

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

EA Networks

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EXECUTIVE SUMMARY

This audit has found alleged non-compliance related to;

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AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Complete and accurate information	2.1	11.21(1)	Incomplete address information and 366 ICPs believed to be trading but status new.	None	High	12	Identified
Initial energisation date	3.5	7(2A) of schedule 11.1	Information not provided for 1 ICP	Moderate	Low	2	Identified
New state	2.12	Clause 13 Schedule 11.1	366 traded ICPs in new state	None	High	12	Identified
Changed ICP information	4.1	8 of schedule 11.1	Changed ICP information not provided within 3 business days	Moderate	Low	2	Identified
NSP for ICP	4.2	Clauses 7(1),(4) and (5) Schedule 11.1	NSP for ICP not being maintained.	None	Low	5	Identified
ICP addresses	4.4	Clause 2 of schedule 11.1	Address information does not allow ready location of ICP	None	Medium	8	Identified
Future Risk Rating						41	

RECOMMENDATIONS

Subject	Section	Recommendation	Description

ISSUES

Subject	Section	Recommendation	Description

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

We have examined the Electricity Authority register of current exemptions from the Code. EA Networks are the holder of exemption No 163 exempting them from the provision on NSP metering at the very small embedded network URK0111. A condition of the exemption is that EA Networks have in place a materially accurate method to calculate consumption for settlement.

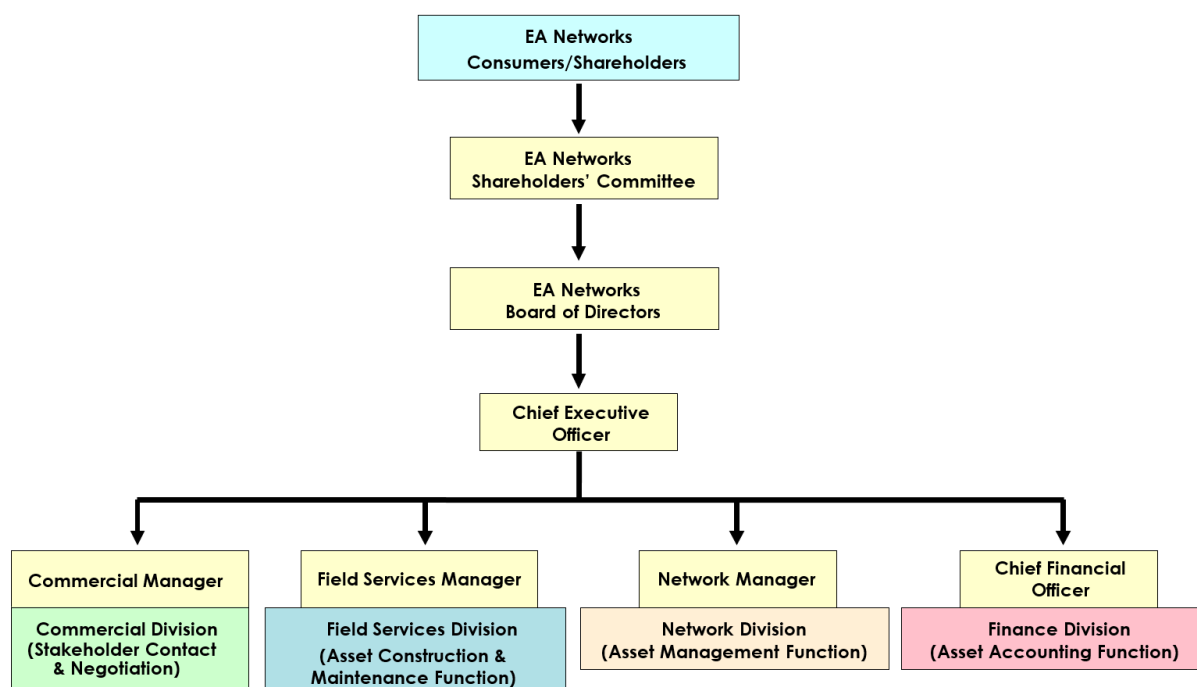
Audit commentary

EA Networks provided the source data and their calculation of the NSP volume. We have confirmed the methodology and calculation is producing materially accurate NSP volumes. EA Networks are complying with the conditions of their exemption.

Audit outcome

Compliant

1.2. Structure of Organisation



1.3. Persons involved in this audit

Name	Title	Company
David Wilson	Business Analyst	EA Networks
David Bond	Network controller	EA Networks
Amy Stewart	GIS Draftsman	EA Networks
Paul Troon	Auditor	Paul Troon Consultancy

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 commentary

EA Networks do not use any contractor to perform any task relevant to this audit.

1.5. Supplier list

Not applicable

1.6. Hardware and Software

EA Networks use custom developed computer software systems to manage their compliance responsibilities relevant to this audit.

1.7. Breaches or Breach Allegations

We have examined the Electricity Authority web site and no existing breaches or breach allegations relevant to this audit are identified.

1.8. ICP and NSP Data

NSP: The following NSP information is sourced from the NSP table.

NSP	POC code	Participant	Recon Type	Start Date	Bal area	MEP	Responsible party
ASB0661EASHGN	ASB0661	EASH	GN	01/05/2008	ASHBURTEASHG	TPNZ	TPNZ

NSP	POC code	Participant	Recon Type	Start Date	Bal area	MEP	Responsible party
ASB0331EASHGN	ASB0331	EASH	GN	01/05/2008	ASHBURTEASHG	TPNZ	TPNZ
URK0111EASHEN	URK0111	EASH	EN	01/05/2008	UPPERAKEASHE		

ICP: The following ICP information is sourced from the audit data set.

Status	Number of ICPs 13/9/2017
Active (2,0)	19,191
Inactive- new connection in progress (1,12)	56
Inactive – vacant (1,4)	22
Inactive – AMI remote disconnection (1,7)	17
Inactive – -at pole fuse (1,8)	1
Inactive – - meter disconnected (1,9)	0
Inactive – de-energised at meter box switch (1,10)	0
Inactive- at meter box switch (1,11)	0
Inactive – ready for decommissioning (1,6)	24
Inactive - reconciled elsewhere (1,5)	0
Decommissioned (3)	82

1.9. Authorisation Received

Not applicable - the auditor has not required authorisation to seek information from any party regarding this audit.

1.10. Scope of Audit

The scope of this audit is all distributor functions as required by Clauses 16A.3 to 16A.16 and 16A.23

The following additional matters specified by the Authority are considered.

Emphasis required by Authority Clause 10A.9

We have not received any notice of specific emphasis required by the Authority.

Self-reported instances of non-compliance

We have not been advised of any self-reported instances of non-compliance.

Follow up from previous audit

From the review of the previous audit we identify the following matters as included in the scope of audit.

- Energised ICPs being shown on registry with new or ready status. Refer to section 3.13 of this audit report.

Compliance with exemption

Exemption 163 - see section 1.1 of this audit report.

1.11. Summary of previous audit

The following information is sourced from the previous audit report.

Table of non-compliance

Non-compliance	Description	Audited party comment	Remedial action
With: Clause 13 of schedule 11.1	Energised ICPs being traded with status new or ready on registry.		Identified.
From / to: Open	Indicative impact: Unknown		
Report section: Error! Reference source not found.	Audit history: Twice previously		
	Procedures: Need improvement		

Table of recommendations

There were no recommendations arising from the previous audit.

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(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 Part 11 is:

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

Audit Observation

We have evaluated the audit data set throughout this audit to determine instances of the provision of incorrect or incomplete information.

Audit commentary

Address information is in many cases incomplete.

The identification of 366 ICPs in the new status that are being traded is inaccurate and likely to mislead retailers.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11.2(1) From: 06-Nov-16 To: 15-Sep-17	<i>Incomplete ICP address information and 366 ICPs that are believed to be electrically connected (active) but in the new state on the registry.</i> Potential impact: High Actual impact: Unknown Audit history: Several times Controls: None Breach risk rating: 12		
Audit risk rating	Rationale for audit risk rating		
High	Past audits have established that we expect most if not all the 366 identified ICPs are consuming electricity but may not be traded.		
Actions taken to resolve the issue		Completion date	Remedial action status
For "New" State issue see 3.12, Address issue see 4.4		16 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
For "New" State issue see 3.12, Address issue see 4.4		1st May 2018	

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

Code reference

Clause 11.2(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

We have evaluated the audit data set throughout this audit for errors that should have been corrected.

Audit commentary

Throughout the audit we have not identified any situations where errors have been identified and corrected during the period of audit.

Compliance is confirmed.

Audit outcome

Compliant

3. CREATION OF ICPS

New connections sample selection.

Compliance with the requirements for the creation of ICPs is determined by examining a sample of the new connections created by the distributor and made active by a trader during the period of audit. It is necessary to examine a sample because the registry does not hold all information relevant to auditing these functions, and consequently additional information must be obtained from the distributor.

A risk analysis is performed to inform the sample size selection. The inherent risk for these functions is determined by the Authority as high and the controls in place to ensure compliance are assessed as moderate. The residual risk is therefore high and we examine all obligations with a high sample size that is appropriate to the population size.

EA Networks have created 215 new connections during the period of audit. We randomly select a sample of 7% (15) of these using the judgment based methodology.

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

We have examined the ICP identifiers for all new ICPs created during the period of audit.

Audit conclusion

All ICP identifiers have passed the registry ICP identifier test. Compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

The Distributor, within 3 business days of receiving a request from a participant 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

We have examined the Distributors records for each of the 15 ICPs in the new connections sample to identify if a request for the creation of an ICP identifier has been made by a participant.

Audit commentary

None of the ICPs were created as a result of a request from a participant, compliance is confirmed.

We further note that the Distributor has created all ICPs on the registry in a timely manner.

Audit outcome

Compliant

3.3. Provision of ICP Information to the registry (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 clause 7 of Schedule 11.1.

Audit observation

We have examined all ICPs in the new connections sample and confirm that all achieved status active which can only be achieved if the Distributor has provided all the required information.

Audit commentary

Based on the audit observation described above we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

3.4. Timeliness of Provision of ICP Information to the registry (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

We have examined all new connections in the audit data set to determine the date on which the Distributor provided all the information required. We have compared this date with the date on which the trader first traded electricity at the ICP (status = active),

Audit commentary

In all instances the required information was provided to the registry before the ICP was traded. Compliance is confirmed.

Audit outcome

Compliant

3.5. Timeliness of Provision of Initial Energisation 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 no later than 10 business days after the date on which the ICP is initially energised.

Audit Observation

We examined the provision of the initial energised date for all 215 new connections created during the period of audit and found 3 ICPs for which no initial energised date has been provided. For 2 of these ICPs 10 business days has not passed at the time of audit. For one of these ICPs (0000033257EAC8) the first energised date was 19/7/2017 (retailer status 2) and at the time of audit (15/9/2017) more than 10 business days has elapsed.

We have examined the provision of the initial energised date for the remainder of the new connections sample and find all have been provided within 10 business days.

Audit commentary

Based on examination of all new connections created during the period of audit we find the initial energisation date had not been provided within 10 business days for 1 ICP.

No participant or reconciliation process depends on this information being provided, we therefore assess the potential adverse impact of the alleged non-compliance as none.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: 7(2A) of schedule 11.1 From: 06-Nov-16 To: 15-Oct-17	<i>Distributor provides initial energisation date to registry. The participant did not provide the initial energisation date for 1 new ICP within the required period.</i> Potential impact: None Actual impact: None Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Audit risk is assessed as Low because only 1 ICP is involved and no participant or reconciliation process depends on this information.

Actions taken to resolve the issue	Completion date	Remedial action status
Missing Initial energisation Date have been amended	13 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
A report has been created which is run on a daily basis to identified missing energisation dates for Active ICPs.	2 nd November 2017	

3.6. Connection of ICPs (Clause 11.17)

Code reference

Clause 11.17

Code related audit information

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

The Distributor must not electrically 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 electrically connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load.

Audit Observation

For the new connections sample we have identified from the registry record the date on which the first trader was recorded on the registry. We have obtained from the Distributor the date on which each ICP in the new connections sample was electrically connected.

Audit commentary

In all 15 cases examined the first trader was recorded on the registry before the ICP was electrically connected. Compliance is confirmed.

Audit outcome

Compliant

3.7. Electrical connection of ICPs (Clause 10.28(7))

Code reference

Clause 10.28(7)

Code related audit information

A network owner must not electrically connect a new point of connection that is to be quantified by metering unless requested to do so by the:

- *MEP (for a temporary energisation); or*
- *reconciliation participant responsible for ensuring there is a metering installation.*

Audit Observation

For the new connections sample of 15 ICPs we asked the Distributor to provide evidence of approval from the trader assuming responsibility for metering at the ICP and we examined that evidence to determine the date on which the approval (request to connect) was given.

Audit commentary

We compared the approval date with the date each ICP in the sample was electrically connected, and in all 15 cases the ICP was electrically connected after approval was given by the first trader.

Compliance is confirmed.

Audit outcome

Compliant

3.8. Electrical connection of ICP that is not an NSP (Clause 10.31)

Code reference

Clause 10.31

Code related audit information

A Distributor must not electrically connect an ICP that is not also an NSP unless:

- *the trader trading at the ICP has requested the electrical connection; or*
- *the MEP who has an arrangement with the trader trading at the ICP has requested temporary energisation of the ICP.*

Audit Observation

This requirement is a duplication of the requirement in section 3.7 of this audit report. Please Refer to section 3.7 of this audit report for details.

Audit commentary

Refer to section 3.7 of this audit report

Audit outcome

Compliant

3.9. Electrical connection of NSP that is not a point of connection to the grid (Clause 10.30(2))

Code reference

Clause 10.30(2)

Code related audit information

A Distributor must, within 5 business days of electrically connecting an NSP that is not also a point of connection to the grid, notify the reconciliation manager of the following in the prescribed form:

- *the NSP electrically connected*
- *the date of the electrical connection*
- *the participant identifier of each MEP*

- the certification expiry date for each metering installation.

Audit Observation

We have examined the current NSP mapping table and determined that no connection has been made to the Distributors network during the period of audit of any new NSP that is not a connection to the grid.

Audit commentary

Compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

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

xxxxxxxxxxccc where:

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

Audit Observation

This requirement is a duplication of requirement 3.1 of this audit report. Please refer to section 3.1 of this audit report for the compliance outcome.

Audit commentary

Refer to section 3.1 of this audit report. Compliance is confirmed.

Audit outcome

Compliant

3.11. 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

For all ICPs in the audit data set we have examined the registry record to confirm that each ICP has a loss factor code.

The Distributor loss factors have been obtained from the registry static data, and we confirm that all loss factor codes provided for ICPs in the new connections sample are referenced in such a way that the associated loss factors are identified.

Audit commentary

Based on the audit observation described above we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

3.12. 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

EA Networks create new connections directly with status ready and apart from the exceptions described below comply with the requirements of the Code.

We have examined the registry data set and identify 377 ICPs in the new state, that have been in the new state since prior to 2003. These ICPs are identified by EA Networks as being active and were historically billed with other ICPs by EA Networks prior to 2003.

Audit commentary

We have previously identified and investigated this issue, our investigations have demonstrated it is highly likely many of these ICPs are active and not being reconciled.

We are advised by EA Networks that no further work has been undertaken to resolve this issue since the previous audit.

We repeat our previous non-compliance allegation.

Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 3.12 With: Clause 13 Schedule 11.1 From: 06-Nov-16 To: 15-Sep-17	366 ICPs in new state believed to be consuming electricity. Potential impact: High Actual impact: Unknown Audit history: Several times Controls: None Breach risk rating: 12		
Audit risk rating	Rationale for audit risk rating		
High	Past audits have performed a desktop investigation of small samples of these ICPs and the findings strongly suggest the ICPs are consuming electricity and not being traded.		
Actions taken to resolve the issue		Completion date	Remedial action status
EA Network has not created any new ICPs with this issue during the audit period.		16 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
EA Networks will work with Retailers to create and to carry out a process to begin trading on these ICPs.		5 th May 2018	

3.13. 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 calendar months or more:

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

Audit Observation

We have examined the audit data set and find 366 ICPs that have been in status new or ready for greater than 24 months, these ICPs are discussed in section 3.12 of this audit report.

There are no other ICPs in the new or ready state for > 24 months.

Audit commentary

A relevant non-compliance for the 366 ICPs identified above is raised in section 3.12 of this audit report, with this qualification compliance is confirmed.

Audit outcome

Compliant

3.14. 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

We have examined all ICPs in the audit data set with generation (type B and G) and find one has a generation capacity of 28MW. This ICP has a unique loss category code.

Audit commentary

Compliance is confirmed.

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 provide notice to the registry of that change.

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

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

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

Audit Observation

From the audit data set, registry pricing and network event creation dates are compared to event dates to assess the timely creation of records on the registry. When evaluating the timing of events we allow 4 business days because it is common for the registry to introduce an extra day due to computer process timing.

The results of examining registry events are presented in the following table.

Item	Events Identified	Events > 3 Business days
Address events		
Address change	608	608
Pricing events		
Price category code	76	17
Loss code	0	0
Chargeable capacity	53	12
Installation details	0	0
Network events		
Dedicated status	0	0
Installation type	19	16
Reconciliation type	0	0
SI List	0	0
UNM detail	0	0

Audit commentary

We have examined all relevant registry events for the period of audit and find the participant non-compliant with this clause of the Code as indicated in the table above.

Address information: Updates of address information have in all cases been performed without using an event date, the registry therefore defaults the change to the original entry date and backdating occurs.

Price category code: The 17 backdated changes are between general supply and irrigation or industrial supply charges.

Chargeable capacity: 12 chargeable capacity values were backdated.

Installation type: 16 installation types were backdated after EA Networks discovered DG had been installed.

None of the events for which the provision of information was delayed are identified as having any impact other than minor.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.1</p> <p>With: 8 of schedule 11.1</p> <p>From: 03-Jan-16</p> <p>To: 13-Jul-17</p>	<p><i>Participant provides changes to registry information within 3 business days of the change taking effect. Participant did not provide information within 3 business days as tabulated in audit report for changes of address, price category code and installation type.</i></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		
Low	Controls in place are satisfactory for the small volume of changes made and no change has had any material impact on the market, any participant or any consumer.		
Actions taken to resolve the issue		Completion date	Remedial action status
Issue identified		16 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

For the future Address Changes, the Event Date will also be updated instead of using the default date.	25 th October 2017	
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4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)

Code reference

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

Code related audit information

The Distributor must notify the registry of the NSP identifier of the NSP to which the ICP is usually connected under Clause 7(1)(b) of Schedule 11.1.

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

Registry changes: We have examined the registry events for changes of NSP for ICP and find 173 events occurred during the period of audit, all but 2 of these were changes from ASB331 to ASB661 reported on 16/12/2016 with an event date of 16/12/2016.

We asked EA Networks to provide evidence of the date on which the 171 changes reported for 16/12/2016 occurred from their records. EA Networks have satisfactorily demonstrated that these changes occurred on 13 December when customers were transferred from 33kV to 66kV. All but 2 of the customers were transferred during switching without an outage.

Registry data: We have performed an indicative evaluation of allocated NSP against address information expecting that in rural towns it is highly unlikely there should be isolated ICPs allocated to NSPs other than the NSP the remainder of the ICPs are allocated to.

Care must be taken with such an evaluation because parts of towns or ends of streets may well be supplied by alternate feeders with alternate NSPs. When that is the case we see geographically isolated groups of ICPs allocated to the same NSP.

We found a very high correlation of NSP allocation with address information throughout the network - this indicates consistency but not necessarily correctness.

Process to maintain NSP for ICP: EA Networks use a GIS connectivity model to determine NSP for ICP, a trace of the model is manually initiated whenever staff identify that an open point has been altered. A separate scheduled computer process runs each Friday, picks up the trace result, compares it with the registry and updates the registry with any changes.

We examined the audit data set and note the last significant NSP for ICP update was performed in December 2016, since then only 4 ICPs have been changed. We consider it highly unlikely that these would be all the changes occurring in this period and have further investigated.

In early 2017 EA Networks changed to a new GIS system and advise that a successful trace of the connectivity model has not been performed since due to technical difficulties. EA Networks could not run the process for us as there are still some issues to resolve before that is possible.

Audit commentary

EA Networks have had no process in place to maintain NSP for ICP since early 2017, and consequently have not updated the registry with changes of NSP for ICP that will have occurred. This is identified as an alleged non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.2 With: (Clauses 7(1),(4) and (5) Schedule 11.1 From: 01-Jan-17 To: 09-Oct-17	<i>No process operating to maintain NSP for ICP information on the registry.</i> Potential impact: Low Actual impact: Unknown Audit history: None Controls: None Breach risk rating: 5		
Audit risk rating	Rationale for audit risk rating		
Low	Incorrect allocation of NSP to ICP can have a significant adverse effect on reconciliation. In this case there are only 2 NSPs which are both in the same balancing area, and the balancing process will significantly mitigate the adverse effect of the non-compliance.		
Actions taken to resolve the issue		Completion date	Remedial action status
Issue identified		16 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Work is being undertaken to amend systems to integrate with the new GIS system. EA Networks will undertake monthly checking of Process to make sure updates are been made on the Registry.		10 th January 2018	

4.3. Customer queries about ICP (Clause 11.31(2))

Code reference

Clause 11.31(2)

Code related audit information

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

Audit Observation

EASH confirm they have not had any request from any customer or their authorised agent for their ICP identifier during the period of audit.

Audit commentary

We are advised there were no such requests. With this qualification we find the participant compliant with this clause of the Code. We are confident that any consumer or their agent requesting the ICP address would be provided that information promptly.

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

1. **The presence of unique GPS coordinates:** EASH do not provide GPS coordinates for their ICP address information.
2. **Duplication of addresses:** EA Networks have eliminated duplicate addresses by appending the ICP identifier to each property name field. By eliminating the property name field from our duplicated address test we find 3,311 ICP identifiers that are duplicated. In most cases there will be more than one ICP at the identified address, however without further information in the property name field the identity and location of each ICP may not be clear. We note there are instances such as 184 Burnett Street (below) where the property name field inadequately identifies many ICP's.

ICP	59 Town	57 Street	55 Number	61 Property name	54 Unit	56 Region
0000024869EA820	ASHBURTON	BURNETT STREET	184	0000024869EA820 THE ARCADE		Canterbury
0000026182EA607	ASHBURTON	BURNETT STREET	184	0000026182EA607		Canterbury
0000024871EA099	ASHBURTON	BURNETT STREET	184	0000024871EA099 THE ARCADE		Canterbury
0000024860EA671	ASHBURTON	BURNETT STREET	184	0000024860EA671 C J REDMOND LIMITED		Canterbury
0000024862EA6F4	ASHBURTON	BURNETT STREET	184	0000024862EA6F4 THE ARCADE		Canterbury
0000024859EAFD8	ASHBURTON	BURNETT STREET	184	0000024859EAFD8 AIR CONDITIONING SUPPLY IN ARCADE		Canterbury
0000024866EA7FE	ASHBURTON	BURNETT STREET	184	0000024866EA7FE THE ARCADE		Canterbury
0000019361EA236	ASHBURTON	BURNETT STREET	184	0000019361EA236		Canterbury
0000024864EA77B	ASHBURTON	BURNETT STREET	184	0000024864EA77B THE ARCADE		Canterbury
0000024867EABBB	ASHBURTON	BURNETT STREET	184	0000024867EABBB THE ARCADE		Canterbury
0000024863EAAB1	ASHBURTON	BURNETT STREET	184	0000024863EAAB1 THE ARCADE		Canterbury

3. **Missing key information:** We have identified 17 ICPs with 0 for the street address and no further address information that would allow ready location of the ICP.
4. **DUML ICPs:** EA Networks identified 9 DUML ICPs on their network. We examined address information for these and none of the address information facilitates ready identification of where the DUML database may be located.

Address change event timing: Is reported in section 4.1 of this audit report.

Audit commentary

The following alleged non-compliance is identified:

- 3,311 ICPs with non-unique addresses that do not permit ready location of the ICP.
- 17 ICPs that could not be readily located due to a lack of address information.

- 9 DUMML ICPs for which the address information does not identify the location of the DUMML database.

Auditors note: We consider it satisfactory for DUMML ICPs, to identify the ICP as DUMML and refer to the current retailer for the exact location of the database, which may change when DUMML ICPs are switched between retailers.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.4</p> <p>With: Clause 2 of schedule 11.1</p> <p>From: 03-Jan-16</p> <p>To: 13-Jul-17</p>	<p><i>Address information provided for many ICPs would not allow ready location of the ICP (as described in audit report).</i></p> <p>Potential impact: Unknown</p> <p>Actual impact: Unknown</p> <p>Audit history: Several times</p> <p>Controls: None</p> <p>Breach risk rating: 8</p>		
Audit risk rating	Rationale for audit risk rating		
Medium	EA Networks have no process in place to correct and maintain address information that would not allow ready location of the ICP. The impact of this is mitigated by local network knowledge which can be accessed with a phone call.		
Actions taken to resolve the issue		Completion date	Remedial action status
EA network regularly amends the Registry Addresses at the requests from Traders on the behalf of Customers and meter readers. ICP tag is on site to differentiate individual ICPs.		16 th October 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

<p>Staff will review & Update Addresses where appropriate to reduce the number duplicate addresses i.e. Add "House" or "Shed" etc. to the Property Name Field.</p> <p>For DUML (Street Lighting) a review will be carried out as part of upcoming Pricing round where Street Lighting Numbers will be changed to be accessed by use of RAMM (Council) Database. Addresses for these ICPs will amended to reflect this change.</p>	5 th May 2018	
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4.5. ICP de-energisation (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 de-energised without de-energisation of 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 difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit Observation

Compliance with this requirement could only be confirmed by field examination of a large number of installations, and in most cases would require a power outage at the installation. This is considered beyond the scope of this audit.

Audit commentary

We have discussed this requirement with the participant and find they are aware of the requirement.

Given modern electrical practice that has been in place since the year 2002, we think it extremely unlikely any ICP would have been connected that could not be isolated without isolating any other ICP, and we consider the risk of non-compliance to be extremely low.

With this qualification we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry (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:

- *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 from metering information
 - c) the actual chargeable capacity of the ICP in any other case
- the Distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder Distributor installation details only if the Distributor is unable to assign the actual Distributor installation details because the capacity or volume information required to assign the actual Distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)
- the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)
- the status of the ICP (Clause 7(1)(k) of Schedule 11.1)
- designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)
- if unmetered load, other than distributed unmetered load, is associated with the ICP, the type and capacity in kW of unmetered load (Clause 7(1)(m) of Schedule 11.1)
- if shared unmetered load is associated with the ICP, a list of the ICP identifiers of the ICPs that are associated with the unmetered load (Clause 7(1)(n) of Schedule 11.1)
- if the ICP is capable of generating into the Distributors network (Clause 7(1)(o) of Schedule 11.1):
 - a) the nameplate capacity of the generator; and
 - b) the fuel type
- the initial energisation date of the ICP (Clause 7(1)(p) of Schedule 11.1).

Audit observation

Item Clause 7 (1)	
(a): Location address.	Refer to section 4.4 of this report
(b): NSP usually connected	Refer to section 4.2 of this report
(c): Installation type	<p>There are 19,191 active ICPs on the network 160 are configured as installation type B 2 are configured as installation type G The remainder are configured as installation type L Compliance is confirmed. One generation ICP has capacity in excess of 10MW (28MW). This ICP has a unique loss category code. All ICPs identified as having generation have generator capacity and fuel type provided. One ICP 0000013329EACC7 is identified as having the retailer profile PV1 and no DG details as of 14/9/2017.</p>

Item Clause 7 (1)	
(d): Reconciliation type	The NSP mapping table identifies EA Networks as the owner of 1 embedded network URK0111EASHEN. The audit data set identifies 13 active ICPs on URK0111, all have reconciliation type set to EN. All other ICPs are correctly set at GN. Compliance is confirmed.
(e): Loss category code	We have examined all records for active ICPs in the audit data set and find that all have valid loss category codes applied. Refer also to sections 3.11 and section 5 of this report for further examination of loss category codes and loss factors. Compliance is confirmed.
(f): EG > 10MW	One ICP has generation capacity of 28MW. This ICP has a unique loss category code. Compliance is confirmed.
(g): Price category code	We have examined all records in the audit data set for price category code and confirm that each ICP has a price category code. We have compared the price category codes in the audit data set with the participants price information records and with the registry. All codes are valid and have associated pricing information. EA Networks use placeholders during the creation of new connections, the replacement of placeholders is addressed in section 4.7 of this audit report. Compliance is confirmed.
(h): Chargeable capacity	We have examined the participants pricing disclosure and found that irrigation and large user / industrial ICPs have a capacity charge applicable. The chargeable capacity for Irrigation pricing and the Highbank pumps is connected KVA which cannot be calculated from metering information and is published in the chargeable capacity field of the registry. The chargeable capacity for large user / industrial connections is kVA / day which can be measured using metering information. None of these ICPs have the chargeable capacity published in the chargeable capacity field. Compliance is confirmed.
(i): Installation details	<p>(i) the distributor installation details of 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;</p> <p>We have examined the participants pricing disclosure and do not find any requirements for the participant to publish installation details for any ICP on the registry. Compliance is confirmed.</p>
(j): First trader	Refer to section 0 for provision of first trader. This information is provided when an ICP is first energised and is not subsequently maintained.
(k): ICP status	ICP status is not directly managed by Distributors. Depending on the information provided to the registry an ICP will be allocated a particular status, Distributors may effect new, ready and decommissioned status. Refer to the following sections of this audit report for status change analysis. New: Section 3.12 Ready: Section 0 Decommissioned: Section 4.11
(l): Dedicated status	<p>(l) 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—</p> <p>(i) the ICP will be supplied only from the NSP with the NSP identifier provided under paragraph (b); or</p> <p>(ii) the ICP is a point of connection between a network and an embedded network;</p> <p>The participants network has multiple NSPs and multiple balancing areas. Each balancing area is examined as follows: We have examined the dedicated status values on the registry which are all set to N. We agree that no ICP on the network should have dedicated status set to Y. Compliance is confirmed.</p>
(m): UNM details	One unmetered load was added during the audit period. The load was a EA Networks asset (substation), the load details were provided by EA Networks who know them. No DUML ICP has UNM details. Compliance is confirmed.
(n): SUML list	We have examined the registry and find there are no shared unmetered loads on the network.

Item Clause 7 (1)	
	Compliance is confirmed.
(o): DG capacity and fuel type	From the audit data set we identify 162 ICPs having installation type B or G indicating the ICPs have generation. All ICPs with installation type B or G have generation capacity and fuel type correctly identified on the registry. Compliance is confirmed. We identify one ICP with the profile PV1 and no generation identified by EA Networks. The profile change was implemented by the retailer on 14/9/2017.
(p): Date initially energised	For the new connections sample we have examined the provision of the first energised date. The date of first energisation is determined from the electrical connection records which include the required certificate of compliance safety tests that are performed at the time of electrical connection and for which the installation must be energised. The date of initial energisation is therefore the date of electrical connection. In 18 of the 20 installations examined in the new connections sample we find the initial energisation date has been correctly recorded, for 2 of the 20 there is no initial energisation date recorded. Refer to section 3.5 of this audit report for the related non-compliance allegation.

Audit Observation

We examined the maintenance of ICP information on the registry for the entire audit data set as indicated in the table above above.

Audit commentary

As detailed in the above table compliance is confirmed.

Audit outcome

Compliant

4.7. Replacement of placeholder information 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 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

EA Networks use the placeholder POA when creating new connections. We have analysed the provision of real price category codes for all new connections and found 1 that was provided 26 business days after the ICP was first traded.

Audit commentary

We consider it ridiculous to allege this as a non-compliance, however we are compelled to do so by Electricity Authority officials. This alleged non-compliance has no real or potential adverse impact on the operation of the electricity market.

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

We have examined the audit data set for the existence of GPS coordinates on the registry.

Audit commentary

EA Networks do not use GPS coordinates in ICP address information, Compliance is confirmed.

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

We have discussed ready status with the participant, it is well understood. The audit data set has been examined for the correct use of ICP status. New connections are created in the new state and when the required information is available and provided they change to ready state.

Audit commentary

Compliance is confirmed.

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

We have discussed status management with EA Networks and it is well understood. We have examined the audit data set for the presence of any Distributor status ICP and found none.

Audit commentary

Compliance is confirmed.

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

We examined the audit data set for ICPs that had been decommissioned during the period of audit.

Audit commentary

We identified and examined 73 decommissioning events recorded in the audit data set.

- 64 of these have been decommissioned on advice from the trader that the ICP has been de-energised ready for decommissioning.
- 7 were new ICPs created in error and decommissioned without becoming active.
- 3 were never made active and decommissioned by EA Networks due to ICP amalgamation.

Compliance is confirmed.

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 2 months after the date the code is entered in the table.

A price category code takes effect on the specified date.

Audit Observation

We examined the Distributors pricing methodology and related disclosures. We have examined the registry price category code table.

Audit commentary

No price category codes were changed on the registry during the period of audit.

Compliance is confirmed.

Audit outcome

Compliant

5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

Code reference

Clause 21 Schedule 11.1

Code related audit information

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

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

A loss category code takes effect on the specified date.

Audit Observation

We have examined the loss category code table on the registry.

Audit commentary

There have not been any changes made in the period of audit, compliance is confirmed.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

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

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

Audit Observation

We have examined the loss factor table on the registry.

Audit commentary

Each loss category code has a maximum of 2 loss factors per calendar month and each loss factor covers all trading periods in any month.

Compliance is confirmed.

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 notify the reconciliation manager of the creation or decommissioning.

If the embedded network owner is creating or decommissioning an NSP that is an interconnection point between 2 embedded networks, the embedded network owner must notify 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 notify 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:

- notify the reconciliation manager*
- notify the market administrator*
- notify each affected reconciliation participant*
- comply with Schedule 11.2.*

Audit Observation

The NSP table was examined to determine if any NSP has been created or decommissioned during the period of audit.

Audit commentary

No NSP has been created or decommissioned during the period of audit. Compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

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

Audit Observation

The NSP table was examined to determine if any NSP has been created during the period of audit.

Audit commentary

No new NSP has been created during the period of audit, compliance is confirmed.

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 notify 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 to determine if any participant has notified the creation of an NSP during the period of audit.

Audit commentary

We examined the NSP table and determined that no new NSP has been created during the period of audit, and no changes are required to balancing areas. Compliance is confirmed.

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 notify the reconciliation manager at least 1 calendar 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 for the creation of any embedded networks.

Audit commentary

No embedded networks have been created on the EA Networks network during the period of audit, compliance is confirmed.

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

Audit Observation

EA Networks network is supplied by 3 NSPs arranged in 2 balancing areas - one of these is a very small network embedded within a neighboring local network.

We have examined the NSP table for any change of balancing area during the audit period and found no changes.

We have examined the EA Networks asset management plan and find nothing that would indicate any need for changes to balancing areas now or in the immediate future.

Audit commentary

Based on the audit observation described above we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

6.6. Notify 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 notify any trader trading at the ICP of the transfer at least 1 calendar month before the transfer.

Audit Observation

We have examined the NSP table for the addition of any new NSP where an ICP has become the NSP.

Audit commentary

No new NSP has been created on the EA Networks network during the period of audit, there has therefore not been any ICP becoming an NSP. Compliance is confirmed.

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 notify the market administrator in the prescribed form, no later than 3 business days before the transfer takes effect.

Audit Observation

We asked EA Networks to identify any ICPs that have been transferred as per clause 1 to 4 of schedule 11.2.

Audit commentary

We are advised that no ICPs have been transferred, compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 10.25(1) and 10.25(3)

Code related audit information

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

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

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

The NSP table was examined to determine if the participant is responsible for metering at any NSP. We have confirmed that EA Networks are not responsible for metering at any NSP.

Audit commentary

Compliance is confirmed.

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 to determine if the participant has proposed any new NSP that is not a connection to the grid.

Audit commentary

EA Networks have not proposed the creation of any new NSP during the period of audit. Compliance is confirmed.

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 notify:

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

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

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

Audit Observation

We have asked EA Networks if they have acquired any part of any network during the period of audit, EA Networks advise they have not acquired any part of any network during the period of audit.

Audit commentary

Based on the audit observation described above we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

6.11. Electrically connecting NSP that is not point of connection to grid (Clause 10.30(1))

Code reference

Clause 10.30(1)

Code related audit information

A Distributor must not electrically connect an NSP that is not a point of connection to the grid unless:

- *a reconciliation participation has requested the electrical connection (Clause 10.30(1)(a)); or*

- *a metering equipment provider (authorised by the trader) has requested the electrical connection for a temporary energisation of the ICP (Clause 10.30(1)(b)).*

Audit Observation

The NSP table was examined to determine if any new NSP has been connected during the period of audit.

Audit commentary

No new NSP has been connected during the period of audit, compliance is confirmed.

Audit outcome

Compliant

6.12. 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 notify the reconciliation manager and the gaining MEP.

Audit Observation

The NSP table was examined to determine if the participant is responsible for any embedded network.

Audit commentary

EA Networks are not responsible for any embedded network gateway metering, compliance is confirmed.

Audit outcome

Compliant

6.13. 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 market administrator 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

EA Networks advised there has not been any ICP transfer during the period of audit.

Audit commentary

Compliance is confirmed.

Audit outcome

Compliant

6.14. 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

We ask the participant if any ICP transfer has taken place.

Audit commentary

We are advised no ICP transfer has taken place, compliance is confirmed.

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 notify the registry 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 notify the registry and each trader responsible for any of the ICPs across which the unmetered load is shared of the addition or omission of the ICP.

Audit Observation

EA Networks do not have any SUML on their networks.

Audit commentary

Compliance is confirmed.

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 notify all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit Observation

EA Networks do not have any SUML on their networks.

Audit commentary

Compliance is confirmed.

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 Code requires that participants provide complete and accurate information as specified in the Code. The Code does not specify what constitutes complete and accurate information regarding the calculation of loss factors.

Clause 16A.23 identifies additional requirements for Distributor audits, including (c) The creation of loss factors.

Distributors are required to provide and update loss factors for loss category codes (clause 22 of schedule 11.1)

In the absence of any standard against which we may evaluate the creation of loss factors, we compare the loss factors provided by EA Networks with those provided by similar Distributors and at 1.03 for low voltage and 1.0733 for high voltage we find these consistent with the network structure which supplies a mixture of urban and widely dispersed rural load.

Audit commentary

Based on the audit observation described above we find the participant compliant with this clause of the Code.

Audit outcome

Compliant

CONCLUSION

The audit has identified 6 matters of alleged non-compliance.

Based on the audit findings we apply the audit guideline table to determine the indicative next audit due date.

Analysis of next audit due date.

Audit Section	Subject	Breach risk rating
2.1	Provision of complete and accurate information	12
3.5	Provision of initial energised date	2
3.12	Management of new status	12
4.1	Timely changes of registry information	2
4.2	Allocation of NSP to ICP	5
4.4	ICP location address	8
Total		41

From the audit frequency table in the distributor audit guideline we determine the indicative next audit due date would be in 3 months time. Given that the Authority will probably take 3 months to review this audit report we recommend for the sake of practicality that the next audit be conducted in 6 months. This will also give EA Networks time to act on the matters identified that will, if they remain unresolved, continue to result in very short audit return periods.

PARTICIPANT RESPONSE

With reference to 4.4:

For the example given, EA Networks ask the owner of this private property to number the shops for this shopping complex however this has never occurred. It should be noted that all metering for this complex is situated in one location.

This would also be a problem with rural properties which are also private properties i.e. Numbering of pump sheds which share the same address.

We have no authority to mandate this for private properties. In leu of this, the ICP tag is on site to differentiate each connection. Having said this EA will actively work with ICP owners to find a solution to the problem.

In Summary:

EA Networks will undertake work to put in place processes to reduce issues raised in this Audit and aim to be compliant within six months. This time frame will be dependent on cooperation from Traders and Consumers.