

ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTED UNMETERED LOAD AUDIT REPORT



For

NZTA WAIRARAPA AND GENESIS ENERGY  
LIMITED

Prepared by: Tara Gannon

Date audit commenced: 27 February 2020

Date audit report completed: 15 April 2020

Audit report due date: 1 June 2020

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## EXECUTIVE SUMMARY

This audit of the **NZTA Wairarapa** DUML database and processes was conducted at the request of **Genesis Energy Limited (Genesis)** 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 scope of the audit encompasses the collection, security and accuracy of the data, including the preparation of submission information.

A Microsoft Access database is held by Dave Patten, on behalf of NZTA. This is the audited database, and Genesis intends to begin using this for settlement. Dave maintains this database in his capacity as a contractor to Power Services Wairarapa (PSW). PSW complete all fieldwork for the NZTA lights, with assistance from Fulton Hogan as required e.g. if repairs are needed following a major incident such as a pole being knocked down. When changes are made, PSW inform Dave Patten via email, who updates the Access database. Fulton Hogan is also advised, and they update RAMM for completeness. RAMM is not used for DUML processes for NZTA Wairarapa.

The NZTA Wairarapa DUML database contains two ICPs, which are currently supplied by different retailers. This audit report considers only 0666002555PC35F, which is supplied by Genesis. A separate audit report has been created for Contact Energy for 0020909000WR49A.

ICP	Property Name	NSP	Trader	Wattage	Light count
0020909000WR49A	TRANSIT NEW ZEALAND STREET LIGHTING	MST0331	CTCT 12/11/19 onwards GENE up to 11/11/19	4,987 W	33
0666002555PC35F	OFF POLE 818826 STATE HIGHWAY 2	GYT0331	GENE	6,768 W	41

A field audit was conducted of all 41 items of load connected to the GYT0331 GXP. 100% accuracy was confirmed.

Genesis reconciles the DUML load using the UNM profile, based on the registry unmetered load details. A monthly snapshot is provided to Genesis by Dave Patten, but this is not used for submission.

Four non-compliances were identified, and no recommendations were raised. The future risk rating of 15 indicates that the next audit be completed in 12 months. I recommend that the next audit is completed in a minimum of 12 months (01/06/2021 at the earliest), to allow time to investigate and confirm the correct ICPs for all NZTA lights within the region.

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	Submissions are not calculated based on database information.  32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331).	Weak	Medium	6	Identified
Audit trails	2.7	11(4) of Schedule 15.3	The available audit trails do not specify:  1) the user who made the data change, and 2) the date and time of the data change.	Strong	Low	1	Identified
Database accuracy	3.1	15.2 and 15.37B(b)	32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331).	Moderate	Low	2	Identified
Volume information accuracy	3.2	15.2 and 15.37B(c)	Submissions are not calculated based on database information.  32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331).	Weak	Medium	6	Identified
Future Risk Rating						15	

<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

Subject	Section	Recommendation
		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

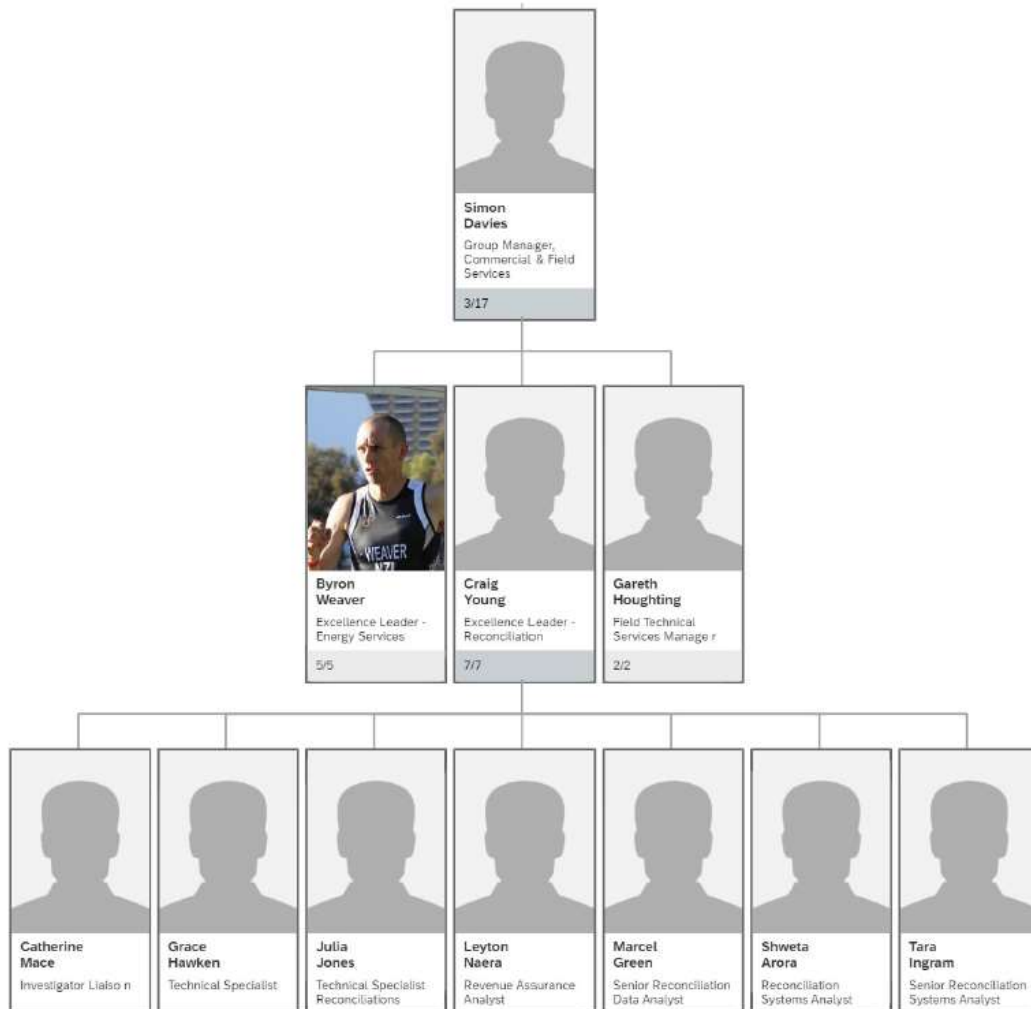
Current code exemptions were reviewed on the Electricity Authority website.

#### Audit commentary

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

### 1.2. Structure of Organisation

Genesis provided a copy of their organisational structure:



### 1.3. Persons involved in this audit

Auditor:

**Tara Gannon**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Other personnel assisting in this audit were:

Name	Title	Company
Dave Patten	Project Manager	Sole Trader
Bernie Lett	Director	Power Services Wairarapa
Grace Hawken	Technical Specialist – Reconciliation Team	Genesis Energy

### 1.4. Hardware and Software

The Microsoft Access database used for the management of DUML is hosted by Dave Patten. Dave is a sole trader and confirmed that the database back-up is to a separate machine. Access to the database is restricted to Dave Patten.

### 1.5. Breaches or Breach Allegations

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

### 1.6. ICP Data

The NZTA Wairarapa DUML database contains two ICPs, which are currently supplied by different retailers. This audit report considers only 0666002555PC35F, which is supplied by Genesis. A separate audit report has been created for 0020909000WR49A.

ICP Number	Description	Trader	NSP	Profile	Number of items of load	Database wattage (watts)
0020909000WR49A	TRANSIT NEW ZEALAND STREET LIGHTING	CTCT	MST0331	RPS	33	4,987
0666002555PC35F	OFF POLE 818826 STATE HIGHWAY 2	GENE	GYT0331	UNM	41	6,768
Total					74	11,755

### 1.7. Authorisation Received

All information was provided directly by Genesis, Dave Patten or PSW.

## 1.8. Scope of Audit

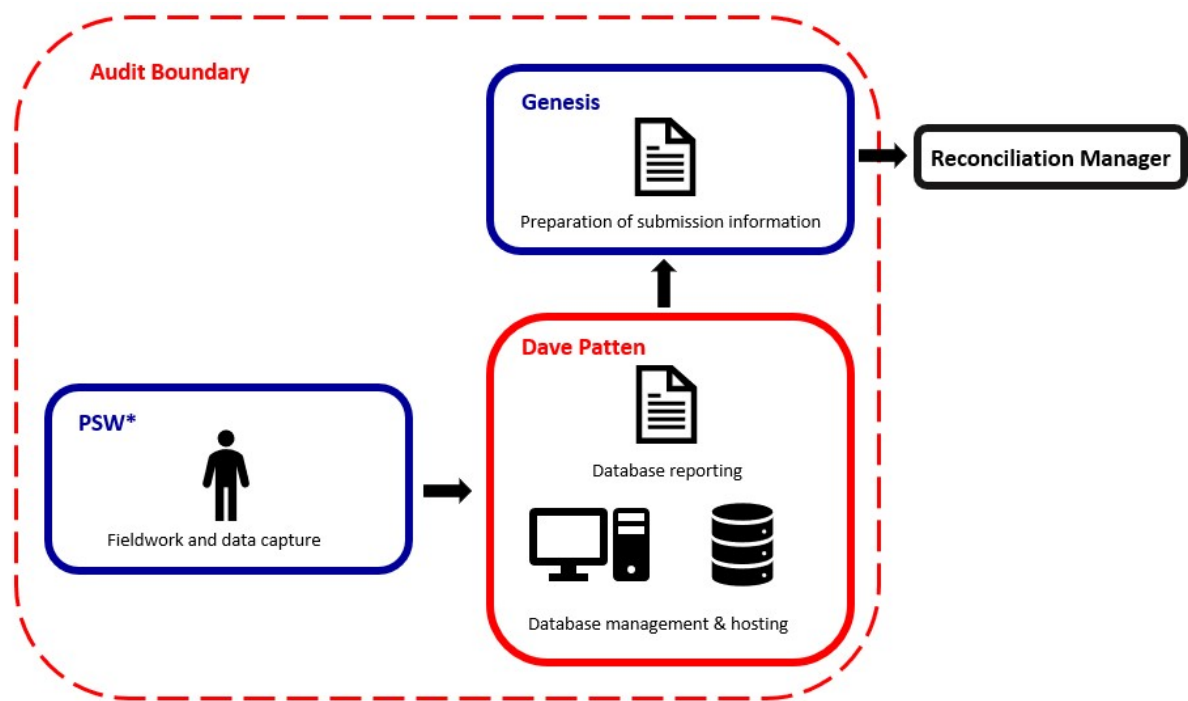
This audit of the NZTA Wairarapa DUMML database and processes was conducted at the request of Genesis in accordance with clause 15.37B. The purpose of this audit is to verify that the volume information is being calculated accurately, and that profiles have been correctly applied. The audit was conducted in accordance with the audit guidelines for DUMML audits version 1.1.

A Microsoft Access database is held by Dave Patten, on behalf of NZTA. This is the audited database, and Genesis intends to begin using this for settlement. Dave maintains this database in his capacity as a contractor to PSW. PSW complete all fieldwork for the NZTA lights, with assistance from Fulton Hogan as required if repairs are required e.g. if repairs are needed following a major incident such as a pole being knocked down. When changes are made, PSW inform Dave Patten via email, who updates the database. Fulton Hogan is also advised, and they update RAMM for completeness. RAMM is not used for DUMML processes for NZTA Wairarapa.

Genesis reconciles the DUMML load using the UNM profile, based on the registry unmetered load details. A monthly snapshot is provided to Genesis by Dave Patten, but this is not used for submission.

The NZTA Wairarapa DUMML database contains two ICPs, which are currently supplied by different retailers. This audit report considers only 0666002555PC35F, which is supplied by Genesis. A separate audit report has been created for Contact Energy for 0020909000WR49A.

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 boundaries for clarity.



\*with assistance from Fulton Hogan as required

A field audit was conducted of all 41 items of load connected to the GYT0331 GXP on 27 February 2020.

### 1.9. Summary of previous audit

The previous audit of this database was undertaken by Tara Gannon of Veritek Limited in March 2018. 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	1) Submissions for ICP 0666002555PC35F are not based on an unmetered load database. 2) In February 2018, the submission to the reconciliation manager for 0666002555PC35F was based on incorrect information. 3) November and December 2017 submissions for ICP 0020909000WR49A were based upon incorrect data.	1) Still existing. 2) Cleared. 3) A correction has been processed and revised submission data will be washed up.
Volume information accuracy	3.2	15.2 and 15.37B(c)	1) Submissions for ICP 0666002555PC35F are not based on an unmetered load database. 2) In February 2018, the submission to the reconciliation manager for 0666002555PC35F was based on incorrect information. 3) November and December 2017 submissions for ICP 0020909000WR49A were based upon incorrect data.	1) Still existing. 2) Cleared. 3) A correction has been processed and revised submission data will be washed up.

### 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

Genesis 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

Genesis reconciles the DUML load for 0666002555PC35F as NHH using the UNM profile. I reviewed the submission information for February 2020 and confirmed that the wattages and on hours were calculated based on the registry information.

I compared the registry information used for submission and database values, and I found that use of the registry values resulted in potential under submission of 22,448 kWh p.a. for 0666002555PC35F as shown in the table below.

Source	Daily kWh	On hours	kW	Estimated annual kWh <sup>1</sup>
Database	-	-	6.768	28,906
Registry/submission	18	11.9 per day	1.512	6,570
<b>Difference</b>			<b>+5.256</b>	<b>+22,448</b>

Some inaccurate ICP numbers were identified in the database, but there is no impact on submission because the database is not used. 32 of the 41 items of load with Powerco GXP = TP Greytown had ICP 0020909000WR49A recorded. I confirmed that the Powerco GXPs for these items were correct and the ICP numbers were incorrect, and this is recorded as non-compliance below.

The database extracts are provided as a snapshot, which only shows the database values on the date that the extract is created. The database records a “last changed date” which indicates the date that the work was carried out, and it is possible to retrospectively determine the lights that were installed on a given date using this information.

#### Previous audit issue

The 2018 audit found that some incorrect submission data was provided because the correct email data was not used. These issues were re-checked during the audit:

- In November 2017, daily unmetered kWh of 84.5 was applied instead of 114.2 for ICP 0020909000WR49A. In December, the billing team attempted to correct the under submission

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<sup>1</sup> Based on daily on hours of 11.9 for the registry and annual on hours of 4,271 for the database.

by applying a larger unmetered volume in December 2017. Following this, the consumption over the two months was correct, but the November consumption was too low, and the December consumption was too high. Genesis have confirmed that a correction was processed, but the billing process overrode this load and undid the correction. Derive has now been updated and revision submissions will be provided for the last 14 months.

- In February 2018, incorrect daily unmetered kWh of 36 was applied for ICP 0666002555PC35F instead of 18. Revised data has been washed up.

**Audit outcome**

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11(1) of Schedule 15.3 From: 27-Feb-20 To: 27-Feb-20	Submissions are not calculated based on database information. 32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331). Potential impact: High Actual impact: Unknown Audit history: Twice Controls: Weak Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
<b>Medium</b>	The controls are rated as weak because the database information is not used for submission. The controls over database accuracy are rated as moderate. The risk is medium based on the 5.256 kW or 22,488 kWh per annum difference between the database and registry information used for submission. The incorrect ICP numbers currently have no impact because the database information is not used for submission.		
Actions taken to resolve the issue		Completion date	Remedial action status
The current assets are being investigated as ICP WR9A had switched to CTCT leaving some data with Genesis and on the wrong ICP. The corrections have been made however further issues have been identified where there maybe further duplication of load across 3 traders and 4 ICP's in this region, some pertaining to Masterton DC		01/12/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis works with the data source administrator to rectify any issue raised in the audits.		01/04/2020	

## 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 the correct ICP was recorded against each item of load.

### Audit commentary

An ICP and GXP is recorded for each item of load in the database. The accuracy of ICP identifiers is discussed in **sections 2.1, 3.1 and 3.2.**

### 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 street address and location for each item of load. I was able to locate all items of load during the field audit.

### 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 light type and wattage capacity,
- wattage capacities include any ballast or gear wattage, and
- each item of load has a light type, light wattage, and gear wattage recorded.

**Audit commentary**

A lamp description and size (including make and model) and lamp and gear wattages are recorded in the database for all items of load.

All items of load recorded in the database were surveyed in the field, and the database was found to be 100% accurate. No inaccurate wattage information was identified during the database review.

**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 conducted of all 41 items of load connected to the GYT0331 GXP on 27 February 2020.

**Audit commentary**

The field audit did not find any differences between the information recorded in the database, and the lights present in the field.

**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 functionality achieves compliance with the code. The database records a “last changed date” which indicates the date that the work was carried out, and it is possible to retrospectively determine the lights that were installed on a given date using this information.

The change management process and the compliance of the database reporting provided to Genesis is detailed in **sections 3.1** and **3.2**.

## 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 Access database does not contain an audit trail, but before and after values are maintained within the database, and also retained in the monthly database extracts.

The detail sheets of the database extracts have an audit trail, which includes the new values and last lamp change date. The summary sheet contains notes briefly describing changes since the last database extract.

Non-compliance is recorded because:

- 1) the user is not specified, but only Dave Patten maintains the database, and
- 2) the date and time of the data change is not specified, only the date of the physical lamp change.

## Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.7 With: Clause 11(4) of Schedule 15.3  From: 27-Feb-20 To: 27-Feb-20	The available audit trails do not specify: <ol style="list-style-type: none"><li>1) the user who made the data change, and</li><li>2) the date and time of the data change.</li></ol> <p>Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1</p>

Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	<p>Controls are rated as strong, because the user who made the change and the approximate date and time of the change can be determined from other information which is available.</p> <p>The impact is assessed to be low based on the nature and type of non-compliance, and because only one user is maintaining the database.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Genesis finds the database manager is generally adequate to ensure changes are administered.		01/04/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Genesis will advise the database manager of the potential impact inaccuracies in change management.		01/04/2020	

### 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

Genesis reconciles the DUML load for 0666002555PC35F as NHH using the UNM profile. I reviewed the submission information for February 2020 and confirmed that the wattages and on hours were calculated based on the registry information.

A database extract was provided in February 2020 and I assessed the accuracy of this by using the DUML Statistical Sampling Guideline. The table below shows the survey plan.

Plan Item	Comments
Area of interest	NZTA Wairarapa streetlights connected to 41 items of load connected to the GYT0331 GXP (ICP 0666002555PC35F).
Strata	The database contains 41 items of load connected to the GYT0331 GXP (ICP 0666002555PC35F). All 41 items of load were checked.
Area units	Not applicable, all 41 items of load were checked.
Total items of load	All 41 items of load were checked.

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

##### Field audit findings

All lights recorded in the database were surveyed in the field, and the database was found to be 100% accurate.

##### Light description and capacity accuracy

As discussed in **section 2.4**, a lamp description and size (including make and model) and lamp and gear wattages are recorded in the database for all items of load. No inaccurate wattage information was identified during the database review.

##### ICP number accuracy

The NZTA Wairarapa DUML database contains two ICPs:

- 0666002555PC35F (GYT0331), which is supplied by Genesis; and
- 0020909000WR49A (MST0331), which was supplied by Genesis until 11/11/19 and is now supplied by Contact Energy.

The database records the Powerco GXP description, ICP, and location for each item of load. I checked the consistency between these fields for each item of load. I found that 32 of the 41 items of load with

Powerco GXP = TP Greytown had ICP 0020909000WR49A recorded. I confirmed that the Powerco GXPs for these items were correct and the ICP numbers were incorrect, and this is recorded as non-compliance below.

### Change management process findings

PSW complete all fieldwork for the NZTA lights, with assistance from Fulton Hogan as required e.g. if repairs are needed following a major incident such as a pole being knocked down. When changes are made, PSW inform Dave Patten via email, who updates the database. There are very few new connections or changes.

Night patrols are completed monthly by Dave Patten, who reports any maintenance issues arising to PSW. The normal email process is followed to advise Dave of any changes made.

There are no immediate plans for widespread upgrades to occur. Where repair or maintenance activity requires a lamp to be replaced and PSW is unable to source a light of the same type, an LED is used.

The database records a “last changed date” which indicates the date that the work was carried out, and it is possible to retrospectively determine the lights that were installed on a given date using this information.

### Festive and private lights

There are no private or festive lights for NZTA Wairarapa.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b)  From: 27-Feb-20 To: 27-Feb-20	32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331).  Potential impact: High  Actual impact: Unknown  Audit history: None  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	Controls are rated as moderate. The ICP number missed being updated when the GXP was updated, creating a discrepancy.  The impact is assessed to be low because the correct GXPs are recorded. There is no impact on submission because the database information is not used for submission.		
Actions taken to resolve the issue		Completion date	Remedial action status
The current assets are being investigated as ICP WR9A had switched to CTCT leaving some data with Genesis and on the wrong ICP. The corrections have been made however further issues have been identified where there may be further duplication of load across 3 traders and 4 ICP's in this region, some pertaining to Masterton DC		01/12/2020	Identified



Preventative actions taken to ensure no further issues will occur	Completion date	
Genesis works with the data source administrator to rectify any issue raised in the audits.	01/04/2020	

### 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 on hours against the submitted figure to confirm accuracy.

#### Audit commentary

Genesis reconciles the DUML load for 0666002555PC35F as NHH using the UNM profile. The correct profiles and submission types are recorded on the registry.

I reviewed the submission information for February 2020 and confirmed that the wattages and on hours were calculated based on the registry information.

I compared the registry information used for submission and database values, and I found that use of the registry values resulted in potential under submission of 22,448 kWh p.a. for 0666002555PC35F as shown in the table below.

Source	Daily kWh	On hours	kW	Estimated annual kWh <sup>2</sup>
Database	-	-	6.768	28,906
Registry/submission	18	11.9 per day	1.512	6,570
<b>Difference</b>			<b>+5.256</b>	<b>+22,448</b>

Some inaccurate ICP numbers were identified in the database, but there is no impact on submission because the database is not used. 32 of the 41 items of load with Powerco GXP = TP Greytown had ICP 0020909000WR49A recorded. I confirmed that the Powerco GXPs for these items were correct and the ICP numbers were incorrect, and this is recorded as non-compliance below.

<sup>2</sup> Based on daily on hours of 11.9 for the registry and annual on hours of 4,271 for the database.

The database extracts are provided as a snapshot, which only shows the database values on the date that the extract is created. The database records a “last changed date” which indicates the date that the work was carried out, and it is possible to retrospectively determine the lights that were installed on a given date using this information.

### Previous audit issue

The 2018 audit found that some incorrect submission data was provided because the correct email data was not used. These issues were re-checked during the audit:

- In November 2017, daily unmetered kWh of 84.5 was applied instead of 114.2 for ICP 0020909000WR49A. In December, the billing team attempted to correct the under submission by applying a larger unmetered volume in December 2017. Following this, the consumption over the two months was correct, but the November consumption was too low, and the December consumption was too high. Genesis have confirmed that a correction was processed, but the billing process overrode this load and undid the correction. Derive has now been updated and revision submissions will be provided for the last 14 months.
- In February 2018, incorrect daily unmetered kWh of 36 was applied for ICP 0666002555PC35F instead of 18. Revised data has been washed up.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 15.2 and 15.37B(c) From: 27-Feb-20 To: 27-Feb-20	Submissions are not calculated based on database information. 32 items of load with Powerco GXP = TP Greytown had 0020909000WR49A (MST0331) recorded, but instead should have 0666002555PC35F (GYT0331). Potential impact: High Actual impact: Unknown Audit history: Twice Controls: Weak Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
<b>Medium</b>	The controls are rated as weak because the database information is not used for submission. The controls over database accuracy are rated as moderate. The risk is medium based on the 5.256 kW or 22,488 kWh per annum difference between the database and registry information used for submission. The incorrect ICP numbers currently have no impact because the database information is not used for submission.		
Actions taken to resolve the issue		Completion date	Remedial action status
The database adjustments have been made, however further investigation into the NZTA assets in this region is required as the assets are across multiple ICP's and multiple traders. This has just come to light when Genesis question NZTA why 1 ICP switched away and not the other.		01/12/2020	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Genesis will have the corrections made, and will update the registry monthly with the correct uml details for these assets.	01/04/2020	

## CONCLUSION

A Microsoft Access database is held by Dave Patten, on behalf of NZTA. This is the audited database, and Genesis intends to begin using this for settlement. Dave maintains this database in his capacity as a contractor to Power Services Wairarapa (PSW). PSW complete all fieldwork for the NZTA lights, with assistance from Fulton Hogan as required e.g. if repairs are needed following a major incident such as a pole being knocked down. When changes are made, PSW inform Dave Patten via email, who updates the Access database. Fulton Hogan is also advised, and they update RAMM for completeness. RAMM is not used for DUML processes for NZTA Wairarapa.

The NZTA Wairarapa DUML database contains two ICPs, which are currently supplied by different retailers. This audit report considers only 0666002555PC35F, which is supplied by Genesis. A separate audit report has been created for Contact Energy for 0020909000WR49A.

ICP	Property Name	NSP	Trader	Wattage	Light count
0020909000WR49A	TRANSIT NEW ZEALAND STREET LIGHTING	MST0331	CTCT 12/11/19 onwards GENE up to 11/11/19	4,987 W	33
0666002555PC35F	OFF POLE 818826 STATE HIGHWAY 2	GYT0331	GENE	6,768 W	41

A field audit was conducted of all 41 items of load connected to the GYT0331 GXP. 100% accuracy was confirmed.

Genesis reconciles the DUML load using the UNM profile, based on the registry unmetered load details. A monthly snapshot is provided to Genesis by Dave Patten, but this is not used for submission.

Four non-compliances were identified, and no recommendations were raised. The future risk rating of 15 indicates that the next audit be completed in 12 months. I recommend that the next audit is completed in a minimum of 12 months (01/06/2021 at the earliest), to allow time to investigate and confirm the correct ICPs for all NZTA lights within the region.

## PARTICIPANT RESPONSE

Dave Patten administers this database and generally keeps a high level of accuracy. The loss of ICP 0020909000WR49A has reveal that there is potential duplication in the NZTA assets over this region. The below ICP's are listed with the NZTA and need to be confirm who is responsible for those assets under each ICP.

Genesis will be working with the NZTA to unravel the mystery of this region and will be requesting a 12 month review period in order to clearly identify asset ownerships, with the help of other traders.

ICP 0020902000WRB7A – Mercury Energy - MASTERTON DC;SL;MST0331;URBAN;DUML

ICP 0020903000WRADA – Mercury Energy - CARTERTON DC;SL;MST0331;DUML

ICP 0020909000WR49A – Contact Energy – Masterton 10.09KW;64FITTINGS; TRANSIT S/L – MST0331

ICP 0666002555PC35F – Genesis Energy – Featherston – GYT0331 - ROAD LIGHTING OFF POLE 818826 - E49917