ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTED UNMETERED LOAD AUDIT REPORT

VERITEK

For

FAR NORTH HOLDINGS JETTY AND WHARF LIGHTS CONTACT ENERGY

Prepared by: Rebecca Elliot

Date audit commenced: 20 November 2019

Date audit report completed: 12 October 2020

Audit report due date: 15-Dec-19

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EXECUTIVE SUMMARY

This audit of the Far North Holdings Wharf Lights (FNH) DUML database and processes was conducted at the request of Contact Energy (Contact), in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied.

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

The audit found eight non-compliances relating to inaccuracies in the database and makes two recommendations.

This audit covers the Far North Holdings DUML ICPs that are managed by Contact. An excel spreadsheet containing all of the light information is held by Top Energy. The TOPE excel spreadsheet is not used by Contact for submission. The database is not used by Contact for submission. Contact uses the Daily Unmetered kWh field from the registry for submission. The TOPE excel spreadsheet was 54.14% of the submission information, annualised (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool) this is an estimated over submission of 13,290 kWh.

The field audit of all items of load found the TOPE excel spreadsheet contained a high number of inaccuracies. The database data being 88.9% of the field data resulting in an estimated under submission of 1964.66 kWh per annum.

The future risk rating of 32 indicates that the next audit be completed in three months. I have considered this in conjunction with the comments provided by Contact Energy and recommend that the next audit be in nine months to enable sufficient time for Contact to resolve the issues raised.

The matters raised are detailed below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
DUML Audit	1.10	16A.26(1)(b)	Audit not completed within the required timeframe. Audit not completed by 1 June 2018 for ICP 0000910450TE75D.	Strong	Low	1	Cleared
Deriving submission information	2.1	11(1) of Schedule 15.3	The TOPE excel spreadsheet was 54.14% of the submission information indicating an estimated over submission of 13,290 kWh per annum. The TOPE excel spreadsheet was 88.9% of the field data indicating under submission of 1,964.66 kWh per annum. The registry figures are used for submission and this does not track load on a daily basis.	Weak	Medium	6	Investigating
Description and capacity of load	2.4	11(2)(c) and (d) of Schedule 15.3	3 x no input wattage recorded.	Weak	Low	3	Investigating
All load recorded in database	2.5	11(2A) of Schedule 15.3	21 items of load not recorded in the database.	Weak	Low	3	Investigating
Tracking of load changes	2.6	11(3) of Schedule 15.3	Tracking of load change not carried out.	None	Low	5	Investigating
Audit trail	2.7	11(4) of Schedule 15.3	Tracking of load change not carried out and therefore no audit trail of changes.	None	Low	5	Investigating
Database accuracy	3.1	11(2A) of Schedule 15.3	The TOPE excel spreadsheet data was 88.9% of the field data indicating under	Weak	Low	3	Investigating

			submission of 1964.66 kWh per annum.837.12 kWh per annum.				
Volume information accuracy	3.2	15.2 and 15.37B(c)	The TOPE excel spreadsheet was 54.14% of the submission information indicating over submission of 13,290 kWh per annum. The TOPE excel spreadsheet data was 88.9% of the field data indicating under submission of 1964.66 kWh per annum. The registry figures are used for submission and this does not track load on a daily basis.	Weak	Medium	6	Investigating
Future Risk Rating						32	

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	Remedial Action
Database Accuracy	3.1	Conduct an audit of all load items to correct the database information.	Investigating
		Review tracking of load change process	Investigating

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

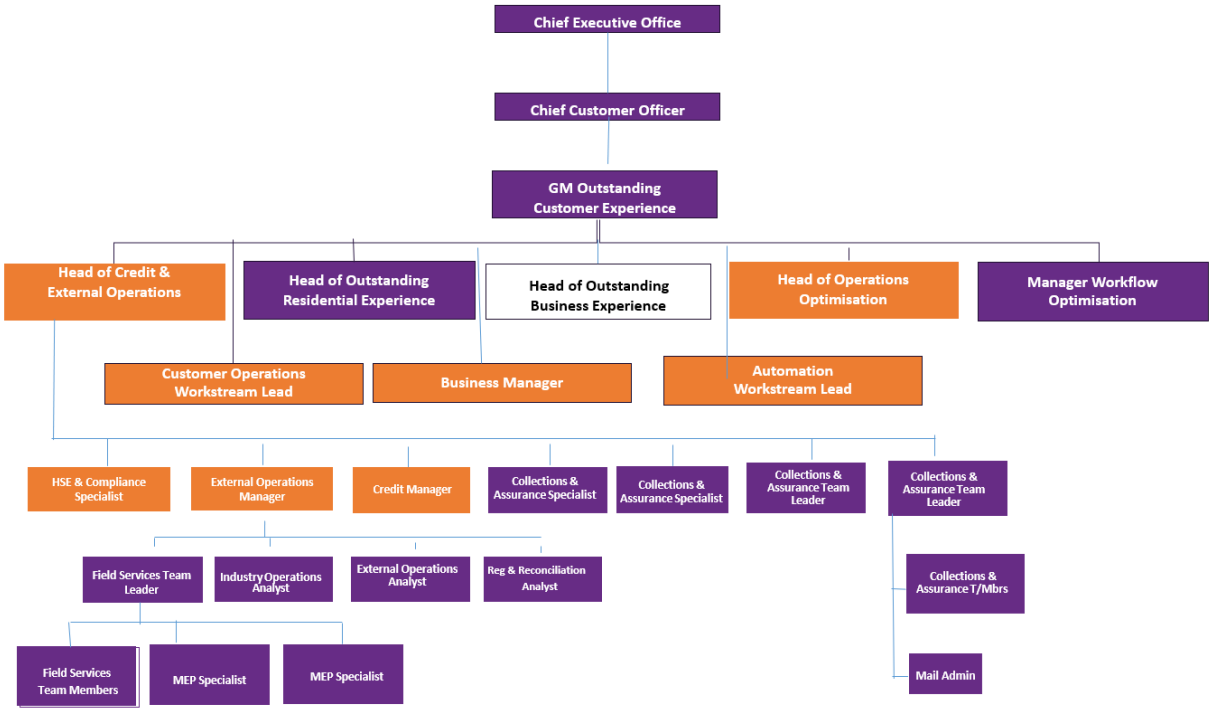
The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

Audit commentary

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

1.2. Structure of Organisation

Contact provided their current organisational structure:



1.3. Persons involved in this audit

Auditors:

Rebecca Elliot – Lead Auditor

Brett Piskulic – Supporting Auditor

Veritek Limited

Electricity Authority Approved Auditors

Other personnel assisting in this audit were:

Name	Title	Company
Esther Delamain	Business Analyst	Top Energy
Allie Jones	External Operations Analyst	Contact Energy

1.4. Hardware and Software

The streetlight data is held in excel spreadsheets. These are backed up in accordance with standard industry procedures. Access to the spreadsheets is restricted by way of user log on into the computer drive.

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)
0000003946TEC6B	JETTY LIGHTS	KOE1101	RPS	3	428
0000003947TE02E	WHARF LIGHT	KOE1101	RPS	10	1,420
0000910450TE75D	WHARF LIGHTS NRC	KOE1101	RPS	15	1,826

1.7. Authorisation Received

All information was provided directly by Contact and Top Energy.

1.8. Scope of Audit

This audit of the Far North Holdings Wharf Lights (FNH) DUML database and processes was conducted at the request of Contact Energy (Contact), 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 ICPs are each managed in an excel spreadsheet held by Top Energy.

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.

A field audit of all items of load was conducted to determine the TOPE excel spreadsheet accuracy on March 5th, 2020.

1.9. Summary of previous audit

An audit was undertaken by Rebecca Elliot of Veritek in 2017 under a different trader. The audit did not include ICP 0000910450TE75D. The findings from that audit are set out below with the current statuses.

Table of Non-Compliance

Subject	Section	Clause	Non compliance	Status
Submission accuracy	2.1	11(1) of schedule 15.3	Inaccurate submission due to database inaccuracies for both ICPs.	Still existing
			Inaccurate submission due to incorrect lamp ballasts being applied for ICP 0000003947TE02E.	Still existing
Lamp Capacities	2.2.4	11(2)(d) of Schedule 15.3	Incorrect ballast applied to 125W lamps resulting in an estimated over submission of 136 kWh per annum.	Still existing
Tracking of Load Changes	2.3	11(3) of Schedule 15.3	Inaccurate submission due to database inaccuracies for both ICPs.	Still existing

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
Tracking of load changes	2.3 refer **section 2.5**	11(3) of Schedule 15.3	Work with Contact Energy to determine correct recording of the Russell Wharf lights.	Still existing
			Conduct an audit of all load items to correct the database information.	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

Contact have requested Veritek to undertake this streetlight audit.

Audit commentary

This audit report confirms that the requirement to conduct an audit has not been met for this database. Contact were unable to complete this audit by the required timeframe as a database extract was not able to be obtained within time to complete the audit by the due date.

This is the first audit for the unmetered load under ICP 0000910450TE75D, therefore the requirement to complete an audit by 1 June 2018 was not met.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 1.10 With: Clause 16A(1)(b) of Part 16A & 17.295F From: 01-Jun-18 To: 08-Apr-20	Audit not completed within the required timeframe. Audit not completed by 1 June 2018 for ICP 0000910450TE75D. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong, as Contact are reliant on the database provider to supply the data and in this case their delay caused this report to be late. The impact is assessed to be low, as this has no direct impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status

The two issues identified in this non compliance are largely outside of Contact control. ICP 0000910450TE75D is vacant (we have made multiple attempts to get this customer to sign into this ICP since 2013 without success) in CTCT systems so there was no ability to engage with customer / DUML Database owner. Additionally it was not possible to disconnect this load either from a logistic perspective (46 individual disconnections) or a safety perspective. We believe that the primary responsibility or this non compliance was with the trader for Far North Holdings in 2014 for failing to switch this ICP or include it as part of DUML database audits upto when the customer switched back to Contact in 2019.	April 2020	Cleared
Preventative actions taken to ensure no further issues will occur	**Completion date**	
-	-	

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

This clause requires that the distributed unmetered load database must satisfy the requirements of schedule 15.5 regarding the methodology for deriving submission information. Contact reconciles this DUML load using the RPS profile. The Daily Unmetered kWh field from the registry is used for submission. I checked the accuracy of the submission information by comparing the submission information provided by Contact for December 2019 with the TOPE excel spreadsheet kW figures. I found that both were incorrect as detailed in **section 3.2**. The TOPE excel spreadsheet was 54.14% of the submission information, annualised (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool) this is an estimated over submission of 13,290 kWh. This is recorded as non-compliance.

The 100% field audit undertaken found that the TOPE excel spreadsheet data was 88.9% of the field data. The total wattage recorded in the TOPE excel spreadsheet was 3,674 watts. The total wattage found in the field was 4,134 watts, a difference of 460 watts. This will result in estimated under submission of 1964.66 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool). This is recorded as non-compliance and discussed in **section 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 TOPE excel spreadsheet does not track load changes. I recommend in **section 3.1**, that this process be reviewed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3 From: 24-May-17 To: 05-Mar-20	The TOPE excel spreadsheet was 54.14% of the submission information indicating an estimated over submission of 13,290 kWh per annum. The TOPE excel spreadsheet data was 88.9% of the field data indicating under submission of 1,964.66 kWh per annum. The registry figures are used for submission and this does not track load on a daily basis. Potential impact: Medium Actual impact: Medium Audit history: Once Controls: Weak Breach risk rating: 6
Audit risk rating	**Rationale for audit risk rating**
Medium	Controls are rated as weak as a database is not used for submission. The risk is medium due to the impact on submission.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact has provided an update of the light details and associated load to TOPE to enable a more accurate assessment of unmetered consumption while we continue to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove audit requirement.	On-going	Investigating
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 TOPE excel spreadsheet was checked to confirm the correct ICP was recorded against each item of load.

Audit commentary

The analysis found that all items of load had the correct ICP recorded against them for the three ICPs recorded 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 TOPE excel spreadsheet was checked to confirm the location is recorded for all items of load.

Audit commentary

The location of each item of load was recorded in the TOPE excel spreadsheet. The lights are located on small wharfs and jettys. The TOPE excel spreadsheet records the name of the wharf or jetty and the numbers of each type of lamp at each location.

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 TOPE excel spreadsheet 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 TOPE excel spreadsheet contains a field for the lamp input wattage including ballast. All hade a lamp description, lamp wattage and ballast wattage recorded with the exception of three items of load that had no wattage recorded.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.4 With: Clause 11(2)(c) and (d) of Schedule 15.3 From: 01-May-18 To: 05-Mar-20	3 x no input wattage recorded Potential impact: Low Actual impact: Low Audit history: Once Controls: Weak Breach risk rating: 3
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as weak as the TOPE excel spreadsheet has a high level of inaccuracy indicating controls are weak. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact has provided an update of the light details and associated load to TOPE to enable a more accurate assessment of unmetered consumption while we continue to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	On-going	Investigating
Preventative actions taken to ensure no further issues will occur	**Completion date**	
-	-	

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 all 28 items of load on 05/03/2020.

Audit commentary

Details of the field audit findings are detailed in the table below:

Street/Area	Database count	Field count	Light count differences	Wattage recorded incorrectly	Comments
Totara North Wharf	5	5	-	5	Database = 5 lamps 4 x 120W MV + 1 x no wattage Field count = 5 lamps - 2 x 150W HPS, 2 x 250W HPS, 1 x 21 W LED
Ruato Rd Wharf	1	5	+4	1	Database = 1 lamp 1 x 400W MV Field count = 5 lamps – 2 x 20W LED navigation lights, 3 x 21W LED
Public Jetty Whangaroa	1	2	+1	1	Database = 1 lamp 1 x 120W MV Field count = 2 lamps – 2 x 21W LED
Boat Ramp Waitangi	1	2	+1	1	Database = 1 lamp 1 x 150W HPS Field count = 2 lamps – 2 x 21W LED
Jetty Waitangi	2	9	+7	2	Database = 2 lamps 2 x general lighting service filament, no wattage recorded

Street/Area	Database count	Field count	Light count differences	Wattage recorded incorrectly	Comments
					Field count = 9 lamps – 1 x 30W LED, 6 x 58W twin fluorescent, 2 x 150W HPS
Wharf Russell	10	18	+8	8	Database = 10 lamps - 8 x 120W MV + 2 x 80W MV Field count = 17 lamps – 2 x 20W LED navigation lights, 5 x 30W LED, 8 x 150W HPS, 2 x 80W MV, 1 x Tsunami warning siren of unknown wattage
Opua Wharf	8	5	-3	8	Database = 8 lamp 4 x 150W HPS, 4 x 70W HPS Field count = 5 lamps – 5 x 30W LED
Total	**28**	**46**	**-3, +21**	**26**	

The field audit found 21 additional lights in the field. This is recorded as non-compliance.

The database accuracy is discussed in **section 3.1**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.5 With: Clause 11(2A) of Schedule 15.3 From: 24-May-17 To: 05-Mar-20	21 items of load not recorded in the TOPE excel spreadsheet. Potential impact: Low Actual impact: Low Audit history: Once Controls: Weak Breach risk rating: 3

Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as weak as the TOPE excel spreadsheet has not been updated to reflect the field information. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		**Completion date**	**Remedial action status**
Contact has provided an update of the light details and associated load to TOPE to enable a more accurate assessment of unmetered consumption while we continue to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement		On -going	Investigating
Preventative actions taken to ensure no further issues will occur		**Completion date**	
-		-	

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 TOPE excel spreadsheet was examined.

Audit commentary

There is no mechanism in the TOPE excel spreadsheet for recording changes in the TOPE excel spreadsheet information.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.6 With: Clause 11(3) of Schedule 15.3 From: 24-May-17 To: 05-Mar-20	Tracking of load change not carried out. Potential impact: Low Actual impact: Low Audit history: None Controls: None Breach risk rating: 5
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as none as there is no mechanism for tracking load changes. The field audit identified a high number of discrepancies indicating that the TOPE excel spreadsheet has not been kept up to date. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact is continuing to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. As part of this transition a more complete asset register will be implemented to allow tracking of load changes • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	On-going	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 TOPE excel spreadsheet was checked for audit trails.

Audit commentary

The TOPE excel spreadsheet does not contain a mechanism to record changes in information therefore there is no audit trail created. I recommend in **section 3.1**, that this process is reviewed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.7 With: Clause 11(4) of Schedule 15.3 From: 24-May-17 To: 05-Mar-20	Tracking of load change not carried out and therefore no audit trail of changes. Potential impact: Low Actual impact: Low Audit history: None Controls: None Breach risk rating: 5
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as none as there is no mechanism for tracking load changes. The field audit identified a high number of discrepancies indicating that the TOPE excel spreadsheet has not been kept up to date. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Contact is continuing to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. As part of this transition a more complete asset register will be implemented to allow tracking of load changes • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	On-going	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 field audit of all items of load was conducted to determine the database accuracy.

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 the field audit

The TOPE excel spreadsheet data was 88.9% of the field data. The total wattage recorded in the TOPE excel spreadsheet was 3,674 watts. The total wattage found in the field was 4,134 watts, a difference of 460 watts. This will result in estimated under submission of 1964.66 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).

The TOPE excel spreadsheet was found to contain a high number of inaccuracies as detailed in **sections 2.4** and **2.5**. There were:

- 21 additional items of load found in the field,
- 3 items of load not found in the field,
- 19 incorrect lamp types recorded in the TOPE excel spreadsheet,
- 3 items with no input wattage recorded in the TOPE excel spreadsheet,
- 11 items of load with incorrect input wattage recorded in the TOPE excel spreadsheet.

It appears that changes made in the field are not being communicated to Top Energy hence the number of discrepancies found. I repeat the last audit's recommendation (recorded in **section 2.5** of that audit) to undertake a full audit of all lights to correct the discrepancies found in the field audit.

Recommendation	Description	Audited party comment	Remedial action

Database accuracy	Conduct an audit of all load items to correct the database information.	Contact is continuing to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. As part of this transition a more complete asset register will be implemented to allow tracking of load changes TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	Investigating

I also recommend that the tracking of load changes be reviewed to ensure that these are captured accurately and in a timely manner to maintain database accuracy going forward.

Recommendation	Description	Audited party comment	Remedial action

Database accuracy	Review tracking of load change process	Contact is continuing to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. As part of this transition a more complete asset register will be implemented to allow tracking of load changes TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	Investigating

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.1 With: Clause 11(2A) of Schedule 15.3 From: 24-May-17 To: 05-Mar-20	The TOPE excel spreadsheet data was 88.9% of the field data indicating under submission of 1,964.66 kWh per annum. Potential impact: Low Actual impact: Low Audit history: Once Controls: Weak Breach risk rating: 3

Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as weak as the TOPE excel spreadsheet has not been updated to reflect the field information. The risk is low due to the minimal impact on submission.		
Actions taken to resolve the issue		**Completion date**	**Remedial action status**
Contact has provided an update of the light details and associated load to TOPE to enable a more accurate assessment of unmetered consumption while we continue to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement		On-going	Investigating
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 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

As detailed in **section 2.1**. ontact reconciles this DUML load using the RPS profile. The Daily Unmetered kWh field from the registry is used for submission. I checked the accuracy of the submission information by comparing the submission information provided by Contact for December 2019 with the TOPE excel spreadsheet kW figures. I found that both were incorrect as detailed in **section 3.2**. The TOPE excel spreadsheet was 54.14% of the submission information, annualised (based on annual burn hours of 4,271 as detailed in the DUML TOPE excel spreadsheet auditing tool) this is an estimated over submission of 13,290 kWh. This is recorded as non-compliance.

As noted in **section 3.1**, the TOPE excel spreadsheet was found to contain a high number of inaccuracies. The TOPE excel spreadsheet was 88.9% of the field data. The total wattage recorded in the TOPE excel spreadsheet was 3,674 watts. The total wattage found in the field was 4,134 watts, a difference of 460 watts. This will result in estimated under submission of 1964.66 kWh per annum (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool).

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 TOPE excel spreadsheet does not track load changes. I recommend in **section 3.1**, that this process be reviewed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c) From: 24-May-17 To: 06-Mar-20	The TOPE excel spreadsheet was 54.14% of the submission information indicating over submission of 13,290 kWh per annum. The TOPE excel spreadsheet was 88.9% of the field data indicating under submission of 1964.66 kWh per annum. The registry figures are used for submission and this does not track load on a daily basis. Potential impact: Medium Actual impact: Medium Audit history: Once Controls: Weak Breach risk rating: 6
Audit risk rating	**Rationale for audit risk rating**
Medium	Controls are rated as weak as the TOPE excel spreadsheet has not been updated to reflect the field information. The risk is medium due to the impact on submission.
Actions taken to resolve the issue	**Completion date** / **Remedial action status**

Contact has provided an update of the light details and associated load to TOPE to enable a more accurate assessment of unmetered consumption while we continue to try and engage with the customer in order to address these non compliance issues. We are looking at a number of potential options such as: • Continue to try and engage with customer to transition responsibility of the database from TOPE to FNHL as FNHL have no mechanism to advise TOPE of any changes to the number or type of lights associated with this DUML. As part of this transition a more complete asset register will be implemented to allow tracking of load changes • TOPE have assigned reference ICPs for each light within their systems for tracing purposes which would enable this unmetered load to be transitioned to standard unmetered load. We intend to investigate with both TOPE and FNHL the possibility of transitioning this DUML to standard UML therefore remove the DUML audit requirement	On-going	Investigating
Preventative actions taken to ensure no further issues will occur	**Completion date**	
-	-	

CONCLUSION

This audit covers the Far North Holdings DUML ICPs that are managed by Contact. An excel spreadsheet containing all of the light information is held by Top Energy. The TOPE excel spreadsheet is not used by Contact for submission. Contact uses the Daily Unmetered kWh field from the registry for submission. The TOPE excel spreadsheet was 54.14% of the submission information, annualised (based on annual burn hours of 4,271 as detailed in the DUML database auditing tool) this is an estimated over submission of 13,290 kWh.

The field audit of all items of load found the TOPE excel spreadsheet contained a high number of inaccuracies. The TOPE excel spreadsheet data being 88.9% of the field data resulting in an estimated under submission of 1964.66 kWh per annum.

The future risk rating of 32 indicates that the next audit be completed in three months. I have considered this in conjunction with the comments provided by Contact Energy and recommend that the next audit be in nine months to enable sufficient time for Contact to resolve the issues raised.

PARTICIPANT RESPONSE

Not account managed so traditional mechanisms to engage with customer not applied

Options

1. combine into single ICP with agreement from TOPE and cust – audits continue
2. Move some to std UML (TOPE to confirm if lights on same dedicated circuit – move rest to single DUML ICP
3. Move all to std UML (TOPE to confirm if lights on same dedicated circuit – no audit requirement) if no material impact to pricing (any change in pricing less than cost of audit every 3 years

Actions

Get contact at FNHL

Move FNHL into ICP 0000910450TE75D back to at least 2014 if not from legacy move out date.

Discuss options with FNHL and TOPE

Correct install fact back 14 months