ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

For

GREATER WELLINGTON REGIONAL COUNCIL AND MERIDIAN ENERGY

Prepared by: Tara Gannon

Date audit commenced: 31 January 2024

Date audit report completed: 21 February 2024

Audit report due date: 9 March 2024

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EXECUTIVE SUMMARY

This audit of the **Greater Wellington Regional Council Unmetered Streetlights (GWRC)** DUML database and processes was conducted at the request of **Meridian Energy Limited (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 conducted in accordance with the audit guidelines for DUML audits version 1.1.

The GWRC lights are in the Porirua, Paremata, and Petone railway station carparks. The data for these lights is held in GWRC's Technology One ERP system, called Ngātahi.

Responsibility for maintaining the station lights has recently changed from **Commercial Signals** to **Master Maintenance Services (MMS).**

- Commercial Signals maintained a spreadsheet of any changes that were made to the lights, which was passed to GWRC for manual entry into Ngātahi.
- MMS has access to a contractor portal which allows them to view and update Ngātahi from the field using smart phones.

When changes occur, GWRC provides an updated database extract to Meridian.

The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum. No physical light changes have been made since the last audit by either Commercial Signals or MMS, and the inaccuracies found during this audit appear to be historic. MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will check and update the Ngātahi database records, including tagging each pole and recording a GPS location. Once the database is confirmed to be complete and accurate, revised data will be provided to Meridian so that submission data can be washed up.

Meridian submits the load as NHH using the UML profile based on the unmetered daily kWh recorded in the registry and the number of active ICP days for the reconciliation period. Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE since November 2022 resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up.

The audit found five non-compliances. An audit risk rating of ten indicates that the next audit be completed in 12 months. I have considered this in conjunction with Meridian's comments and recommend that the next audit be in 12 months on 9 March 2025, to confirm that the database has been corrected through MMS' maintenance checks, and revision submissions have been provided.

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	Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up. The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum.	Moderate	Low	2	
Location of items of load	2.3	11(2)(b) of Schedule 15.3	Location information is not sufficient to locate each item of load.	Weak	Low	3	
All load recorded in database	2.5	11(2A) of Schedule 15.3	One extra 102 W LED at Porirua Station was not recorded in the database.	Strong	Low	1	
Database accuracy	3.1	15.2 and 15.37B(b)	The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum.	Moderate	Low	2	
Volume information accuracy	3.2	15.2 and 15.37B(c)	Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up. The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum.	Moderate	Low	2	

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Future Risk Rating						10	

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	Action
		Nil	

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

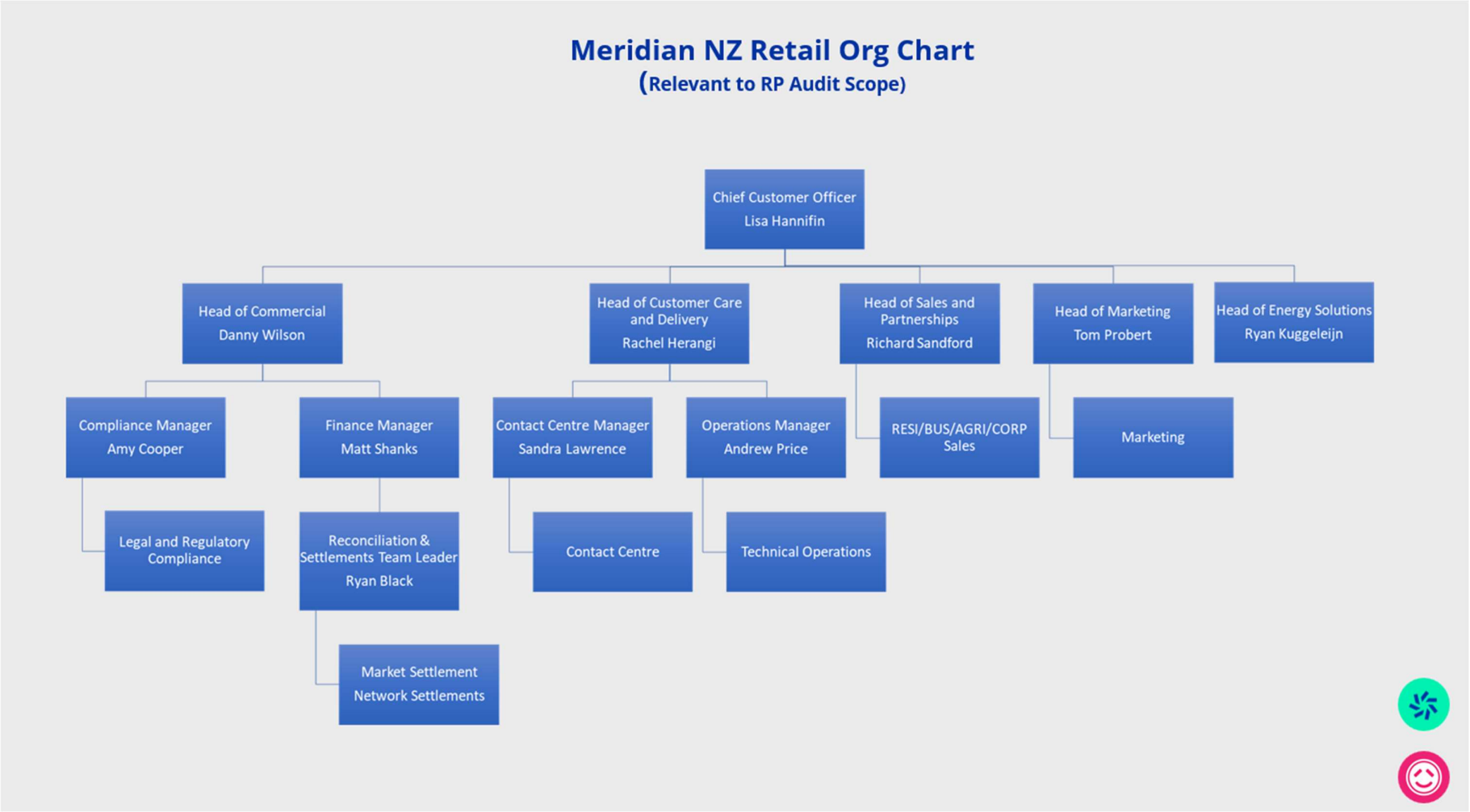
Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

Audit commentary

Meridian confirms that there are no exemptions in place relevant to the scope of this audit.

1.2. Structure of Organisation

Meridian provided the relevant organisational structure:



1.3. Persons involved in this audit

Auditor:

Name	Role	Company
Tara Gannon	Auditor	Provera

Other personnel assisting in this audit were:

Name	Title	Company
Melanie Matthews	Quality and Compliance Advisor	Meridian Energy
Daniel Lau	Reconciliation Analyst	Meridian Energy
Danielle Nowell-Usticke	Senior Asset Planning Engineer	GWRC
Mitchell Davis	Technical Asset Planning Specialist Lighting Assets	GWRC

1.4. Hardware and Software

GWRC systems

Data is held in GWRC's Technology One ERP system, called Ngātahi. The system is cloud-based, and cloud-based backup arrangements are in place.

Access to Ngātahi is restricted with logins and passwords as part of GWRC's Microsoft 365 logins.

MMS staff have access to Ngātahi via an online portal, which requires a login and password.

Meridian systems

Systems used by the trader to calculate submissions are assessed as part of their reconciliation participant audit.

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)
0000160523CK83F	MASTER ICP GWRC STREETLIGHTS PNI0331	PNI0331	UML	19	2,797
0000161690CK4EE	PETONE WESTERN CARPARK STREETLIGHTS	GFD0331	UML	44	5,966
0000171063CK6DE	MASTER ICP GWRC STREETLIGHTS TKR0331	TKR0331	UML	51	8,015

ICP Number	Description	NSP	Profile	Number of items of load	Database wattage (watts)
Total				114	16,778

1.7. Authorisation Received

All information was provided directly by Meridian or GWRC.

1.8. Scope of Audit

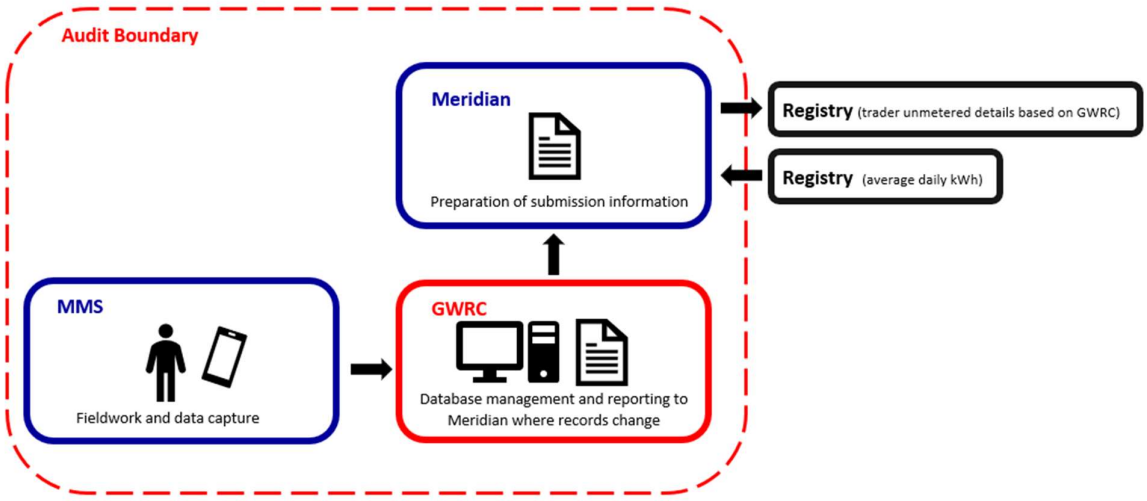
This audit of the GWRC DUML database and processes was conducted at the request of Meridian Energy Limited (Meridian), in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied. The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

The GWRC lights are in the Porirua, Paremata and Petone railway station carparks. The data for these lights is held in GWRC's Technology One ERP system, called Ngātahi.

Responsibility for maintaining the station lights has recently changed from Commercial Signals to MMS. MMS has access to a contractor portal which allows them to view and update Ngātahi from the field using smart phones. When database changes occur, GWRC provides an updated database extract to Meridian.

Meridian submits the load as NHH using the UML profile based on the unmetered daily kWh recorded in the registry and the number of active ICP days for the reconciliation period.

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 all lights within the carparks at the Paremata, Porirua, and Petone stations on 31 January 2024.

1.9. 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 Provera to undertake this streetlight audit.

Audit commentary

The audit was completed within the required timeframe.

Audit outcome

Compliant

1.10. Summary of previous audit

The previous audit of this database was undertaken by Bernie Cross of Veritek Limited in February 2023. The summary table below shows the statuses of the non-compliances raised in the previous audit. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-Compliance	Status
Deriving submission information	2.1	11(1) of Schedule 15.3	Under submission of 12.8 kWh per annum due to incorrect gear wattage.	Cleared
			53 lights associated with Porirua Carpark incorrectly assigned to PNI0331 GXP and not TKR0331.	Cleared
			Under submission of approx. 2,270 kWh per annum for ICP 0000161690CK4EE and over submission of 1,046 kWh per annum for ICP 0000160523CK83F due to not using the current database capacities.	Partially cleared
			Database is not confirmed as accurate with a 95% level of confidence resulting in an estimated over submission of 5,164 kWh p.a.	Still existing
ICP identifier and items of load	2.2	11(2)(a) and (aa) of Schedule 15.3	ICP assignment is not correct for all items of load resulting in incorrect allocation of submission volumes to the respective NSP.	Cleared
Location of items of load	2.3	11(2)(b) of Schedule 15.3	Location information not sufficient to locate each item of load.	Still existing
All load recorded in database	2.5	11(2A) of Schedule 15.3	One additional lamp in the field was not recorded in the database.	Still existing

Subject	Section	Clause	Non-Compliance	Status
Database accuracy	3.1	15.2 and 15.37B(b)	Under submission of 12.8 kWh per annum due to incorrect gear wattage. 53 lights associated with Porirua Carpark were incorrectly assigned to PNI0331 GXP and not TKR0331. Database is not confirmed as accurate with a 95% level of confidence resulting in an estimated over submission of 5,164 kWh p.a.	Cleared Cleared Still existing
Volume information accuracy	3.2	15.2 and 15.37B(c)	Under submission of 12.8 kWh per annum due to incorrect gear wattage. Under submission of approx. 2,270 kWh per annum for ICP 0000161690CK4EE and over submission of 1,046 kWh per annum for ICP 0000160523CK83F due to not using the current database capacities. Database is not confirmed as accurate with a 95% level of confidence resulting in an estimated over submission of 5,164 kWh p.a.	Cleared Partially cleared Still existing

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 submits the load as NHH using the UML profile based on the unmetered daily kWh recorded in the registry and the number of active ICP days.

Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE since November 2022 resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up.

The registry information for the Porirua (0000171063CK6DE) and Paremata Stations (0000160523CK83F) was corrected following the last audit, and is consistent with the database information.

ICP Number	NSP	Database wattage	Registry wattage applied for submission	Difference
0000160523CK83F	PNI0331	2,797 W	2,797 W	-
0000161690CK4EE	GFD0331	5,966 W	5,439 W	527 W or 2,269 kWh p.a.
0000171063CK6DE	TKR0331	8,015 W	8,015 W	-

Examination of the database found:

Issue	Estimated volume information impact (Annual kWh)
The wattage found in the field was 91.62% of the wattage recorded in the database.	Over submission of 3,859.07 kWh p.a.

The database does record change dates. Changes to lights are rare and can be managed by Meridian by updating the registry daily kWh from the correct date.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3 From: 29-Nov-22 To: 31-Jan-24	Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up. The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are assessed to be moderate. The inaccuracies relate to historic information and there is a new process to ensure that the database is updated from the field. Controls are expected to improve to strong once the MMS database validation is complete. The audit risk rating is low based on the kWh differences described above. • The registry unmetered load value for ICP 0000161690CK4EE has been corrected and revised submission data will be washed up. • MMS are validating the database as part of a condition check and once updated revised submission data will be washed up.

Actions taken to resolve the issue	Completion date	Remedial action status
Meridian has advised Great Wellington Regional Council of the inaccuracies identified and has requested for corrections to be made.	21/02/2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Meridian will continue to follow up with Greater Wellington Regional Council regularly to have the inaccuracies corrected.	09/09/2024	

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 an ICP was recorded against each item of load.

Audit commentary

The database contains an ICP identifier for each item of load, and the previous audit issue relating to the Porirua and Paremata stations having the same ICP number applied has been resolved.

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 a description field for location but they are not unique, and there is not sufficient information to locate each item of load within each carpark.

MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will tag each pole and record a GPS location in Ngātahi.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.3 With: Clause 11(2)(b) of Schedule 15.3 From: 31-Jan-24 To: 31-Jan-24	Location information is not sufficient to locate each item of load. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Weak Breach risk rating: 3
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are weak because the database contains a field for location, which is populated, but the recorded locations are not unique or detailed enough to allow the lamps to be readily located. There is no direct impact on submission, but it does make it more difficult to assess database accuracy and identify discrepancies between the database and lights present in the carparks.

Actions taken to resolve the issue	Completion date	Remedial action status
Meridian has advised Great Wellington Regional Council of the inaccuracies identified and has requested for corrections to be made.	21/02/2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Meridian will continue to follow up with Greater Wellington Regional Council regularly to have the inaccuracies corrected.	09/09/2024	

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 and that each item of load had a value recorded in these fields.

Audit commentary

The database contains fields for lamp make, model, wattage and gear wattage which are populated for all items of load. All lights are LED and have a zero gear wattage.

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 all lights at Porirua, Paremata and Petone station carparks on 31 January 2024 to determine whether the database was complete and accurate.

Audit commentary

I checked all lights at Porirua, Paremata and Petone station carparks on 31 January 2024 to determine whether the database was complete and accurate. The database does not contain location details, which made it difficult to assess accuracy as I could not be sure I was viewing the same light each record was for.

The field audit findings are listed in the table below:

Light type	Wattage	Database count	Field Count	Difference (field – database)	Station
Philips Exceed BRP372 90W	90	10	10	-	Petone
LED - 149W	149	34	29	-5	Petone
OF3 STW 4.7-4m 102W	102	4	5	1	Porirua
149w LED 5118 48LED	149	43	42	-1	Porirua
4 Halcyon Assametric Floodlights	300	4	4	-	Porirua
Light Fitting - LED	75	2	2	-	Paremata
Floodlights - 100w LED	100	6	6	-	Paremata
149W CDO-TT/828	149	3	3	-	Paremata
Floodlights - 200w LED	200	8	7	-1	Paremata
Count		**114**	**108**	**8(-7+1)**	**-7/+1**
Wattage		**10,691**	**9,795**	**-896**	
kWh per annum (based on 11.8 hours per day)		**46046.14**	**42187.07**	**-3,859.07**	

The wattage found in the field was 91.62% of the wattage recorded in the database because of the following differences:

- five LEDs 149 W recorded in the database could not be found at Petone station,
- one extra 102 W LED at Porirua Station was not recorded in the database,
- one LED 149 W recorded in the database could not be found at Porirua Station, and
- one 200 W flood light recorded in the database could not be found at Paremata Station.

MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will check and update the Ngātahi database records. Once updated revised data will be provided to Meridian so that submission data can be washed up.

Non-compliance is recorded in this section for the extra 102 W LED found at Porirua Station which was not recorded in the database. Non-compliance is recorded in **sections 2.1**, **3.1** and **3.2** because the database total was not within ±5% of the field audit count.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: 31-Jan-24	One extra 102 W LED at Porirua Station was not recorded in the database. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong

To: 31-Jan-24	Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong because only one additional lamp was found in the field. The audit risk rating is low based on the small volume of lights and light differences across the database population. MMS are validating the database as part of a condition check and once updated revised submission data will be washed up.

Actions taken to resolve the issue	Completion date	Remedial action status
Meridian has advised Great Wellington Regional Council of the inaccuracies identified and has requested for corrections to be made.	21/02/2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Meridian will continue to follow up with Greater Wellington Regional Council regularly to have the inaccuracies corrected.	09/09/2024	

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 discussed with GWRC.

Audit commentary

Ngātahi records lamp commissioning dates and removal dates, which are populated as required.

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

Access to Ngātahi is restricted with logins and passwords, and each time a record is entered or updated a compliant audit trail is created.

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

I reviewed the whole database for completeness and accuracy and checked all lights listed in the database in the field.

Audit commentary

Database accuracy based on the field audit

The wattage found in the field was 91.62% of the wattage recorded in the database because of the following differences:

- five LEDs 149 W recorded in the database could not be found at Petone station,
- one extra 102 W LED at Porirua Station was not recorded in the database,
- one LED 149 W recorded in the database could not be found at Porirua Station, and
- one 200 W flood light recorded in the database could not be found at Paremata Station.

The inaccuracies could lead to under submission of 896 W or 3,859.07 kWh per annum.

MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will check and update the Ngātahi database records. Once updated revised data will be provided to Meridian so that submission data can be washed up.

Lamp description and capacity accuracy

The database contains fields for lamp make, model, wattage and gear wattage which are populated for all items of load. All lights are LED and have a zero gear wattage. I checked the recorded wattages against lamp specifications where sufficient detail was recorded and/or the labels of lights in the field and confirmed that the wattages were accurate.

There are some inconsistencies in the lamp descriptions in the database; in some cases the same lamp type is recorded with a different description depending on which station it is situated at. This is expected to be corrected as part of the MMS data validation as they clean and inspect each lamp.

ICP accuracy

The database contains an ICP identifier for each item of load, and the previous audit issue relating to the Porirua and Paremata stations having the same ICP number applied has been resolved.

Location accuracy

The database contains a description field for location but they are not unique, and there is not sufficient information to locate each item of load within each carpark.

Change management process findings

Responsibility for maintaining the station lights has recently changed from Commercial Signals to MMS**.**

- Commercial Signals maintained a spreadsheet of any changes that were made to the lights, which was passed to GWRC for entry into Ngātahi.

- MMS has access to a contractor portal which allows them to view and update Ngātahi from the field, using smart phones.

When changes occur, GWRC provides an updated database extract to Meridian.

No physical light changes have been made since the last audit by either Commercial Signals or MMS, and the inaccuracies found during this audit appear to be historic. MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will check and update the Ngātahi database records, including tagging each pole and recording a GPS location. Once the database is confirmed to be complete and accurate, revised data will be provided to Meridian so that submission data can be washed up.

There are no formal outage patrols. Outages are normally reported by Metlink staff or the public who use the station. Light condition is usually assessed annually.

NZTA lighting

NZTA lighting is included in a separate NZTA database with different ICPs.

Festive lighting

No festive lighting is used.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b) From: 01-Jan-24 To: 31-Jan-24	The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are assessed to be moderate. The inaccuracies relate to historic information and there is a new process to ensure that the database is updated from the field. Controls are expected to improve to strong once the MMS database validation is complete. The audit risk rating is low based on the small volume of lights and light differences across the database population. MMS are validating the database as part of a condition check and once updated revised submission data will be washed up.

Actions taken to resolve the issue	Completion date	Remedial action status
Meridian has advised Great Wellington Regional Council of the inaccuracies identified and has requested for corrections to be made.	21/02/2024	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Meridian will continue to follow up with Greater Wellington Regional Council regularly to have the inaccuracies corrected.	09/09/2024	

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

Meridian submits the load as NHH using the UML profile based on the unmetered daily kWh recorded in the registry and the number of active ICP days. The correct profiles and submission types are recorded on the registry.

Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE since November 2022 resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up.

The registry information for the Porirua (0000171063CK6DE) and Paremata Stations (0000160523CK83F) was corrected following the last audit, and is consistent with the database information.

ICP Number	NSP	Database wattage	Registry wattage applied for submission	Difference
0000160523CK83F	PNI0331	2,797 W	2,797 W	-
0000161690CK4EE	GFD0331	5,966 W	5,439 W	527 W or 2,269 kWh p.a.
0000171063CK6DE	TKR0331	8,015 W	8,015 W	-

Examination of the database found:

Issue	Estimated volume information impact (Annual kWh)
The wattage found in the field was 91.62% of the wattage recorded in the database.	Over submission of 3,859.07 kWh p.a.

The database does record change dates. Changes to lights are rare and can be managed by Meridian by updating the registry daily kWh from the correct date.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c) From: 29-Nov-22 To: 31-Jan-24	Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up. The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are assessed to be moderate. The inaccuracies relate to historic information and there is a new process to ensure that the database is updated from the field. Controls are expected to improve to strong once the MMS database validation is complete. The audit risk rating is low based on the kWh differences described above. • The registry unmetered load value for ICP 0000161690CK4EE has been corrected and revised submission data will be washed up. MMS are validating the database as part of a condition check and once updated revised submission data will be washed up.

Actions taken to resolve the issue	Completion date	Remedial action status
Meridian has advised Great Wellington Regional Council of the inaccuracies identified and has requested for corrections to be made.	21/02/2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Meridian will continue to follow up with Greater Wellington Regional Council regularly to have the inaccuracies corrected.	09/09/2024	

CONCLUSION

The wattage found in the field was 91.62% of the wattage recorded in the database which could lead to under submission of 896 W or 3,859.07 kWh per annum. MMS are in the process of completing a clean and condition check for each of the station lights, and as part of this process will check and update the Ngātahi database records, including tagging each pole and recording a GPS location. Once the database is confirmed to be complete and accurate, revised data will be provided to Meridian so that submission data can be washed up.

Meridian submits the load as NHH using the UML profile based on the unmetered daily kWh recorded in the registry and the number of active ICP days for the reconciliation period. Submission was based on an incorrect average daily kWh in the registry for ICP 0000161690CK4EE since November 2022 resulting in potential under submission of 2,269 kWh p.a. Meridian corrected the values during the audit, and revised submission data will be washed up.

The audit found five non-compliances. An audit risk rating of ten indicates that the next audit be completed in 12 months. I have considered this in conjunction with Meridian's comments and recommend that the next audit be in 12 months on 9 March 2025, to confirm that the database has been corrected through MMS' maintenance checks, and revision submissions have been provided.

PARTICIPANT RESPONSE

Meridian have reviewed this report and their comments are contained within its body.