

ELECTRICITY INDUSTRY PARTICIPATION CODE  
RECONCILIATION PARTICIPANT AUDIT REPORT

For

OPUNAKE HYDRO LIMITED (OPHL)

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Date audit commenced: 22 February 2020

Date audit report completed: 28 February 2020

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## EXECUTIVE SUMMARY

This reconciliation participant audit was performed at the request of Opunake Hydro (OPHL) as required by clause 16A.24(b) to support the application for recertification.

At the time of audit Opunake Hydro was trading 7 ICPs (6 ICPs HHR and 1 ICP NHH, which switched out to Meridian on 17/02/2020. The company strategy is not to gain more retail customers.

To assess compliance we used the registry files for the period 1/11/18 to 20/02/2020.

We identified 2 non-compliances. One of them relates to switching, another one to a late MEP nomination for a new connection. They have no impact on settlement outcomes because of the small number of ICPs affected.

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 Reconciliation Participant audit provides some guidance on this matter. The Future Risk Rating score is 2 which results in an indicative audit frequency of 24 months. We agree with the outcome from the matrix provided by the Authority.

We thank the Opunake Hydro staff for their 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
Provision of information to the registry manager	3.5	9 of Schedule 11.3	One trader entry (MEP nominations) for a new connection was recorded later than 5BD (35 days)	Strong	Low	1	Identified
Losing trader response to switch request and event dates - standard switch	4.2	3 of Schedule 11.3	AN file was sent one day late	Strong	Low	1	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHR aggregates information provision to the reconciliation manager	Strong	Low	1	Not required. The Code change required a line up with RN file specification. Breach risk rating excluded from total
Future Risk Rating						2	

Future risk rating	0-1	1-3	4-15	16-40	41-55	56+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

### RECOMMENDATIONS

Subject	Section	Description	Recommendation
			Nil

### ISSUES

Subject	Section	Description	Issue
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			Nil
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## 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.*

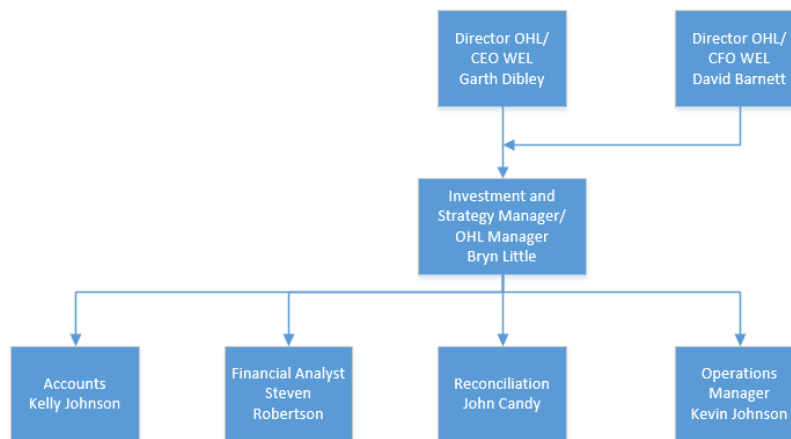
#### Audit observation

Opunake Hydro does not have any exemptions granted to exempt them from compliance with all or any of the clauses.

#### Audit commentary

Opunake Hydro did not apply for any exemptions. 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
Steven Robertson	Commercial Analyst	WEL Networks
John Candy	Director	John Candy Consulting
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates

### 1.4. Use of Agents (Clause 15.34)

#### Code reference



#### Clause 15.34

#### Code related audit information

*A reconciliation participant who uses an agent*

- *remains responsible for the contractor's fulfilment of the participant's Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to something the agent has or has not done*

#### Audit observation

Opunake Hydro uses JC Consulting to create and submit files to the reconciliation manager. Switching and population of registry information is also done by JC Consulting using the registry web interface. AccuCal provides data for one ICP, and AMCI for 5 ICPs.

As a part of this audit we audited work done by JC Consulting and AccuCal. AMS provided the audit report for HHR data collection and submission, dated 23/05/19.

#### Audit commentary

#### 1.5. Hardware and Software

The main systems are as follows:

- Switching is conducted via web interface
- Access Database (RM TOOL) provided and run by JC Consulting for submissions

#### 1.6. Breaches or Breach Allegations

No breaches or alleged breaches were recorded that relate to this audit.

#### 1.7. ICP Data

Metering Category	(2020)	(2018)	(2017)
1	2	1	1,231
2	1	1	213
3	2	2	24
4	2	2	10
5	0	0	0
9	0	0	84

Status	Number of ICPs (20/02/20)	Number of ICPs (2018)	Number of ICPs (2017)
Active (2,0)	7	6	1,454
Inactive – new connection in progress (1,12)	0	0	0
Inactive – electrically disconnected vacant property (1,4)	0	0	7

Inactive – electrically disconnected remotely by AMI meter (1,7)	0	0	1
Inactive – electrically disconnected at pole fuse (1,8)	0	0	1
Inactive – electrically disconnected due to meter disconnected (1,9)	0	1	0
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	1	1	4
Inactive – reconciled elsewhere (1,5)	0	0	0
Decommissioned (3)	109	109	96

#### 1.8. Authorisation Received

A letter of authorisation was not required.

#### 1.9. Scope of Audit

This reconciliation participant audit was performed at the request of Opunake Hydro (OPHL) as required by clause 16A.24(b) to support the application for recertification. The audit was carried out on 22nd February 2020.

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.1.

The table below shows the functions which require certification to be held by OPHL.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Relevant to audit	Agents Involved in Performance of Tasks
(a) - Maintaining registry information and performing customer and embedded generator switching	✓	JCC Consulting (OPHL)
(b) – Gathering and storing raw meter data	✓	AccuCal (1 HHR ICP), AMCI
(c)(i) - Creation and management of HHR volume information	✗	
(c)(ii) - Creation and management of NHH volume information	✗	
(c)(ii) - Creation and management of HHR and NHH volume information	✓	JCC Consulting (OPHL)

(c)(iv) - Creation and management of dispatchable load information	✗	
(d)(i) – Calculation and delivery of ICP days under clause 15.6	✓	JCC Consulting (OPHL)
(d)(ii) - delivery of electricity supplied information under clause 15.7	✓	JCC Consulting (OPHL)
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	✓	JCC Consulting (OPHL)
(e) – Provision of submission information for reconciliation	✓	JCC Consulting (OPHL)
(f) - Provision of metering information to the grid owner in accordance with subpart 4 of part 13	✗	

#### 1.10. Summary of previous audit

The previous audit was conducted in December 2018 by Tara Gannon of Veritek. Non-compliances are shown in the table. Non-compliance identified in the audit completed on 13/12/2018 were not assessed in this audit because they relate to historical events. OPHL exited the retail market from 01/08/2018. All ICPs have switched out, except 5 HHR and 1 NHH AMI ICP associated with OPHL's own sites on the PowerCo network.

Subject	Section	Clause	Non-Compliance	Comment
Changes to registry information	3.3	10 Schedule 11.1	Five late status updates. Six late MEP nominations. Five late trader updates.	Cleared
Provision of information to the registry manager	3.5	9 Schedule 11.1	One late status update for a new connection.	Still exist
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for six ICPs with advanced meters.	Cleared
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	Seven late CS files for transfer switches. One CS files contained an incorrect estimated daily kWh value.	Cleared
Retailers must use same reading - standard switch	4.4	6(1) and 6A Schedule 11.3	One late AC file for a transfer switch.	Cleared
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for two ICPs with advanced meters.	Cleared
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	16 late CS files for switch moves.	Cleared
Gaining trader changes	4.11	12 Schedule	One ICP did not have the agreed switch readings	Cleared

to switch meter reading - switch move		11.3	applied.	
Losing trader provision of information - gaining trader switch	4.13	15 Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for two ICPs with advanced meters and one ICP with unmetered supply.	Cleared
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	Two late NW files.	Cleared
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.	DataCol did not conduct checks for phase failure during the period where AMI meters were supplied.  Some customer readings prior to 09/02/18 were treated as actual without being appropriately validated for ICP 0002995060CN7C2.	Cleared
Interrogate meters once	6.8	7(1) and (2) Schedule 15.2	One ICP did not have an actual read recorded during the period of supply.	Cleared
NHH meters 90% read rate	6.10	9(1) and (2) Schedule 15.2	For two NSPs with less than 90% of ICPs read in the previous four months, exceptional circumstances did not exist.	
Identification of readings	9.1	3(3) Schedule 15.2	Some customer readings prior to 09/02/18 were treated as actual without being appropriately validated for ICP 0002995060CN7C2.	Cleared
Electronic meter readings and estimated readings	9.6	17 Schedule 15.2	Event log information is not received from Arc for NHH meters.  Event log information provided by Metrix and WEL Networks is not routinely reviewed for NHH meters.	Cleared
Calculation of ICP days	11.2	15.6	ICP days are not calculated correctly for the day of decommissioning or the day of downgrade.	Cleared
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHR aggregates file does not contain electricity supplied information.	Still exist
Accuracy of submission information	12.7	15.12	Historic estimate may be labelled as forward estimate where SASV are not available.  ICP days are not calculated correctly for the day of decommissioning or the day of downgrade.  Some customer readings prior to 09/02/18 were treated as actual without being appropriately validated for ICP 0002995060CN7C2.  The agreed switch readings were not applied for ICP 0000171354TR14A.	Cleared
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	Some estimated readings are not replaced with permanent estimates by revision 14.	Cleared
Historical estimates and forward estimates	12.10	3 Schedule 15.3	Historic estimate may be labelled as forward estimate where SASV are not available.	Cleared
Forward estimate process	12.12	6 Schedule 15.3	The accuracy threshold was not met for one balancing area for month.	Cleared
Historical estimate reporting to RM	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Cleared



## 2. OPERATIONAL INFRASTRUCTURE

### 2.1. Relevant information (Clause 10.6, 11.2, 15.2)

#### Code reference

*Clause 10.6, 11.2, 15.2*

#### Code related audit information

*A participant must take all practicable steps to ensure that information that the participant is required to provide is:*

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

*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

The LIS file dated 20/02/20 was examined to identify any inaccuracies. The Event Detail (EDA) file and the Audit Compliance report for the audit period was examined.

#### Audit commentary

The LIS file and Metering Installation Information (PR-255) were analysed. ICP information in the registry was correct.

#### Audit outcome

Compliant

### 2.2. Provision of information (Clause 15.35)

#### Code reference

*Clause 15.35*

#### Code related audit information

*If an obligation exists to provide information in accordance with Part 15, a participant must deliver that information to the required person within the timeframe specified in the Code, or, in the absence of any such timeframe, within any timeframe notified by the Authority. Such information must be delivered in the format determined from time to time by the Authority.*

#### Audit observation

We reviewed the process for file submission performed by JC Consulting.

#### Audit commentary

We found JC Consulting processes to be compliant. No RM files were submitted late.

#### Audit outcome

Compliant

### 2.3. Data transmission (Clause 20 Schedule 15.2)

#### Code reference

## Clause 20 Schedule 15.2

### Code related audit information

*Transmissions and transfers of data related to metering information between reconciliation participants or their agents, for the purposes of the Code, must be carried out electronically using systems that ensure the security and integrity of the data transmitted and received.*

### Audit observation

Once per month JC Consulting downloads data from AMCI, NGCM (ICP switched out to Meridian on 17/02/20), and AccuCal ( 1 ICP) servers on behalf of Opunake Hydro.

### Audit commentary

Once metering data is downloaded from the service providers servers it is uploaded to the RM TOOL. Metering data is shared with OPHL via Dropbox.

### Audit outcome

Compliant

## 2.4. Audit trails (Clause 21 Schedule 15.2)

### Code reference

## Clause 21 Schedule 15.2

### Code related audit information

*Each reconciliation participant must ensure that a complete audit trail exists for all data gathering, validation, and processing functions of the reconciliation participant.*

*The audit trail must include details of information:*

- *provided to and received from the registry manager*
- *provided to and received from the reconciliation manager*
- *provided and received from other reconciliation participants and their agents.*

*The audit trail must cover all archived data in accordance with clause 18.*

*The logs of communications and processing activities must form part of the audit trail, including if automated processes are in operation.*

*Logs must be printed and filed as hard copy or maintained as data files in a secure form, along with other archived information.*

*The logs must include (at a minimum) the following:*

- *an activity identifier (clause 21(4)(a))*
- *the date and time of the activity (clause 21(4)(b))*
- *the operator identifier for the person who performed the activity (clause 21(4)(c)).*

### Audit observation

We checked the audit trail for all data gathering, validation, and correction.

### Audit commentary

JC Consulting retains an audit trail of downloaded data via FileZilla.

It was confirmed during the audit that the audit trail for data gathering, validation and processing functions is archived. For any changes to data in the RM TOOL, logs are created showing the date and time of the activity, an activity identifier, and the operator identifier.

## Audit outcome

Compliant

### 2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)

#### Code reference

*Clause 10.4*

#### Code related audit information

*If a participant must obtain a consumer's consent, approval, or authorisation, the participant must ensure it:*

- *extends to the full term of the arrangement*
- *covers any participants who may need to rely on that consent.*

#### Audit observation

We reviewed Opunake Hydro's terms and conditions.

#### Audit commentary

OPHL's standard terms include consent for authorised parties for the duration of the contract. OPHL is a retailer to one customer with number connections.

## Audit outcome

Compliant

### 2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))

#### Code reference

*Clause 10.7(2),(4),(5) and (6)*

#### Code related audit information

*The responsible reconciliation participant must, if requested, arrange access for the metering installation to the following parties:*

- *the Authority*
- *an ATH*
- *an auditor*
- *an MEP*
- *a gaining metering equipment provider.*

*The trader must use its best endeavours to provide access:*

- *in accordance with any agreements in place*
- *in a manner and timeframe which is appropriate in the circumstances.*

*If the trader has a consumer, the trader must obtain authorisation from the customer for access to the metering installation, otherwise it must arrange access to the metering installation.*

*The reconciliation participant must provide any necessary facilities, codes, keys or other means to enable the party to obtain access to the metering installation by the most practicable means.*

#### Audit observation

We reviewed Opunake Hydro's terms and conditions.



### Audit commentary

OPHL's standard terms include consent for authorised parties to have access to metering installations for the duration of the contract.

### Audit outcome

Compliant

## 2.7. Physical location of metering installations (Clause 10.35(1)&(2))

### Code reference

Clause 10.35(1)&(2)

### Code related audit information

*A reconciliation participant responsible for ensuring there is a category 1 metering installation or category 2 metering installation must ensure that the metering installation is located as physically close to a point of connection as practical in the circumstances.*

*A reconciliation participant responsible for ensuring there is a category 3 or higher metering installation must:*

- a) if practical in the circumstances, ensure that the metering installation is located at a point of connection; or*
- b) if it is not practical in the circumstances to locate the metering installation at the point of connection, calculate the quantity of electricity conveyed through the point of connection using a loss compensation process approved by the certifying ATH.*

### Audit observation

The LIS file dated 20/02/20 was reviewed. Opunake Hydro trades category 1-4 metering installations.

### Audit commentary

OPHL does not supply any ICPs which require loss compensation. No new connections with metering installations of category 3 or above were created during the audit period.

### Audit outcome

Compliant

## 2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)

### Code reference

Clause 11.15B

### Code related audit information

*A trader must at all times ensure that the terms of each contract between a customer and a trader permit:*

- the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and*
- the terms of the assigned contract to be amended on such an assignment to—*
- the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or*

- *such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii); and*
- *the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*
- *the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and*
- *the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).*

*The terms specified in subclause (1) must be expressed to be for the benefit of the Authority for the purposes of the Contracts (Privacy) Act 1982, and not be able to be amended without the consent of the Authority (clause 11.15B(2)).*

#### **Audit observation**

We reviewed Opunake Hydro's terms and conditions.

#### **Audit commentary**

OPHL's standard terms does include assignment by the Authority in the event of retailer default.

#### **Audit outcome**

Compliant

### **2.9. Connection of an ICP (Clause 10.32)**

#### **Code reference**

*Clause 10.32*

#### **Code related audit information**

*A reconciliation participant must only request the connection of a point of connection if they:*

- *accept responsibility for their obligations in Parts 10, 11 and 15 for the point of connection; and*
- *have an arrangement with an MEP to provide 1 or more metering installations for the point of connection.*

#### **Audit observation**

We checked The LIS and EDA files for the audit period.

#### **Audit commentary**

OPHL had one new connection becoming active on 04/12/19. JC Consulting managed the process, OPHL accepted responsibility and had an arrangement with the MEP.

There are no plans to have more new connections in the near future.

#### **Audit outcome**

Compliant

### **2.10. Temporary Electrical Connection of an ICP (Clause 10.33)**

#### **Code reference**

*Clause 10.33(1)*

### Code related audit information

*A reconciliation participant may temporarily electrically connect a point of connection, or authorise a MEP to temporarily electrically connect a point of connection, only if:*

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
  - *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
  - *if the ICP has metered load, 1 or more certified metering installations are in place*
  - *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

### Audit observation

We checked The LIS and EDA files for the audit period.

### Audit commentary

OPHL had one new connection becoming active on 04/12/19. JC Consulting managed the process. OPHL did not ask for a temporary electrical connection.

OPHL did not asked for any temporary electrical connections during the audit period.

### Audit outcome

Compliant

## 2.11. Electrical Connection of Point of Connection (Clause 10.33A)

### Code reference

*Clause 10.33A(1)*

### Code related audit information

*A reconciliation participant may electrically connect or authorise the electrical connection of a point of connection only if:*

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
  - *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
  - *if the ICP has metered load, 1 or more certified metering installations are in place*
  - *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

### Audit observation

We checked the LIS and EDA files for the audit period.

### Audit commentary

OPHL had one new connection becoming active on 04/12/19. JC Consulting managed the process. The installation was certified on its electrical connection date.

We did not identify any disconnections/reconnections during the audit period.

No bridged meters were identified during the audit period.

## Audit outcome

Compliant

## 2.12. Arrangements for line function services (Clause 11.16)

### Code reference

*Clause 11.16*

### Code related audit information

*Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must ensure that it, or its customer, has made any necessary arrangements for the provision of line function services in relation to the relevant ICP*

*Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must have entered into an arrangement with an MEP for each metering installation at the ICP.*

### Audit observation

We examined the process which ensures an arrangement is in place before trading commences.

### Audit commentary

OPHL currently trades only on the Powerco network and does not expect to supply ICPs on other networks in the foreseeable future.

OPHL does not intend to switch in any ICPs or complete any new connections.

## Audit outcome

Compliant

## 2.13. Arrangements for metering equipment provision (Clause 10.36)

### Code reference

*Clause 10.36*

### Code related audit information

*A reconciliation participant must ensure it has an arrangement with the relevant MEP prior to accepting responsibility for an installation.*

### Audit observation

We examined the process which ensures an arrangement with an MEP is in place before trading commences or switches in.

### Audit commentary

According to the LIS file, AMCI and AccuCal provide the MEP services. OPHL does not expect to supply ICPs with other MEPs in the foreseeable future. OPHL does not intend to change the MEP for any existing ICPs.

## Audit outcome

Compliant

### 3. MAINTAINING REGISTRY INFORMATION

#### 3.1. Obtaining ICP identifiers (Clause 11.3)

##### Code reference

*Clause 11.3*

##### Code related audit information

*The following participants must, before assuming responsibility for certain points of connection on a local network or embedded network, obtain an ICP identifier for the point of connection:*

- a) a trader who has agreed to purchase electricity from an embedded generator or sell electricity to a consumer*
- b) an embedded generator who sells electricity directly to the clearing manager*
- c) a direct purchaser connected to a local network or an embedded network*
- d) an embedded network owner in relation to a point of connection on an embedded network that is settled by differencing*
- e) a network owner in relation to a shared unmetered load point of connection to the network owner's network*
- f) a network owner in relation to a point of connection between the network owner's network and an embedded network.*

*ICP identifiers must be obtained for points of connection at which any of the following occur:*

- a consumer purchases electricity from a trader 11.3(3)(a)*
- a trader purchases electricity from an embedded generator 11.3(3)(b)*
- a direct purchaser purchases electricity from the clearing manager 11.3(3)(c)*
- an embedded generator sells electricity directly to the clearing manager 11.3(3)(d)*
- a network is settled by differencing 11.3(3)(e)*
- there is a distributor status ICP on the parent network point of connection of an embedded network or at the point of connection of shared unmetered load. 11.3(3)(f)*

##### Audit observation

The LIS and EDA files were examined. The new connections process was examined.

##### Audit commentary

OPHL gained one new connection on 4/12/19 (Tag Oil Supplejack Well Site). JC Consulting managed the new connection process in the registry.

The company strategy is not to actively look for new connections.

##### Audit outcome

Compliant

#### 3.2. Providing registry information (Clause 11.7(2))

##### Code reference

*Clause 11.7(2)*

##### Code related audit information

*Each trader must provide information to the registry manager about each ICP at which it trades electricity in accordance with Schedule 11.1.*

##### Audit observation

The LIS file was examined.

#### Audit commentary

OPHL gained one new connection on 4/12/19 (Tag Oil Supplejack Well Site). The registry was updated by JC Consulting..

#### Audit outcome

Compliant

### 3.3. Changes to registry information (Clause 10 Schedule 11.1)

#### Code reference

*Clause 10 Schedule 11.1*

#### Code related audit information

*If information provided by a trader to the registry manager about an ICP changes, the trader must provide written notice to the registry manager of the change no later than 5 business days after the change.*

#### Audit observation

The EDA file and Audit Compliance report for the audit period was examined.

#### Audit commentary

The only activities recorded in the registry for the audit period are related to the new connection, 1000586630PC607. There were no changes to registry information for existing installations.

#### Audit outcome

Compliant

### 3.4. Trader responsibility for an ICP (Clause 11.18)

#### Code reference

*Clause 11.18*

#### Code related audit information

*A trader becomes responsible for an ICP when the trader is recorded in the registry as being responsible for the ICP.*

*A trader ceases to be responsible for an ICP if:*

- *another trader is recorded in the registry as accepting responsibility for the ICP (clause 11.18(2)(a)); or*
- *the ICP is decommissioned in accordance with clause 20 of Schedule 11.1 (clause 11.18(2)(b)).*
- *if an ICP is to be decommissioned, the trader who is responsible for the ICP must (clause 11.18(3)):*
  - *arrange for a final interrogation to take place prior to or upon meter removal (clause 11.18(3)(a)); and*
  - *advise the MEP responsible for the metering installation of the decommissioning (clause 11.18(3)(b)).*

*A trader who is responsible for an ICP (excluding UML) must ensure that an MEP is recorded in the registry for that ICP (clause 11.18(4)).*

*A trader must not trade at an ICP (excluding UML) unless an MEP is recorded in the registry for that ICP (clause 11.18(5)).*

#### **Audit observation**

The LIS file was analysed, and we confirm that all ICPs had a MEP recorded in the registry.

#### **Audit commentary**

All OPHL ICPs have the “active” status in the registry. OPHL is not planning any disconnection or reconnection of existing ICPs.

Opunake Hydro fully understand that as soon as they are recorded in the registry as accepting responsibility, the responsibility will cease only when an ICP switches out to another trader and its code is recorded in the registry.

Opunake Hydro is aware of their responsibility to notify the MEP where an ICP is decommissioned, and to obtain a final reading. Since the last audit, the company has not marked any ICP as “ready for decommissioning”.

#### **Audit outcome**

Compliant

### **3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)**

#### **Code reference**

*Clause 9 Schedule 11.1*

#### **Code related audit information**

*Each trader must provide the following information to the registry manager for each ICP for which it is recorded in the registry as having responsibility:*

- a) the participant identifier of the trader, as approved by the Authority (clause 9(1)(a))*
- b) the profile code for each profile at that ICP, as approved by the Authority (clause 9(1)(b))*
- c) the metering equipment provider for each category 1 metering or higher (clause 9(1)(c))*
- d) the type of submission information the trader will provide to the RM for the ICP (clause 9(1)(ea))*
- e) if a settlement type of UNM is assigned to that ICP, either:*
  - the code ENG if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*
  - in all other cases, the daily average kWh of unmetered load at the ICP (clause 9(1)(f)(ii)).*
  - the type and capacity of any unmetered load at each ICP (clause 9(1)(g))*
  - the status of the ICP, as defined in clauses 12 to 20 (clause 9(1)(j))*
  - except if the ICP exists for the purposes of reconciling an embedded network or the ICP has distributor status, the trader must provide the relevant business classification code applicable to the customer (clause 9(1)(k)).*

*The trader must provide information specified in (a) to (j) above within 5 business days of trading (clause 9(2)).*

*The trader must provide information specified in 9(1)(k) no later than 20 business days of trading (clause 9(3))*

#### **Audit observation**

We analysed the LIS file and the EDA files for the audit period.

#### **Audit commentary**

OPHL had only one new connection on 04/12/19. There is no intention to accept more new connections. JC Consulting populated the registry.

The analyses of the EDA files showed that Opunake Hydro provided all required information to the registry for their ICPs. The information recorded is correct.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: 9 of Schedule 11.1  From: 01-Nov-18 To: 20-Feb-20	One trader entry (MEP nominations) for a new connection was recorded later than 5BD (35 days) Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating:1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong. The audit risk rating is recorded as low because it is only one ICP therefore any impact to the market will be minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
This was an isolated incident and not expected to reoccur		28/2/20	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This was an isolated incident and not expected to reoccur		28/2/20	

### 3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)

#### Code reference

*Clause 9 (1(k) of Schedule 11.1*

#### Code related audit information

*Traders are responsible to populate the relevant ANZSIC code for all ICPs for which they are responsible.*

#### Audit observation

The LIS file was checked . ANZSIC codes for all ICPs were checked.

#### Audit commentary

All active ICPs had a valid ANZSIC code recorded. ANZSIC codes are unlikely to change for OPHL's existing ICPs.

#### Audit outcome

Compliant



### 3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)

#### Code reference

*Clause 9(1)(f) of Schedule 11.1*

#### Code related audit information

*if a settlement type of UNM is assigned to that ICP, the trader must populate:*

*the code ENG - if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*

*the daily average kWh of unmetered load at the ICP - in all other cases (clause 9(1)(f)(ii)).*

#### Audit observation

The LIS file was checked.

#### Audit commentary

All OPHL ICPs are metered. There are no plans to trade UML ICPs.

#### Audit outcome

Compliant

### 3.8. Management of “active” status (Clause 17 Schedule 11.1)

#### Code reference

*Clause 17 Schedule 11.1*

#### Code related audit information

*The ICP status of “active” is be managed by the relevant trader and indicates that:*

- *the associated electrical installations are electrically connected (clause 17(1)(a))*
- *the trader must provide information related to the ICP in accordance with Part 15, to the reconciliation manager for the purpose of compiling reconciliation information (clause 17(1)(b)).*

*Before an ICP is given the “active” status, the trader must ensure that:*

- *the ICP has only 1 customer, embedded generator, or direct purchaser (clause 17(2)(a))*
- *the electricity consumed is quantified by a metering installation or a method of calculation approved by the Authority (clause 17(2)(b)).*

#### Audit observation

The LIS and EDA files were examined.

#### Audit commentary

All OPHL ICPs have the “active” status in the registry. OPHL does not plan to disconnect any ICP.

Each of the currently supplied ICPs is metered and has one customer.

#### Audit outcome

Compliant

### 3.9. Management of “inactive” status (Clause 19 Schedule 11.1)

#### Code reference

#### Clause 19 Schedule 11.1

##### Code related audit information

*The ICP status of “inactive” must be managed by the relevant trader and indicates that:*

- *electricity cannot flow at that ICP (clause 19(a)); or*
- *submission information related to the ICP is not required by the reconciliation manager for the purpose of compiling reconciliation information (clause 19(b)).*

##### Audit observation

The LIS and EDA files were examined.

##### Audit commentary

All OPHL ICPs have the “active” status in the registry. OPHL does not plan to disconnect any ICP.

The event detail report for 01/11/18 to 15/02/20 was examined to identify all status changes to “inactive”. There were no such changes.

##### Audit outcome

Compliant

#### 3.10. ICPs at new or ready status for 24 months (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 "Ready" for 24 calendar months or more, the distributor must ask the trader whether it should continue to have that status and must decommission the ICP if the trader advises the ICP should not continue to have that status.*

##### Audit observation

It is a distributor’s code obligation to monitor any ICP which has had the status of “New” or “Ready” for 24 calendar months or more. It is expected that a trader be able to respond to such queries from distributors.

##### Audit commentary

The new connection occurred on 04/12/19. Any requests for future new connections, which are unlikely, will be handled by JC Consulting.

##### Audit outcome

Compliant

## 4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

### 4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)

#### Code reference

*Clause 2 Schedule 11.3*

#### Code related audit information

*The standard switch process applies where a trader and a customer or embedded generator enters into an arrangement in which the trader commences trading electricity with the customer or embedded generator at a non-half hour or unmetered ICP at which another trader supplies electricity, or the trader assumes responsibility for such an ICP.*

*If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and 1 or more profile codes associated with that ICP.*

#### Audit observation

The standard switch process was examined to assess compliance. We reviewed the EDA file for the audit period.

#### Audit commentary

OPHL has not used this type of switch in the audit period. The company does not intend to switch in new ICPs in the foreseeable future.

If a new switch occurs in the future, JC Consulting will manage it using the registry web interface.

#### Audit outcome

Compliant

### 4.2. Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)

#### Code reference

*Clauses 3 and 4 Schedule 11.3*

#### Code related audit information

*Within 3 business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12 month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:*

- *provide acknowledgement of the switch request by (clause 3(a) of Schedule 11.3):*
- *providing the proposed event date to the registry manager and a valid switch response code (clause 3(a)(i) and (ii) of Schedule 11.3); or*
- *providing a request for withdrawal of the switch in accordance with clause 17 (clause 3(c) of Schedule 11.3).*

*When establishing an event date for clause 4, the losing trader may disregard every event date established by the losing trader for an ICP for which when the losing trader received notice from the registry manager under clause 22(a) the losing trader had been responsible for less than 2 months.*

#### Audit observation

The standard switch process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

#### Audit commentary

During the audit period OPHL received NTTR from Meridian. It was a request for ICP 0001372320PC122. Opunake Hydro sent AN files one day late.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.2 With: 9 of Schedule 11.1  From: 21-Feb-20 To: 21-Feb-20	AN file was sent one day late  Potential impact: None  Actual impact: None  Audit history: None  Controls: Strong  Breach risk rating:1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong. The audit risk rating is recorded as low because it is only one ICP therefore any impact to the market will be minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
This was an isolated incident and not expected to reoccur		28/2/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This was an isolated incident and not expected to reoccur		28/2/2020	

#### 4.3. Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)

##### Code reference

*Clause 5 Schedule 11.3*

##### Code related audit information

*If the losing trader provides information to the registry manager in accordance with clause 3(a) of Schedule 11.3 with the required information, no later than 5 business days after the event date, the losing trader must complete the switch by:*

- *providing event date to the registry manager (clause 5(a)); and*

- *provide to the gaining trader a switch event meter reading as at the event date, for each meter or data storage device that is recorded in the registry with accumulator of C and a settlement indicator of Y (clause 5(b)); and*
- *if a switch event meter reading is not a validated reading, provide the date of the last meter reading (clause 5(c)).*

#### Audit observation

The standard switch process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

#### Audit commentary

During the audit period ICP 0001372320PC122 switched away to Meridian. The CS file was sent to the registry within 5 BD. Information contained in the file was correct.

#### Audit outcome

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Compliant

### 4.4. Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)

#### Code reference

*Clause 6(1) and 6A Schedule 11.3*

#### Code related audit information

*The losing trader and the gaining trader must both use the same switch event meter reading as determined by the following procedure:*

- *if the switch event meter reading provided by the losing trader differs by less than 200 kWh from a value established by the gaining trader, the gaining trader must use the losing trader's validated meter reading or permanent estimate (clause 6(a)); or*
- *the gaining trader may dispute the switch meter reading if the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more. (clause 6(b)).*

*If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within 4 calendar months of the registry manager giving the gaining trader written notice of having received information about the switch completion, provide to the losing trader a changed switch event meter reading supported by 2 validated meter readings.*

- *the losing trader can choose not to accept the reading, however, must advise the gaining trader no later than 5 business days after receiving the switch event meter reading from the gaining trader (clause 6A(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 6A(b)).*

#### Audit observation

The standard switch process and the EDA file was examined to assess compliance.

#### Audit commentary

During the audit period ICP 0001372320PC122 switched away to Meridian. The switch event date was 17/02/20. The switch event meter reading contained in the CS file will be used in a submission file for Feb'20.

#### Audit outcome

Compliant

#### 4.5. Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)

##### Code reference

*Clause 6(2) and (3) Schedule 11.3*

##### Code related audit information

*If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AMI certified meter flagged Y in the registry: and*

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b));*
- *the gaining trader within 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.*

##### Audit observation

The standard switch process and the EDA file was examined to assess compliance.

##### Audit commentary

No RR were sent or received by OPHL. If any RR or AC files are required in the future, which is unlikely, they will be managed by JC Consulting.

##### Audit outcome

Compliant

#### 4.6. Disputes - standard switch (Clause 7 Schedule 11.3)

##### Code reference

*Clause 7 Schedule 11.3*

##### Code related audit information

*A losing trader or gaining trader may give written notice to the other that it disputes a switch event meter reading provided under clauses 1 to 6. Such a dispute must be resolved in accordance with clause 15.29 (with all necessary amendments).*

##### Audit observation

There were no disputes with losing retailers. If such a situation were to occur in the future it would be resolved in accordance with this clause.

##### Audit commentary

Opunake Hydro confirmed that no disputes occurred in the period covered by this audit which would require a resolution. Opunake Hydro stated that they will not decline to accept another retailer' validated meter reading or permanent estimate if they are reasonable and appropriate in the applicable circumstances.

##### Audit outcome

Compliant

#### 4.7. Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)

## Code reference

Clause 9 Schedule 11.3

## Code related audit information

*The switch move process applies where a gaining trader has an arrangement with a customer or embedded generator to trade electricity at an ICP using non half-hour metering or an unmetered ICP, or to assume responsibility for such an ICP, and no other trader has an agreement to trade electricity at that ICP, this is referred to as a switch move and the following provisions apply:*

*If the “uninvited direct sale agreement” applies, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*In the event of a switch move, the gaining trader must advise the registry manager of a switch and the proposed event date no later than 2 business days after the arrangement comes into effect.*

*In its advice to the registry manager the gaining trader must include:*

- *a proposed event date (clause 9(2)(a)); and*
- *that the switch type is "MI" (clause 9(2)(b)); and*
- *one or more profile codes of a profile at the ICP. (clause 9(2)(c))*

## Audit observation

The switch move process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

## Audit commentary

The switch move process was not used in the audit period.

## Audit outcome

Compliant

## 4.8. Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)

## Code reference

Clause 10(1) Schedule 11.3

## Code related audit information

*10(1) Within 5 business days after receiving notice of a switch move request from the registry manager—*

- *10(1)(a) If the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry manager:*
  - *confirmation of the switch event date; and*
  - *a valid switch response code; and*
  - *final information as required under clause 11; or*
- *10(1)(b) If the losing trader does not accept the event date proposed by the gaining trader, the losing trader must acknowledge the switch request to the registry manager and determine a different event date that—*
  - *is not earlier than the gaining trader’s proposed event date, and*
  - *is no later than 10 business days after the date the losing trader receives notice; or*
- *10(1)(c) request that the switch be withdrawn in accordance with clause 17.*

## Audit observation

The switch move process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

#### **Audit commentary**

The switch move process was not used in the audit period.

#### **Audit outcome**

Compliant

### **4.9. Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)**

#### **Code reference**

*Clause 10(2) Schedule 11.3*

#### **Code related audit information**

*If the losing trader determines a different date, then within 10 business days of receiving notice the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):*

- *the event date proposed by the losing trader; and*
- *a valid switch response code; and*
- *final information as required under clause 1.*

#### **Audit observation**

The switch move process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

#### **Audit commentary**

The switch move process was not used in the audit period.

#### **Audit outcome**

Compliant

### **4.10. Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)**

#### **Code reference**

*Clause 11 Schedule 11.3*

#### **Code related audit information**

*The losing trader must provide final information to the registry manager for the purposes of clause 10(1)(a)(ii), including—*

- *the event date (clause 11(a)); and*
- *a switch event meter reading as at the event date for each meter or data storage device that is recorded in the registry with an accumulator type of C and a settlement indicator of Y (clause 11(b)); and*
- *if the switch event meter reading is not a validated meter reading, the date of the last meter reading of the meter or storage device. (clause (11(c)).*

#### **Audit observation**

The switch move process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.



#### Audit commentary

The switch move process was not used in the audit period.

#### Audit outcome

Compliant

#### 4.11. Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)

##### Code reference

Clause 12 Schedule 11.3

##### Code related audit information

*The gaining trader may use the switch event meter reading supplied by the losing trader or may, at its own cost, obtain its own switch event meter reading. If the gaining trader elects to use this new switch event meter reading, the gaining trader must advise the losing trader of the switch event meter reading and the actual event date to which it refers as follows:*

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within 4 calendar months of the date the registry manager gives the gaining trader written notice of having received information about the switch completion, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by 2 validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
- *advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 12(3)(b)).*

*12(2A) If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AMI certified meter flagged Y in the registry,*

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 12(2A)(b));*
- *the gaining trader no later than 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading. (clause 12(2B)).*

##### Audit observation

The switch move process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

#### Audit commentary

The switch move process was not used in the audit period.

#### Audit outcome

Compliant

#### 4.12. Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3)

##### Code reference

Clause 14 Schedule 11.3

##### Code related audit information

*The gaining trader switch process applies when a trader has an arrangement with a customer or embedded generator to trade electricity at an ICP at which the losing trader trades electricity with the customer or embedded generator, and one of the following applies at the ICP:*

- *the gaining trader will trade electricity through a half hour metering installation that is a category 3 or higher metering installation; or*
- *the gaining trader will trade electricity through a non-AMI half hour metering installation and the losing trader trades electricity through a non-AMI non half hour metering installation; or*
- *the gaining trader will trade electricity through a non-AMI non half hour metering installation and the losing trader trades electricity through a non-AMI half hour metering installation*

*If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*A gaining trader must advise the registry manager of the switch and expected event date no later than 3 business days after the arrangement comes into effect.*

*14(2) The gaining trader must include in its advice to the registry manager:*

- a) a proposed event date; and*
- b) that the switch type is HH.*

*14(3) The proposed event date must be a date that is after the date on which the gaining trader advises the registry manager, unless clause 14(4) applies.*

*14(4) The proposed event date is a date before the date on which the gaining trader advised the registry manager, if:*

*14(4)(a) – the proposed event date is in the same month as the date on which the gaining trader advised the registry manager; or*

*14(4)(b) – the proposed event date is no more than 90 days before the date on which the gaining trader advises the registry manager and this date is agreed between the losing and gaining traders.*

##### Audit observation

The gaining trader switch process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

##### Audit commentary

The gaining trader switch process was not used in the audit period.

If a new switch occurs in the future, JC Consulting will manage it using the registry web interface.

##### Audit outcome

Compliant

#### 4.13. Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3)

## Code reference

Clause 15 Schedule 11.3

## Code related audit information

*Within 3 business days after the losing trader is informed about the switch by the registry manager, the losing trader must:*

*15(a) - provide to the registry manager a valid switch response code as approved by the Authority; or*

*15(b) - provide a request for withdrawal of the switch in accordance with clause 17.*

## Audit observation

The gaining trader switch process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

## Audit commentary

The gaining trader switch process was not used in the audit period.

If a new switch occurs in the future, JC Consulting will manage it using the registry web interface.

## Audit outcome

Compliant

## 4.14. Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule 11.3)

## Code reference

Clause 16 Schedule 11.3

## Code related audit information

*The gaining trader must complete the switch no later than 3 business days, after receiving the valid switch response code, by advising the registry manager of the event date.*

*If the ICP is being electrically disconnected, or if metering equipment is being removed, the gaining trader must either-*

*16(a)- give the losing trader or MEP for the ICP an opportunity to interrogate the metering installation immediately before the ICP is electrically disconnected or the metering equipment is removed; or*

*16(b)- carry out an interrogation and, no later than 5 business days after the metering installation is electrically disconnected or removed, advise the losing trader of the results and metering component numbers for each data channel in the metering installation.*

## Audit observation

The gaining trader switch process was examined to assess compliance. We reviewed the EDA file and Switch Breach Report for the audit period.

## Audit commentary

The gaining trader switch process was not used in the audit period.

If a new switch occurs in the future, JC Consulting will manage it using the registry web interface.

## Audit outcome

Compliant

#### 4.15. Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3)

##### Code reference

*Clauses 17 and 18 Schedule 11.3*

##### Code related audit information

*A losing trader or gaining trader may request that a switch request be withdrawn at any time until the expiry of 2 calendar months after the event date of the switch.*

*If a trader requests the withdrawal of a switch, the following provisions apply:*

- *for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*
  - o *the participant identifier of the trader making the withdrawal request (clause 18(c)(i)); and*
  - o *the withdrawal advisory code published by the Authority. (clause 18(c)(ii))*
- *within 5 business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal. (clause 18(d))*
- *on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c). All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request. (clause 18(e))*
- *if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within 2 business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16. (clause 18(f))*

##### Audit observation

The EDA file for the audit period was examined.

##### Audit commentary

OPHL does not intend to switch in new ICPs. If NW or AW files are required in the future, which is unlikely, they will be managed by JC Consulting.

##### Audit outcome

Compliant

#### 4.16. Metering information (Clause 21 Schedule 11.3)

##### Code reference

*Clause 21 Schedule 11.3*

##### Code related audit information

*For an interrogation or validated meter reading or permanent estimate carried out in accordance with Schedule 11.3:*

*21(a)- the trader who carries out the interrogation, switch event meter reading must ensure that the interrogation is as accurate as possible, or that the switch event meter reading is fair and reasonable.*

*21(b) and (c) - the cost of every interrogation or switch event meter reading carried out in accordance with clauses 5(b) or 11(b) or (c) must be met by the losing trader. The costs in every other case must be met by the gaining trader.*

#### **Audit observation**

The meter reading process in relation to the switching process was examined. All reads are received from AMCI or AccuCal.

#### **Audit commentary**

All meter readings used in the switching process will be validated meter readings or estimates.

#### **Audit outcome**

Compliant

### **4.17. Switch saving protection (Clause 11.15AA to 11.15AB)**

#### **Code reference**

*Clause 11.15AA to 11.15AB*

#### **Code related audit information**

*A trader that buys electricity from the clearing manager may elect to have a switch saving protection by giving notice to the Authority in writing.*

*If a protected trader enters into an arrangement with a customer of another trader (the losing trader), or a trader enters into an arrangement with a customer of a protected trader, to commence trading electricity with the customer, the losing trader must not, by any means, initiate contact with the customer to attempt to persuade the customer to terminate the arrangement during the period from the receipt of the NT to the event date of the switch including by:*

*11.15AB(4)(a)- making a counter offer to the customer; or*

*11.15AB(4)(b)- offering an enticement to the customer.*

#### **Audit observation**

Opunake Hydro is not part of the Switch saving protection program.

#### **Audit commentary**

The EDA file was checked and found no NWCX coded switch withdrawal requests were sent.

#### **Audit outcome**

Compliant

## 5. MAINTENANCE OF UNMETERED LOAD

### 5.1. Maintaining shared unmetered load (Clause 11.14)

#### Code reference

Clause 11.14

#### Code related audit information

The trader must adhere to the process for maintaining shared unmetered load as outlined in clause 11.14:

11.14(2) - The distributor must give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.

11.14(3) - A trader who receives such a notification from a distributor must give written notice to the distributor if it wishes to add or omit any ICP from the ICPs across which unmetered load is to be shared.

11.14(4) - A distributor who receives such a notification of changes from the trader under (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.

11.14(5) - If a distributor becomes aware of any 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 as soon as practicable after that change or decommissioning.

11.14(6) - Each trader who receives such a notification must, as soon as practicable after receiving the notification, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP.

11.14(7) - A trader must take responsibility for shared unmetered load assigned to an ICP for which the trader becomes responsible as a result of a switch in accordance with Part 11.

11.14(8) - A trader must not relinquish responsibility for shared unmetered load assigned to an ICP if there would then be no ICPs left across which that load could be shared.

11.14(9) - A trader can change the status of an ICP across which the unmetered load is shared to inactive status, as referred to in clause 19 of Schedule 11.1. In that case, the trader is not required to give written notice to the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.

#### Audit observation

The LIS file was analysed. Opunake Hydro's intention is not to trade SUML or UML.

#### Audit commentary

There are no shared unmetered load ICPs traded by OPHL. JC Consulting checks weekly to see if any of the networks have entered any historic SUML.

#### Audit outcome

Compliant

### 5.2. Unmetered threshold (Clause 10.14 (2)(b))

#### Code reference

Clause 10.14 (2)(b)

### Code related audit information

*The reconciliation participant must ensure that unmetered load does not exceed 3,000 kWh per annum, or 6,000 kWh per annum if the load is predictable and of a type approved and published by the Authority.*

### Audit observation

The LIS file dated 20/02/20 was analysed.

### Audit commentary

No unmetered load over the 3,000 kWh threshold was traded.

### Audit outcome

Compliant

## 5.3. Unmetered threshold exceeded (Clause 10.14 (5))

### Code reference

*Clause 10.14 (5)*

### Code related audit information

*If the unmetered load limit is exceeded the retailer must:*

- *within 20 business days, commence corrective measure to ensure it complies with Part 10*
- *within 20 business days of commencing the corrective measure, complete the corrective measures*
- *no later than 10 business days after it becomes aware of the limit having been exceeded, advise each participant who is or would be expected to be affected of:*
  - o *the date the limit was calculated or estimated to have been exceeded*
  - o *the details of the corrective measures that the retailer proposes to take or is taking to reduce the unmetered load.*

### Audit observation

The LIS file dated 20/02/20 was analysed.

### Audit commentary

No unmetered load over the 3,000 kWh threshold was traded.

### Audit outcome

Compliant

## 5.4. Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B)

### Code reference

*Clause 11 Schedule 15.3, Clause 15.37B*

### Code related audit information

*An up-to-date database must be maintained for each type of distributed unmetered load for which the retailer is responsible. The information in the database must be maintained in a manner that the resulting submission information meets the accuracy requirements of clause 15.2.*

*A separate audit is required for distributed unmetered load data bases.*

*The database must satisfy the requirements of Schedule 15.5 with regard to the methodology for deriving submission information.*

**Audit observation**

The LIS file dated 20/02/20 was analysed.

**Audit commentary**

Opunake Hydro does not trade distributed unmetered load and does not have such plans for the future.

**Audit outcome**

Not applicable



## 6. GATHERING RAW METER DATA

### 6.1. Electricity conveyed & notification by embedded generators(Clause 10.13, Clause 10.24 and 15.13)

#### Code reference

*Clause 10.13, Clause 10.24 and Clause 15.13*

#### Code related audit information

*A participant must use the quantity of electricity measured by a metering installation as the raw meter data for the quantity of electricity conveyed through the point of connection.*

*This does not apply if data is estimated or gifted in the case of embedded generation under clause 15.13.*

*A trader must, for each electrically connected ICP that is not also an NSP, and for which it is recorded in the registry as being responsible, ensure that:*

- *there is 1 or more metering installations*
- *all electricity conveyed is quantified in accordance with the Code*
- *it does not use subtraction to determine submission information for the purposes of Part 15.*

*An embedded generator must give notification to the reconciliation manager for an embedded generating station, if the intention is that the embedded generator will not be receiving payment from the clearing manager or any other person through the point of connection to which the notification relates.*

#### Audit observation

The LIS file dated 20/02/20 was reviewed.

#### Audit commentary

OPHL trades both NHH and HHR ICP. The only NHH reconciled ICP switched out on 17/02/20. No subtraction is used to determine submission information.

Opunake Hydro trades 3 ICPs for which embedded generation is recorded (category 3 and 4 metering installations). We cross checked submission files against registry files and confirm that import volumes (HHR) for all ICPs are submitted.

#### Audit outcome

Compliant

### 6.2. Responsibility for metering at GIP(Clause 10.26 (6), (7) and (8))

#### Code reference

*Clause 10.26 (6), (7) and (8)*

#### Code related audit information

*For each proposed metering installation or change to a metering installation that is a connection to the grid, the participant, must:*

- *provide to the grid owner a copy of the metering installation design (before ordering the equipment)*
- *provide at least 3 months for the grid owner to review and comment on the design*
- *respond within 3 business days of receipt to any request from the grid owner for additional details or changes to the design*
- *ensure any reasonable changes from the grid owner are carried out.*

*The participant responsible for the metering installation must:*

- *advise the reconciliation manager of the certification expiry date not later than 10 business days after certification of the metering installation*
- *become the MEP or contract with a person to be the MEP*
- *advise the reconciliation manager of the MEP identifier no later than 20 days after entering into a contract or assuming responsibility to be the MEP.*

#### **Audit observation**

OPHL does not trade connections to the grid.

#### **Audit commentary**

This clause is not applicable.

#### **Audit outcome**

Not applicable

### **6.3. Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3)**

#### **Code reference**

*Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3*

#### **Code related audit information**

*The reconciliation participant must advise the metering equipment provider if a control device is used to control load or switch meter registers.*

*The reconciliation participant must ensure the control device is certified prior to using it for reconciliation purposes.*

#### **Audit observation**

The LIS file was reviewed to identify which profiles are used for reconciliation purposes.

#### **Audit commentary**

OPHL uses RPS and HHR profiles. No control devices are required. The only ICP using RPS profile for submissions switched away on 17/02/20.

#### **Audit outcome**

Compliant

### **6.4. Reporting of defective metering installations (Clause 10.43(2) and (3))**

#### **Code reference**

*Clause 10.43(2) and (3)*

#### **Code related audit information**

*If a participant becomes aware of an event or circumstance that lead it to believe a metering installation could be inaccurate, defective, or not fit for purpose they must:*

- *advise the MEP*
- *include in the advice all relevant details.*

#### **Audit observation**

The process related to defective installations was examined.

### Audit commentary

Any defective installations are identified through the meter reading validation process conducted by JC Consulting or they are notified by MEPs. If such an issue arises, a SR will be raised asking for an investigation and replacement of a meter if necessary

No defective meters have been identified during the period covered by this audit.

### Audit outcome

Compliant

## 6.5. Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2)

### Code reference

Clause 2 Schedule 15.2

### Code related audit information

*Only a certified reconciliation participant may collect raw meter data, unless only the MEP can interrogate the meter, or the MEP has an arrangement which prevents the reconciliation participant from electronically interrogating the meter:*

*2(2) - The reconciliation participant must collect raw meter data used to determine volume information from the services interface or the metering installation or from the MEP.*

*2(3) - The reconciliation participant must ensure the interrogation cycle is such that it does not exceed the maximum interrogation cycle in the registry .*

*2(4) - The reconciliation participant must interrogate the meter at least once every maximum interrogation cycle.*

*2(5) - When electronically interrogating the meter the participant must:*

- a) ensure the system is to within +/- 5 seconds of NZST or NZDST*
- b) compare the meter time to the system time*
- c) determine the time error of the metering installation*
- d) if the error is less than the maximum permitted error, correct the meter's clock*
- e) if the time error is greater than the maximum permitted error then:*
  - i) correct the metering installation's clock*
  - ii) compare the metering installation's time with the system time*
  - iii) correct any affected raw meter data.*
- f) download the event log.*

*2(6) – The interrogation systems must record:*

- the time*
- the date*
- the extent of any change made to the meter clock.*

### Audit observation

Meter readings are collected by AMCI and AccuCal. Meter data is downloaded from servers by JC Consulting and imported to the RM TOOL.

### Audit commentary

Compliance with this clause in relation to clock synchronisation is validated during the AMS audit.

AccuCal stated that the clock of the computer which reads one ICP for Opunake Hydro is automatically synchronised to MSL time.

## Audit outcome

Compliant

### 6.6. Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)

#### Code reference

*Clause 3(1), 3(2) and 5 Schedule 15.2*

#### Code related audit information

*All meter readings must in accordance with the participants certified processes and procedures and using its certified facilities be sourced directly from raw meter data and, if appropriate, be derived and calculated from financial records.*

*All validated meter readings must be derived from meter readings.*

*A meter reading provided by a consumer may be used as a validated meter reading only if another set of validated meter readings not provided by the consumer are used during the validation process.*

*During the manual interrogation of each NHH metering installation the reconciliation participant must:*

- a) obtain the meter register*
- b) ensure seals are present and intact*
- c) check for phase failure (if supported by the meter)*
- d) check for signs of tampering and damage*
- e) check for electrically unsafe situations.*

*If the relevant parts of the metering installation are visible and it is safe to do so.*

#### Audit observation

Data collection was examined.

#### Audit commentary

All meters are read remotely for OPHL by AccuCal and AMCI. There are no customer or participant reads.

## Audit outcome

Compliant

### 6.7. NHH meter reading application (Clause 6 Schedule 15.2)

#### Code reference

*Clause 6 Schedule 15.2*

#### Code related audit information

*For NHH switch event meter reads, for the gaining trader the reading applies from 0000 hours on the day of the relevant event date and for the losing trader at 2400 hours at the end of the day before the relevant event date.*

*In all other cases, All NHH readings apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation.*

#### Audit observation

The switch read from the CS file is used as a start read for NHH ICPs. Consecutive readings from Wells, MEPs or a customer, apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation.

#### Audit commentary

During the period covered by this audit, OPHL had one NHH ICP, which switched out on 17/2/2020. Compliance confirmed based on scenarios described in **section 12.11**.

#### Audit outcome

Compliant

### 6.8. Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)

#### Code reference

*Clause 7(1) and (2) Schedule 15.2*

#### Code related audit information

*Each reconciliation participant must ensure that a validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant and used to create volume information.*

*This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 7(1).*

#### Audit observation

The EDA file was examined to identify ICPs which have switched out since the last audit. The process for monitoring missing reads, run by JC Consulting, was examined.

#### Audit commentary

Only one ICP switched out during the audit period. It was on 17/02/2020. We were shown evidence that it was read more than once during the period of supply.

#### Audit outcome

Compliant

### 6.9. NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)

#### Code reference

*Clause 8(1) and (2) Schedule 15.2*

#### Code related audit information

*At least once every 12 months, each reconciliation participant must obtain a validated meter reading for every meter register for non-half hour metered ICPs, at which the reconciliation participant trades continuously for each 12 month period.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 8(1).*

#### Audit observation

Every month JC Consulting provides the Authority with a Meter Reading Frequency report.

#### **Audit commentary**

OPHL had traded one NHH ICP in the audit period. There are no plans to gain more ICPs. JC Consulting manages meter reads. The meter frequency report is provided by JC Consulting.

A review of the Meter Frequency Reports confirmed that Opunake Hydro met the read attainment requirements. JC Consulting monitors missing reads by running weekly reports.

#### **Audit outcome**

Compliant

### **6.10. NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)**

#### **Code reference**

*Clause 9(1) and (2) Schedule 15.2*

#### **Code related audit information**

*In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each 4 months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every 4 months for 90% of the non-half hour metered ICPs.*

*A report is to be sent to the Authority providing the percentage, in relation to each NSP, for which consumption information has been collected no later than 20 business days after the end of each month.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 9(1).*

#### **Audit observation**

Every month JC Consulting provides the Authority with a Meter Reading Frequency report.

#### **Audit commentary**

OPHL had traded one NHH ICP in the audit period. There are no plans to gain more ICPs. JC Consulting manages meter reads. The meter frequency report is provided by JC Consulting.

A review of the Meter Frequency Reports confirmed that Opunake Hydro met the read attainment requirements. JC Consulting monitors missing reads by running weekly reports.

#### **Audit outcome**

Compliant

### **6.11. NHH meter interrogation log (Clause 10 Schedule 15.2)**

#### **Code reference**

*Clause 10 Schedule 15.2*

#### **Code related audit information**

*The following information must be logged as the result of each interrogation of the NHH metering:*

*10(a) - the means to establish the identity of the individual meter reader*

*10(b) - the ICP identifier of the ICP, and the meter and register identification*

*10(c) - the method being used for the interrogation and the device ID of equipment being used for interrogation of the meter.*

*10(d) - the date and time of the meter interrogation.*

#### **Audit observation**

NHH metering data is collected for one ICP and was done by NGCM.

#### **Audit commentary**

AMS provides reads for NHH ICPs. Compliance with this clause was reviewed during the AMS audit.

#### **Audit outcome**

Compliant

### **6.12. HHR data collection (Clause 11(1) Schedule 15.2)**

#### **Code reference**

*Clause 11(1) Schedule 15.2*

#### **Code related audit information**

*Raw meter data from all electronically interrogated metering installations must be obtained via the services access interface.*

*This may be carried out by a portable device or remotely.*

#### **Audit observation**

6 ICPs are traded by Opunake Hydro. HHR data is provided by two agents, AMCI and AccuCal. All meters are read remotely.

#### **Audit commentary**

Compliance with this clause was assessed during the AMCI audit. The audit confirmed compliance with this clause.

We assessed AccuCal compliance during this audit. AccuCal uses proprietary software to read EDM1 meters.

#### **Audit outcome**

Compliant

### **6.13. HHR interrogation data requirement (Clause 11(2) Schedule 15.2)**

#### **Code reference**

*Clause 11(2) Schedule 15.2*

#### **Code related audit information**

*The following information is collected during each interrogation:*

*11(2)(a) - the unique identifier of the data storage device*

*11(2)(b) - the time from the data storage device at the commencement of the download unless the time is within specification and the interrogation log automatically records the time of interrogation*

*11(2)(c) - the metering information, which represents the quantity of electricity conveyed at the point of connection, including the date and time stamp or index marker for each half hour period. This may be limited to the metering information accumulated since the last interrogation*

*11(2)(d) - the event log, which may be limited to the events information accumulated since the last interrogation*

*11(2)(e) - an interrogation log generated by the interrogation software to record details of all interrogations.*

*The interrogation log must be examined by the reconciliation participant responsible for collecting the data and appropriate action must be taken if problems are apparent or an automated software function flags exceptions.*

#### **Audit observation**

6 ICPs are traded by Opunake Hydro. HHR data is provided by two agents, AMCI and AccuCal. All meters are read remotely.

#### **Audit commentary**

AMS provides reads for HHR ICPs. Compliance with this clause was reviewed during the AMS audit.

Compliance with this clause was assessed during the AMCI audit. The audit confirmed compliance with this clause.

We assessed AccuCal compliance during this audit. AccuCal uses a proprietary software to read EDM I meters.

AccuCal meets compliance with clause 11(2)(b) by manually recording meter time before reconciliation and adjusting if necessary. The event log is downloaded and reviewed by AccuCal on behalf of Opunake Hydro.

Compliance with 11(2)(e) is met by creating an interrogation log manually. The evidence was provided by AccuCal.

#### **Audit outcome**

Compliant

### **6.14. HHR interrogation log requirements (Clause 11(3) Schedule 15.2)**

#### **Code reference**

*Clause 11(3) Schedule 15.2*

#### **Code related audit information**

*The interrogation log forms part of the interrogation audit trail and, as a minimum, must contain the following information:*

*11(3)(a)- the date of interrogation*

*11(3)(b)- the time of commencement of interrogation*

*11(3)(c)- the operator identification (if available)*

*11(3)(d)- the unique identifier of the meter or data storage device*

*11(3)(e)- the clock errors outside the range specified in Table 1 of clause 2*

*11(3)(f)- the method of interrogation*

*11(3)(g)- the identifier of the reading device used for interrogation (if applicable).*



### **Audit observation**

6 ICPs are traded by Opunake Hydro. HHR data is provided by two agents, AMCI and AccuCal. All meters are read remotely.

### **Audit commentary**

AMS provides the reads for HHR ICPs. Compliance with this clause was reviewed during the AMS audit.

We assessed AccuCal compliance during this audit. AccuCal uses a proprietary software to read EDM1 meters.

The functionality of the EDM1 software allows the programming of meters and the downloading of data. A log file created of interrogation is created manually to meet the requirements of this clause.

Compliance with clause 11(3)(e) is achieved by recording the clock errors manually for each meter.

### **Audit outcome**

Compliant

## 7. STORING RAW METER DATA

### 7.1. Trading period duration (Clause 13 Schedule 15.2)

#### Code reference

*Clause 13 Schedule 15.2*

#### Code related audit information

*The trading period duration, normally 30 minutes, must be within  $\pm 0.1\%$  ( $\pm 2$  seconds).*

#### Audit observation

OPHL received HHR data from AMCI and AccuCal.

#### Audit commentary

The trading period is managed by AMS. It was assessed during their audit.

We reviewed data provided by AccuCal and confirm that the trading period duration is 30 minutes.

#### Audit outcome

Compliant

### 7.2. Archiving and storage of raw meter data (Clause 18 Schedule 15.2)

#### Code reference

*Clause 18 Schedule 15.2*

#### Code related audit information

*A reconciliation participant who is responsible for interrogating a metering installation must archive all raw meter data and any changes to the raw meter data for at least 48 months, in accordance with clause 8(6) of Schedule 10.6.*

*Procedures must be in place to ensure that raw meter data cannot be accessed by unauthorised personnel.*

*Meter readings cannot be modified without an audit trail being created.*

#### Audit observation

Meter data is received from AccuCal, AMCI, and HGCM, who archives raw meter data. Opunake Hydro keeps a copy of all HHR & NHH data.

#### Audit commentary

A review of audit trails in **section 2.4** confirmed that reads cannot be modified without creating an audit trail.

#### Audit outcome

Compliant

### 7.3. Non metering information collected / archived (Clause 21(5) Schedule 15.2)

#### Code reference

*Clause 21(5) Schedule 15.2*

#### Code related audit information

*All relevant non-metering information, such as external control equipment operation logs, used in the determination of profile data must be collected, and archived in accordance with clause 18.*

**Audit observation**

Opunake Hydro only uses RPS and HHR profiles for reconciliation submissions. No external control equipment is used.

**Audit commentary**

This clause is not applicable to the OPHL's operation.

**Audit outcome**

Not applicable

## 8. CREATING AND MANAGING (INCLUDING VALIDATING, ESTIMATING, STORING, CORRECTING AND ARCHIVING) VOLUME INFORMATION

### 8.1. Correction of NHH meter readings (Clause 19(1) Schedule 15.2)

#### Code reference

Clause 19(1) Schedule 15.2

#### Code related audit information

*If a reconciliation participant detects errors while validating non-half hour meter readings, the reconciliation participant must:*

*19(1)(a) - confirm the original meter reading by carrying out another meter reading*

*19(1)(b) - replace the original meter reading the second meter reading (even if the second meter reading is at a different date)*

*19(1A) if a reconciliation participant detects errors while validating non half hour meter readings, but the reconciliation participant cannot confirm the original meter reading or replace it with a meter reading from another interrogation, the reconciliation participant must:*

- *substitute the original meter reading with an estimated reading that is marked as an estimate; and*
- *subsequently replace the estimated reading in accordance with clause 4(2)*

#### Audit observation

The correction of NHH readings, if necessary, is completed by JC Consulting.

#### Audit commentary

No NHH corrections were made during the period covered by this audit. As per meter frequency reports, Opunake Hydro makes sure to have frequent reads for the NHH site. At the time of this audit there were no NHH ICPs left.

#### Audit outcome

Compliant

### 8.2. Correction of HHR metering information (Clause 19(2) Schedule 15.2)

#### Code reference

Clause 19(2) Schedule 15.2

#### Code related audit information

*If a reconciliation participant detects errors while validating half hour meter readings, the reconciliation participant must correct the meter readings as follows:*

*19(2)(a) - if the relevant metering installation has a check meter or data storage device, substitute the original meter reading with data from the check meter or data storage device; or*

*19(2)(b) - if the relevant metering installation does not have a check meter or data storage device, substitute the original meter reading with data from another period provided:*

- (i) *The total of all substituted intervals matches the total consumption recorded on a meter, if available; and*
- (ii) *The reconciliation participant considers the pattern of consumption to be materially similar to the period in error*

### Audit observation

The correction of HHR readings, if necessary, is completed by JC Consulting. The validation process used by JC Consulting was reviewed.

### Audit commentary

No HHR corrections were made during the period covered by this audit. JC Consulting conducts very thorough HHR data validation to detect possible data inaccuracies.

### Audit outcome

Compliant

## 8.3. Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)

### Code reference

*Clause 19(3) Schedule 15.2*

### Code related audit information

*A reconciliation participant may use error compensation and loss compensation as part of the process of determining accurate data. Whichever methodology is used, the reconciliation participant must document the compensation process and comply with audit trail requirements set out in the Code.*

### Audit observation

Error and loss compensation was discussed during the audit.

### Audit commentary

OPHL does not have such installations where error and loss compensation has to be used as part of the process for determining accurate data.

### Audit outcome

Compliant

## 8.4. Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)

### Code reference

*Clause 19(4) and (5) Schedule 15.2*

### Code related audit information

*In correcting a meter reading in accordance with clause 19, the raw meter data must not be overwritten. If the raw meter data and the meter readings are the same, an automatic secure backup of the affected data must be made and archived by the processing or data correction application.*

*If data is corrected or altered, a journal must be generated and archived with the raw meter data file. The journal must contain the following:*

*19(5)(a)- the date of the correction or alteration*

*19(5)(b)- the time of the correction or alteration*

*19(5)(c)- the operator identifier for the person within the reconciliation participant who made the correction or alteration*

*19(5)(d)- the half-hour metering data or the non-half hour metering data corrected or altered, and the total difference in volume of such corrected or altered data*

*19(5)(e)- the technique used to arrive at the corrected data*

*19(5)(f)- the reason for the correction or alteration.*

#### **Audit observation**

The process for the correction of NHH and HHR reads used by JC Consulting was examined during the audit.

#### **Audit commentary**

No corrections have occurred since the last audit. Audit trails are discussed in **section 2.4**. JC Consulting receives only a copy of raw meter data. Retention of raw meter data is the responsibility of AMCI, AccuCal and NGCM. It was covered in their audits and found compliant.

#### **Audit outcome**

Compliant

## 9. ESTIMATING AND VALIDATING VOLUME INFORMATION

### 9.1. Identification of readings (Clause 3(3) Schedule 15.2)

#### Code reference

*Clause 3(3) Schedule 15.2*

#### Code related audit information

*All estimated readings and permanent estimates must be clearly identified as an estimate at source and in any exchange of metering data or volume information between participants.*

#### Audit observation

The estimation processes and classifications were examined during this audit.

#### Audit commentary

We reviewed a sample of six readings in the RM TOOL and confirmed they were correctly labelled. We traced them from the source file to the RM TOOL. Each register read or interval read has a flag assigned.

#### Audit outcome

Compliant

### 9.2. Derivation of volume information (Clause 3(4) Schedule 15.2)

#### Code reference

*Clause 3(4) Schedule 15.2*

#### Code related audit information

*Volume information must be directly derived, in accordance with Schedule 15.2, from:*

*3(4)(a) - validated meter readings*

*3(4)(b) - estimated readings*

*3(4)(c) - permanent estimates.*

#### Audit observation

JC Consulting provided a submission summary for Dec'18 to Jan'20.

#### Audit commentary

The data provided by JC Consulting was reviewed in **section 11** and **12** to confirm that volumes were based on readings as required.

#### Audit outcome

Compliant

### 9.3. Meter data used to derive volume information (Clause 3(5) Schedule 15.2)

#### Code reference

*Clause 3(5) Schedule 15.2*

#### Code related audit information

*All meter data that is used to derive volume information must not be rounded or truncated from the stored data from the metering installation.*

### Audit observation

Meter data is collected by AMCI and AccuCal. Up to 17/02/2020, NGCM was providing data for one ICP.

### Audit commentary

We took a sample of five ICPs and compared data received from AMCI and AccuCal and data stored in the RM TOOL. We confirmed that data was neither rounded nor truncated.

### Audit outcome

Compliant

## 9.4. Half hour estimates (Clause 15 Schedule 15.2)

### Code reference

*Clause 15 Schedule 15.2*

### Code related audit information

*If a reconciliation participant is unable to interrogate an electronically interrogated metering installation before the deadline for providing submission information, the submission to the reconciliation manager must be the reconciliation participant's best estimate of the quantity of electricity that was purchased or sold in each trading period during any applicable consumption period for that metering installation.*

*The reconciliation participant must use reasonable endeavours to ensure that estimated submission information is within the percentage specified by the Authority.*

### Audit observation

HHR estimation is conducted by JC Consulting if necessary.

### Audit commentary

The method which is used depends on how many intervals needs to be estimated. If it is only a small number of intervals needing to be estimated, a straight line is used. If one day or more requires estimation, a customer profile is used. Estimated data is created in Excel and imported into the RM TOOL, labelled as "estimated" against each interval. In both scenarios estimated data is scaled to match the total kWh. The RM TOOL records the name of the file, date and time of when it is imported.

JC Consulting confirmed that data was estimated for ICP 0042251484PC993 for Nov'19 because actual data was not available for submission. Later on AMCI provided actual meter data which replaced the estimated data.

### Audit outcome

Compliant

## 9.5. NHH metering information data validation (Clause 16 Schedule 15.2)

### Code reference

*Clause 16 Schedule 15.2*

### Code related audit information

*Each validity check of non-half hour meter readings and estimated readings must include the following:*

*16(2)(a) - confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register*

*16(2)(b) - checks for invalid dates and times*



*16(2)(c) - confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern, or trend*

*16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected 0 values.*

#### **Audit observation**

The review of the LIS file showed that Opunake Hydro trades 6 HHR ICPs. 5 ICPs are read by AMCI and 1 ICP by AccuCal. Also up to 17/02/2020, OPHL was trading one NHH ICP. Data was provided by NGCM.

#### **Audit commentary**

JC Consulting uses a validation process for NHH reads which consists of checking for high or low reads, consumption detected >10% of rollover amount, consumption on de energised sites, missing reads, negative consumption. There is also a process to monitor “possible” bridged meters.

#### **Audit outcome**

Compliant

### **9.6. Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)**

#### **Code reference**

*Clause 17 Schedule 15.2*

#### **Code related audit information**

*Each validity check of electronically interrogated meter readings and estimate readings must be at a frequency that will allow a further interrogation of the data storage device before the data is overwritten within the data storage device and before this data can be used for any purpose under the Code.*

*Each validity check of a meter reading obtained by electronic interrogation or an estimated reading must include:*

*17(4)(a) - checks for missing data*

*17(4)(b) - checks for invalid dates and times*

*17(4)(c) - checks of unexpected 0 values*

*17(4)(d) - comparison with expected or previous flow patterns*

*17(4)(e) - comparisons of meter readings with data on any data storage device registers that are available*

*17(4)(f) - a review of meter and data storage device event list. Any event that could have affected the integrity of metering data must be investigated.*

#### **Audit observation**

JC Consulting receives remotely read metering data from AccuCal and AMCI.

#### **Audit commentary**

When data is uploaded into the RM TOOL a validity check of meter readings is conducted and an exception report is created. AMCI or AccuCal are advised if there is an issue. According to the service agreement with AMCI and AccuCal, the companies have an obligation to advise of meter events. The data is received by JC Consulting. No events were reported which could affect the integrity of metering data in the audit period.

#### **Audit outcome**

Compliant

## 10. PROVISION OF METERING INFORMATION TO THE GRID OWNER IN ACCORDANCE WITH SUBPART 4 OF PART 13 (CLAUSE 15.38(1)(F))

### 10.1. Generators to provide HHR metering information (Clause 13.136)

#### Code reference

Clause 13.136

#### Code related audit information

*The generator (and/or embedded generator) must provide to the grid owner connected to the local network in which the embedded generator is located, half hour metering information in accordance with clause 13.138 in relation to generating plant that is subject to a dispatch instruction:*

- *that injects electricity directly into a local network; or*
- *if the meter configuration is such that the electricity flows into a local network without first passing through a grid injection point or grid exit point metering installation.*

#### Audit observation

OPHL is not a generator.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### Audit outcome

Not applicable

### 10.2. Unoffered & intermittent generation provision of metering information (Clause 13.137)

#### Code reference

Clause 13.137

#### Code related audit information

*Each generator must provide the relevant grid owner half-hour metering information for:*

- *any unoffered generation from a generating station with a point of connection to the grid 13.137(1)(a)*
- *any electricity supplied from an intermittent generating station with a point of connection to the grid. 13.137(1)(b)*

*The generator must provide the relevant grid owner with the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of that generator's volume information. (clause 13.137(2))*

*If such half-hour metering information is not available, the generator must provide the pricing manager and the relevant grid owner a reasonable estimate of such data. (clause 13.137(3))*

#### Audit observation

OPHL is not a generator.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### Audit outcome

Not applicable

### 10.3. Loss adjustment of HHR metering information (Clause 13.138)

#### Code reference

Clause 13.138

#### Code related audit information

*The generator must provide the information required by clauses 13.136 and 13.137,*

*13.138(1)(a)- adjusted for losses (if any) relative to the grid injection point or, for embedded generators the grid exit point, at which it offered the electricity*

*13.138(1)(b)- in the manner and form that the pricing manager stipulates*

*13.138(1)(c)- by 0500 hours on a trading day for each trading period of the previous trading day.*

*The generator must provide the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of the generator's volume information.*

#### Audit observation

OPHL is not a generator.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### Audit outcome

Not applicable

### 10.4. Notification of the provision of HHR metering information (Clause 13.140)

#### Code reference

Clause 13.140

#### Code related audit information

*If the generator provides half-hourly metering information to a grid owner under clauses 13.136 to 13.138, or 13.138A, it must also, by 0500 hours of that day, advise the relevant grid owner.*

#### Audit observation

OPHL is not a generator.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### Audit outcome

Not applicable

## 11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

### 11.1. Buying and selling notifications (Clause 15.3)

#### Code reference

Clause 15.3

#### Code related audit information

*Unless an embedded generator has given a notification in respect of the point of connection under clause 15.3, a trader must give notice to the reconciliation manager if it is to commence or cease trading electricity at a point of connection using a profile with a profile code other than HHR, RPS, UML, EG1, or PV1 at least five business days before commencing or ceasing trader.*

*The notification must comply with any procedures or requirements specified by the reconciliation manager.*

#### Audit observation

The review of the LIS file identified which profiles are used by OPHL.

#### Audit commentary

OPHL uses only RPS and HHR profiles and is not planning to use other profiles.

#### Audit outcome

Compliant

### 11.2. Calculation of ICP days (Clause 15.6)

#### Code reference

Clause 15.6

#### Code related audit information

*Each retailer and direct purchaser (excluding direct consumers) must deliver a report to the reconciliation manager detailing the number of ICP days for each NSP for each submission file of submission information in respect of:*

*15.6(1)(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period*

*15.6(1)(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

*The ICP days information must be calculated using the data contained in the retailer or direct purchaser's reconciliation system when it aggregates volume information for ICPs into submission information.*

#### Audit observation

JC Consulting created and submit NHHVOLS file to the reconciliation manager. The company provided the submission files and GR-100 for the audit period.

#### Audit commentary

We reviewed the ICP days file (AV-110) submitted to the reconciliation manager and GR-100. The registry calculated ICP days match ICP days calculated by Opunake Hydro.

#### Audit outcome

Compliant

### 11.3. Electricity supplied information provision to the reconciliation manager (Clause 15.7)

#### Code reference

Clause 15.7

#### Code related audit information

A retailer must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each NSP, aggregated by invoice month, for which it has provided submission information to the reconciliation manager, including revised submission information for that period as non-loss adjusted values in respect of:

15.7(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period

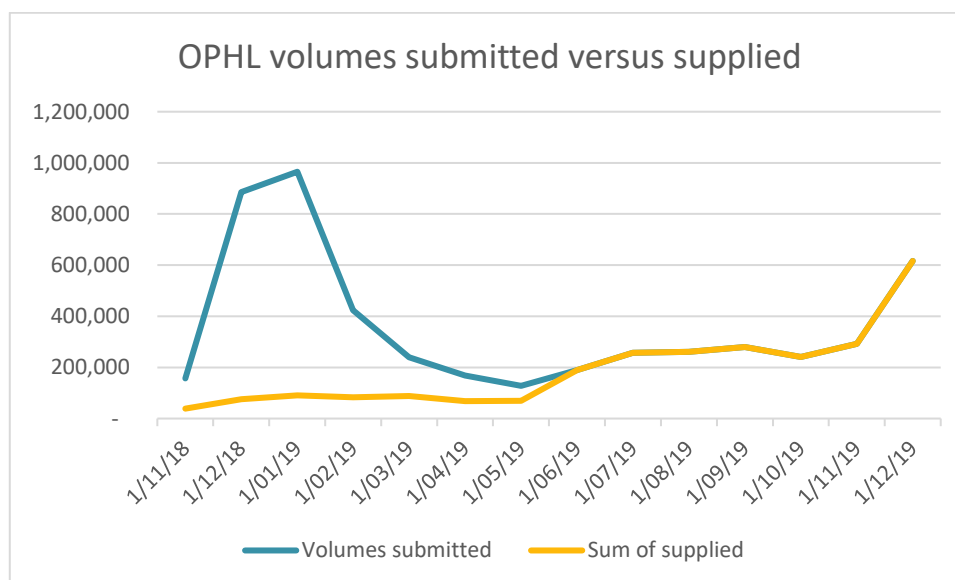
15.7(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.

#### Audit observation

As a part of the process for file submission to the reconciliation manager, JC Consulting submits AV-120 (BILLED) every month for the current month and scheduled revisions.

#### Audit commentary

The table below shows a comparison between volumes submitted and supplied.



One ICP 0080013325PC9CF was excluded from the as Billed reporting for the periods up to 1/4/2019 as it was billed in a separate spreadsheet. The energy supplied figures will be re-worked and resubmit them, to be washed up in due course.

#### Audit outcome

Compliant

### 11.4. HHR aggregates information provision to the reconciliation manager (Clause 15.8)

## Code reference

Clause 15.8

## Code related audit information

*A retailer or direct purchaser (excluding direct consumers) must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each half hourly metered ICP for which it has provided submission information to the reconciliation manager, including:*

*15.8(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period*

*15.8(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

## Audit observation

JC Consulting provided a set of submission files (AV140) for Dec'18 to Jan'20. GR-090 was reviewed for the same period. We compared the volumes in HHRVOLS and HHRAGGR for four months.

## Audit commentary

OPHL trades 6 HHR ICPs

We compared volumes in HHRVOLS and HHRAGGR for the months Oct'19 to Jan'20. There were no differences between the volumes and aggregates.

The HHRAGGR files are prepared at ICP level based on submission information. Clause 15.8 states that the HHRAGGR should contain electricity supplied information rather than submission information. The Reconciliation Manager Functional Specification in section 3, described HHRAGGR as HHR submission information that is aggregated per ICP for the whole month.

There is a misalignment between the Code requirements and RM file specification. It is a problem well known to the Authority and is awaiting a resolution.

## Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: 15.8  From: 01-Nov-18 To: 20-Feb-20	HHRAGGR files do not contain electricity supplied information  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Strong  Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	OPHL submits submissions volumes as per the reconciliation manager specification.		
Actions taken to resolve the issue		Completion date	Remedial action status

None	NA	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
None	NA	



## 12. SUBMISSION COMPUTATION

### 12.1. Daylight saving adjustment (Clause 15.36)

#### Code reference

Clause 15.36

#### Code related audit information

*The reconciliation participant must provide submission information to the reconciliation manager that is adjusted for NZDT using 1 of the techniques set out in clause 15.36(3) specified by the Authority.*

#### Audit observation

HHR data is collected by AMCI and AccuCal. All data provided is daylight saving adjusted.

#### Audit commentary

OPHL trades 6 HHR ICPs. Submission volumes are submitted by JC Consulting.

Compliance with this clause has been demonstrated by AMS as part of their agent audit. AccuCal provided evidence of how data is daylight shifted.

#### Audit outcome

Compliant

### 12.2. Creation of submission information (Clause 15.4)

#### Code reference

Clause 15.4

#### Code related audit information

*By 1600 hours on the 4th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all NSPs for which the reconciliation participant is recorded in the registry as having traded electricity during the consumption period immediately before that reconciliation period (in accordance with Schedule 15.3).*

*By 1600 hours on the 13th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all points of connection for which the reconciliation participant is recorded in the registry as having traded electricity during any consumption period being reconciled in accordance with clauses 15.27 and 15.28, and in respect of which it has obtained revised submission information (in accordance with Schedule 15.3).*

#### Audit observation

In the period covered by this audit, no breaches have been recorded for the late provision of submission files to the reconciliation manager.

We reviewed the process for the submission of files for HHR & NHH ICPs. We sampled two NSPs to validate if volumes submitted were correct.

#### Audit commentary

During the audit, we walked through the process for the submission of reconciliation files used by JC Consulting and found it robust and compliant.

We reviewed the submission process and we are fully satisfied with the timeliness of the reconciliation submissions.

#### Audit outcome

Compliant

### 12.3. Allocation of submission information (Clause 15.5)

#### Code reference

Clause 15.5

#### Code related audit information

*In preparing and submitting submission information, the reconciliation participant must allocate volume information for each ICP to the NSP indicated by the data held in the registry for the relevant consumption period at the time the reconciliation participant assembles the submission information. Volume information must be derived in accordance with Schedule 15.2.*

*However, if, in relation to a point of connection at which the reconciliation participant trades electricity, a notification given by an embedded generator under clause 15.13 for an embedded generating station is in force, the reconciliation participant is not required to comply with the above in relation to electricity generated by the embedded generating station.*

#### Audit observation

We examined both HHRVOLS and HHRAGGR for Aug'19 and Jan'20.

#### Audit commentary

OPHL trades 6 HHR ICPs and one NHH. Submission volumes are submitted by JC Consulting.

We reviewed the process for the submission of files for HHR & NHH ICPs. We sampled two NSPs to validate if volumes were submitted to NSP indicated in the registry.

#### Audit outcome

Compliant

### 12.4. Grid owner volumes information (Clause 15.9)

#### Code reference

Clause 15.9

#### Code related audit information

*The participant (if a grid owner) must deliver to the reconciliation manager for each point of connection for all of its GXPs, the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.9(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.9(b))*

#### Audit observation

OPHL is not a grid owner.

#### Audit commentary

This clause is not applicable. Compliance was not assessed.

#### Audit outcome

Not applicable

## 12.5. Provision of NSP submission information (Clause 15.10)

### Code reference

Clause 15.10

### Code related audit information

*The participant (if a local or embedded network owner) must provide to the reconciliation manager for each NSP for which the participant has given a notification under clause 25(1) Schedule 11.1 (which relates to the creation, decommissioning, and transfer of NSPs) the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.10(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.10(b))*

### Audit observation

OPHL is not an embedded network owner.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

### Audit outcome

Not applicable

## 12.6. Grid connected generation (Clause 15.11)

### Code reference

Clause 15.11

### Code related audit information

*The participant (if a grid connected generator) must deliver to the reconciliation manager for each of its points of connection, the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.11(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.11(b))*

### Audit observation

OPHL is not a grid connected generator.

### Audit commentary

This clause is not applicable. Compliance was not assessed.

### Audit outcome

Not applicable

## 12.7. Accuracy of submission information (Clause 15.12)

### Code reference

Clause 15.12

### Code related audit information

*If the reconciliation participant has submitted information and then subsequently obtained more accurate information, the participant must provide the most accurate information available to the reconciliation manager or participant, as the case may be, at the next available opportunity for submission (in accordance with clauses 15.20A, 15.27, and 15.28).*

#### **Audit observation**

All relevant revisions in the audit period were submitted on day 13 by JC Consulting.

#### **Audit commentary**

A review of alleged breaches confirmed that no reconciliation submissions (revisions) were made late.

JC Consulting provided evidence that any updates to metering information are submitted to the RM. On day 4 JC Consulting used Opunake Hydro's own profile to calculate NHH (1 ICP) submissions, they are replaced as soon as GR-030 is available.

#### **Audit outcome**

Compliant

### **12.8. Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)**

#### **Code reference**

*Clause 4 Schedule 15.2*

#### **Code related audit information**

*Only volume information created using validated meter readings, or if such values are unavailable, permanent estimates, has permanence within the reconciliation processes (unless subsequently found to be in error).*

*The relevant reconciliation participant must, at the earliest opportunity, and no later than the month 14 revision cycle, replace volume information created using estimated readings with volume information created using validated meter readings.*

*If, despite having used reasonable endeavours for at least 12 months, a reconciliation participant has been unable to obtain a validated meter reading, the reconciliation participant must replace volume information created using an estimated reading with volume information created using a permanent estimate in place of a validated meter reading.*

#### **Audit observation**

JC Consulting created and submit NHHVOLS file to the reconciliation manager. The company provided the submission files and GR-070NHH covered by this audit.

#### **Audit commentary**

Only one NHH ICP is currently supplied by OPHL, there are no plans to gain more NHH ICPs. Volume information will still be provided by JC Consulting.

Analysis of GR-170NHH confirmed that submissions (rev 14) for Jul'18, Aug'18, Sept'18, Oct'18, Nov'18 met compliance with this clause.

#### **Audit outcome**

Compliant

### **12.9. Reconciliation participants to prepare information (Clause 2 Schedule 15.3)**

#### **Code reference**

## Clause 2 Schedule 15.3

### Code related audit information

*If a reconciliation participant prepares submission information for each NSP for the relevant consumption periods in accordance with the Code, such submission information for each ICP must comprise the following:*

- *half hour volume information for the total metered quantity of electricity for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a)) for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):*
  - a) *any half hour volume information for the ICP; or*
  - b) *any non-half hour volumes information calculated under clauses 4 to 6 (as applicable).*
  - c) *unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in the period, the distributed unmetered load database, or other sources of relevant information. (clause 2(1)(c))*
- *to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
  - a) *the certification of the control device is recorded in the registry; or*
  - b) *the metering installation in which the control device is location has interim certification.*
- *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
  - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
  - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report. (clause 2(3)(b))*

### Audit observation

We reviewed submission files for HHR ICPs created by JC Consulting, as the agent of Opunake Hydro, for the audit period.

### Audit commentary

OPHL trades 7 ICPs, 6 of them are reconciled as HHR and 1 ICP as NHH. Submission volumes will be provided by JC Consulting.

Opunake Hydro submits HHRAGGR, HHRVOLS, ICPDAYS, and BILLED. All volumes are submitted using the HHR and RPS profile. The company does not trade UML, SUML or NHH ICPs.

### Audit outcome

Compliant

## 12.10. Historical estimates and forward estimates (Clause 3 Schedule 15.3)

### Code reference

## Clause 3 Schedule 15.3

### Code related audit information

*For each ICP that has a non-half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates must be allocated to consumption periods using the following techniques to create historical estimates and forward estimates. (clause 3(1))*

*Each estimate that is a forward estimate or a historical estimate must clearly be identified as such. (clause 3(2))*

*If validated meter readings are not available for the purpose of clauses 4 and 5, permanent estimates may be used in place of validated meter readings. (clause 3(3))*

#### **Audit observation**

We reviewed AV-080 for Aug'19 to Jan'20.

#### **Audit commentary**

Only one NHH has been supplied by OPHL up to 17/02/20, there are no plans to gain more NHH ICPs.

We confirm that historical and forward estimates were included and identified correctly.

#### **Audit outcome**

Compliant

### 12.11. Historical estimate process (Clause 4 and 5 Schedule 15.3)

#### **Code reference**

*Clause 4 and 5 Schedule 15.3*

#### **Code related audit information**

*The methodology outlined in clause 4 of Schedule 15.3 must be used when preparing historic estimates of volume information for each ICP when the relevant seasonal adjustment shape is available.*

*If a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP must be the same as in clause 4, except that the relevant quantities  $kWh_{Px}$  must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by  $kWh_{Px}$ .*

#### **Audit observation**

JC Consulting, as the agent to Opunake Hydro, calculates historical estimates if required..

#### **Audit commentary**

We asked JC Consulting to provide examples of historical estimate calculations relevant to Opunake Hydro's trading, but no examples were available because OPHL traded only one ICP for which actual data was always available.

#### **Audit outcome**

Compliant

### 12.12. Forward estimate process (Clause 6 Schedule 15.3)

#### **Code reference**

*Clause 6 Schedule 15.3*

#### **Code related audit information**

*Forward estimates may be used only in respect of any period for which an historical estimate cannot be calculated.*

*The methodology used for calculating a forward estimate may be determined by the reconciliation participant, only if it ensures that the accuracy is within the percentage of error specified by the Authority.*

#### Audit observation

Forward estimates are calculated by JC Consulting if required. Average daily kWh from CS files are used or historic customer consumption if required.

#### Audit commentary

We analysed the GR170NHH to check for variances between submission day 4 and day 13, the variances were negligible.

By revision 3, as per note in **section 13.3**, forward estimates are replaced by historical estimates.

Compliant

#### 12.13. Compulsory meter reading after profile change (Clause 7 Schedule 15.3)

##### Code reference

*Clause 7 Schedule 15.3*

##### Code related audit information

*If the reconciliation participant changes the profile associated with a meter, it must, when determining the volume information for that meter and its respective ICP, use a validated meter reading or permanent estimate on the day on which the profile change is to take effect.*

*The reconciliation participant must use the volume information from that validated meter reading or permanent estimate in calculating the relevant historical estimates of each profile for that meter.*

#### Audit observation

The LIS file showed that Opunake Hydro uses HHR and RPS profiles.

#### Audit commentary

The company understands the process. There are no changes of the profile for any of ICPs.

#### Audit outcome

Compliant

### 13.1. Provision of submission information to the RM (Clause 8 Schedule 15.3)

#### Code reference

*Clause 8 Schedule 15.3*

#### Code related audit information

*For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.*

*For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:*

- Half hour submission information; or*
- Non half hour submission information; or*
- A combination of half hour submission information and non-half hour submission information*

*However, a reconciliation participant may instead use a profile if:*

- The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and*
- The approved profile allows the reconciliation participant to provide half hour submission information from a non-half hour metering installation; and*
- The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.*

*Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:*

- NSP code*
- reconciliation type*
- profile*
- loss category code*
- flow direction*
- dedicated NSP*
- trading period*

*The non-half hour submission information that a reconciliation participant submits must be aggregated to the following levels:*

- NSP code*
- reconciliation type*
- profile*
- loss category code*
- flow direction*
- dedicated NSP*
- consumption period or day*

#### Audit observation

Opunake Hydro provided submission files for Dec'18 to Jan'20.

#### Audit commentary

Submission files for OPHL are prepared by JC Consulting.

We reviewed the files and confirm that the format of submission files is compliant. We reviewed HHRVOLS and HHRAGGR in **section 11.4**. NHHVOLS were discussed in **section 12.9**.



## Audit outcome

Compliant

### 13.2. Reporting resolution (Clause 9 Schedule 15.3)

#### Code reference

*Clause 9 Schedule 15.3*

#### Code related audit information

*When reporting submission information, the number of decimal places must be rounded to not more than 2 decimal places.*

*If the unrounded digit to the right of the second decimal place is greater than or equal to 5, the second digit is rounded up, and*

*If the digit to the right of the second decimal place is less than 5, the second digit is unchanged.*

#### Audit observation

We reviewed submission files for Jun'19 to Jan'20.

#### Audit commentary

Submission files for OPHL are prepared by JC Consulting.

Submission information for NHH and HHR is rounded to two decimal places. It was discussed with JC Consulting as to how submission information was calculated. JC Consulting confirm that submission volumes are rounded, using a method prescribed by this clause, at the end of calculations.

## Audit outcome

Compliant

### 13.3. Historical estimate reporting to RM (Clause 10 Schedule 15.3)

#### Code reference

*Clause 10 Schedule 15.3*

#### Code related audit information

*By 1600 hours on the 13th business day of each reconciliation period the reconciliation participant must report to the reconciliation manager the proportion of historical estimates per NSP contained within its non-half hour submission information.*

*The proportion of submission information per NSP that is comprised of historical estimates must (unless exceptional circumstances exist) be:*

- *at least 80% for revised data provided at the month 3 revision (clause 10(3)(a))*
- *at least 90% for revised data provided at the month 7 revision (clause 10(3)(b))*
- *100% for revised data provided at the month 14 revision. (clause 10(3)(c))*

#### Audit observation

JC Consulting created and submit the NHHVOLS file to the reconciliation manager. The company provided to the submission files covered by this audit.

#### Audit commentary

OPHL trades one NHH ICP. Submissions are prepared by JC Consulting.

The analysis of GR170 NHH showed that Opunake Hydro met compliance with above clause for all revisions submitted in the audit period.

**Audit outcome**

Compliant

## CONCLUSION

## PARTICIPANT RESPONSE