively static and the correct volumes are being submitted to the market.   |                 |                        |
| Actions taken to resolve the issue  |   | Completion date | Remedial action status |
| We will liaise with Marlborough Lines regarding the update of the 2 incorrect wattage values in their database.                           |   | 31/05/2020      | Identified             |
| We will propose a process change so wattage values from the database are used for the monthly report rather than adding ballasts outside. |   | 31/05/2020      |                        |
| Preventative actions taken to ensure no further issues will occur   |   | Completion date |                        |
|   |   |                 |                        |

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

### Code reference

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

### Code related audit information

The DUML database must contain:

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

### Audit observation

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

### Audit commentary

All items of load have an ICP recorded.

### **Audit outcome**

Compliant

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

### **Code reference**

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

### **Code related audit information**

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

### **Audit observation**

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

### **Audit commentary**

The database contains the nearest street address for each item of load.

### **Audit outcome**

Compliant

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

### **Code reference**

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

### **Code related audit information**

*The DUMML database must contain:*

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

### **Audit observation**

The database was checked to confirm 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 fields for fitting type and lamp type in addition to a nominal lamp wattage and circuit wattage fields and all were populated for each item of load. The ballasts recorded in EAM are not used for submission and Marlborough Lines add the ballasts outside of the database as part of the monthly wattage report sent to Meridian. The accuracy of the ballast wattages is discussed in **sections 3.1 and 3.2.**

### **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

I checked complete database since it was last audited in 2017.

### Audit commentary

There have been seven lights changed during the audit period. The change documentation was reviewed in all instances and confirmed that the database had been updated with the correct lamp type and wattage with the exception of two items of load. The database wattage for the lights at 22 & 38-40 Woodward St are recorded as 90W but should have a total wattage of 83W. This is recorded correctly in the monthly wattage report provided to Meridian, so this has no impact on submission accuracy. No missing items of load were identified. The accuracy of the database is detailed in **section 3.1**.

### Audit outcome

Compliant

## 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

The database contains a "Commission date". When a wattage is changed in the database due to a physical change or a correction, only the record present at the time the report is run is recorded, and not the historical information showing dates of changes. The audit trail may be able to be retrieved but this is not visible as required by this clause. This is recorded as non-compliance.

### Audit outcome

Non-compliant

| Non-compliance  | Description   |                 |                        |
|---|---|-----------------|------------------------|
| Audit Ref: 2.6<br>Clause 11(3) of<br>Schedule 15.3<br><br>From: 17-Aug-17<br>To: 31-Mar-20  | Changes not tracked.<br><br>Potential impact: Low<br><br>Actual impact: Low<br><br>Audit history: None<br><br>Controls: Weak<br><br>Breach risk rating: 3   |                 |                        |
| Audit risk rating   | Rationale for audit risk rating   |                 |                        |
| <b>Low</b>  | The controls are rated as weak as whilst the processes for updating the database are robust it was not proven that the database is able to meet the requirements of the code.<br><br>The audit risk rating is low as the volume of changes is not high. |                 |                        |
| Actions taken to resolve the issue  |   | Completion date | Remedial action status |
| We'll discuss with Marlborough Lines what options there are for resolving this issue taking into account the low volume of lights managed and the relatively static nature of the database. |   | 31/07/2020      | Investigating          |
| Preventative actions taken to ensure no further issues will occur   |   | Completion date |                        |
|   |   |                 |                        |

## 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 contains a "Commission date". When a wattage is changed in the database due to a physical change or a correction, only the record present at the time the report is run is recorded, and not the historical information showing dates of changes. The audit trail may be able to be retrieved but this is not visible as required by this clause. This is recorded as non-compliance.

### Audit outcome

Non-compliant

| Non-compliance  | Description   |                        |
|---|---|------------------------|
| Audit Ref: 2.7<br>Clause 11(4) of<br>Schedule 15.3<br><br>From: 17-Aug-17<br>To: 31-Mar-20  | Audit trail not visible.<br><br>Potential impact: Low<br>Actual impact: Low<br>Audit history: None<br>Controls: Weak<br>Breach risk rating: 3   |                        |
| Audit risk rating   | Rationale for audit risk rating   |                        |
| <b>Low</b>  | The controls are rated as weak as whilst the processes for updating the database are robust it was not proven that the database is able to meet the requirements of the code.<br><br>The audit risk rating is low as the volume of changes is not high. |                        |
| Actions taken to resolve the issue  | Completion date   | Remedial action status |
| We'll discuss with Marlborough Lines what options there are for resolving this issue taking into account the low volume of lights managed and the relatively static nature of the database. | 31/07/2020  | Investigating          |
| Preventative actions taken to ensure no further issues will occur   | Completion date   |                        |
|   |   |                        |

### 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

A database extract provided in March 2020 was checked for accuracy, along with the records for all light changes since the last audit was undertaken in 2017.

Wattages were checked for alignment with the published standardised wattage table produced by the Electricity Authority against the database or in the case of LED lights against the LED light specification.

The change management process and timeliness of database updates was evaluated.

##### Audit commentary

##### Database accuracy based on changes made since the last audit

There have been seven lights changed during the audit period. The change documentation was reviewed in all instances and confirmed that the database had been updated with the correct lamp type and wattage with the exception of two items of load. The database wattage for the lights at 22 & 38-40 Woodward St are recorded as 90W but should have a total wattage of 83W. This is recorded correctly in the monthly wattage report provided to Meridian, so this has no impact on submission accuracy.

##### Lamp description and capacity accuracy

Wattages for all items of load were checked against the published standardised wattage table produced by the Electricity Authority or in the case of LED lights against the LED light specification. All were confirmed to be correct with the exception of the two incorrect wattages (circuit wattages) recorded above. The circuit wattages recorded in EAM are not used. The nominal lamp wattage is used and Marlborough Lines add the ballasts to this outside of the database as part of the monthly wattage report sent to Meridian. The values used in the monthly report were confirmed to be correct, so this has no impact on submission accuracy. I recommend that the wattage values are corrected and derived from within the database.

| Recommendation    | Description                                    | Audited party comment   | Remedial action |
|-------------------|--|---|-----------------|
| Database accuracy | Apply wattage values from within the database. | We will propose a process change so wattage values from the database are used for the monthly report rather than adding ballasts outside. | Identified      |

##### ICP accuracy

All items of load appear to have the correct ICP recorded.

##### Location accuracy

The location details are accurate and complete.



### Change management process findings

There have been no new connections made during the audit period and there are none expected as this is an RNZAF air base and no new housing is planned.

The change management process remains the same as was recorded in the last audit. A database check is included as part of the lamp replacement process. The job sheet comes directly from the EAM database and requires the field crew to indicate if any discrepancies are found and need to be updated. Daily updates are made to EAM and all changes are made prior to the end of the month.

There are no festive lights are connected into the unmetered circuits.

### Audit outcome

Non-compliant

| Non-compliance  | Description   |                 |                        |
|---|---|-----------------|------------------------|
| Audit Ref: 3.1<br>With: Clause 15.2 and 15.37B(b)<br><br>From: 17-Aug-17<br>To: 31-Mar-20   | Two incorrect wattage values recorded in the database, but these are reported correctly in the monthly wattage report, therefore this has no impact on submission.<br><br>Potential impact: None<br><br>Actual impact: None<br><br>Audit history: Once<br><br>Controls: Moderate<br><br>Breach risk rating: 2 |                 |                        |
| Audit risk rating   | Rationale for audit risk rating   |                 |                        |
| <b>Low</b>  | The controls are rated as moderate as the ballasts are not derived from the database but are being added correctly for reconciliation purposes.<br><br>The impact is assessed to be low as this database is relatively static and the correct volumes are being submitted to the market.                      |                 |                        |
| Actions taken to resolve the issue  |   | Completion date | Remedial action status |
| We will liaise with Marlborough Lines regarding the update of the 2 incorrect wattage values in their database.                           |   | 31/05/2020      | Cleared                |
| We will propose a process change so wattage values from the database are used for the monthly report rather than adding ballasts outside. |   | 31/05/2020      |                        |
| Preventative actions taken to ensure no further issues will occur   |   | Completion date |                        |
|   |   |                 |                        |

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

#### Code reference

Clause 15.2 and 15.37B(c)

#### Code related audit information

The audit must verify that:

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

#### Audit observation

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

- checking the registry to confirm that 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

Meridian reconciles this DUML load using the DST profile. based on a monthly database report derived from the Marlborough Lines EAM database and the “burn time” which is sourced from data loggers. Meridian supplies EMS with the capacity information and EMS calculates the kWh figure for the ICP and includes this in the relevant AV080 file. This process was audited during Meridian’s reconciliation participant audit and EMS’ agent audit.

The capacities supplied to EMS for February 2020 were checked and confirmed to be correct.

The database accuracy check identified two lights with the incorrect wattage recorded. This is recorded correctly in the monthly wattage report provided to Meridian, so this has no impact on submission accuracy. This is recorded as non-compliance below and in **sections 3.1** and **3.2**.

On 18 June 2019, the Electricity Authority issued a memo confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed, and
- wash up volumes must take into account where historical corrections have been made to the DUML load and volumes.

The current monthly report is provided as a snapshot and this practice is non-compliant. The database contains a “Commission date”. When a wattage is changed in the database due to a physical change or a correction, only the record present at the time the report is run is recorded, not the historical information showing dates of changes is provided. It is unknown whether the database is capable of tracking this or not.

#### Audit outcome

Non-compliant

| Non-compliance   | Description  |                   |                        |
|--|--|-------------------|------------------------|
| <p>Audit Ref: 3.2</p> <p>With: Clause 15.2 and 15.37B(c)</p> <p>From: 17-Aug-17</p> <p>To: 31-Mar-20</p>   | <p>Two incorrect wattage values recorded in the database. These are reported correctly in the monthly wattage report sent to Meridian therefore this has no impact on submission.</p> <p>The monthly wattage report provided does not track changes at a daily basis and is provided as a snapshot.</p> <p>Potential impact: None</p> <p>Actual impact: None</p> <p>Audit history: Once</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p> |                   |                        |
| Audit risk rating  | Rationale for audit risk rating  |                   |                        |
| <p><b>Medium</b></p>   | <p>The controls are rated as weak as whilst the processes for updating the database are robust it was not proven that the database is able to meet the requirements of the code.</p> <p>The impact is assessed to be low/none as this database is relatively static and the correct volumes are being submitted to the market.</p>   |                   |                        |
| Actions taken to resolve the issue   |  | Completion date   | Remedial action status |
| <p>We will liaise with Marlborough Lines regarding the update of the 2 incorrect wattage values in their database.</p>                           |  | <p>31/05/2020</p> | <p>Identified</p>      |
| <p>We will propose a process change so wattage values from the database are used for the monthly report rather than adding ballasts outside.</p> |  | <p>31/05/2020</p> |                        |
| Preventative actions taken to ensure no further issues will occur  |  | Completion date   |                        |
|  |  |                   |                        |

## CONCLUSION

The audit was largely conducted in accordance with the audit guidelines for DUMML audits version 1.1. A field audit was not undertaken due to the restrictions imposed by the Covid-19 lockdown; therefore, all changes made to the database since the last audit in 2017 were examined.

This database switched into Meridian on 1/07/19.

An EAM database is managed by Marlborough Lines on behalf of RNZAF Woodbourne in relation to this load, with monthly reporting sent to Meridian. The field work, asset data capture, and database population is conducted by Marlborough Lines' staff.

The database accuracy has improved since the last audit. In this audit I found only two incorrect wattages recorded in the database. The wattages provided to Meridian in the monthly wattage report are correct, therefore this has no impact on reconciliation.

Examination of the EAM database found that when changes are made, only the record present at the time the report is run is recorded, not the historical information showing dates of changes is provided. This does not meet the database requirements.

The audit found five non-compliances and makes one recommendation. The future risk rating of 14 indicates that the next audit be completed in 12 months. The audit found five non-compliances and makes one recommendation. The future risk rating of 14 indicates that the next audit be completed in 12 months. Due to the small number of lights associated with this database and there is no submission inaccuracy I recommend that the next audit be in 18 months time.

## PARTICIPANT RESPONSE

Meridian have reviewed this report and their comments are provided in the audit report. No further comments have been provided.