

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

TOP ENERGY

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EXECUTIVE SUMMARY

This audit was performed at the request of Top Energy (TOPE), as required by clause 11.10 of Schedule 11, to assure compliance with the Electricity Industry Participation Code 2010. The relevant rules audited are as required by the Guidelines for Distributor Audits, version 7.0, issued by the Electricity Authority.

Top Energy created 377 new ICPs on its network. Overall Top Energy maintain their level of compliance. During the audit Top Energy made it clear that the company's policy is to have the registry information correct as per clause 11.2 of the Code. This would mean having to backdate registry transactions, but this is considered secondary to the objective of having accurate information in the registry.

The level of compliance has improved in the following areas:

- updating information in the registry

The main issues identified during this audit are:

- lack information for a small number of embedded generation (solar)
- Lack of follow up of ICPs with the status of "ready" or "new" for longer than 24 months

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Distributor audit provides some guidance on this matter. The Future Risk Rating score is 14 which results in an indicative audit frequency of 12 months. We agree with the result.

We thank Top Energy for its full and complete cooperation in this audit.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1)	Missing information for a number of embedded generation (solar) ICPs, missing information for some UML ICPs	Moderate	Low	2	Identified
Timeliness of provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	8 ICPs out of 377 new connections had Initial Electrical Connection Date populated later than 10BD	Strong	Low	1	Identified
Monitoring “new” and “ready” statuses	3.14	15 of Schedule 11.1	9 ICPs with the status “ready” and 26 ICPs with the status “new” were not followed up with the trader	Weak	Low	3	Identified
Changes to registry information	4.1	8 of Schedule 11.1	Some updates to the registry were done later than 3BD.	Moderate	Low	2	Identified
ICP location address	4.4	2 of Schedule 11.1	Four ICPs have identical addresses. 36 ICPs do not have GPS coordinates populated and their address description does not meet compliance with this clause	Moderate	Low	2	Identified
Distributor to provide ICP information to the registry manager	4.6	7(1) of Schedule 11.1	Incorrect information in the registry in relation to Initial Electrical Connection Date, connection of solar panels, UML	Moderate	Low	2	Identified
Management of “ready” status	4.9	14 of Schedule 11.1	Top Energy does not receive a trader acceptance of responsibility for	Moderate	Low	2	Identified

			the ICP before the registry assigns the ICP status “ready				
Future Risk Rating						14	

Future risk rating	0-1	2-5	6-8	9-20	21-29	30+
Indicative audit frequency	36 months	24 months	18 months	12months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Description
Management of “decommissioned” status	4.11	Look for a more effective mechanism to update ICPs status to “decommissioned” in a timely manner.	Manual process of checking if a trader changed an ICP status to “inactive-ready for decommissioning”

ISSUES

Subject	Section	Issue	Description
		Nil	

1. ADMINISTRATIVE

1.1. Exemptions from Obligations to Comply with Code (Section 11)

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.

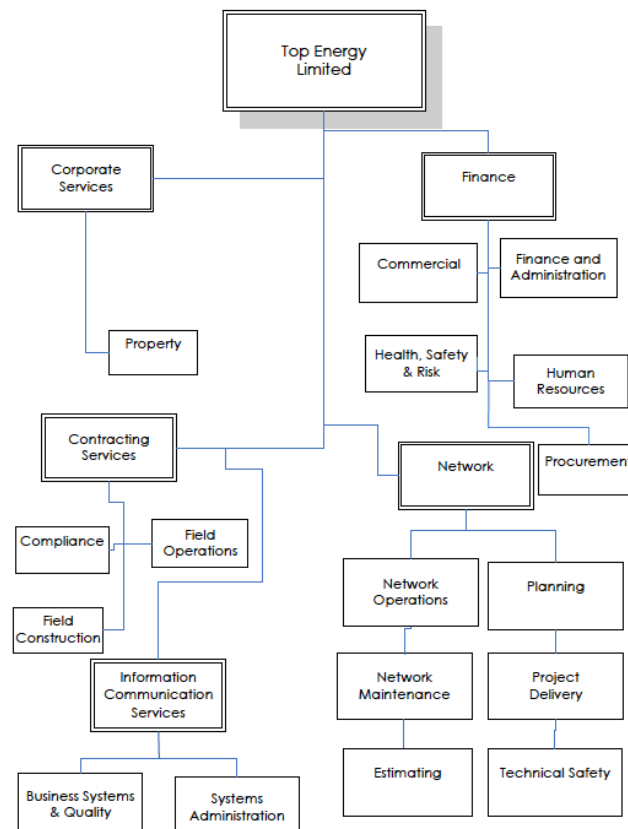
Audit observation

It was discussed with Top Energy and it was confirmed that there are no exemptions in place which are relevant to the scope of this audit

Audit commentary

We checked the Electricity Authority website and confirm that there are no exemptions in place.

1.2. Structure of Organisation



1.3. Persons involved in this audit

Name	Title	Company	Comment
Ken Mitchell	General Manager Network	Top Energy Ltd	Contact person
Paul Doherty	General Manager Finance	Top Energy Ltd	
Helen Rush	Administrator	Top Energy Ltd	
Caroline Pusch	Administrator	Top Energy Ltd	
Rachel Cornwell	Metering Services Co-ordinator	Top Energy Ltd	
Sandra Dearly	GIS Technician	Top Energy Ltd	
Esther Delamain	Business Analyst	Top Energy Ltd	
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates Ltd	

1.4. Use of contractors (Clause 11.2A)

Code reference

Clause 11.2A

Code related audit information

A participant who uses a contractor

- *remains responsible for the contractor's fulfilment of the participants Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to the action of a contractor*
- *must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the participant would be required to have if it were performing the obligation itself*

Audit observation

There are no contractors who assist with the Top Energy operations that were audited.

Audit commentary

During the audit, we did not identify any contractors which assist Top Energy to meet their obligation.

1.5. Supplier list

There are suppliers who assist with the Top Energy operations that were audited.

Club ICP is supported by Hexagon

DigSILENT is provided by PowerFactory

1.6. Hardware and Software

Oracle Server is used to run the ICP database and retrieve reports from the registry.

- Club ICP is supported by Hexagon; it is used for managing the ICP database and connections to the registry.

- DigSILENT PowerFactory – network management tool for modelling electricity flows and recording specifications for equipment used to transfer electricity.

1.7. Breaches or Breach Allegations

Top Energy confirms there are no exemptions in place, relevant to the scope of this audit.

1.8. ICP and NSP Data

Top Energy provided the LIS file dated 24/08/2018, the total number of ICPs was 37,741.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
TOPE	KOE1101	Kaikohe			KOE1101TOPEG	G	01/04/2012	33,458

Status	Number of ICPs (24/08/2018)	Number of ICPs (11/09/2017)	Number of ICPs (2016)	Number of ICPs (2015)
New (999,0)	22	31	36	144
Ready (0,0)	182	159	84	57
Active (2,0)	32,075	31,633	31,325	31,024
Distributor (888)	1	1	1	1
Inactive – new connection in progress (1,12)	25	15	5	14
Inactive – electrically disconnected vacant property (1,4)	952	1,000	979	1,001
Inactive – electrically disconnected remotely by AMI meter (1,7)	79	47	4	0
Inactive – electrically disconnected at pole fuse (1,8)	15	8	1	2
Inactive – electrically disconnected due to meter disconnected (1,9)	7	4	0	0
Inactive – electrically disconnected at meter box fuse (1,10)	7	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	1	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	93	60	49	73
Inactive – reconciled elsewhere (1,5)	0	0	0	0
Decommissioned (3)	4,283	4,253	4,215	4,095

1.9. Authorisation Received

Top Energy provided a letter of authorisation to the auditors permitting the collection of data from other parties for matters directly related to the audit.

1.10. Scope of Audit

This audit was performed at the request of Top Energy, as required by clause 11.10 of Schedule 11, to assure compliance with the Electricity Industry Participation Code 2010. The audit covers the following processes, under clause 11.10(4) of Part 11, performed by Top Energy:

- (a) -The creation of ICP identifiers for ICPs
- (b) -The provision of ICP information to the registry and the maintenance of that information
- (c) - The creation and maintenance of loss factors

The audit was carried out on the Top Energy premises at the John Butler Centre in Kerikeri, and Puketona, on the 6/7 September 2018.

1.11. Summary of previous audit

The previous audit was carried out on the 28 October 2017 by Ewa Glowacka (TEG & Associates Ltd). The findings of the audit are shown below:

Subject	Clause	Non-Compliance	Comment
Requirement to provide complete and accurate information	11.2(1)	Unmetered load information is missing, incorrect information for embedded generation (solar)	Still exits
Requirements to correct errors	11.2(2)	Incorrect data is proactively corrected but there are some outstanding issues effecting a small number of ICPs identified in the last audit	Still exits
Timeliness of provision of Initial Electrical Connection Date	7(2A) of Schedule 11.1	Five ICPs out of 362 new connection had Initial Electrical Connection Date populated later than 10BD	Still exits
Changes to registry information	8 of Schedule 11.1	Some updates to the registry were done later than 3BD. These were mostly updating of the Status “decommissioned” and clean-up of Initial Electrical Connection Date after the last audit	Still exits
ICP location address	2 of Schedule 11.1	Four ICPs have identical addresses and for one ICP the address description does not allow the ICP to be readily located (GPS coordinates recorded)	Still exits
Distributor to provide ICP information to the registry manager	7(1) of Schedule 11.1	Incorrect information in the registry in relation to Initial Electrical Connection Date, connection of solar panels, UML	Still exits
Management of “ready” status	14 of Schedule 11.1	Top Energy receives confirmation from a trader accepting responsibility for the ICP after the registry changes the ICP status to “ready” because a proposed trader specified by a customer was uploaded	Still exits

2. OPERATIONAL INFRASTRUCTURE

2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1))

Code reference

Clause 11.2(1) and 10.6(1)

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Parts 10 or 11 is:

- a) complete and accurate*
- b) not misleading or deceptive*
- c) not likely to mislead or deceive.*

Audit observation

Compliance with these clauses was reviewed to assess if all practicable steps had been taken to provide accurate information.

Audit commentary

As described in section 4.1, there is small number of information which is not accurate or missing. There is a problem with the population of information for embedded generation, some UML ICPs do not have detailed information recorded, some Initial Electrical Connection Dates are incorrect.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: 11.2(1) From: 16-Aug-16 To: 31-Aug-17	Missing information for a number of embedded generation (solar) ICPs, missing information for some UML ICPs Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are recorded as moderate. There are good reports in place to monitor the accuracy of data but there are still some areas which need more attention; no impact on settlement market because of the small number of ICPs therefore audit risk rating is recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
We continue to work on ensuring registry information is accurate. Some actions include: <ul style="list-style-type: none"> - Reviewing if Club ICP needs changes to support data integrity - Ongoing work with councils and road authorities to improve unmetered records (significant work has already been done but dependant on 3rd parties) - Work through and correct ICP's identified with missing data in this audit 		30 June 19 Ongoing 20 Dec 18	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing continual improvement of processes of investment of training of new staff members to enhance knowledge.		Ongoing	

2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))

Code reference

Clause 11.2(2) and 10.6(2)

Code related audit information

If the participant becomes aware that in providing information under this Part, the participant has not complied with that obligation, the participant must, as soon as practicable, provide such further information as is necessary to ensure that the participant does comply.

Audit observation

Top Energy is proactive to correct errors in the registry when discovered.

On a weekly basis reports are run to check information from the registry against Club ICP. These reports include duplicate addresses, status differences, price category codes, ICPs that have been electrically connected that have not been made “active” in the registry. Each fortnight, Top Energy runs reports which look for ICPs in CLUB ICP with “active” status but no Initial Electrical Connection Date (IECD), ICPs with the status “new”.

Audit commentary

Top Energy is proactively working towards reducing the amount of incorrect or missing information in the registry. As per section 4.1 and 4.6 the results they achieve are good.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

The distributor must create an ICP identifier in accordance with Clause 1 of Schedule 11.1 for each ICP on the distributor's network. This includes an ICP identifier for the point of connection at which an embedded network connects to the distributor's network.

Audit observation

The new connection process has not changed since the last audit. A request for a new connection is made by the customer or his/her representative. A customer uses the Customer Initiated Work Application Form. The Application can be received by mail, fax, e-mail or in person.

Audit commentary

A customer is asked to fill in details about a new installation, number of phase, capacity (commercial), is builders temp required, name of trader. Once an application is received it is passed to an estimator to assess and create a quote. An ICP identifier is uploaded to the registry once the quote has been paid.

The customer's contribution is required to be paid before the work commences. Once the payment is made an ICP identifier is created in the CLUB ICP and uploaded to the registry. The customer contacts the chosen trader.

Audit outcome

Compliant

3.2. Participants may request distributors to create ICPs (Clause 11.5(3))

Code reference

Clause 11.5(3)

Code related audit information

The distributor, within 3 business days of receiving a request for the creation of an ICP identifier for an ICP, must either create a new ICP identifier or advise the participant of the reasons it is unable to comply with the request.

Audit observation

An ICP identifier is issued to a customer or his/her electrician not a participant.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

3.3. Provision of ICP Information to the registry manager (Clause 11.7)

Code reference

Clause 11.7

Code related audit information

The distributor must provide information about ICPs on its network in accordance with Schedule 11.1.

Audit observation

Top Energy staff use Club ICP to create new ICPs based on information provided by a customer in the Customer Initiated Work Application Form. Club ICP creates the UIS file and it is uploaded to the registry overnight to create the ICP in the registry.

Audit commentary

The EDA for the period 01/09/17 to 15/8/18 was examined. We confirm that all information required is uploaded. CLUB ICP has built-in validation to ensure mandatory fields are populated.

Audit outcome

Compliant

3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1)

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

The distributor must provide information specified in Clauses 7(1)(a) to 7(1)(o) of Schedule 11.1 as soon as practicable and prior to electricity being traded at the ICP.

Audit observation

The EDA for the period 01/09/17 to 15/8/18 was examined.

Audit commentary

We checked “status” entries and confirm that all ICPs were uploaded prior to electricity being traded at the ICP. Additionally, we chose 10 new connections and checked each step of the process.

Audit outcome

Compliant

3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

The distributor must provide the information specified in subclause (1)(p) to the registry manager no later than 10 business days after the date on which the ICP is initially electrically connected.

Audit observation

The EDA for the period 01/09/17 to 15/8/18 was examined.

Audit commentary

We reviewed network updates in the registry and identified that for 8 ICPs Initial Electrical Connection date was uploaded later than 10 business days. The delay was 18 to 100 business days. The total number of new connections in the period covered by this audit was 377.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: 7(A) of Schedule 11.1 From: 01-Sep-17 To: 15-Aug-18	8 ICPs out of 377 new connections had Initial Electrical Connection Date populated later than 10BD Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	We have recorded the controls as strong. There are reports in place to monitor compliance in this area but maybe they should be run more often or maybe the correction of errors is too slow; Settlement outcome not effected therefore audit risk rating is recorded as low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Continual effort to ensure Initial Electrical Connection Dates are populated within the timeframe. - Will look at whether changing the frequency of reports to identify issues is viable		20 Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing continual improvement of processes of investment of training of new staff members to enhance knowledge.		Ongoing	

3.6. Connection of ICP that is not an NSP (Clause 11.17)

Code reference

Clause 11.17

Code related audit information

A distributor must, when connecting an ICP that is not an NSP, follow the connection process set out in Clause 10.31.

The distributor must not connect an ICP (except for an ICP across which unmetered load is shared) unless a trader is recorded in the registry as accepting responsibility for the ICP.

In respect of ICPs across which unmetered load is shared, the distributor must not connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load.

Audit observation

We reviewed the new connection process and “walked” through 10 new ICPs.

Audit commentary

The process review showed that Top Energy does not connect an ICP unless a trader is recorded in the registry and a SR asking for a connection is received.

We checked entries in the EDA file related to the uploading of ICPs and did not identify any ICPs with the status “ready”, which were backdated. Our conclusion is that Top Energy is compliant with 11.17 (2).

Top Energy does not accept shared unmetered load on its network.

Audit outcome

Compliant

3.7. Connection of ICP that is not an NSP (Clause 10.31)

Code reference

Clause 10.31

Code related audit information

A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP.

Audit observation

The new connection process was examined. Top Energy controls any activities on its network very well.

Audit commentary

Top Energy’s new connection process is that the company must receive a SR from the trader recorded in the registry. All traders’ requests go through VircomEMS. Once a SR is received Top Energy contact an electrician to check if the job is ready and then Top Energy’s inspector to go on site. Job Pack is issued containing all the details. Inspectors bring back paperwork and switchboard photos. All documentation is sent to the trader.

The safeguard of not connecting an ICP without a trader accepting responsibility is the fact that Top Energy’s inspectors only connect and electrically connect an installation after receiving a service request from a trader.

Audit outcome

Compliant

3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)

Code reference

Clause 10.31A

Code related audit information

A distributor may only temporarily electrically connect an ICP that is not an NSP if requested by an MEP for a purpose set out in clause 10.31A(2), and the MEP:

- *has been authorised to make the request by the trader responsible for the ICP; and*
- *the MEP has an arrangement with that trader to provide metering services.*

Audit observation

It was discussed during the audit.

Audit commentary

If Top Energy is asked by an MEP to temporarily electrically connect it would, but it has not occurred.

Audit outcome

Compliant

3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)

Code reference

Clause 10.30

Code related audit information

A distributor must not connect an NSP on its network that is not a point of connection to the grid unless requested to do so by the reconciliation participant responsible for ensuring there is a metering installation for the point of connection.

The distributor must, within 5 business days of connecting the NSP that is not a point of connection to the grid, advise the reconciliation manager of the following in the prescribed form:

- *the NSP that has been connected*
- *the date of the connection*
- *the participant identifier of the MEP for each metering installation for the NSP*
- *the certification expiry date of each metering installation for the NSP.*

Audit observation

We checked the NSP table in the registry.

Audit commentary

Top Energy hasn't had such connections in the last 12 months.

Audit outcome

Compliant

3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))

Code reference

Clause 10.30(A)

Code related audit information

A distributor may only temporarily electrically connect an NSP that is not a point of connection to the grid if requested by an MEP for a purpose set out in clause 10.30A(3), and the MEP:

- *has been authorised to make the request by the reconciliation participant responsible for the NSP; and*
- *the MEP has an arrangement with that reconciliation participant to provide metering services.*

Audit observation

We checked the NSP table in the registry.

Audit commentary

Top Energy hasn't had such connections in the last 12 months.

Audit outcome

Compliant

3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

Each ICP created by the distributor in accordance with Clause 11.4 must have a unique identifier, called the "ICP identifier", determined in accordance with the following format:

xxxxxxxxxxccc where:

- *xxxxxxxxxx is a numerical sequence provided by the distributor*
- *xx is a code that ensures the ICP is unique (assigned by the Authority to the issuing distributor)*
- *ccc is a checksum generated according to the algorithm provided by the Authority.*

Audit observation

The LIS file dated 24/08/18 was examined.

Audit commentary

There is a unique distributor code used within the Top Energy area, this is "TE". The ICP is created by the ICP Club application in prescribed format. Club ICP creates ICPs based on a sequential number, unique distributor code and checksum, which is generated according to the algorithm. If an ICP does not meet the requirements of the algorithm, it is rejected on upload by the registry.

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

Each ICP must have a single loss category that is referenced to identify the associated loss factors.

Audit observation

The LIS registry file date 24/08/18 was examined and we confirm compliance.

Audit commentary

All ICPs with the status "active" and "inactive" recorded in the registry have a single loss category code.

Audit outcome

Compliant

3.13. Management of “new” status (Clause 13 Schedule 11.1)

Code reference

Clause 13 Schedule 11.1

Code related audit information

The ICP status of “New” must be managed by the distributor to indicate:

- *the associated electrical installations are in the construction phase (Clause 13(a) of Schedule 11.1)*
- *the ICP is not ready for activation (Clause 13(b) of Schedule 11.1).*

Audit observation

The new connection process and both the EDA and LIS files were examined.

Audit commentary

According to the process, Top Energy does not use the status “new” because all relevant information, including a proposed retailer, is uploaded to the registry which assigns the status “ready”. There are 21 ICPs with the status “new” but they were created in 2012 to 2015. We identified one ICP 0000009234TE4FD created on 24/8/18 with the status “new” but it was corrected within two days.

Audit outcome

Compliant

3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of “New” or has had the status of “Ready” for 24 months or more:

- *the distributor must ask the trader who intends to trade at the ICP whether the ICP should continue to have that status (Clause 15(2)(a) of Schedule 11.1)*
- *the distributor must decommission the ICP if the trader advises that the ICP should not continue to have that status (Clause 15(2)(b) of Schedule 11.1).*

Audit observation

We reviewed the LIS file dated 24/8/18.

Audit commentary

We identified 9 ICPs with the status “ready” and 26 ICPs with the status “new”. Top Energy used to be very proactive contacting traders and customers asking if the ICP is still required. It led to decommissioning a number of ICPs. Since the last audit the process was not followed and the number of ICPs has increased.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.14 With: 15 of Schedule 11.1 From: 01-Sep-17 To: 15-Aug-18	9 ICPs with the status "ready" and 26 ICPs with the status "new" were not followed up with the trader Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are recorded as weak because the previously established process was not followed. Audit risk rating is recorded as low because impact on the settlement outcomes is minor		
Actions taken to resolve the issue		Completion date	Remedial action status
We will review the current manual decommissioning process and implement improvements to regain compliance in this area		20 Dec 2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing continual improvement of processes of investment of training of new staff members to enhance knowledge.		Ongoing	

3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1)

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

If the ICP connects the distributor's network to an embedded generating station that has a capacity of 10 MW or more (clause 7(1)(f) of Schedule 11.1):

- The loss category code must be unique; and
- The distributor must provide the following to the reconciliation manager:
 - o the unique loss category code assigned to the ICP
 - o the ICP identifier of the ICP
 - o the NSP identifier of the NSP to which the ICP is connected
 - o the plant name of the embedded generating station.

Audit observation

We examined the LIS file dated 24 August 2018.

Audit commentary

Top Energy has one embedded generation station (Ngawha Geothermal Power Station) that has a capacity of 25 MW on its network. We confirm that ICP 0000003490TE5AE has the unique loss category code assigned (GEN1).

Audit outcome

Compliant

4. MAINTENANCE OF REGISTRY INFORMATION

4.1. Changes to registry information (Clause 8 Schedule 11.1)

Code reference

Clause 8 Schedule 11.1

Code related audit information

If information held by the registry that relates to an ICP for which the distributor is responsible changes, the distributor must give written notice to the registry manager of that change.

Notification must be given by the distributor within 3 business days after the change takes effect, unless the change is to the NSP identifier of the NSP to which the ICP is usually connected (other than a change that is the result of the commissioning or decommissioning of an NSP).

In those cases, notification must be given no later than 8 business days after the change takes effect.

If the change to the NSP identifier is for more than 14 days, the time within which notification must be effected in accordance with Clause 8(3) of Schedule 11.1 begins on the 15th day after the change.

Audit observation

We examined the EDA file for the period of 01/09/17 to 15/08/18 to assess compliance.

Audit commentary

The results of analysis are shown below:

Activity	Total number of updates		No of updates later than 3BD		Date range of updates [BD]	
	2017	2018	2017	2018	2017	2018
Address	6,257	1,911	700 (11.18%)	673 (35.2%)	4 to 3683	4 to 3977
Network	32,996	2,597	34 (0.1%)	10 (0.4%)	4 to 756	8 to 166
Pricing	4,036	3,702	1,175 (29.1%)	665 (18%)	4 to 370	4 to 556
Status (3)	58	30	55 (94.8%)	23 (76.7%)	4 to 741	6 to 440

Address events

The number of late updates has increased. We checked a few of them and it appears that many updates are just changing descriptions of addresses to capital letters.

Network events

The number of updates is much smaller than last year. A small number of late updates

The bulk of network updates, last year, was the removal of 29,237 incorrect Initial Electrical Connection Dates in the registry

Pricing events

The level of compliance has improved in comparison with the last year

Status events (3)

A small number of ICPs was decommissioned. 10 ICPs were decommissioned because “setup in error”.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: 8 of Schedule 11.1 From: 02-Sep-17 To: 15-Aug-18	Some updates to the registry were done later than 3BD. 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	We recorded controls as moderate. The company tries to restrict the number of backdated updates but to have the registry information correct as per clause 11.2 of the Code is more important. No impact on settlement outcomes therefore audit risk rating recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
Our objective remains that of achieving an accurate Registry. - We will continue to ensure that any updates that are processed meet this objective		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Our aim is for compliance however where ensuring the registry is accurate causes a non-compliance, we believe this is acceptable. We do however wish to minimise this as much as possible.			

4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)

Code reference

Clauses 7(1), 7(4) and 7(5) Schedule 11.1

Code related audit information

Under Clause 7(1)(b) of Schedule 11.1, the distributor must provide to the registry manager the NSP identifier of the NSP to which the ICP is usually connected.

If the distributor cannot identify the NSP that an ICP is connected to, the distributor must nominate the NSP that the distributor thinks is most likely to be connected to the ICP, taking into account the flow of electricity within its network, and the ICP is deemed to be connected to the nominated NSP.

Audit observation

The NSP mapping table stored in the registry was examined.

Audit commentary

Top Energy has only one NSP on its network, KOE1101. It is very clear, at the time of ICP creation, to which NSP the ICP will be connected.

Audit outcome

Compliant

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

The distributor must advise a customer (or any person authorised by the customer) or embedded generator of the customer or embedded generator's ICP identifier within 3 business days after receiving a request for that information.

Audit observation

Any request from a customer for advice on an ICP for an existing connection is answered immediately, while the customer is on the phone.

Audit commentary

Top Energy receives phone calls not only from customers but also from traders or electricians asking them to confirm an ICP or asking for additional information or clarification.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

Each ICP identifier must have a location address that allows the ICP to be readily located.

Audit observation

Top Energy provided the LIS file, dated 27/08/2018, which was examined.

Audit commentary

We identified four ICPs (two pairs), which have identical location addresses, which did not allow them to be readily located. They were payphones. It was corrected during the audit. The payphone ID number was added to the "Property name" field.

There are 32 ICPs whose addresses do not allow the ICP to be readily located but they all have GPS coordinates recorded in the registry. It allows the easy location of ICPs as long as the relevant device is used to assist.

We identified 88 "active" ICPs in total, which do not have GPS coordinates populated and their address description does not meet compliance with this clause. In total 67 of them are UML ICPs. We identified 19 unmetered ICPs (payphones or PCM cabinets), which don't have GPS coordinates populated and 17 ICPs have meters installed (SMCO and NGCM) They are not historic installations, the oldest only goes back

to 2015. The audit conducted in 2016 to 2017 stated that 90.8% of “active” ICPs had the GPS coordinates recorded.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: 2 of Schedule 11.1 From: 01-Sep-17 To: 15-Aug-18	Four ICPs have identical addresses. 36 ICPs do not have GPS coordinates populated and their address description does not meet compliance with this clause Potential impact: None Actual impact: None Audit history: Multiple times Controls: Moderate Breach risk rating:1		
Audit risk rating	Rationale for audit risk rating		
Low	We have recorded the controls as moderate. There are reports in place to monitor compliance in this area, it appears that parameters of the relevant report should be changed to identify all non-compliant ICPs. Settlement outcome not effected therefore audit risk rating is recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
As per previous audits, we are continuing to apply GPS coordinates to new ICP's or when they are visited for maintenance. - Have also requested the list if ICP's identified by the auditor so we can update and correct.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

4.5. Electrically disconnecting an ICP (Clause 3 Schedule 11.1)

Code reference

Clause 3 Schedule 11.1

Code related audit information

Each ICP created after 7 October 2002 must be able to be electrically disconnected without electrically disconnecting another ICP, except for ICPs that are the point of connection between a network and an embedded network, or ICPs that represent the consumption calculated by the difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit observation

There are no known situations where an ICP could not be de-energised without the de-energisation of another ICP. The company policy precludes such a situation.

Audit commentary

Before a new ICP is created, a connection is validated (visually) in GIS to make sure that such a situation does not occur.

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1)

Code reference

Clause 7(1) Schedule 11.1

Code related audit information

For each ICP on the distributor's network, the distributor must provide the following information to the registry manager:

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
 - a) *the unique loss category code assigned to the ICP*
 - b) *the ICP identifier of the ICP*
 - c) *the NSP identifier of the NSP to which the ICP is connected*
 - a. *the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
 - a) *a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
 - b) *a blank chargeable capacity if the capacity value can be determined from metering information*
 - c) *the actual chargeable capacity of the ICP in any other case*
- *the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is unable to assign the actual distributor installation details because the capacity or volume*

information required to assign the actual distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)

- *the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)*
- *the status of the ICP (Clause 7(1)(k) of Schedule 11.1)*
- *designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)*
- *if unmetered load, other than distributed unmetered load, is associated with the ICP, the type and capacity in kW of unmetered load (Clause 7(1)(m) of Schedule 11.1)*
- *if shared unmetered load is associated with the ICP, a list of the ICP identifiers of the ICPs that are associated with the unmetered load (Clause 7(1)(n) of Schedule 11.1)*
- *if the ICP is capable of generating into the distributors network (Clause 7(1)(o) of Schedule 11.1):*
 - a) *the nameplate capacity of the generator; and*
 - b) *the fuel type*
- *the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).*

Audit observation

The LIS and Metering Information files (PR-255) dated 24/08/18 were examined to assess compliance.

We identified the following areas where information was incomplete or missing:

1. No UML details in the "Unmetered Load Details – distributor" field in the registry for 28 ICPs but traders recorded daily units
2. 26 ICPs have Import/Export meters installed and programmed as EG; There is no record of embedded generation recorded by TOPE and Installation Flag is incorrect. 12 of them were previously populated but CLUB ICP deleted it July/August'18
3. Initial Electrical Connection Date – incorrect for 41 ICPs. These ICPs were created in 1999 to 2012 so it is rather unlikely that some of them were first electrically connected for example in 2016. Our observation is that it is the date that solar panels were installed

Audit commentary

This audit identified less non-compliances than last time. There is still an issue with solar panels being installed at customer premises without filing an application with Top Energy. It is a common occurrence which we have seen on other networks.

Top Energy runs many reports, weekly or fortnightly, to assure the correctness of data in the registry.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.6 With: 7(1) of Schedule 11.1 From: 01-Sep-17 To: 15-Aug-18	Incorrect information in the registry in relation to Initial Electrical Connection Date, connection of solar panels, UML 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	Controls are recorded as moderate because there are some improvements that can be made to them. There are reports in place to monitor compliance in this area but based on results it appears that these reports are not very effective; Settlement outcomes not effected therefore audit risk rating is recorded as low		
Actions taken to resolve the issue		Completion date	Remedial action status
This is very similar to the issues identified in 2.1 as it is the same information and as such are penalised twice. - Same actions as 2.1.			Identified
Preventative actions need to be taken to ensure no further issues will occur		Completion date	

4.7. Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

The distributor must provide the following information to the registry manager no later than 10 business days after the trading of electricity at the ICP commences:

- the actual price category code assigned to the ICP (Clause 7(3)(a) of Schedule 11.1)
- the actual chargeable capacity of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(b) of Schedule 11.1)
- the actual distributor installation details of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(c) of Schedule 11.1).

Audit observation

The new connection process was examined.

Audit commentary

The actual price category code is assigned based on information given by a customer. Connections with customers with higher capacity are discussed separately before an ICP is created. The price category code is assigned when an ICP is uploaded to the registry.

Audit outcome

Compliant

4.8. GPS coordinates (Clause 7(8) and (9) Schedule 11.1)

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

If a distributor populates the GPS coordinates (optional), it must meet the NZTM2000 standard in a format specified by the Authority.

Audit observation

Top Energy provided the LIS file, dated 27/08/2018, which was examined.

Audit commentary

Almost all ICPs with the status “active” have the GPS coordinates field populated. 348 ICPs do not have GPS coordinates populated. The GPS coordinates meet the NZTM standard.

Audit outcome

Compliant

4.9. Management of “ready” status (Clause 14 Schedule 11.1)

Code reference

Clause 14 Schedule 11.1

Code related audit information

The ICP status of “Ready” must be managed by the distributor and indicates that:

- *the associated electrical installations are ready for connecting to the electricity supply (Clause 14(1)(a) of Schedule 11.1); or*
- *the ICP is ready for activation by a trader (Clause 14(1)(b) of Schedule 11.1)*

Before an ICP is given the “Ready” status in accordance with Clause 14(1) of Schedule 11.1, the distributor must:

- *identify the trader that has taken responsibility for the ICP (Clause 14(2)(a) of Schedule 11.1)*
- *ensure the ICP has a single price category (Clause 14(2)(b) of Schedule 11.1).*

Audit observation

The new connection process was examined to assess compliance.

Audit commentary

The process adopted by Top Energy is that when an ICP is uploaded to the registry it contains all the information which allow the registry to assign the status of “ready”. A trader is notified when a new ICP is created and a customer specifies them as a trader from whom they want to buy electricity, which is not

exactly an agreement from a trader to take responsibility for the ICP. Top Energy does not have it in writing, at this point in time, that the trader will take responsibility for the ICP.

Top Energy does not have a “blanket” agreement with any trader to accept new ICPs.

According to the EDA file for the period 01/09/17 to 15/08/18, a single price category code is recorded by Top Energy, when the ICP information is uploaded to the registry.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.9 With: 14 of Schedule 11.1 From: 02-Sep-11 To: 15-Aug-18	Top Energy does not receive a trader acceptance of responsibility for the ICP before the registry assigns the ICP status “ready” Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	We have recorded the controls as moderate. Top Energy has a good process in place to receive confirmation from a trader accepting responsibility for the ICP when they ask for electrical connection. Audit risk rating low, no impact on settlement outcomes		
Actions taken to resolve the issue		Completion date	Remedial action status
In the first instance, we will engage with retailers to obtain a blanket acceptance. If this is not achievable we will look at alternative processes internally where all ICP’s are created following a request from the retailer and not after a customer accepts/pays a quote as is the current practice.		31 Mar 2019	Identified
		TBC	
Preventative actions taken to ensure no further issues will occur		Completion date	
As above			

4.10. Management of “distributor” status (Clause 16 Schedule 11.1)

Code reference

Clause 16 Schedule 11.1

Code related audit information

The ICP status of “distributor” must be managed by the distributor and indicates that the ICP record represents a shared unmetered load installation or the point of connection between an embedded network and its parent network.

Audit observation

The LIS dated 24/8/18 was examined.

Audit commentary

Top Energy has one ICP 0000005544TE522 (Kerikeri Retirement Village) with the status of “distributor”, representing a connection to an embedded network.

Top Energy does not have shared unmetered load on its network.

Audit outcome

Compliant

4.11. Management of “decommissioned” status (Clause 20 Schedule 11.1)

Code reference

Clause 20 Schedule 11.1

Code related audit information

The ICP status of “decommissioned” must be managed by the distributor and indicates that the ICP is permanently removed from future switching and reconciliation processes (Clause 20(1) of Schedule 11.1).

Decommissioning only occurs when:

- *electrical installations associated with the ICP are physically removed (Clause 20(2)(a) of Schedule 11.1); or*
- *there is a change in the allocation of electrical loads between ICPs with the effect of making the ICP obsolete (Clause 20(2)(b) of Schedule 11.1); or*
- *in the case of a distributor-only ICP for an embedded network, the embedded network no longer exists (Clause 20(2)(c) of Schedule 11.1).*

Audit observation

The process of ICP decommissioning was examined. We sampled 8 randomly chosen ICPs to check the process.

Audit commentary

Top Energy decommissions an ICP upon trader instruction, e.g. via WELLS, or Vircom, who is instructed by traders. Top Energy linemen removes equipment and a trader is notified. Sometimes, a trader asks Top Energy to check the installation, after receiving a notification from a meter reader that the building “was gone” or meters were removed. A trader is notified of findings.

On some occasions Top Energy has received a request from a contractor to dismantle a connection on the customer’s behalf. According to the process adopted by Top Energy, a trader is contacted. Top Energy’s lineman inspects the site and physically remove connection to the network.

After physically dismantling a connection, a notification is sent to the trader. Once a trader changes the registry status to “Inactive-ready for decommissioning”, Top Energy changes the ICP status to “decommissioned”.

Below is the table which shows the timeline of decommissioning. We observed that in some instance’s traders take their time to update the registry status. Top Energy does not have a good process “to watch” the update of the status in the registry. The decommissioned ICPs paperwork is kept in a separate folder

and once per month one of Top Energy's staff check each ICP status in the registry. If the status is "inactive-ready for decommissioning", CLUB ICP is updated which uploads information to the registry. Such a process is time consuming and not effective. It leads to non-compliances identified in section 4.1

I would like to recommend TOPE look for a more effective mechanism to update ICPs status to "decommissioned" in a timely manner.

ICP	Site visit	Trader changed registry status	TOPE registry update
0000008015TEE4A	13/10/17	17/10/17	01/11/17
0000008125TE0B6	20/11/17	23/11/07	27/11/17
0000132200TE8AF	14/02/18	26/02/18	28/05/18
0000576900TEF0B	24/01/18	31/01/18	24/04/18
0000675500TED53	31/01/18	26/02/18	28/05/18
0000797680TE14B	24/10/17	27/11/17	29/11/17
0000898630TE4E3	18/05/18	21/05/18	28/05/18
0000943962TE4BC	23/08/17	1/09/17	25/09/17

Audit outcome

Compliant

Recommendation	Description	Audited party comment	Remedial action
Look for a more effective mechanism to update ICPs status to "decommissioned" in a timely manner	Manual process of checking if a trader changed an ICP status to "inactive-ready for decommissioning"	We are reviewing our process and looking at whether an additional report will assist in improving compliance.	

4.12. Maintenance of price category codes (Clause 23 Schedule 11.1)

Code reference

Clause 23 Schedule 11.1

Code related audit information

The distributor must keep up to date the table in the registry of the price category codes that may be assigned to ICPs on each distributor's network by entering in the table any new price category codes.

Each entry must specify the date on which each price category code takes effect, which must not be earlier than 2 months after the date the code is entered in the table.

A price category code takes effect on the specified date.

Audit observation

The Price Category Codes table in the registry was examined.

Audit commentary

Since the last audit no new price category codes were added to the registry.

Audit outcome

Compliant

5. CREATION AND MAINTENANCE OF LOSS FACTORS

5.1. Updating table of loss category codes (Clause 21 Schedule 11.1)

Code reference

Clause 21 Schedule 11.1

Code related audit information

The distributor must keep the registry up to date with the loss category codes that may be assigned to ICPs on the distributor's network.

The distributor must specify the date on which each loss category code takes effect.

A loss category code takes effect on the specified date.

Audit observation

We examined the Loss Factor Codes table in the registry.

Audit commentary

Top Energy did not add a new loss category code since the last audit.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

Each loss category code must have a maximum of 2 loss factors per calendar month. Each loss factor must cover a range of trading periods within that month so that all trading periods have a single applicable loss factor.

If the distributor wishes to replace an existing loss factor on the table in the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

We examined the Loss Factor Codes table in the registry.

Audit commentary

Loss Factor Codes have a single value for a whole year, which covers a range of trading periods. There was an update to loss factor GLV. A new value for Loss Factor "GLV" took effect on 1st April 2018. The registry was updated on 24th January 2018. Compliance was met.

Audit outcome

Compliant

6. CREATION AND MAINTENANCE OF NSPS (INCLUDING DECOMMISSIONING OF NSPS AND TRANSFER OF ICPS)

6.1. Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

If the distributor is creating or decommissioning an NSP that is an interconnection point between 2 local networks, the distributor must give written notice to the reconciliation manager of the creation or decommissioning.

If the embedded network owner is creating or decommissioning an NSP that is an interconnection point between 2 embedded networks, the embedded network owner must give written notice to the reconciliation manager of the creation or decommissioning.

If the distributor is creating or decommissioning an NSP that is a point of connection between an embedded network and another network, the distributor must give written notice to the reconciliation manager of the creation or decommissioning.

If the distributor wishes to change the record in the registry of an ICP that is not recorded as being usually connected to an NSP in the distributor's network, so that the ICP is recorded as being usually connected to an NSP in the distributor's network (a "transfer"), the distributor must:

- give written notice to the reconciliation manager*
- give written notice to the Authority*
- give written notice to each affected reconciliation participant*
- comply with Schedule 11.2.*

Audit observation

We examined the NSP mapping table in the registry.

Audit commentary

Since the last audit Top Energy did not establish a new, or decommission, an NSP. There is only one NSP on its network. Based on examination of the NSP mapping table in the registry it was confirmed that no new NSP was created and no NSP was decommissioned since the last audit

Audit outcome

Compliant

6.2. Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

If the distributor wishes to create an NSP or transfer an ICP as described above, the distributor must request that the reconciliation manager create a unique NSP identifier for the relevant NSP.

The request must be made at least 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between 2 local networks. In all other cases, the request must be made at least 1 month before the NSP is electrically connected or the ICP is transferred.

Audit observation

Top Energy has not created a new NSP since the last audit.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.3. Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)

Code reference

Clause 24(1) and Clause 26(3) Schedule 11.1

Code related audit information

If a participant has notified the creation of an NSP on the distributor's network, the distributor must give written notice to the reconciliation manager of the following:

- *if the NSP is to be located in a new balancing area, all relevant details necessary for the new balancing area to be created and notification that the NSP to be created is to be assigned to the new balancing area*
- *in all other cases, notification of the balancing area in which the NSP is located.*

Audit observation

Top Energy did not create any new NSP in the last 12 months.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.4. Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

If a participant notifies the creation of an NSP, or the transfer of an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor, the distributor must give notice to the reconciliation manager at least 1 month before the creation or transfer of:

- *the network on which the NSP will be located after the creation or transfer (Clause 26(4)(a))*
- *the ICP identifier for the ICP that connects the network and the embedded network (Clause 26(4)(b))*
- *the date on which the creation or transfer will take effect (Clause 26(4)(c)).*

Audit observation

Top Energy did not become the owner of embedded network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.5. Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

The distributor must give written notice to the reconciliation manager of any change to balancing areas associated with an NSP supplying the distributor's network. The notification must specify the date and trading period from which the change takes effect and be given no later than 3 business days after the change takes effect.

Audit observation

We examined the NSP mapping table in the registry.

Audit commentary

Top Energy has only one balancing area, KOE1101TOPEG. Examination of the NSP mapping table in the registry showed that there were no changes to the balancing area in the last 12 months.

Audit outcome

Compliant

6.6. Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)

Code reference

Clause 27 Schedule 11.1

Code related audit information

If a transfer of an ICP results in an ICP becoming an NSP at which an embedded network connects to a network, or in an ICP becoming an NSP that is an interconnection point, in respect of the distributor's network, the distributor must give written notice to any trader trading at the ICP of the transfer at least 1 month before the transfer.

Audit observation

Top Energy has not transferred any ICP which resulted in an ICP becoming an NSP.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.7. Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)

Code reference

Clause 1 to 4 Schedule 11.2

Code related audit information

If the distributor wishes to transfer an ICP, the distributor must give written notice to the Authority in the prescribed form, no later than 3 business days before the transfer takes effect.

Audit observation

Since the last audit Top Energy did not transfer any ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.8. Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))

Code reference

Clause 10.25(1) and 10.25(3)

Code related audit information

A network owner must, for each NSP that is not a point of connection to the grid for which it is responsible, ensure that:

- *there is 1 or more metering installations (Clause 10.25(1)(a)); and*
- *the electricity is conveyed and quantified in accordance with the Code (Clause 10.25(1)(b))*

For each NSP covered in 10.25(1) the network owner must, no later than 20 business days after a metering installation at the NSP is recertified advise the reconciliation manager of:

- *the reconciliation participant for the NSP*
- *the participant identifier of the metering equipment provider for the metering installation*
- *the certification expiry date of the metering installation*

Audit observation

Top Energy does not have any NSPs that are not connections to the grid for which they are responsible.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.9. Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))

Code reference

Clause 10.25(2)

Code related audit information

If the network owner proposes the creation of a new NSP which is not a point of connection to the grid it must:

- *assume responsibility for being the metering equipment provider (Clause 10.25(2)(a)(i)); or*

- *contract with a metering equipment provider to be the MEP (Clause 10.25(2)(a)(ii)); and*
- *no later than 20 business days after identifying the MEP advise the reconciliation manager in the prescribed form of:*
 - a) the reconciliation participant for the NSP (Clause 10.25(2)(b)(i)); and*
 - b) the MEP for the NSP (Clause 10.25(2)(b)(ii)); and*
 - c) no later than 20 business days after the data of certification of each metering installation, advise the reconciliation participant for the NSP of the certification expiry date (Clause 10.25(2)(c)).*

Audit observation

Top Energy does not have any NSPs that are not connections to the grid for which they are responsible.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.10. Obligations concerning change in network owner (Clause 29 Schedule 11.1)

Code reference

Clause 29 Schedule 11.1

Code related audit information

If a network owner acquires all or part of a network, the network owner must give written notice to:

- *the previous network owner (Clause 29(1)(a) of Schedule 11.1)*
- *the reconciliation manager (Clause 29(1)(b) of Schedule 11.1)*
- *the Authority (Clause 29(1)(c) of Schedule 11.1)*
- *every reconciliation participant who trades at an ICP connected to the acquired network or part of the network acquired (Clause 29(1)(d) of Schedule 11.1).*

At least 1-month notification is required before the acquisition (Clause 29(2) of Schedule 11.1).

The notification must specify the ICPs to be amended to reflect the acquisition and the effective date of the acquisition (Clause 29(3) of Schedule 11.1).

Audit observation

Since the last audit, Top Energy did not acquire all or part of a new network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.11. Change of MEP for embedded network gate meter (Clause 10.22(1)(b))

Code reference

Clause 10.22(1)(b)

Code related audit information

If the MEP for an ICP which is also an NSP changes the participant responsible for the provision of the metering installation under Clause 10.25, the participant must advise the reconciliation manager and the gaining MEP.

Audit observation

Top Energy does not own any embedded network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.12. Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)

Code reference

Clauses 5 and 8 Schedule 11.2

Code related audit information

The distributor must give the Authority confirmation that it has received written consent to the proposed transfer from:

- *the distributor whose network is associated with the NSP to which the ICP is recorded as being connected immediately before the notification (unless the notification relates to the creation of an embedded network) (Clause 5(a) of Schedule 11.2)*
- *every trader trading at an ICP being supplied from the NSP to which the notification relates (Clause 5(b) of Schedule 11.2).*

The notification must include any information requested by the Authority (Clause 8 of Schedule 11.2).

Audit observation

Top Energy does not own any embedded network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

6.13. Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)

Code reference

Clause 6 Schedule 11.2

Code related audit information

If the notification relates to an embedded network, it must relate to every ICP on the embedded network.

Audit observation

Top Energy does not own any embedded network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

7. MAINTENANCE OF SHARED UNMETERED LOAD

7.1. Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))

Code reference

Clause 11.14(2) and (4)

Code related audit information

The distributor must give written notice to the registry manager and each trader responsible for the ICPs across which the unmetered load is shared of the ICP identifiers of those ICPs.

A distributor who receives notification from a trader relating to a change under Clause 11.14(3) must give written notice to the registry manager and each trader responsible for any of the ICPs across which the unmetered load is shared of the addition or omission of the ICP.

Audit observation

We examined the LIS file dated 24th August 2018.

Audit commentary

There is no shared unmetered load on the Top Energy network. The company does not permit the installation of shared unmetered load on its network.

Audit outcome

Compliant

7.2. Changes to shared unmetered load (Clause 11.14(5))

Code reference

Clause 11.14(5)

Code related audit information

If the distributor becomes aware of a change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must give written notice to all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit observation

As described in the above section, there is no shared unmetered load on Top Energy's network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

8. CALCULATION OF LOSS FACTORS

8.1. Creation of loss factors (Clause 11.2)

Code reference

Clause 11.2

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 11 is:

- a) *complete and accurate*
- b) *not misleading or deceptive*
- c) *not likely to mislead or deceive.*

Audit observation

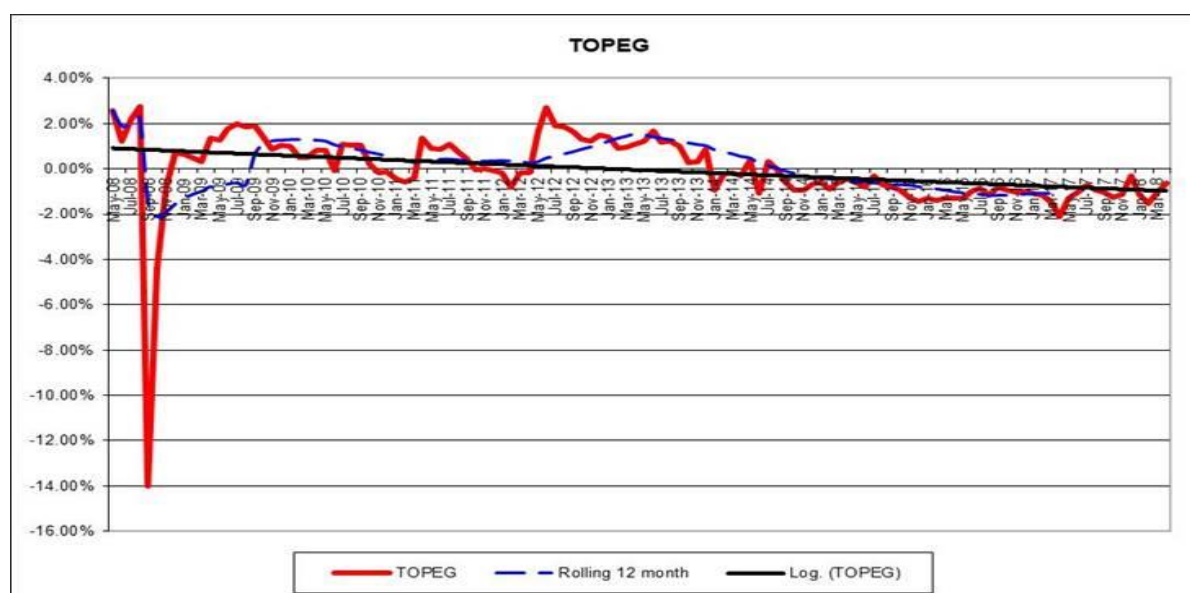
This year, Top Energy recalculated loss factors. As a result, the value of loss code GLV was changed from 1.1320 to 1.1234. A decrease by 0.8%.

Audit commentary

The methodology of calculation of loss factors is based on the requirements set out in the Electricity Authority's Guidelines on the calculation and the use of loss factors for reconciliation purposes. Where HHR metering data was not available, the peak demand data for the analysis was extracted from recent SCADA data. To calculate the technical Loss, DigSilent PowerFactory software was used. Reconciliation losses were calculated from the last 24 months' worth of energy injection and consumption information for network.

Top Energy has three ICC (Individually Calculated Customer), JNL, AFFCO, and Ngawha Generation.

Below is shown graphs of UFE provided by the Authority. According to the Guidelines, UFE is expected to be within $\pm 1\%$ over the course of any 12-month period. 14-month UFE around -1.12%.



We reviewed Top Energy's website and confirm that the brief outline of loss factor calculation is published.

Audit outcome

Compliant

CONCLUSION

PARTICIPANT RESPONSE

The last year has been challenging with several changes of staff occurring. The documented processes that were implemented a couple of years ago supported this transition and has allowed us to maintain a similar level of compliance. It is pleasing to see that the effort to correct errors has provided a complaint result under 2.2. It is disappointing that our overall rating has reduced slightly from last year (from 12 to 14), especially when the same data errors are penalised under two code requirements. (2.1 and 4.6)

We do acknowledge that we remain non-compliant in several areas, all of which provide no material reconciliation issues. As our objective is to maintain an accurate registry, we will continue to look for opportunities where we can improve compliance.

We had looked at changing our Club ICP system during the year, as we identified in last years audit. Unfortunately, the solutions provider we were working with, in conjunction with 3 other distributors, informed us that they were unable to provide a suitable solution. We are now looking at alternatives, but this has delayed progress in the area by at least 12 months.

We thank Ewa for her constructive approach to the audit.