

**ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTOR AUDIT REPORT**

For

**MOUNTAIN POWER LIMITED**

Prepared by: Tara Gannon

Date audit commenced: 30 October 2019

Date audit report completed: 13 November 2019

Audit report due date: 14 November 2019

---

## TABLE OF CONTENTS

Executive summary .....	4
Audit summary .....	5
Non-compliances .....	5
Recommendations .....	6
Issues .....	6
1. Administrative.....	7
1.1. Exemptions from Obligations to Comply With Code (Section 11) .....	7
1.2. Structure of Organisation .....	7
1.3. Persons involved in this audit.....	7
1.4. Use of contractors (Clause 11.2A) .....	8
1.5. Supplier list .....	8
1.6. Hardware and Software .....	8
1.7. Breaches or Breach Allegations.....	8
1.8. ICP and NSP Data .....	9
1.9. Authorisation Received .....	9
1.10. Scope of Audit .....	10
1.11. Summary of previous audit .....	10
2. Operational Infrastructure .....	12
2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1)) ..	12
2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2)) .....	15
3. Creation of ICPs .....	16
3.1. Distributors must create ICPs (Clause 11.4) .....	16
3.2. Participants may request distributors to create ICPs (Clause 11.5(3)) .....	16
3.3. Provision of ICP Information to the registry manager (Clause 11.7) .....	17
3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1) .....	17
3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1) .....	18
3.6. Connection of ICP that is not an NSP (Clause 11.17).....	19
3.7. Connection of ICP that is not an NSP (Clause 10.31).....	20
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A) .....	20
3.9. Connection of NSP that is not point of connection to grid (Clause 10.30) .....	21
3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A)) .....	21
3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1) .....	22
3.12. Loss category (Clause 6 Schedule 11.1).....	22
3.13. Management of “new” status (Clause 13 Schedule 11.1).....	23
3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1).....	23
3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1).....	24
3.16. Electrical connection of a point of connection (Clause 10.33A) .....	25
4. Maintenance of registry information.....	26
4.1. Changes to registry information (Clause 8 Schedule 11.1) .....	26
4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1) .....	28
4.3. Customer queries about ICP (Clause 11.31).....	28

4.4.	ICP location address (Clause 2 Schedule 11.1).....	29
4.5.	Electrically disconnecting an ICP (Clause 3 Schedule 11.1) .....	30
4.6.	Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1) .....	31
4.7.	Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1) .....	37
4.8.	GPS coordinates (Clause 7(8) and (9) Schedule 11.1) .....	37
4.9.	Management of “ready” status (Clause 14 Schedule 11.1) .....	37
4.10.	Management of “distributor” status (Clause 16 Schedule 11.1) .....	38
4.11.	Management of “decommissioned” status (Clause 20 Schedule 11.1) .....	38
4.12.	Maintenance of price category codes (Clause 23 Schedule 11.1).....	39
5.	Creation and maintenance of loss factors .....	40
5.1.	Updating table of loss category codes (Clause 21 Schedule 11.1).....	40
5.2.	Updating loss factors (Clause 22 Schedule 11.1) .....	40
6.	Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs).....	41
6.1.	Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1).....	41
6.2.	Provision of NSP information (Clause 26(1) and (2) Schedule 11.1) .....	41
6.3.	Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1) .....	42
6.4.	Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1) ....	42
6.5.	Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1) .....	43
6.6.	Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1) .....	43
6.7.	Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2) .....	43
6.8.	Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3)) .....	44
6.9.	Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2)) .....	44
6.10.	Obligations concerning change in network owner (Clause 29 Schedule 11.1) .....	45
6.11.	Change of MEP for embedded network gate meter (Clause 10.22(1)(b)) .....	45
6.12.	Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2) .....	46
6.13.	Transfer of ICPs for embedded network (Clause 6 Schedule 11.2).....	46
7.	Maintenance of shared unmetered load .....	47
7.1.	Notification of shared unmetered load ICP list (Clause 11.14(2) and (4)) .....	47
7.2.	Changes to shared unmetered load (Clause 11.14(5)).....	47
8.	Calculation of loss factors .....	48
8.1.	Creation of loss factors (Clause 11.2).....	48
	Conclusion .....	50
	Participant response .....	51

## EXECUTIVE SUMMARY

This Distributor audit was conducted at the request of **Mountain Power Ltd (Mountain Power)** to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

Mountain Power has two embedded networks situated in Twizel, with 243 active ICPs connected as at 6 September 2019. The parent network (**Alpine Energy**) creates ICPs and performs registry maintenance as Mountain Power's agent. All activity from 1 March 2019 was considered during this audit, and Alpine Energy's processes for Mountain Power were reviewed at their office in Timaru on 30 October 2019.

Improvements have been made following the February 2019 audit:

- registry validation processes are in place;
- corrections were processed following the previous audit, and no issues with incorrect NSP assignment were identified; and
- improved processes have been implemented to identify late or missing initial electrical connection dates, and further monitoring of accuracy of initial electrical connection dates will be implemented.

Most of the discrepancies identified related to initial electrical connection dates and registry event dates.

Event dates should reflect the date from which the attribute values for the event apply. Where event updates are processed directly from the Mountain Power ICP database according to the usual process, event dates should be correctly applied. I found that some registry updates were manually processed using the registry web interface, and the user did not select an updated event date. This results in the previous registry event of the same type being replaced, and the date will be incorrect if the change occurred after the previous event.

While the process to determine initial electrical connection dates is compliant and based on the date the ICP is confirmed to be connected, I found some dates were incorrectly populated with the date that the customer application was accepted. Mountain Power understands the initial electrical connection date requirements and has asked for a copy of the paperwork to be forwarded to them from now on. They will complete validation to ensure that the registry matches the paperwork, and intend to query any discrepancies with Alpine Energy.

The audit found seven non-compliances and makes two recommendations. The audit risk rating is 14, indicating that the next audit should be completed in 12 months. Taking into account:

- the size of the network and anticipated future activity,
- the reduction in audit risk rating from 19 to 14,
- that non-compliances relating to a small number of data inaccuracies are captured in several sections,
- that one non-compliance relating to following up ICPs at "new" or "ready" status for more than two years is of a technical nature and another non-compliance is cleared, and
- that Mountain Power is working with Alpine Energy to resolve the issues

I recommend that the next audit should be due in 18 months, on 14 May 2021.

The matters raised are recorded in the table below.

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1) and 10.6(1)	<p>28 ICPs have incorrect initial electrical connection dates populated on the registry.</p> <p>0000024050MO1CA has an incorrect price category populated on the registry.</p> <p>24 initial electrical connection date registry updates did not have the correct event date recorded.</p> <p>Four distributed generation updates did not have the correct event date recorded</p>	Weak	Low	3	Identified
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	All 17 ICPs which became active during the audit period had late initial electrical connection date updates.	Moderate	Low	2	Identified
Monitoring of “new” & “ready” statuses	3.14	15 Schedule 11.1	ICPs 0000012400MO12F (ready since 31/01/17) and 0000012452MO9A2 (ready since 03/03/17) had been followed up with the customer or their agent to determine whether they were still required, but not the trader.	Strong	Low	1	Identified
Changes to registry information	4.1	8 Schedule 11.1	<p>43 late address updates.</p> <p>17 late network updates.</p> <p>12 late pricing updates.</p>	Moderate	Low	2	Investigating
ICP location address	4.4	2 Schedule 11.1	<p>Eight ICPs had duplicate addresses.</p> <p>15 ICPs had incorrect street names.</p>	Moderate	Low	2	Cleared

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Distributors to Provide ICP Information to the Registry manager	4.6	7(1) Schedule 11.1	28 ICPs have incorrect initial electrical connection dates populated on the registry.  0000024050MO1CA has an incorrect price category populated on the registry.  Three ICPs with distributed generation temporarily had an installation type of L recorded, instead of B. The records were corrected during the audit.	Moderate	Low	2	Investigating
Creation of loss factors	8.1	11.2	Loss factors are not accurate as indicated by the reconciliation losses.	Moderate	Low	2	Identified
Future Risk Rating						14	

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

## RECOMMENDATIONS

Subject	Section	Recommendation	Description
Requirement to provide complete and accurate information	2.1	Registry validation	Identify and check instances where trader or MEP information is inconsistent with distributor information.
Distributors to Provide ICP Information to the Registry manager	4.6	Dedicated NSP status	Change dedicated status to "Y".
Distributors to Provide ICP Information to the Registry manager	4.6	Distributor unmetered load details	Update the unmetered load details for 0000022015MOBE0 if known to include the wattage, on hours and description.

## ISSUES

Subject	Section	Issue	Description
		Nil	

## 1. ADMINISTRATIVE

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

#### Code reference

*Section 11 of Electricity Industry Act 2010.*

#### Code related audit information

*Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.*

#### Audit observation

The Electricity Authority website was checked to determine whether Mountain Power has any Code exemptions in place.

#### Audit commentary

Review of exemptions on the Electricity Authority website confirmed that there are no exemptions in place for Mountain Power.

### 1.2. Structure of Organisation

The Mountain Power operation is managed by Andrew Hocken. This is not a large business and does not have an organisation chart.

### 1.3. Persons involved in this audit

Auditor:

**Tara Gannon**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Personnel assisting in this audit were:

Name	Title	Organisation
Andrew Hocken	Company Director	Mountain Power
Hayden Darling	Customer Services Manager	Alpine Energy
Peter Bennett	Metering Officer	Alpine Energy
Taryn Butcher	Commercial and Regulatory Analyst	Alpine Energy
Tony Heron	Infrastructure and Operations Team Leader	Alpine Energy

#### 1.4. Use of contractors (Clause 11.2A)

##### Code reference

Clause 11.2A

##### Code related audit information

*A participant who uses a contractor*

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

##### Audit observation

I checked whether any agents were engaged in any relevant processes.

##### Audit commentary

Alpine Energy is engaged for creation of ICPs and registry management.

#### 1.5. Supplier list

Alpine Energy is engaged for creation of ICPs and registry management.

#### 1.6. Hardware and Software

Mountain Power does not have hardware or software relevant to this audit. A spreadsheet exists of all ICPs, but this does not interface to the registry.

Registry information is maintained by Alpine Energy using their Mountain Power ICP database. It is a Microsoft Access database and VB application. Access to the database is restricted through network access permissions, and access to the network is restricted using logins and passwords.

The database is fully backed up every night, with incremental backups every 15 minutes as part of Alpine Energy's virtual systems.

#### 1.7. Breaches or Breach Allegations

Mountain Power has not had any breach allegations recorded by the Electricity Authority during the audit period.



### 1.8. ICP and NSP Data

Mountain Power has responsibility for the NSPs in the table below, and active ICP numbers are as at 06/09/19. No NSPs were created, decommissioned, or transferred to or from other networks during the audit period.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
MOPO	MMP0111	MACKENZIE PARK	ALPE	TWZ0331	MMP0111MOPOE	EN	01/05/2008	101
MOPO	MMT0111	MANUKA TERRACE	ALPE	TWZ0331	MMT0111MOPOE	EN	01/05/2008	142

Mountain Power's ICPs are summarised by status below:

Status	Number of ICPs Sep 2019	Number of ICPs Nov 2018
New (999,0)	-	-
Ready (0,0)	5	7
Active (2,0)	243	221
Distributor (888,0)	-	-
Inactive – new connection in progress (1,12)	-	-
Inactive – electrically disconnected vacant property (1,4)	-	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	2	-
Inactive – electrically disconnected at pole fuse (1,8)	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-	-
Inactive – reconciled elsewhere (1,5)	-	-
Decommissioned (3)	1	1

### 1.9. Authorisation Received

A letter of authorisation was provided.

#### 1.10. Scope of Audit

This Distributor audit was performed at the request of Mountain Power, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

Mountain Power has two embedded networks situated in Twizel, with 243 active ICPs connected as at 6 September 2019. The parent network (Alpine Energy) creates ICPs and performs registry maintenance as Mountain Power's agent.

The scope of the audit is shown in the table below:

Functions Requiring Audit Under Clause 11.10(4) of Part 11	Contractors Involved in Performance of Tasks
The creation of ICP identifiers for ICPs.	Alpine Energy
The provision of ICP information to the registry and the maintenance of that information.	Alpine Energy
The creation and maintenance of loss factors.	Nil

All activity from 1 March 2019 was considered during this audit, and Alpine Energy's processes for Mountain Power were reviewed at their office in Timaru on 30 October 2019.

#### 1.11. Summary of previous audit

Mountain Power provided a copy of their previous audit conducted in February 2019 by Steve Woods of Veritek Limited. The audit recorded nine non-compliances, and made two recommendations. The current status of the non-compliances and recommendations is listed below.

Subject	Section	Clause	Non-compliance	Status
Provide complete and accurate information	2.1	11.2(1) and 10.6(1)	Information on the registry not complete and accurate.	Still existing
Timeliness of Ready update	3.4	7(2) of Schedule 11.1	ICP 0000030083MOE29 changed to Ready after electrical connection.	Cleared
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Late updating of the initial electrical connection date for 66 ICPs.	Still existing
New and Ready statuses	3.14	15 Schedule 11.1	ICP 0000012400MO12F at Ready for 24 months and no check with the trader.	Still existing

Subject	Section	Clause	Non-compliance	Status
Changes to registry information	4.1	8 Schedule 11.1	Registry event updates backdated greater than three days.	Still existing
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	Incorrect NSP for three ICPs.	Cleared
Address information	4.4	2 Schedule 11.1	14 addresses not able to be readily located.	Some issues were identified, but were resolved during the audit.
Provide ICP Information to the Registry manager	4.6	7(1)(o)&(p) Schedule 11.1	65 IECD fields blank. One ICP with distributed generation details missing.	Still existing
Price category code updates	4.7	7(3) Schedule 11.1	Backdated price category code population for ICP 0000030083MOE29.	Cleared

Subject	Section	Issue	Remedial action	Status
IECD updates	3.5	Regarding Clause 7(2A) of Schedule 11.1	Implement reporting to identify blank IECD fields.	Implemented, Alpine Energy monitors ICPs which have become active but do not have an initial electrical connection date populated.
Registry population	4.6	Regarding Clause 7(1) Schedule 11.1	Adopt the recommended format for unmetered load. Change dedicated status to "Y".	Not implemented.  Not implemented.

## 2. OPERATIONAL INFRASTRUCTURE

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

#### Code reference

*Clause 11.2(1) and 10.6(1)*

#### Code related audit information

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

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

#### Audit observation

I walked through the process to ensure that registry information is complete, accurate, and not misleading or deceptive, including viewing reports used to resolve discrepancies.

The registry list file as at 06/09/19, event detail report for 01/03/19 to 06/09/19, and NSP table were examined to confirm compliance.

#### Audit commentary

##### Registry update

ICP information is maintained with Alpine Energy's Mountain Power ICP database. When data maintained by the distributor on the registry is updated in the ICP database, the update is automatically sent to the registry.

Although it is not the usual process, I found that some registry updates were processed manually using the registry web interface. These updates were all processed prior to 16/07/19 and mostly related to corrections. There have been some staffing changes since July 2019, and all updates are now expected to be made using the Mountain Power ICP database.

Acknowledgement files are imported, and reports are run to identify any failed updates each morning and at 3pm. Issues are investigated and corrected.

Notification files are reviewed manually to identify status changes such as a retailer moving a new connection to "active" status, or an existing ICP to "ready for decommissioning" status. These changes are provided to Alpine Energy's metering officer, who follows up paperwork for new connections, and checks and follows up applications for decommissioning. The ICP database and registry are updated as necessary.

##### Registry validation

The ICP notifications database is used to check the data held in the Mountain Power ICP database against the registry information daily. Discrepancies are identified and resolved by Alpine Energy.

There are no regular checks to identify trader or MEP information which is inconsistent with distributor information. Inconsistencies could indicate that distributor information requires review or update, such as:

- addition of trader unmetered load details, where no distributor unmetered load is recorded;
- addition of a trader profile which is used for distributed generation (e.g. PV1 or EG1), where no distributor generation is recorded; and
- addition of meters with flow direction I, where no distributor generation is recorded.

I recommend that Mountain Power consider adding these checks and follow up any discrepancies identified.

Recommendation	Description	Audited party comment	Remedial action
Registry validation	Identify and check instances where trader or MEP information is inconsistent with distributor information.	This will be completed on a monthly basis with all new ICP's generated.	Identified

Mountain Power periodically checks that loss factors and pricing categories are correctly assigned, including that they are valid for the ICP's NSP.

There were some examples recorded in this report where “not all practicable steps” have been taken to ensure information accuracy, and it remains incorrect:

- 28 ICPs have incorrect initial electrical connection dates populated on the registry (**section 4.6**); and
- 0000024050MO1CA has an incorrect price category populated on the registry (**section 4.6**).

#### Event dates

Event dates should reflect the date from which the attribute values for the event apply. Event dates are set within the ICP database, and transferred to the registry with the updated value for the affected fields:

Event type	Event date setting processes
Address events	Addresses are held within the site details in the ICP database, and updates are sent effective from the connection date.
Network events	Unmetered load details are held within the site details in the ICP database, and updates are sent effective from the connection date.  Other network information is held within the network details in the ICP database, and an effective date can be entered for each change to GXP details, initial electrical connection date, dedicated NSP, installation type and/or generation information.
Pricing events	An effective date is recorded against each load group change, and this is applied as the effective date for any pricing changes.
Status events	Status events have a job date, which is applied as the effective date for the update.

As discussed above I found that some registry updates made prior to 16/07/19 were manually processed using the registry web interface. When event details are updated using the web interface, the user must manually update the event date, otherwise the previous event's date is automatically applied, and the previous event is replaced by the update. For all the manually processed updates checked, the previous event's date was applied. In some cases where the previous event was incorrect on its event date, this was valid. In other cases, the details should have been changed from a date after the previous event's event date.

I identified the following manual updates which were incorrectly processed from the previous record's event date, instead of the date from which the attribute values for the event applied:

- 24 initial electrical connection date updates which recorded the ICP creation date as the event date, instead of the initial electrical connection date - nine of the updates related to initial population of the initial electrical connection date and 13 updates related to correction of the initial electrical connection date; and
- four distributed generation updates which had been made from an incorrect event date, based on when the PV inspection was carried out according to the high risk database ([www.energysafety.govt.nz/energysafety/app/highrisk-db/home](http://www.energysafety.govt.nz/energysafety/app/highrisk-db/home)).

ICP	Event date	High risk database PV inspection
0000013365MOD32	12/04/2016	18/02/19
0000022045MO3E8	13/10/2016	24/04/19
0000030150MO6AF	11/01/2018	12/02/19
0000030185MO6A2	8/02/2019	18/02/19

### Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 2.1</p> <p>With: Clause 11.2(1) and 10.6(1)</p> <p>From: 28-Mar-19</p> <p>To: 16-Jul-19</p>	<p>28 ICPs have incorrect initial electrical connection dates populated on the registry.</p> <p>0000024050MO1CA has an incorrect price category populated on the registry.</p> <p>24 initial electrical connection date registry updates did not have the correct event date recorded.</p> <p>Four distributed generation updates did not have the correct event date recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>
Audit risk rating	Rationale for audit risk rating
<b>Low</b>	<p>Moderate controls are in place, which will improve to strong with Mountain Power's monitoring of initial electrical connection dates. If updates are processed using the Mountain Power ICP database, the correct date should be applied. The incorrect event dates appear to relate mainly to corrections which were processed manually, earlier in the audit period.</p> <p>The overall controls are currently rated as weak, because a large proportion (but small number) of dates remain incorrect.</p> <p>The audit risk rating is low. The initial electrical connection date is itself a date field, other participants can easily determine the date it applies from, even if the event date is incorrect. An incorrect event date for distributed generation and incorrect pricing information could have a minor impact on other participants.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
Regular monthly reporting of all new ICP's with subsequent checking of the Registry for incorrectly loaded fields.	Ongoing	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
All new ICP connection forms to be sent direct to MOPO for cross checking date input into the registry.	Ongoing	

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

### Code reference

*Clause 11.2(2) and 10.6(2)*

### Code related audit information

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

### Audit observation

Mountain Power's data management processes were examined. The registry list as at 06/09/19 was examined to confirm compliance.

### Audit commentary

As detailed in **section 2.2**, there is registry validation in place and errors and detected and corrected through this process.

### Audit outcome

Compliant

### 3. CREATION OF ICPs

#### 3.1. Distributors must create ICPs (Clause 11.4)

##### Code reference

Clause 11.4

##### Code related audit information

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

##### Audit observation

The new connection process was examined.

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were reviewed to identify all new connections during the period and check that ICPs were created as required by this clause.

##### Audit commentary

Alpine Energy creates ICPs for Mountain Power as required by clause 1 of schedule 11.1.

Examination of the registry list found 19 ICPs were created during the audit period. ICPs were created in accordance with this clause for all new connections.

##### Audit outcome

Compliant

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

##### Code reference

Clause 11.5(3)

##### Code related audit information

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

##### Audit observation

The new connection process was examined. A sample of ten new connections were checked to confirm compliance.

ICP requests are usually made by the customer's agent. If the request is not made by a trader this rule does not apply.

##### Audit commentary

Mountain Power receives new connection requests from customers' agents, normally electricians, who provide a completed Network Application form on which a retailer is nominated. This is then provided to Alpine Energy and the ICP is created and populated into the registry at "ready".

The new connections checked were requested by the customer, not the trader. All the ICPs were created within three business days of the date the request was received.



#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 11.7*

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

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

#### **Audit observation**

The new connection process was examined.

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were reviewed to identify all new connections during the period and check that information was provided as required by this clause.

#### **Audit commentary**

Alpine Energy provides information as Mountain Power's agent. Information was provided as required by this clause for all ICPs created during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 7(2) of Schedule 11.1*

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

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

#### **Audit observation**

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine the timeliness of the provision of ICP information for new connections.

#### **Audit commentary**

The distributor must provide to the registry the information listed in clause 7(1) of schedule 11.1 as soon as practicable, and before electricity is traded at the ICP. Alpine Energy provides the ICP information as Mountain Power's agent, using the verified information provided in the completed Network Application form.

17 of the 19 new ICPs had an initial electrical connection date or were moved to "active" status during the audit period. All had "ready" status, a proposed trader, address and pricing information recorded prior to the initial electrical connection date or becoming "active".

#### **Audit outcome**

Compliant

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

#### Code reference

*Clause 7(2A) of Schedule 11.1*

#### Code related audit information

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

#### Audit observation

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine the timeliness of the provision of initial electrical connection date information for new connections.

All late updates were checked.

#### Audit commentary

Alpine Energy directly receives connection paperwork for Mountain Power ICPs, and updates the Mountain Power ICP database and registry to reflect the initial electrical connection date. Processes are in place to monitor ICPs which have become “active” but do not have initial electrical connection dates recorded as discussed in **section 2.1**.

17 of the 19 new ICPs had an initial electrical connection date or were moved to “active” status during the audit period.

- Nine had initial electrical connection dates updated between 13 and 70 business days after the event date.
- Eight had become “active” and had meter certification details entered, but did not have an initial electrical connection date recorded. All the missing dates were updated during the audit.

The late updates occurred because confirmation that the ICP had been connected was received, and/or processed late. No new connections were completed after July 2019.

Non-compliance is recorded in **section 2.1** because some initial electrical connection date updates had an incorrect event dates, and in **section 4.6** because some initial electrical connection dates were inaccurate.

#### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1  From: 28-Jun-19 To: 16-Jul-19	All 17 ICPs which became active during the audit period had late initial electrical connection date updates.  Potential impact: Low  Actual impact: Low  Audit history: Multiple times  Controls: Moderate  Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>I saw evidence that controls are now in place to detect ICPs which have become active and check and update initial electrical connection dates, as well as monitor new connections. All of the late updates occurred mid-July 2019 or earlier.</p> <p>Because there have been no recent new connections to prove that the improved controls are operating as expected, and all updates during the audit period were late, controls have been rated as moderate.</p> <p>The impact on participants is minor because this field is used to validate other fields against.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Under control moving forward.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
All new ICP connection forms to be sent direct to MOPO for cross checking date input into the registry.		Ongoing	

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

#### Code reference

Clause 11.17

#### Code related audit information

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

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

*In respect of ICPs across which unmetered load is shared, the distributor must not connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load, and all traders that are responsible for an ICP on the shared unmetered load have been advised.*

#### Audit observation

The new connection process was examined in **section 3.2**.

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine compliance.

#### Audit commentary

ICPs will not be electrically connected without the agreement from the trader. Trader acceptance is confirmed during the application process, and a blanket approval is in place with Contact Energy.

Review of the registry list for 06/09/19 confirmed that a trader is currently recorded for all active and inactive ICPs. All ICPs which were initially electrically connected during the period reviewed had a proposed trader recorded on the initial electrical connection date. A sample of ten new connections were checked, and trader responsibility had been confirmed as part of the application process prior to the ICP being electrically connected.

Review of the registry list confirmed that shared unmetered load is not recorded for any ICPs on Mountain Power's network. Mountain Power does not intend to supply shared unmetered load.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 10.31*

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

*A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP, or if there is only shared unmetered load at the ICP and each trader has been advised.*

#### **Audit observation**

The new connection process was examined in **section 3.2**. The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine compliance.

#### **Audit commentary**

Review of the registry list confirmed that a trader is currently recorded for all active ICPs.

The new connection process requires applications for new connections to be approved by traders. A sample of ten of the 17 new connections which were electrically connected during the audit period were reviewed, and were approved to be connected by the trader.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 10.31A*

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

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

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

*If the ICP is only shared unmetered load, the distributor must advise the traders of the intention to temporarily connect the ICP unless:*

*advising all traders would impose a material cost on the distributor, and*

*in the distributor's reasonable opinion the advice would not result in any material benefit to any of the traders.*

#### **Audit observation**

The new connection process was examined in **section 3.2**. The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine compliance.

### Audit commentary

No temporary electrical connections were identified.

Network and meter connection are normally completed on the same day by the same contractor for Mountain Power new connections, making it unlikely that ICPs would be temporarily electrically connected.

### Audit outcome

Compliant

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

### Code reference

*Clause 10.30*

### Code related audit information

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

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

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

### Audit observation

The NSP table was examined.

### Audit commentary

No new NSPs have been created by Mountain Power.

### Audit outcome

Compliant

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

### Code reference

*Clause 10.30(A)*

### Code related audit information

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

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

### Audit observation

The NSP table was examined.

#### **Audit commentary**

No new NSPs have been created by Mountain Power.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 1(1) Schedule 11.1*

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

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

*xxxxxxxxxxxccc where:*

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

#### **Audit observation**

The process for the creation of ICPs was examined and observed.

#### **Audit commentary**

ICP numbers are created within the Mountain Power ICP database.

The user creates a new number taking into account the house or lot number, and the sequence of nearby addresses. The database automatically applies the leading zeros, distributor code, and the checksum to create a compliant ICP number.

If the new ICP number is not unique, a warning is displayed on screen stating that the ICP number already exists, and the database will automatically replace the first leading zero with a one to make the number unique. At this point the user would enter a unique set of digits to allow the ICP number to be unique without the leading one.

#### **Audit outcome**

Compliant

### **3.12. Loss category (Clause 6 Schedule 11.1)**

#### **Code reference**

*Clause 6 Schedule 11.1*

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

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

#### **Audit observation**

The list file as at 06/09/19 was examined to confirm whether all active ICPs have a single loss category.

#### **Audit commentary**

Alpine Energy records the loss factor advised by Mountain Power. Loss factors are known at the time of ICP creation, because there is one loss category per NSP.

Mountain Power periodically checks that loss factors are correctly assigned, including that they are valid for the ICP's NSP.

Each active ICP only has a single loss category, which clearly identifies the relevant loss factor.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 13 Schedule 11.1*

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

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

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

#### **Audit observation**

The new connection process was examined. The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were examined to determine compliance.

#### **Audit commentary**

ICPs on Mountain Power's network do not normally require construction, and are created when they are ready for activation.

ICPs are created at “ready”, and the “new” status is only present if another event is reversed. “New” status was not used during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 15 Schedule 11.1*

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

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

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

#### **Audit observation**

Monitoring of “new” and “ready” status was examined. The list file as at 06/09/19 was examined.

#### **Audit commentary**

Alpine Energy follows up Mountain Power ICPs which are at “new” or “ready” status for more than 18 months every six months, to confirm whether they have been connected and if the ICP is still required.

Because applications are received from the customer or their agent, rather than the trader, Alpine Energy normally follows up with the customer and/or agent instead of the trader. The Code technically requires follow up with the trader, who then would obtain information from the customer or their agent, and advise Alpine Energy.

Examination of the list file found no ICPs at “new” status, and five ICPs at “ready” status. Two of the ICPs had been at “ready” status for more than two years, and had been followed up with the customer or their agent in 2019 to confirm that their status was still correct, and the ICPs were still required. The ICPs were not followed up with the trader, and this is recorded as a technical non-compliance below.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.14 With: Clause 15 Schedule 11.1  From: 31-Jan-17 To: 06-Nov-19	ICPs 0000012400MO12F (ready since 31/01/17) and 0000012452MO9A2 (ready since 03/03/17) had been followed up with the customer or their agent to determine whether they were still required, but not the trader.  Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong and the impact is low. This is a technical non-compliance because “new” and “ready” ICPs are checked directly with the party who made the application for the new connection, rather than the trader as the Code requires.		
Actions taken to resolve the issue		Completion date	Remedial action status
All new ICP’s will be checked 6 months later to ensure they do not remain in the ready status.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Spreadsheet adapted to highlight new ICP’s and their status, updated monthly via EIEP files.		Done	

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

#### Code reference

Clause 7(6) Schedule 11.1

#### Code related audit information

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

- The loss category code must be unique; and



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

#### **Audit observation**

The registry list file as at 06/09/19 was examined to determine compliance.

#### **Audit commentary**

Review of the registry list confirmed that no embedded generation over 10 MW is connected.

#### **Audit outcome**

Compliant

### **3.16. Electrical connection of a point of connection (Clause 10.33A)**

#### **Code reference**

*Clause 10.33A(4)*

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

*No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant.*

#### **Audit observation**

Sub-clause (4) states that no participant may electrically connect a point of connection without the permission of the Reconciliation Participant.

The registry list as at 06/09/19 was reviewed to determine compliance.

#### **Audit commentary**

Mountain Power obtains permission from the trader before electrically connecting ICPs, as discussed in **section 3.2**. No new unmetered load connections have been completed during the audit period.

A blanket approval is in place with Contact Energy, who is the retailer for Mountain Power's two DUML ICPs.

#### **Audit outcome**

Compliant

## 4. MAINTENANCE OF REGISTRY INFORMATION

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

#### Code reference

*Clause 8 Schedule 11.1*

#### Code related audit information

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

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

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

*If the change to the NSP identifier is for more than 10 business days, the notification must be provided no later than the 13<sup>th</sup> business day and be backdated to the date the change took effect.*

*In the case of decommissioning an ICP, notification must be given by the later of three business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or three business days after the distributor has decommissioned the ICP.*

#### Audit observation

The management of this process was examined. I also examined the event detail report for 01/03/19 to 06/09/19 to identify late changes to registry information during the audit period.

Initial population of data for new connections is discussed in **sections 3.4** and **3.5**.

#### Audit commentary

When information that is held by the registry changes, the distributor responsible for that ICP must provide notice to the registry of that change within three business days of that change taking effect. The event detail reports were examined to identify backdated event updates.

Alpine Energy processes registry updates once confirmation of the correct values is received from either Mountain Power, the contractor (for status updates) or the customer's electrician (for addition of distributed generation).

#### Address events

44 address updates not relating to initial population of address data for new connections were identified. One update (2.3%) was made within three business days of the event date. The 43 late updates (97.7%) were address corrections backdated to the ICP creation date and were made 34 - 3,450 business days after the event date.

An extreme case sample of ten late updates over 30 business days after the event date were checked. All the late updates were corrections, and were backdated to the ICP creation date.

#### Network events

18 network updates not relating to initial population of data for new connections were identified. One update (5.6%) was made within three business days of the event date. The 17 late updates (94.4%) were made 42 - 3,450 business days after the event date.

13 of the late updates populated missing initial electrical connection dates, and four of the late updates added distributed generation details. In all cases the event date reflected the date of the previous event, which was replaced by the update.

A sample of ten late updates were checked, including all late distributed generation details and five late initial electrical connection date corrections. When the expected event date was taken into account, all of the updates checked were still considered to be late.

The late updates are recorded as non-compliance below. Non-compliance is recorded in **section 2.1** because some network updates had an incorrect event dates, and in **section 4.6** because some initial electrical connection dates were inaccurate.

#### Pricing events

20 pricing updates not relating to initial population of pricing data for new connections were identified.

12 updates (60%) were made within three business days of the event date. The eight (40%) late updated were made 152 - 2,939 business days after the event date. In all cases the event date reflected the date of the previous event, which was replaced by the update.

All late updates were checked, and found to be backdated pricing corrections. The pricing code had been incorrect on the previous event date.

#### Status events

No status updates were identified, apart from updates to “ready” status for new connections which are discussed in **section 3.4**.

#### NSP changes

Review of the registry list for 01/03/19 to 06/09/19 confirmed that no NSP changes occurred during the audit period.

#### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1  From: 21-Mar-19 To: 16-Jul-19	43 late address updates. 17 late network updates. 12 late pricing updates. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
<b>Low</b>	The controls are rated as moderate. Most of the late updates were corrections and were correctly backdated to the date of the previous update for the record type, so that the incorrect record was replaced. Some network updates were processed from an incorrect event date, which is recorded as non-compliance in <b>section 2.1</b> .  There may be a minor impact on other participants, particularly for pricing updates. Processing corrections improves compliance with the completeness and accuracy requirements.

Actions taken to resolve the issue	Completion date	Remedial action status
New connections will not be accepted if a physical address is not available.	Done	Investigating
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
See above	Done	

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

##### Code reference

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

##### Code related audit information

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

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

##### Audit observation

The registry list as at 06/09/19 and NSP table were compared to determine compliance.

The registry list for 01/03/19 to 06/09/19 was reviewed to identify any ICPs which had a change of NSP during the audit period.

##### Audit commentary

Alpine Energy populates the registry with the NSP details provided by Mountain Power.

The registry list was analysed and no NSP assignment issues were identified:

- I compared street address locations to the NSPs recorded, and found NSP assignment appeared reasonable; and
- I identified one street (Ostler Road) with ICPs connected to different NSPs and confirmed that the NSPs were recorded correctly for each address.

No NSP changes occurred on the registry list for 01/03/19 to 06/09/19.

The previous audit identified some ICPs with incorrectly assigned NSPs on Lakeland Ave, Old Glen Lyon Rd, and Woodley Ave. All have now been corrected.

##### Audit outcome

Compliant

#### 4.3. Customer queries about ICP (Clause 11.31)

##### Code reference

*Clause 11.31*

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

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

#### **Audit observation**

The management of customer queries was examined.

#### **Audit commentary**

Mountain Power or Alpine Energy may receive direct requests for ICP identifiers. These are able to be provided immediately on request.

#### **Audit outcome**

Compliant

### **4.4. ICP location address (Clause 2 Schedule 11.1)**

#### **Code reference**

*Clause 2 Schedule 11.1*

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

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

#### **Audit observation**

The process to determine correct and unique addresses was examined. The registry list as at 06/09/19 was reviewed to determine compliance.

#### **Audit commentary**

Addresses are confirmed as part of the application process. The completeness, accuracy, and uniqueness of addresses was checked:

- there were no ICPs with incomplete addresses, each address had a property name, unit number and/or street number;
- eight active ICPs had duplicate addresses, which were corrected to unique addresses during the audit; and
- I located each street name using Google maps, through this process I identified 15 ICPs with incorrect or mis-spelled street names, which were corrected during the audit.

#### **Audit outcome**

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: Clause 2 Schedule 11.1  From: 06-Sep-19 To: 06-Sep-19	Eight ICPs had duplicate addresses. 15 ICPs had incorrect street names. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are recorded as moderate because they ensure that most addresses are unique and accurate.  Incorrect addresses may have a minor impact on other participants, as they can make it more difficult to ensure the correct property is identified for switching and meter reading.		
Actions taken to resolve the issue		Completion date	Remedial action status
Correct addresses must be provided prior to acceptance for connection.		Done	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
See above		Done	

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

##### Code reference

Clause 3 Schedule 11.1

##### Code related audit information

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

##### Audit observation

This was examined as part of the new connection process.

##### Audit commentary

For new connections, this clause is well understood. All new applications are checked to ensure the electrical disconnection clauses are met.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 7(1) Schedule 11.1*

##### Code related audit information

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

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
  - a) *the unique loss category code assigned to the ICP*
  - b) *the ICP identifier of the ICP*
  - c) *the NSP identifier of the NSP to which the ICP is connected*
  - d) *the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
  - a) *a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
  - b) *a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period*
  - c) *if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *no capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - d) *if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *the annual capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - e) *the actual chargeable capacity of the ICP in any other case*
- *the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is*

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

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

#### **Audit observation**

Processes to ensure information is accurate were examined. The registry list as at 06/09/19 was reviewed to determine compliance.

17 of the 19 new ICPs had an initial electrical connection date or were moved to "active" status during the audit period. The initial electrical connection date, meter certification date and earliest active date were compared.

I checked whether all ICPs initially electrically connected by Mountain Power after 29/08/13<sup>1</sup> had an initial electrical connection date populated.

#### **Audit commentary**

Review of the registry list and comparison with the meter event details report identified some inaccurate information.

#### **Event dates**

Non-compliance in **section 2.1** for 24 initial electrical connection date updates and four distributed generation updates which did not record the correct event date.

#### **Addresses**

Non-compliance is recorded in **section 4.4** for eight ICPs which had duplicate addresses, and 15 ICPs which had incorrect or mis-spelled street names. All were corrected during the audit.

#### **Pricing**

Mountain Power periodically checks that price categories are correctly assigned, including that they are valid for the ICP's NSP.

---

<sup>1</sup> When the code change requiring initial electrical connection dates came into effect.



ICP 0000024050MO1CA is connected to MMT0111. The pricing code is MMPD15L but is expected to be MMTD15L.

### **Dedicated NSP**

As recorded in the previous audit, all ICPs should be “dedicated” but the accuracy of this field is not critical where there is one NSP per balancing area. There are 231 ICPs with the dedicated flag set to “N”. I recommend these are changed to “Y”. The previous audit recommendation is repeated to maintain visibility.

Recommendation	Description	Audited party comment	Remedial action
Dedicated NSP status	Change dedicated status to “Y”.	No comment	Undetermined

### **Distributed generation**

Applications for distributed generation are made to Mountain Power who provides approval. The application is then passed to Alpine Energy, who ensure that paperwork is received and update the registry.

Five “active” ICPs have distributed generation recorded. Review of the registry list found three ICPs with a fuel type and generation capacity, but an installation type of L. It is expected that any ICP with generation capacity will have installation type G or B. Alpine Energy had accidentally missed the installation type change, and the ICP information was updated during the audit.

All ICPs with injection registers had generation details recorded.

### **Initial electrical connection dates**

Alpine Energy receives new connection information directly from the contractor, and uses this to update the initial electrical connection date in the Mountain Power ICP database and on the registry. Connections on Mountain Power’s network are normally completed by one contractor who connects both the network and meter, and the initial electrical connection date is provided on their paperwork.

17 of the 19 new ICPs had an initial electrical connection date or were moved to “active” status during the audit period. I compared the initial electrical connection date to the trader’s earliest active date and meter certification date to confirm their accuracy. Where there were discrepancies I checked the new connection paperwork to confirm the correct date. I found:

- three ICPs had incorrect dates applied;
- seven ICPs had the correct initial electrical connection date populated at the time the registry list was run (06/09/19) and were later updated to match the ICP creation date, instead of the initial electrical date; and
- seven ICPs had no initial electrical connection date populated at the time the registry list was run (06/09/19) and were later updated to match the ICP creation date, instead of the initial electrical connection date.

A further six “active” ICPs commissioned between 29/08/13<sup>2</sup> and 28/02/19<sup>3</sup> did not have an initial electrical connection date populated at the time the registry list was run. Initial electrical connection dates were populated later, but for five of the ICPs the ICP creation date was applied instead of the initial electrical connection date.

---

<sup>2</sup> When the initial electrical connection date field came into effect.

<sup>3</sup> The last day of connection before ICPs were included in the new connection sample. The new connection sample included all ICPs connected on or after 01/03/19.

Mountain Power understands the initial electrical connection date requirements and has asked for a copy of the paperwork to be forwarded to them from now on. They will complete validation to ensure that the registry matches the paperwork, and intend to query any discrepancies with Alpine Energy.

The initial electrical connection date discrepancies are listed in the table below:

ICP	Earliest Active Date	Meter Cert Date	IECD as at 06/11/19	Expected IECD
0000015843MO726	27/06/2019	27/06/2019	13/06/2019	27/06/2019
0000016616MO68A	24/06/2019	24/06/2019	5/06/2019	24/06/2019
0000026467MO4B9	5/06/2019	5/06/2019	24/05/2019	05/06/2019
0000018641MOB88	30/05/2019	30/05/2019	15/04/2019	30/05/2019
0000010949MOB93	23/05/2019	23/05/2019	2/05/2019	23/05/2019
0000011720MOD99	1/05/2019	1/05/2019	25/03/2019	01/05/2019
0000018010MO9C3	1/05/2019	1/05/2019	11/03/2019	01/05/2019
0000010202MO4EC	12/04/2019	12/04/2019	18/03/2019	12/04/2019
0000027715MO3C2	28/03/2019	28/03/2019	13/03/2019	28/03/2019
0000012799MO39A	27/03/2019	27/03/2019	7/03/2019	27/03/2019
0000013695MO820	16/07/2019	16/07/2019	18/06/2019	16/07/2019
0000016900MO2A7	19/07/2019	19/07/2019	2/06/2019	19/07/2019
0000017899MOBB5	30/07/2019	30/07/2019	11/07/2019	30/07/2019
0000018850MOB6B	27/03/2019	27/03/2019	20/03/2019	27/03/2019
0000019771MO4D4	8/07/2019	8/07/2019	20/06/2019	08/07/2019
0000019864MOC39	15/08/2019	15/08/2019	3/07/2019	15/08/2019
0000024523MOD52	11/06/2019	11/06/2019	9/05/2019	11/06/2019
0000012440MO38A	17/04/2019	17/04/2019	10/08/2018	17/04/2019
0000012571MO133	19/12/2017	19/12/2017	21/11/2017	19/12/2017
0000020342MOE61	13/06/2019	13/06/2019	24/08/2018	13/06/2019
0000021033MO5DA	28/01/2019	28/01/2019	1/08/2018	28/01/2019
0000031400MOA02	1/11/2018	1/11/2018	17/10/2018	01/11/2019
0000014050MO0E6	4/08/2007	4/08/2007	1/07/2007	04/08/2007
0000030110MO40A	25/11/2008	25/11/2008	14/11/2008	25/11/2008

ICP	Earliest Active Date	Meter Cert Date	IECD as at 06/11/19	Expected IECD
0000030000MO7A3	5/02/2010	5/02/2010	2/11/2009	05/02/2010
0000013265MO436	7/09/2012	7/09/2012	17/08/2012	07/09/2012
0000024444MO66C	4/03/2019	4/03/2019	18/01/2019	04/03/2019
0000030166MO0D8	11/02/2019	11/02/2019	7/01/2019	11/02/2019

### Unmetered load

Three ICPs have unmetered load connected, and both distributor and trader unmetered load details have been populated on the registry.

ICPs 0000010005MO321 and 0000020005MO20D have distributed unmetered load, and 0000022015MOBE0 is a telecommunications cabinet. ICP 0000022015MOBE0 does not have the unmetered load details populated in a format where the loads can be compared between Mountain Power and the trader.

Unmetered Load Details -retailer	Unmetered load details - Distributor
0230;24.0;Telecom cabinet	Telecom Cabinet

I recommend the Electricity Authority's recommended format be adopted. The relevant format is shown below in an extract from the unmetered load guidelines on the Authority's website.

The field definitions are:

Information	Format
Connected load	Watts, 4 digits, zero decimal places. Eg 1565
Semi colon separator	;
Running hours per day	Hours to 2 digits, and decimal hours to 1 decimal place Eg 02.5 (ie two and one half hours)
Semi colon separator	;
Other text	Free form as required

Example strings:

- 0110;10.5; Street light corner Rons Rd and Beatty St  
This is a 110 watt connected capacity street light that runs for 10.5 hours per day.
- 1525;01.0; Sewage pump outside 76 Guthries Rd  
This is a 1525 watt connected capacity sewage pump that runs for 1 hour per day.

Recommendation	Description	Audited party comment	Remedial action
Distributor unmetered load details	Update the unmetered load details for 0000022015MOBE0 if known to include the wattage, on hours and description.	Not known so not able to be completed.	Not implemented

### Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.6</p> <p>With: Clause 7(1) Schedule 11.1</p> <p>From: 06-Sep-19</p> <p>To: 06-Nov-19</p>	<p>28 ICPs have incorrect initial electrical connection dates populated on the registry.</p> <p>0000024050MO1CA has an incorrect price category populated on the registry.</p> <p>Three ICPs with distributed generation temporarily had an installation type of L recorded, instead of B. The records were corrected during the audit.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	<p>The controls are rated as the moderate.</p> <ul style="list-style-type: none"> <li>Mountain Power has requested connection paperwork be provided to them, so they can detect incorrect initial electrical connection dates and arrange correction.</li> <li>Mountain Power advises Alpine Energy of the price category codes to apply, and periodic monitoring is in place to identify and correct inaccurate codes.</li> <li>The incorrect installation types were data processing errors.</li> </ul> <p>The number of discrepancies is minor and have no direct impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Discussions held with AEL on this and other matters		Done	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing discussions with AEL		Ongoing	

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

##### Code reference

Clause 7(3) Schedule 11.1

##### Code related audit information

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

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

##### Audit observation

The process to provide information was examined.

The registry list file as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were reviewed to identify all new connections during the period and check that pricing information was provided as required by this clause.

##### Audit commentary

Alpine Energy provides information as Mountain Power's agent. As discussed in **section 3.4**, all ICPs had pricing information recorded on the registry prior to initial electrical connection.

##### Audit outcome

Compliant

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

##### Code reference

Clause 7(8) and (9) Schedule 11.1

##### Code related audit information

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

##### Audit observation

The registry list as at 06/09/19 was examined to confirm compliance.

##### Audit commentary

No ICPs have GPS coordinates recorded.

##### Audit outcome

Compliant

#### 4.9. Management of "ready" status (Clause 14 Schedule 11.1)

##### Code reference

Clause 14 Schedule 11.1

### Code related audit information

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

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

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

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

### Audit observation

Processes to manage ICPs at “ready” status were reviewed. The registry list as at 06/09/19 was reviewed to identify all ICPs at “ready” status.

### Audit commentary

The new connection process ensures that a trader has taken responsibility for ICPs before the status is changed to “ready”.

The Mountain Power ICP database will only allow one price category, and the requirement to ensure that an ICP has a single price category will always be met. Mountain Power periodically checks that price categories are correctly assigned, including that they are valid for the ICP’s NSP.

All five ICPs at “ready” status had a single price category assigned and proposed trader identified.

### Audit outcome

Compliant

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

### Code reference

*Clause 16 Schedule 11.1*

### Code related audit information

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

### Audit observation

The registry list for 01/03/19 to 06/09/19 was reviewed to identify any ICPs at “distributor” status.

### Audit commentary

The “distributor” status was not used at all during the audit period.

### Audit outcome

Compliant

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

### Code reference

*Clause 20 Schedule 11.1*

#### Code related audit information

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

*Decommissioning only occurs when:*

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

#### Audit observation

The decommissioning process was reviewed. The registry list as at 06/09/19, and event detail report for 01/03/19 to 06/09/19 were reviewed to determine compliance.

#### Audit commentary

Alpine Energy decommissions ICPs as Mountain Power’s agent. ICPs are only decommissioned once an application for decommissioning is received, the trader has moved the ICP to “ready for decommissioning” status, and confirmation that the ICP has been decommissioned is received.

No ICPs were decommissioned during the audit period and there are no ICPs at “ready for decommissioning” status.

#### Audit outcome

Compliant

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

##### Code reference

*Clause 23 Schedule 11.1*

##### Code related audit information

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

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

*A price category code takes effect on the specified date.*

##### Audit observation

The price category code table on the registry was examined.

##### Audit commentary

No new price category codes have been created during the audit period.

##### Audit outcome

Compliant

## 5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

#### Code reference

*Clause 21 Schedule 11.1*

#### Code related audit information

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

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

*A loss category code takes effect on the specified date.*

#### Audit observation

The loss category code table on the registry was examined.

#### Audit commentary

No new loss categories were created during the audit period.

#### Audit outcome

Compliant

### 5.2. Updating loss factors (Clause 22 Schedule 11.1)

#### Code reference

*Clause 22 Schedule 11.1*

#### Code related audit information

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

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

#### Audit observation

The loss category code table on the registry was examined.

#### Audit commentary

No loss factors were modified during the audit period.

There was a maximum of one loss factor per loss factor category code per month, and all trading periods had a single applicable loss factor.

#### Audit outcome

Compliant



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

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

#### Code reference

*Clause 11.8 and Clause 25 Schedule 11.1*

#### Code related audit information

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

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

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

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

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

#### Audit observation

The NSP table was examined.

#### Audit commentary

No NSPs were created or decommissioned during the audit period.

#### Audit outcome

Compliant

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

#### Code reference

*Clause 26(1) and (2) Schedule 11.1*

#### Code related audit information

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

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

#### Audit observation

The NSP table was examined.

#### **Audit commentary**

No NSPs were created or decommissioned during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

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

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

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

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

#### **Audit observation**

The NSP table was examined.

#### **Audit commentary**

No new balancing areas were created during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 26(4) Schedule 11.1*

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

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

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

#### **Audit observation**

The NSP table was examined.

#### **Audit commentary**

No new NSPs were created during the audit period.

#### **Audit outcome**

Compliant

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

##### Code reference

*Clause 24(2) and (3) Schedule 11.1*

##### Code related audit information

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

##### Audit observation

The NSP table was examined.

##### Audit commentary

No balancing areas were changed during the audit period.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 27 Schedule 11.1*

##### Code related audit information

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

##### Audit observation

The NSP table was examined.

##### Audit commentary

The NSP table was examined. No ICPs have changed to become an NSP during the audit period.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 1 to 4 Schedule 11.2*

##### Code related audit information

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

##### Audit observation

The NSP table was examined.

### Audit commentary

Mountain Power has not acquired any networks during the audit period.

### Audit outcome

Compliant

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

### Code reference

*Clause 10.25(1) and 10.25(3)*

### Code related audit information

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

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

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

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

### Audit observation

Processes to ensure that meters are present and certified were reviewed. The NSP table was examined.

### Audit commentary

The MEP provides certification details to Mountain Power when they change, and Mountain Power updates the information on the NSP table.

Both NSPs have current meter certification, and no updates occurred during the audit period.

### Audit outcome

Compliant

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

### Code reference

*Clause 10.25(2)*

### Code related audit information

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

- *assume responsibility for being the metering equipment provider (Clause 10.25(2)(a)(i)); or*
- *contract with a metering equipment provider to be the MEP (Clause 10.25(2)(a)(ii)); and*
- *no later than 20 business days after identifying the MEP advise the reconciliation manager in the prescribed form of:*
  - a) *the reconciliation participant for the NSP (Clause 10.25(2)(b)(i)); and*

- b) *the MEP for the NSP (Clause 10.25(2)(b)(ii)); and*
- c) *no later than 20 business days after the data of certification of each metering installation, advise the reconciliation participant for the NSP of the certification expiry date (Clause 10.25(2)(c)).*

#### **Audit observation**

The NSP table was examined.

#### **Audit commentary**

No NSPs were created during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 29 Schedule 11.1*

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

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

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

*At least one month's notification is required before the acquisition (Clause 29(2) of Schedule 11.1).*

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

#### **Audit observation**

The NSP table was examined.

#### **Audit commentary**

Mountain Power has not acquired any networks therefore this was not assessed as part of this audit.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 10.22(1)(b)*

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

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

**Audit observation**

The NSP table was examined.

**Audit commentary**

There were no MEP changes during the audit period.

**Audit outcome**

Compliant

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

*Clauses 5 and 8 Schedule 11.2*

**Code related audit information**

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

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

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

**Audit observation**

The NSP table and the registry list for 01/03/19 to 06/09/19 were examined.

**Audit commentary**

There were no ICP transfers during the audit period, compliance was not assessed.

**Audit outcome**

Compliant

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

*Clause 6 Schedule 11.2*

**Code related audit information**

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

**Audit observation**

The NSP table and the registry list for 01/03/19 to 06/09/19 were examined.

**Audit commentary**

There were no ICP transfers during the audit period, compliance was not assessed.

**Audit outcome**

Compliant

## 7. MAINTENANCE OF SHARED UNMETERED LOAD

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

#### Code reference

*Clause 11.14(2) and (4)*

#### Code related audit information

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

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

#### Audit

The registry list for 01/03/19 to 06/09/19 was examined to determine compliance.

#### Audit commentary

Examination of the registry list confirmed that no shared unmetered load is connected.

#### Audit outcome

Compliant

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

#### Code reference

*Clause 11.14(5)*

#### Code related audit information

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

#### Audit observation

The registry list for 01/03/19 to 06/09/19 was examined to determine compliance.

#### Audit commentary

Examination of the registry list confirmed that no shared unmetered load is connected.

#### Audit outcome

Compliant

## 8. CALCULATION OF LOSS FACTORS

### 8.1. Creation of loss factors (Clause 11.2)

#### Code reference

Clause 11.2

#### Code related audit information

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

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

#### Audit observation

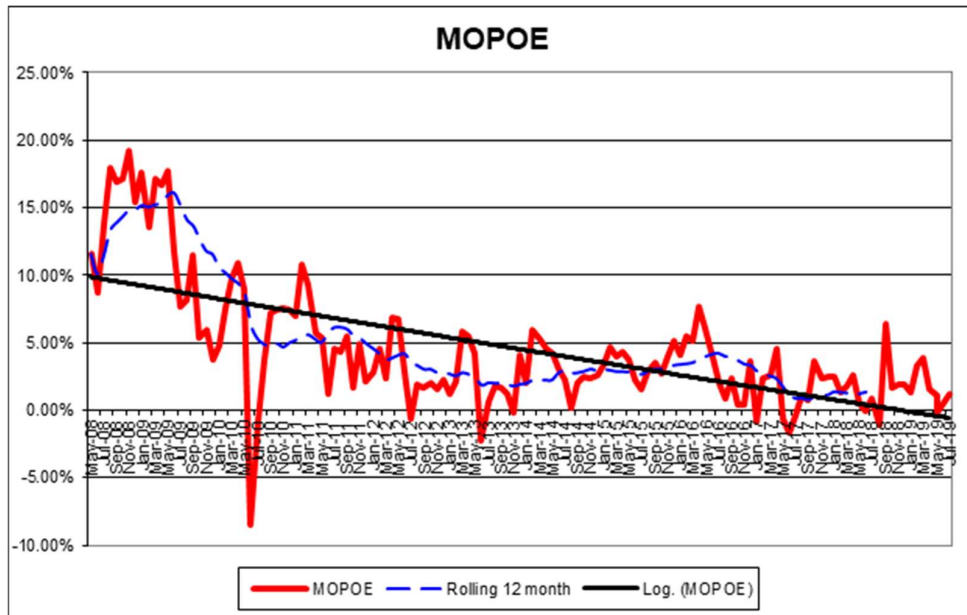
The “Guidelines on the calculation and the use of loss factors for reconciliation purposes” was published on 26/06/18. I checked Mountain Power’s process against the guideline, and I reviewed the rolling UFE report.

#### Audit commentary

Mountain Power calculates loss factors to match the Alpine Energy loss factors for similar ICPs. Alpine Energy’s loss factors have not changed since 1999 and are currently under review. Once this review is complete, Mountain Power intends to review their own loss factors. Mountain Power’s loss factors have not changed since 2006.

Mountain Power monitors rolling 12 month losses and believes that the losses largely relate to “non-technical” losses. Only 126 of the 243 active ICPs connected to the network have AMI metering, and losses may be contributed to by unread meters, estimation of consumption where reads are not taken at month end, and data handling or processing errors. Mountain Power had taken “technical losses” into consideration when designing their network, in an effort to minimise losses.

The Authority confirmed that 14-month UFE is currently around 1.5%.





## Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 8.1 With: Clause 11.2  From: 01-Mar-19 To: 06-Nov-19	Loss factors are not accurate as indicated by the reconciliation losses.  Potential impact: Low  Actual impact: Low  Audit history: Once  Controls: Moderate  Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate because although the loss factors are not adjusted to reflect reconciliation losses, they are aligned with the parent network. The loss factors are monitored, and the network is configured to minimise technical losses.  UFE is allocated to participants; therefore there is no adverse impact on settlement; however traders may use published losses in pricing decisions, therefore the use of inaccurate loss factors could lead to incorrect pricing, which is considered to have a medium impact.		
Actions taken to resolve the issue		Completion date	Remedial action status
MOPO monitors losses and will look to review loss factors going forward		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
See below		Ongoing	

## CONCLUSION

Mountain Power has two embedded networks situated in Twizel, with 243 active ICPs connected as at 6 September 2019. The parent network (**Alpine Energy**) creates ICPs and performs registry maintenance as Mountain Power's agent. All activity from 1 March 2019 was considered during this audit, and Alpine Energy's processes for Mountain Power were reviewed at their office in Timaru on 30 October 2019.

Improvements have been made following the February 2019 audit:

- registry validation processes are in place, and there was a general reduction in the number of data discrepancies identified during the audit;
- corrections were processed following the previous audit, and no issues with incorrect NSP assignment were identified; and
- improved processes have been implemented to identify late or missing initial electrical connection dates, and further monitoring of accuracy of initial electrical connection dates will be implemented.

Most of the discrepancies identified related to initial electrical connection dates and registry event dates.

Event dates should reflect the date from which the attribute values for the event apply. Where event updates are processed directly from the Mountain Power ICP database according to the usual process, event dates should be correctly applied. I found that some registry updates were manually processed using the registry web interface, and the user did not select an updated event date. This results in the previous registry event of the same type being replaced, and the date will be incorrect if the change occurred after the previous event.

While the process to determine initial electrical connection dates is compliant, and based on the date the ICP is confirmed to be connected, I found some dates were incorrectly populated with the date that the customer application was accepted. Mountain Power understands the initial electrical connection date requirements and has asked for a copy of the paperwork to be forwarded to them from now on. They will complete validation to ensure that the registry matches the paperwork, and intend to query any discrepancies with Alpine Energy.

The audit found seven non-compliances and makes two recommendations. The audit risk rating is 14, indicating that the next audit should be completed in 12 months. Taking into account:

- the size of the network and anticipated future activity,
- the reduction in audit risk rating from 19 to 14,
- that non-compliances relating to a small number of data inaccuracies are captured in several sections,
- that one non-compliance relating to following up ICPs at "new" or "ready" status for more than two years is of a technical nature and another non-compliance is cleared, and
- that Mountain Power is working with Alpine Energy to resolve the issues

I recommend that the next audit should be due in 18 months, on 14 May 2021.

## PARTICIPANT RESPONSE

We will look to further improve our processes and procedures with a view to reducing non-compliance.