ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTED UNMETERED LOAD AUDIT REPORT

For

AUCKLAND AIRPORT ADVERTISING SIGNS AND PRIME ENERGY LIMITED

Prepared by: Rebecca Elliot

Date audit commenced: 3 May 2021

Date audit report completed: 28 January 2022

Audit report due date: 1 June 2021

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EXECUTIVE SUMMARY

This audit of the Auckland Airport Advertising Signs DUML database and processes was conducted at the request of Prime Energy Limited (Prime) 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.

A database exists in the form of a spreadsheet and it has an audit trail. A new sheet is saved if any changes are made. No changes have occurred have been made to the spreadsheet since October 2015.

The field audit found a number of errors resulting in the database being outside of the allowable +/-5% allowable variance threshold. I have recommended that the change management process be reviewed as the database is not being maintained.

The audit found four non-compliances and makes one recommendation. The audit risk rating indicates that the next audit be in 12 months time. I have considered this in conjunction with Prime's responses and the late submission of this report and recommend that the next audit be in five months time which equates to 12 months since the last audit.

The matters raised will are detailed in the table below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Deriving submission information	2.1	11(1) of Schedule 15.3	The database is outside the allowable +/-5% accuracy threshold resulting in a potential estimated over submission of 12,264 kWh per annum.	Weak	Low	3	Identified
Audit trails	2.7	11(4) of Schedule 15.3	The available audit trails do not specify the user who made the data change.	Strong	Low	1	Identified
Database accuracy	3.1	15.2 and 15.37B(b)	The database is outside the allowable +/-5% accuracy threshold resulting in a potential estimated over submission of 12,264 kWh per annum.	Weak	Low	3	Identified
Volume information accuracy	mation 15.37B(c) outside the allowable		Weak	Low	3	Investigating	
				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	Clause	Recommendation
Database accuracy	3.1	15.2 and 15.37B(b)	Review the change management process to ensure that all changes are recorded in the spreadsheet for the correct date.

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.

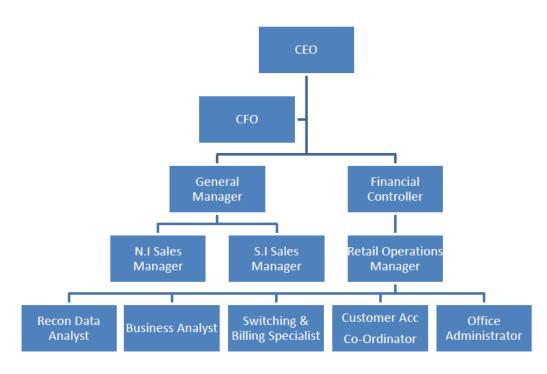
Audit commentary

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

1.2. Structure of Organisation

Prime provided a copy of their organisational structure.

Prime Energy Organizational 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
Shainaz Rafiq	Retail Operations Manager	Prime

1.4. Hardware and Software

Data is contained in a spreadsheet managed by Prime and APN (the customer for the DUML)

Backup is in accordance with standard industry protocols and on site and off site back up occurs.

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	Number of items of load	Daily kWh
0000031344AAEF5	CAC44 ITB - ADVERTISING	AKL0331	84	637.89
Total			84	637.89

1.7. Authorisation Received

All information was provided directly by Prime.

1.8. Scope of Audit

This audit of the Auckland Airport Advertising Signs DUML database and processes was conducted at the request of Prime Energy Limited (Prime) 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.

A database exists in the form of a spreadsheet and it has an audit trail. A new sheet is saved if any changes are made. No changes have occurred have been made to the spreadsheet since October 2015.

1.9. Summary of previous audit

I reviewed the last audit report undertaken by Steve Woods of Veritek Limited in June 2018. Compliance was confirmed with the code.

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

Prime have requested Veritek to undertake this DUML 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.

Audit commentary

Prime reconciles this DUML load using the RPS profile. The lights in the signs are on for 24 hours each day, therefore on/off times are not required.

The submission totals were checked for April and May 2021, and both matched the database.

The field audit found that the database was not within the allowable +/-5% threshold. This will be resulting in an estimated over submission of 12,264 kWh. This is detailed in **section 3.1** and is recorded as non-compliance.

Audit outcome

Non-compliance	Description				
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3	The database is outside the allowable +/-5% accuracy threshold resulting in a potential estimated over submission of 12,264 kWh per annum.				
	Potential impact: Medium				
	Actual impact: Low				
	Audit history: None				
From: 01-Jun-18	Controls: Weak				
To: 31-May-21	Breach risk rating: 3				
Audit risk rating	Rationale for	audit risk rating			
Low	The controls are rated as weak as the ch	ange managemen	t process requires review.		
	The impact is assessed to be potentially described above.	medium, based o	n the kWh values		
Actions to	aken to resolve the issue	Completion date	Remedial action status		
findings. Its been tough fo	with our customer to confirm the audit or everyone through covid lockdowns & r also had staff changeover, but we confirmed.	01/2022	Identified		
Preventative actions take	en to ensure no further issues will occur	Completion date			
Moving forward, we hope	e to carry out quarterly reviews.	04/2022			

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 is recorded for each item of load.

Audit commentary

An ICP is recorded for each item of load in the database.

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 spreadsheet contains a street address and a photo of each item of load so it can be located.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

The DUML database must contain:

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

Audit observation

The database was checked to confirm that it contained a field for lamp type and wattage capacity and included any ballast or gear wattage.

Audit commentary

The spreadsheet contains a description of the sign, details of the light fittings inside each sign, total wattage and kWh per day.

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

A field audit was undertaken of all accessible items of load. Some items are located in the boarding areas of both the domestic and international terminals so were unable to be checked.

Audit commentary

The field audit found the following discrepancies:

The field audit found three discrepancies as detailed in the table below:

Sign ID	Location description	kW	kWh per day	Comments
E3	George Bolt Memorial Drive - Sail Gantry	0.56	13.44	Sign has been removed
E4	George Bolt Memorial Drive - Sail Gantry	0.56	13.44	Sign has been removed
E11	George Bolt Memorial Drive - Aluca Bond Gantry	0.42	10.08	Sign has been removed

No additional signs were found in the field. 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 spreadsheet tracks changes at a daily level.

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 spreadsheet contains an audit trail of all additions and changes. A new sheet is created when any changes are made, however the user is not specified. This is recorded as non-compliance.

Audit outcome

Non-compliance	Description					
Audit Ref: 2.7	The available audit trails do not specify the user who made the data change.					
With: Clause 11(4) of Schedule 15.3						
Scriedule 15.5	Potential impact: Low					
	Actual impact: None					
	Audit history: None					
From: 01-Jun-18	Controls: Strong					
To: 08-Jun-21	Breach risk rating: 1					
Audit risk rating	Rationale for	audit risk rating				
Low	Controls are rated as strong, because there is typically one person who updates the spreadsheet.					
	The impact is assessed to be low based of compliance.	on the nature and	type of the non-			
Actions to	aken to resolve the issue	Completion date	Remedial action status			
Being a small organisation changes & we don't see a	n, only 1 person is authorised to final the need to change this.	N/A	Identified			
Preventative actions take	en to ensure no further issues will occur	Completion date				
staff has been fully traine	authorised to make changes, another d DUML & can take over with approval absence would affect the operational te	N/A				

3. ACCURACY OF DUML DATABASE

3.1. Database accuracy (Clause 15.2 and 15.37B(b))

Code reference

Clause 15.2 and 15.37B(b)

Code related audit information

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

Audit observation

The database includes items of load that are accessible by travelling patrons only therefore I could not randomly select the field audit. The accuracy of the database was assessed by checking all 39 accessible items.

The change management processes were reviewed, and the determination of wattage was confirmed.

Audit commentary

The field audit findings are detailed in **section 2.5**. The database accuracy was found to be potentially 6% lower in the field than is recorded in12,264 kWh per annum. This is recorded as non-compliance below

Change Management

Any changes are expected to be conducted in liaison with Prime. The number of errors found in the field indicate that the customer is not advising Prime when changes are made, and I recommend that this process is reviewed.

Description	Recommendation	Audited party comment	Remedial action
Database Accuracy	Review the change management process to ensure that all changes are recorded in the spreadsheet for the correct date.	This has been difficult with staff changes which is unavoidable. Therefore, we have made a change in process & will communicate directly with the customers management staff every quarter	Identified

Wattage Accuracy

The wattages were consistent with that recorded in the last audit and the process to calculate this is correct.

Audit outcome

Non-compliance	Description				
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b)	The database is outside the allowable +/-5% accuracy threshold resulting in a potential estimated over submission of 12,264 kWh per annum. Potential impact: Medium				
	Actual impact: Low				
	Audit history: None				
From: 01-Jun-18	Controls: Weak				
To: 08-Jun-21	Breach risk rating: 3				
Audit risk rating	Rationale for	audit risk rating			
Low	The controls are rated as weak as the change management process requires review. The impact is assessed to be potentially medium, based on the kWh values described above.				
Actions to	aken to resolve the issue	Completion date	Remedial action status		
We have updated the dat changes with our custom	abase post audit & confirmed all the er.	01/2022	Identified		
Preventative actions take	en to ensure no further issues will occur	Completion date			
	this issue arising again if we continuously our customer. Hoping to see a	04/2022			

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

Audit commentary

Prime reconciles this DUML load using the RPS profile. The lights in the signs are on for 24 hours each day, therefore on/off times are not required.

The submission totals were checked for April and May 2021, and both matched the database.

The field audit found that the database was not within the allowable +/-5% threshold. This will be resulting in an estimated over submission of 12,264 kWh. This is detailed in **section 3.1** and is recorded as non-compliance.

Audit outcome

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c)	The database is outside the allowable +/-5% accuracy threshold resulting in a potential estimated over submission of 12,264 kWh per annum.		
	Potential impact: Medium		
	Actual impact: Low		
	Audit history: None		
From: 01-Jun-18	Controls: Weak		
To: 31-May-21	Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as weak as the change management process requires review. The impact is assessed to be potentially medium, based on the kWh values described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
The changes were confirmed 01/2022 so we will update the Registry & our submission effect 01/01/2022. The customer doesn't have a specific date of when the changes came into effect.		01/2022	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We are looking at improving the accuracy of our submission the information held in the database by having regular communication with our customer. This DUML being part of the airport makes it a very secret process & information isn't shared easily but we are hoping for an improvement.		04/2022	

CONCLUSION

A database exists in the form of a spreadsheet and it has an audit trail. A new sheet is saved if any changes are made. No changes have occurred have been made to the spreadsheet since October 2015.

The field audit found a number of errors resulting in the database being outside of the allowable +/-5% allowable variance threshold. I have recommended that the change management process be reviewed as the database is not being maintained.

The audit found four non-compliances and makes one recommendation. The audit risk rating indicates that the next audit be in 12 months time. I have considered this in conjunction with Prime's responses and the late submission of this report and recommend that the next audit be in five months time which equates to 12 months since the last audit.

PARTICIPANT RESPONSE

Prime have reviewed this audit and provided comments in the body of the report. No further comments were provided.