ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

For

DEEP ENERGY NZ LTD

NZBN: 9429047773745

Prepared by: Tara Gannon

Date audit commenced: 2 August 2024

Date audit report completed: 21 August 2024

Audit report due date: 24 October 2024

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EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Deep Energy NZ Ltd (Deep Energy)**, to support their application for certification in accordance with clause 5 of schedule 15.1. The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.2.

Deep Energy reported a self breach because they did not obtain certification, complete a participant audit, or submit a final audit report to the Electricity Authority by the due date due to an oversight. The audit report was due by 3 January 2021 and certification was due by 3 March 2021. Deep Energy has confirmed its responsibilities and arranged for this audit to be completed. Because of the delay in providing this audit, at the Authority's request I have reviewed all registry, switching and submission activity since Deep Energy began trading in March 2020. A description of the items reviewed is provided in each report section.

Compliance with section 13 of the Code was not assessed because Deep Energy is not a generator. Deep Energy may consider establishing a solar farm in the future. They are aware that a material change audit will be required before this can occur.

Deep Energy had supplied nine ICPs with metering category 1 or 2 since they began trading in March 2020:

ICP	Switch in date	Supply end date	Reason for supply end	Submission type
0000183281UN447	3 March 2020	1 December 2021	Decommissioned	NHH then HHR from 1 July 2021
0000176859UN3A7	5 March 2020	31 August 2023	Switched out	NHH
	2 July 2024		Switched back in	NHH
0000866060HB7F0	22 December 2020	17 July 2021	Switched out	NHH
0008660592HB867	22 December 2020	11 July 2021	Switched out	NHH
0008660601HB843	22 December 2020	11 July 2021	Switched out	NHH
0000241934UN3F0	5 July 2024			NHH
1001252108UN7EC	5 July 2024			NHH
1002179570UNDF6	5 July 2024			NHH
0000231979UN4B7	8 July 2024			NHH

Deep Energy engages **John Candy Consulting** to maintain registry information and perform customer switching, gather and store raw meter data, and create validate and deliver all submission information. Deep Energy also engages **Momentous Consulting** to provide advice and support. **Bluecurrent Assets NZ Limited (NGCM)**, **Influx Energy Data Limited (FCLM)** and **Intellihub Limited (BOPE)** provide meter readings for Deep Energy's ICPs as MEPs.

John Candy Consulting completes most compliance activities, and their processes were assessed during this audit and found to be compliant.

In addition to the late provision of this audit report, a small number of minor non-compliances were identified:

- one status update to "inactive" status was one business day late due to late notification that the ICP was disconnected,
- ICP 0000231979UN4B7's NT was issued with an incorrect switch type and was reissued with the correct switch type once a wrong switch withdrawal was completed,
- the CS file for 0008660592HB867 (CS event 12 July 2021) had an incorrect last actual read date, and the CS file for ICP 0000866060HB7F0 (CS event 12 July 2021) had an incorrect switch event read type and incorrect average daily kWh,
- 1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status; Vector had changed the ICP to "decommissioned" status on the date it was physically decommissioned, but some consumption occurred prior to the decommissioning time,
- Some NHH revision differences outside the allowable thresholds, and
- alleged breach 2001DEEP1 was recorded because incorrect AV090 HHR volumes submission information was provided for October 2021 revision 14; the error was accidental, and corrected submission data was provided as soon as Deep Energy was alerted - there was no market impact, and the breach was closed by the Authority without a warning.

Although there were only six non-compliances, some caused non-compliance in several report sections resulting in 11 non-compliances and an audit risk rating of 14. Based on this, the Electricity Authority's guidance recommends that the next audit is completed in 18 months. I agree that this is reasonable based on the findings of this audit.

The matters raised are shown in the table below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to complete an audit	1.11	15.1	Deep Energy failed to submit an audit under Part 16A of the Electricity Industry Participation Code 2010 by 3 July 2020.	Weak	Low	3	Identified
Relevant information	2.1	10.6, 11.2, 15.2	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was closed by the Authority without a warning.	Strong	Low	1	Identified
Changes to registry information	3.3	10 of schedule 11.1	One status update to "inactive" status was one business day late.	Strong	Low	1	Identified
Management of "inactive" status	3.9	19 of schedule 11.1	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status.	Strong	Low	1	Identified
Inform registry of switch request for ICPs - standard switch	4.1	2 of schedule 11.3	ICP 0000231979UN4B7's NT was issued with an incorrect switch type and was reissued with the correct switch type once a wrong switch withdrawal was completed.	Strong	Low	1	Identified
Losing trader must provide final	4.3	5 of schedule 11.3	The CS file for 0008660592HB867 (CS event 12 July 2021) had an	Moderate	Low	2	Identified

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
information - standard switch			incorrect last actual read date. The CS file for ICP 0000866060HB7F0 (CS event 12 July 2021) had an incorrect switch event read type and incorrect average daily kWh.				
Identification of readings	9.1	3(3) of schedule 15.2	ICP 0000866060HB7F0 (CS event 12 July 2021) had an actual switch event read type recorded in the CS file, but the switch event reading was estimated.	Strong	Low	1	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status.	Strong	Low	1	Identified
Creation of submission information	12.2	15.4	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was closed by the Authority without a warning.	Strong	Low	1	Identified
Accuracy of submission information	12.7	15.12	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was	Strong	Low	1	Identified

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			closed by the Authority without a warning.				
Forward estimate process	12.12	Clause 6 of schedule 15.3	Some revision differences over 15% occurred for December 2020 and January 2021.	Strong	Low	1	Identified
Future Risk Rating						14	

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

RECOMMENDATIONS

Subject	Section	Description	Recommendation	Outcome
Electronic meter readings and estimated readings	9.6	Review of meter events which could affect meter accuracy	To achieve compliance, the meter event reports should be periodically checked for events which could affect accuracy, and these events should be followed up with the MEP. The MEPs can provide guidance on the event types that they report on, and what action they believe is appropriate - given the number of ICPs, a monthly check of the event data provided should be sufficient.	DEEP will take this recommendation into consideration.

ISSUES

Subject	Section	Description	Issue
		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

Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

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

1.2. Structure of Organisation

Deep Energy provided their organisation structure:

Name	Title	Company
Gewei Zhang	Director	Deep Energy NZ Ltd
Brendon Faithfull	Business Operations Manager	Deep Energy NZ Ltd

1.3. Persons involved in this audit

Auditor:

Name	Role	Company
Tara Gannon	Auditor	Provera

Personnel assisting with this audit:

Name	Title	Company
Gewei Zhang	Director	Deep Energy NZ Ltd
Chrissy Burrows	Director/Consultant	Momentous Consulting
John Candy	Director	John Candy Consulting

1.4. Use of Agents (Clause 15.34)

Code reference

Clause 15.34

Code related audit information

A reconciliation participant who uses an agent

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

Audit observation

Use of agents was confirmed.

Audit commentary

Deep Energy engages John Candy Consulting to:

- maintain registry information and perform customer switching,
- gather and store raw meter data,
- create and manage volume information,
- calculate ICP days,
- deliver electricity supplied information,
- deliver information from half hourly metered ICPs, and
- provide submission information for reconciliation.

Deep Energy engages Momentous Consulting to provide advice and support.

Bluecurrent Assets NZ Limited (NGCM), Influx Energy Data Limited (FCLM) and Intellihub Limited (BOPE) provide meter readings for Deep Energy's ICPs as MEPs.

1.5. Hardware and Software

Deep Energy

Deep Energy uses the Billing Suite, which is a cloud based in house developed system. Back up is cloud based and access is restricted using logins and passwords.

ICP, meter reading and billing data is stored in a spreadsheet on Google Drive, and invoices are stored on Google Drive. Google Drive information is backed up to the cloud and access is restricted using Google Drive logins and passwords.

In future, Deep Energy will investigate creating a database to store its ICP, meter reading and billing data.

John Candy Consulting

The Access Database (RM Tool) is provided and run by John Candy Consulting, along with Windows 10 and Microsoft Excel. Online backups are made to OneDrive. Copies of files are also retained in dropbox which is shared with Deep Energy.

Access to systems is restricted using logins and passwords.

1.6. Breaches or Breach Allegations

The Electricity Authority has recorded two alleged breaches for Deep Energy:

Breach number and date	Clauses breached	Commentary
2407DEEP1 24 July 2024	Part 15 of schedule 15.1 clause 2A, Part 15 of schedule 15.1 clause 4.1, Part 16A clause 16A.24,	Deep Energy reported a self breach because they did not obtain certification, complete a participant audit, or submit a final audit report to the Electricity Authority by the due date due to an oversight. The audit report was due by 3 January 2021 and certification was due by 3 March 2021. Deep Energy has

Breach number and date	Clauses breached	Commentary
	and Part 16A clause 16A.13	confirmed its responsibilities and arranged for this audit to be completed. The Authority is currently considering this alleged breach.
2001DEEP1 9 January 2023	Part 15 clause 15.2(1)(a)	An alleged breach was recorded for failing to ensure that all information provided under part 15 was complete and accurate. On 19 December 2022 Deep Energy made an incorrect AV090 HHRVOLS submission for October 2021 revision 14. Because there was no change to the submission data, a revision file was not required and data for the period was archived. A file was produced in error and submitted to the RM without validation. As soon as the RM notified Deep Energy that their submission volumes had changed, a revised file was sent containing correct values, and was used to produce the revision 14 reconciliation results. There was no market impact, and the error is unlikely to recur. The Authority closed the alleged breach without a warning.

1.7. ICP Data

All "active" ICPs are summarised by metering category in the table below.

Metering Category	Jul 2024	Dec 2021	Sep 2021	July 2021	Dec 2020	Mar 2020
1	5	-	1	2	4	2
2	-	-	-	-	1	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
9	-	-	-	-	-	-
Blank	-	-	-	-	-	-

All ICPs on the list file are summarised on the table below.

Status	Jul 2024	Dec 2021	Sep 2021	Jul 2021	Dec 2020	Mar 2020
Active (2,0)	5	-	1	2	5	2
Inactive (1)	-	-	-	-	-	-
Decommissioned (3)	1	1	-	-	-	-

1.8. Authorisation Received

Deep Energy provided authorisation via email.

1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Deep Energy, to support their application for certification in accordance with clauses 5 and 7 of schedule 15.1. The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits version 7.2.

The audit analysis was conducted on a registry list for 1 March 2020 to 15 July 2024, and submission data for March 2020. All registry activity was checked for all ICPs which appeared on the registry list.

The table below shows the tasks under clause 15.38 of part 15 for which Deep Energy requires certification. Some or part of the functions Deep Energy is certified for are conducted by agents, as shown in the table below.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data
(a) - Maintaining registry information and performing customer and embedded generator switching	John Candy Consulting	
(b) – Gathering and storing raw meter data	John Candy Consulting	Bluecurrent Assets NZ Limited (NGCM) Influx Energy Data Limited (FCLM) Intellihub Limited (BOPE)
(c)(iii) - Creation and management of volume information	John Candy Consulting	
(d)(i) – Calculation of ICP days	John Candy Consulting	
(d)(ii) - delivery of electricity supplied information under clause 15.7	John Candy Consulting	
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	John Candy Consulting	
(e) – Provision of submission information for reconciliation	John Candy Consulting	

The functions performed by John Candy Consulting were audited at the same time as those conducted by Deep Energy, and the findings are documented in this report.

Deep Energy may consider establishing a solar farm in the future. They are aware that a material change audit will be required before this occurs.

1.10. Summary of previous audit

This is Deep Energy's first full audit. A desktop audit was completed by Chrissy Burrows of Momentous Consulting Limited in December 2019 as part of Deep Energy's request for approval to commence trading.

1.11. Requirement to complete an audit (Schedule 15.1)

Code reference

Clause 4, 5

Code related audit information

A participant must apply for certification two months before the intended date of certification, under clause 4 of schedule 15.1 of the Code.

Under clause 5 of schedule 15.1, the Authority can only grant certification to a reconciliation participant if it is satisfied, on the basis of an audit report submitted under Part 16A of the Code, that the participant meets certain requirements. The requirements are relevant to the functions specified in clause 15.38 of the Code, or the obligations under clauses 13.136 to 13.138 for which the participant is seeking certification.

Audit observation

Deep Energy failed to submit an audit on time under Part 16A of the Electricity Industry Participation Code 2010.

Audit commentary

Deep Energy reported a self breach because they did not obtain certification, complete a participant audit, or submit a final audit report to the Electricity Authority by the due date due to an oversight. The audit report was due by 3 January 2021 and certification was due by 3 March 2021. Deep Energy has confirmed its responsibilities and arranged for an audit to be completed.

The Authority recorded alleged breach 2407DEEP1 (24 July 2024) for breaching clauses Part 15 of schedule 15.1 clause 2A, Part 15 of schedule 15.1 clause 4.1, Part 16A clause 16A.24, and Part 16A clause 16A.13. The alleged breach is currently being considered by the Authority and the outcome is to be decided.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 1.11 With: Clause 15.1 From: 03-Jan-21 To: 20-Aug-24	Deep Energy failed to submit an audit on time under Part 16A of the Electricity Industry Participation Code 2010. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3

Audit risk rating	Rationale for audit risk rating
Low	The controls are weak because an audit was not completed by the due date. The impact is low because this audit found only minor and low impact non-compliances.

Actions taken to resolve the issue	Completion date	Remedial action status
This was an oversight due to limited ICP numbers and low activity. DEEP has submitted a self-breach and this audit has been conducted to include full period where certification was required.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
DEEP are now full aware of our requirements and will prebook and auditor once the Authority has confirmed the next audit date.	31/10/24	

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

Processes to manage and validate registry information were checked. The registry list for 1 March 2020 to 15 July 2024, and all registry activity was checked for all ICPs which appeared on the registry list.

Audit commentary

Registry and static data accuracy

John Candy Consulting manages registry information as Deep Energy's agent. When ICP information changes, paperwork confirming the ICP attributes is provided to John Candy Consulting, who ensures that the registry is updated as soon as practicable. Registry status and trader updates are completed manually using the registry interface once the correct event dates and event attributes are confirmed.

Registry validation is completed weekly by John Candy Consulting, including checks of:

- switching activity and current agreed switch readings,
- status changes, pricing data changes, metering data changes, network data changes, and
- initial electrical connection date discrepancies.

Any issues are referred to Deep Energy for investigation and correction. Distributed generation and unmetered load detail changes are monitored by John Candy Consulting weekly and referred to Deep Energy to confirm the correct trader values and any action required.

There was little registry activity during the audit period, and all updates were checked. One ICP had distributed generation added, was upgraded to HHR and later decommissioned. No other ICPs had status or trader information changes. No inaccurate registry or static data was identified.

Read and volume data accuracy

John Candy Consulting gathers and stores raw meter data, creates and manages volume information, and provides provide submission information for reconciliation. Where errors are identified, John Candy Consulting processes corrections in consultation with Deep Energy.

Correction processes are outlined below:

Defective meters	Defective meters are typically identified through the meter reading validation process, or from information provided by the meter read provider. Estimated consumption for the defective period is calculated from consumption before the defect or on the replacement meter and provided for submission. No defective meters were identified during the audit period.

Bridged meters	Bridged meters will be identified through review of returned reconnection paperwork, or the meter reading validation process. Estimated consumption for the bridged period is calculated from consumption before or after bridging and provided for submission. No bridged meters were identified during the audit period.
Consumption while inactive	"Inactive" ICPs with consumption are identified through the NHH read validation process discussed in **section 9.5**, and John Candy Consulting's pre submission checks. The registry status records are corrected to "active" for the affected period, and all consumption is submitted. If it is not possible to change the status to "active", permanent estimates will be applied to force the consumption into an "active" period. ICP 0000183281UN447 was disconnected and then decommissioned. Review of raw meter data and submission information found that 1.772 kWh was recorded for trading periods 1-5 on 2 December 2021 but was omitted from submission because the ICP had "decommissioned" status on that day. There was zero I flow on 2 December 2021.
Consumption while vacant	All vacant consumption is captured and reported by John Candy Consulting, and there were no vacant ICPs during the audit period.
Incorrect multipliers	No incorrect multipliers were identified during the audit period, and there have been no multiplier corrections. Only meter category 2 ICP 0008660601HB843 had a multiplier greater than 1, and I confirmed that it was correctly applied for submission.
Unmetered load	No unmetered load has been supplied, and Deep Energy does not intend to supply unmetered load.

The Authority recorded one alleged breach for not providing complete and accurate information:

Breach number and date	Clauses breached	Commentary
2001DEEP1 (9 January 2023)	*Part 15 clause 15.2(1)(a)*	On 19 December 2022 Deep Energy made an incorrect AV090 HHRVOLS submission for October 2021 revision 14. Because there was no change to the submission data, a revision file was not required and data for the period was archived. A file was produced in error and submitted to the RM without validation. As soon as the RM notified Deep Energy that their submission volumes had changed, a revised file was sent containing correct values, and was used to produce the revision 14 reconciliation results. There was no market impact. and the error is unlikely to recur. The Authority closed the alleged breach without a warning.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 10.6, 11.2, 15.2	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was closed by the Authority without a warning.

From: 02-Dec-21 To: 09-Jan-23	Potential impact: Low Actual impact: Low Audit history: None 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. The missing HHR submission for ICP 0000183281UN447 was caused by Vector updating the status on the day decommissioning physically occurred. The October 2021 revision 14 error was resolved as soon as Deep Energy was made aware of it, and there was no market impact.

Actions taken to resolve the issue	Completion date	Remedial action status
Data was included in revision files.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
This is an isolated incident due to an ICP requiring decommissioning which occurred without DEEPs' knowledge.	completed	

2.2. Provision of information (Clause 15.35)

Code reference

Clause 15.35

Code related audit information

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

Audit observation

Processes to provide information were reviewed and observed throughout the audit.

Audit commentary

As discussed throughout this report, there are processes to identify, investigate and resolve discrepancies and errors. When inaccurate submission information was provided in relation to alleged breach 2001DEEP1 (9 January 2023), corrected information was provided immediately.

Audit outcome

Compliant

2.3. Data transmission (Clause 20 Schedule 15.2)

Code reference

Clause 20 of schedule 15.2

Code related audit information

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

Audit observation

The data transmission process was examined. All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843, which is read manually by Deep Energy's director who emails a photo of the reading to John Candy Consulting. Switch event readings are received directly from the registry.

Audit commentary

Manual data collection ICP 0008660601HB843

ICP 0008660601HB843 was supplied from 22 December 2020 to 11 July 2021. At least monthly, the Director of Deep Energy checked the condition of the meter and emailed a reading and/or photo to John Candy Consulting so that the reading could be used for reconciliation. I spot checked a sample of these photo readings against the RM Tool's submission data and confirmed they were accurate.

MEP data collection

All ICPs apart from 0008660601HB843 have category 1 or 2 HHR or AMI metering, and meter readings are provided to John Candy Consulting via SFTP. The readings are loaded into the RM tool on receipt, and a record is retained by Deep Energy.

I traced a sample of readings for each MEP from their files to the RM Tool's submission data for the NHH settled ICPs and HHR settled ICP 0000183281UN447, and confirmed they were accurate.

Switch event readings

Switch event readings are received via SFTP from the registry and loaded directly into the RM tool. I traced all switch event readings for all ICPs from the registry switching files to the RM tool's submission data and confirmed they were accurate.

Customer readings

Deep Energy does not intend to accept customer readings, but if they are required in the future they will be validated against a set of actual readings from another source if they are to be used for reconciliation.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 of schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

A complete audit trail was checked for all data gathering, validation and processing functions. I viewed audit trails in the RM tool.

Audit commentary

Audit trails include the activity identifier, date and time, and an operator identifier.

Audit outcome

Compliant

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

Code reference

Clause 10.4

Code related audit information

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

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

Audit observation

I reviewed Deep Energy's general terms and conditions for electricity supply.

Audit commentary

Deep Energy's standard terms and conditions with their customers includes consent to access for authorised parties for the duration of the contract.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

The trader must use its best endeavours to provide access:

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

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

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

Audit observation

I reviewed Deep Energy's general terms and conditions for electricity supply and checked compliance with these clauses.

Audit commentary

Deep Energy's general terms and conditions include consent to access for authorised parties for the duration of the contract. Deep Energy confirmed that they have been able to arrange access for other parties when requested. If another party has difficulty arranging access, they will support them by liaising with the customer.

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

a) if practical in the circumstances, ensure that the metering installation is located at a point of connection; or

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

Audit observation

The physical meter location point is not specifically mentioned in Deep Energy's terms and conditions for electricity supply, but the existing practices in the electrical industry achieve compliance. The registry list was reviewed.

Audit commentary

Deep Energy only supplies ICPs with metering category 1 or 2 and compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 11.15B

Code related audit information

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

- *the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and*
- *the terms of the assigned contract to be amended on such an assignment to—*
- *the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or*
- *such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii); and*
- *the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*
- *the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under schedule 11.5 (clause 11.15B(1)(d)); and*
- *the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).*

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

Audit observation

I reviewed Deep Energy's general terms and conditions for electricity supply.

Audit commentary

Deep Energy's terms and conditions contain the appropriate clauses to achieve compliance with this requirement.

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

The new connection processes were examined, including review of the new connections process flowchart and "New Connections" procedure. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

New connection process

John Candy Consulting manages registry information as Deep Energy's agent. When ICP information changes, paperwork confirming the ICP attributes is provided to John Candy Consulting, who ensures that the registry is updated as soon as practicable. Registry status and trader updates are completed manually using the registry interface once the correct event dates and event attributes are confirmed.

Deep Energy has not completed any new connections to date but have a documented new connection process.

If the customer requests a new connection from Deep Energy, the customer information will be loaded into the Billing Suite and John Candy will provide the ICP application to the distributor. If the customer requests a new connection from the network, Deep Energy will liaise with their customer and approve the new connection.

Once the distributor has created the ICP and moved it to "ready" status, the ICP will be claimed in the registry at "inactive – new connection in progress" status and the MEP will be nominated at the same time.

Once the ICP is livened and connection paperwork is received, John Candy will update the ICP status to "active" from the connection date. The ICP details will also be updated in the Billing Suite.

Connection accuracy

Deep Energy has not initiated or completed any new connections to date. All "active" ICPs have an MEP recorded, at least one meter register and no unmetered load connected.

Audit outcome

Compliant

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

Code reference

Clause 10.33(1)

Code related audit information

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

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
    - *the trader is recorded in the registry as the trader responsible for the ICP or has an arrangement with the customer and initiates a switch within two business days of electrical connection,*
    - *if the ICP has metered load, one or more certified metering installations are in place,*
    - *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

The new connection processes were examined, including review of the new connections process flowchart and "New Connections" procedure. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Once the distributor has created a new ICP and moved it to "ready" status, Deep Energy will claim the ICP in the registry at "inactive – new connection in progress" status and nominate the MEP at the same time. This will help to ensure that Deep Energy is recorded as the trader on the registry if temporary electrical connection occurs.

Deep Energy has not initiated or completed any new connections to date.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(1)

Code related audit information

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

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
    - *the trader is recorded in the registry as the trader responsible for the ICP or has an arrangement with the customer and initiates a switch within two business days of electrical connection,*
    - *if the ICP has metered load, one or more certified metering installations are in place,*

- *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the electrical connection.*

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Active ICPs without metering

All ICPs which are currently "active" have a meter installed and MEP recorded.

New Connections

Deep Energy has not initiated or completed any new connections to date.

Reconnections

No reconnections have occurred.

Bridged meters

No bridged meters were identified, and no ICPs have been reconnected.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

The process to ensure an arrangement is in place before trading commences on a network was examined.

Audit commentary

As part of the application process, ICPs are checked on the registry to ensure that Deep Energy has an agreement with the network prior to the application being accepted.

Deep Energy have supplied "active" ICPs connected to the Vector Limited (UNET) and Unison Networks Limited (HAWK) networks. Deep Energy provided copies of signed use of system agreements to confirm that agreements are in place.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

The process to ensure an arrangement is in place with the metering equipment provider before an ICP can be created or switched in was checked. The registry list was reviewed to determine the MEPs for Deep Energy's ICPs.

Audit commentary

As part of the application process, ICPs are checked on the registry to ensure that Deep Energy has an agreement with the MEP prior to the application being accepted.

Deep Energy have supplied "active" ICPs with Bluecurrent Assets NZ Limited (NGCM), Influx Energy Data Limited (FCLM) and Intellihub Limited (BOPE) meters. Deep Energy confirmed during their initial desktop audit completed by Momentous Consulting Limited and this audit that agreements are in place with all the MEPs.

Audit outcome

Compliant

2.14. Connecting ICPs then withdrawing switch (Clause 10.33A(5))

Code reference

Clause 10.33B

Code related audit information

If a trader connects an ICP it is in the process of switching and the switch does not proceed or is withdrawn the trader must:

- *restore the disconnection, including removing any bypass and disconnecting using the same method the losing trader used,*
- *reimburse the losing trader for any direct costs incurred.*

Audit observation

The process for reconnecting ICPs in the process of switching in was examined, and I checked all ICPs which switched in to determine whether they had been reconnected.

Audit commentary

All ICPs switched in with "active" status and no reconnections were completed by Deep Energy.

On application ICPs are checked on the registry to determine whether they meet Deep Energy's supply requirements, including having "active" status. It is expected that ICPs applications will normally only be accepted if the ICP has "active" status.

If an ICP was reconnected as part of the switching process and the switch was later withdrawn, Deep Energy would restore the disconnection and reimburse the losing trader for any direct costs incurred if requested.

Audit outcome

Compliant

2.15. Electrical disconnection of ICPs (Clause 10.33B)

Code reference

Clause 10.33B

Code related audit information

Unless the trader is recorded in the registry or is meeting its obligation under 10.33A(5) it must not disconnect or electrically disconnect the ICP or authorise the metering equipment provider to disconnect or electrically disconnect the ICP.

Audit observation

The disconnection process was examined. Traders are only able to update ICP status for event dates where they are responsible for the ICP on the registry.

Audit commentary

Deep Energy has a good understanding of this requirement, and disconnections will not occur where an NT has been received. Only one ICP was disconnected during the audit period, and that was as part of the decommissioning process.

Audit outcome

Compliant

2.16. Removal or breakage of seals (Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7)

Code reference

Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7

Code related audit information

A trader can remove or break a seal without authorisation from the MEP to:

- *reset a load control switch, bridge or unbridge a load control switch – if the load control switch does not control a time block meter channel,*
- *electrically connect load or generation, of the load or generation has been disconnected at the meter,*
- *electrically disconnect load or generation, if the trader has exhausted all other appropriate methods of electrical disconnection,*
- *bridge the meter.*

A trader that removes or breaks a seal in this way must:

- *ensure personnel are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code,*
- *replace the seal with its own seal,*
- *have a process for tracing the new seal to the personnel,*
- *update the registry (if the profile code has changed),*
- *notify the metering equipment provider.*

Audit observation

Policies and processes for removal and breakage of seals were reviewed. Activity that required seals to be removed or broken was reviewed.

Audit commentary

Deep Energy does not remove or break seals, as work is completed by the MEP. If seals were found to be missing or broken a service request would be raised to re-seal the meter. No incidences of missing or broken seals were identified during the audit period.

The MEPs are required to ensure that only qualified personnel perform work and manage and trace seals. Deep Energy uses the returned paperwork to confirm the correct ICP attributes including status and profile. This information is passed to John Candy Consulting who update the registry.

I checked all activity which may have required meter seals to be removed or broken and found that Deep Energy had not removed or broken any seals:

- addition of distributed generation by the network for ICP 0000183281UN447 on 25 April 2021 did not affect seals; the meter already had a settled I flow register, and no metering changes were required,
- the meter change for ICP 0000183281UN447 on 16 July 2021 was completed by the MEP, and
- the disconnection of 000183281UN447 on 2 December 2021 was completed remotely by the MEP and no seals were removed or broken.

Audit outcome

Compliant

2.17. Meter bridging (Clause 10.33C and 2A of Schedule 15.2)

Code reference

Clause 10.33C and 2A of schedule 15.2

Code related audit information

A trader, or a distributor or the MEP which has been authorised by the trader, may only electrically connect an ICP in a way that bypasses a meter that is in place ("bridging") if, despite best endeavours:

- *the MEP is unable to remotely electrically connect the ICP,*
- *the MEP cannot repair a fault with the meter due to safety concerns,*
- *the consumer will likely be without electricity for a period which would cause significant disadvantage to the consumer.*

If the trader bridges a meter, the trader must:

- *determine the quantity of electricity conveyed through the ICP for the period of time the meter was bridged,*
- *submit that estimated quantity of electricity to the reconciliation manager,*
- *within one business day of being advised that the meter is bridged, notify the MEP that they are required to reinstate the meter so that all electricity flows through a certified metering installation.*

The trader must determine meter readings as follows:

- *by substituting data from an installed check meter or data storage device,*
- *if a check meter or data storage device is not installed, by using half hour data from another period where the trader considers the pattern of consumption is materially similar to the period during which the meter was bridged,*

- *if half hour data is not available, a non half hour estimated reading that the trader considers is the best estimate during the bridging period must be used.*

Audit observation

The process for bridging meters was discussed and bridged meters were reviewed including reviewing the "Disconnection – Business Rules" (which also covers bridging) and flow charts. All ICPs supplied by Deep Energy since 3 March 2020 were checked.

Audit commentary

Meters are only bridged if they cannot be reconnected without bridging, and delaying reconnection would cause significant disadvantage to the customer. Deep Energy has not completed any reconnections or bridged any meters. All "active" ICPs have had non-zero volumes submitted.

Bridged meters are identified through the read validation process which identifies meters with zero consumption, or reconnection paperwork returned from the contractor.

If a meter is confirmed to be bridged it will be unbridged as soon as possible, and John Candy Consulting will be advised to calculate and submit an estimate of consumption during the bridged period.

Audit outcome

Compliant

2.18. Use of ICP identifiers on invoices (Clause 11.30)

Code reference

Clause 11.30

Code related audit information

Each trader must ensure the relevant ICP identifier is printed on every invoice or document relating to the sale of electricity.

Audit observation

An invoice was provided to confirm that the ICP number is present.

Audit commentary

ICP numbers are included on invoices. No other documents relating to the sale of electricity have been issued to date, and Deep Energy intends to include ICP numbers when these types of documents are issued.

Audit outcome

Compliant

2.19. Provision of information on dispute resolution scheme (Clause 11.30A)

Code reference

Clause 11.30A

Code related audit information

A retailer must provide clear and prominent information about Utilities Disputes:

- *on their website,*
- *when responding to queries from consumers,*
- *in directed outbound communications to consumers about electricity services and bills.*

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Utilities Disputes is provided to customers was checked. A sample of invoices and documents were reviewed to determine whether clear and prominent information on Utilities Disputes is provided.

Audit commentary

Clear and prominent information on Utilities Disputes is provided:

- on invoices,
- on their website under https://deepenergy.co.nz/compliance, and
- as part of the general terms and conditions.

Deep Energy does not have a call centre and will ensure that information on Utilities Disputes is provided for any inbound customer calls.

No letters have been issued to date, and Deep Energy intends to ensure that information on Utilities Disputes is provided in letters and email footers.

Audit outcome

Compliant

2.20. Provision of information on electricity plan comparison site (Clause 11.30B)

Code reference

Clause 11.30B

Code related audit information

A retailer that trades at an ICP recorded on the registry must provide clear and prominent information about Powerswitch:

- *on their website,*
- *in outbound communications to residential consumers about price and service changes,*
- *to residential consumers on an annual basis,*
- *in directed outbound communications about the consumer's bill.*

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Powerswitch is provided to customers was checked. A sample of invoices and documents were reviewed to determine whether clear and prominent information on Powerswitch is provided.

Audit commentary

Clear and prominent information on Powerswitch is provided:

- on invoices, and
- on their website under https://deepenergy.co.nz/compliance.

Inclusion of Powerswitch information on invoices meets the requirement to ensure that information on Powerswitch is provided at least annually.

No letters have been issued to date, and Deep Energy intends to ensure that information on Powerswitch is provided in letters and email footers of correspondence relating to billing or pricing.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The new connection processes were reviewed in **section 2.9** to confirm compliance with the requirement to obtain ICP identifiers for points of connection to local or embedded networks.

Audit commentary

Deep Energy is aware that new connections require an ICP number, and the new connection process includes a step to obtain an ICP number from the network.

Audit outcome

Compliant

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

Processes to provide registry information were checked. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

No new connections or reconnections occurred. All ICPs were gained through the switching information and trader information was provided within the NT file.

Audit outcome

Compliant

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

Code reference

Clause 10 of schedule 11.1

Code related audit information

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

Audit observation

Processes to update registry information were checked. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Status and trader updates are processed manually by John Candy Consulting using the registry web interface once paperwork confirming the disconnection or reconnection details is received.

"Active" status updates

There were no updates to "active" status for new connections or reconnections.

"Inactive" status updates

There was one "inactive" status update to "inactive – ready for decommissioning" status from 2 December 2022 for ICP 0000183281UN447, which was made six business days after the event date. The update was one business day late because Deep Energy received late notification that decommissioning was required. The ICP was later decommissioned by the network from 2 December 2021. Review of disconnection paperwork confirmed that Deep Energy's "inactive" status event was correct.

Trader updates

There was one trader update which was not associated with an automatic update using NT information on incoming CS receipt. ICP 0000183281UN447 was moved from NHH to HHR submission from 1 July 2021. The update was made on time and with the correct attributes.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.3 With: Clause 10 of schedule 11.1 From: 02-Dec-21 To: 10-Dec-21	One status update to "inactive" status was one business day late. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are strong. Deep Energy updated the registry as soon as they were aware that the update was required. The risk is low because the update was one business day late.

Actions taken to resolve the issue	Completion date	Remedial action status
Status was updated immediately DEEP became aware of issue.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
This is an isolated incident due to an ICP requiring decommissioning which occurred without DEEPs' knowledge. DEEP are now full aware of our requirements to the decommissioning of an ICP and will monitor and update the registry according to the requirement. DEEP will remind distributors of their requirements to provide information in a timely manner if a decommissioning occurs.	completed	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

- *advise the MEP responsible for the metering installation of the decommissioning (clause 11.18(3)(b)).*

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

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

Audit observation

The new connection, MEP nomination and decommissioning processes were reviewed. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process is discussed in detail in **section 2.9**. If new connections are completed, Deep Energy will nominate the MEP at the same time as moving the ICP to the "inactive - new connection in progress" status. No new connections were initiated during the audit period.

All "active" CPs are metered and have an MEP recorded, and no MEP nominations were made.

ICP Decommissioning

ICPs that are vacant and "active", or "inactive" are maintained in the RM Tool. MEPs continue to provide readings for "active vacant" and "inactive" ICPs, and revision submission data continues to be provided for any ICPs which were "active" during the reconciliation period even if the ICP later becomes "inactive" or is "decommissioned".

When Deep Energy receives a request for decommissioning from their customer, or advice of decommissioning from the network, they move the ICP to "inactive - ready for decommissioning" status and raise a job for the MEP to remove their meter and obtain a final reading, unless they are aware that the meter has already been removed and the MEP has been notified.

ICP 0000183281UN447 briefly had "inactive – ready for decommissioning" status prior to being decommissioned and no inactive consumption was identified. The ICP has its final volumes submitted as HHR based on readings provided by the MEP. The MEP was advised of the decommissioning and removed their meter.

Audit outcome

Compliant

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

Code reference

Clause 9 of schedule 11.1

Code related audit information

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

a) the participant identifier of the trader, as approved by the Authority (clause 9(1)(a)),
b) the profile code for each profile at that ICP, as approved by the Authority (clause 9(1)(b)),
c) the metering equipment provider for each category 1 metering or higher (clause 9(1)(c)),
d) the type of submission information the trader will provide to the RM for the ICP (clause 9(1)(ea),
e) if a settlement type of UNM is assigned to that ICP, either:

- *the code ENG if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*
- *in all other cases, the daily average kWh of unmetered load at the ICP (clause 9(1)(f)(ii)),*
- *the type and capacity of any unmetered load at each ICP (clause 9(1)(g)),*
- *the status of the ICP, as defined in clauses 12 to 20 (clause 9(1)(j)) ,*
- *except if the ICP exists for the purposes of reconciling an embedded network or the ICP has distributor status, the trader must provide the relevant business classification code applicable to the customer (clause 9(1)(k)).*

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

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

Audit observation

The new connection processes were examined, including review of the new connections process flowchart and "New Connections" procedure. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not initiated or completed any new connections to date, and their processes for new connections are compliant.

Audit outcome

Compliant

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

Code reference

Clause 9 (1(k) of schedule 11.1

Code related audit information

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

Audit observation

The process to capture and manage ANZISC codes was examined. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

ANZSIC codes are validated on switch in.

ANZSIC codes were validated against Google maps information and/or customer records for all ICPs supplied and confirmed to be correct.

Audit outcome

Compliant

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

Code reference

Clause 9(1)(f) of schedule 11.1

Code related audit information

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

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

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

Audit observation

The process to manage unmetered load was examined. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not supplied any ICPs with unmetered load and does not intend to supply unmetered load.

As part of the application process, ICPs are checked on the registry to ensure that there is no unmetered load connected. Applications for ICPs with unmetered load are declined.

Registry validation is completed weekly by John Candy Consulting, including checks of network data changes such as additions of unmetered load. Any issues found are discussed and resolved with Deep Energy.

Audit outcome

Compliant

3.8. Management of "active" status (Clause 17 Schedule 11.1)

Code reference

Clause 17 of schedule 11.1

Code related audit information

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

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

Before an ICP is given the "active" status, the trader must ensure that:

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

Audit observation

The new connection processes are discussed in **section 2.9.** The reconnection process was examined including reviewing the "Disconnection – Business Rules" (which also covers reconnection) and flow charts. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy's disconnection process documentation includes a step for John Candy Consulting to be advised reconnection is complete and update the registry. The "Disconnection – Business Rules" are compliant with the requirements of the Code for reconnections.

Requirements for "active" ICPs

Deep Energy processes all status updates once paperwork is received. All ICPs which are currently "active" have a meter installed and MEP recorded.

New connection information accuracy

Deep Energy has not initiated or completed any new connections to date.

Reconnection information accuracy

No reconnections have occurred.

Audit outcome

Compliant

3.9. Management of "inactive" status (Clause 19 Schedule 11.1)

Code reference

Clause 19 of schedule 11.1

Code related audit information

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

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

Audit observation

The disconnection process was examined including reviewing the "Disconnection – Business Rules" and flow charts.

Audit commentary

"Inactive - new connection in progress" status

Deep Energy has not initiated or completed any new connections to date, and no ICPs have "inactive - new connection in progress" status.

Once the distributor has created a new ICP and moved it to "ready" status, Deep Energy will claim the ICP in the registry at "inactive – new connection in progress" status and nominate the MEP at the same time.

Other "inactive" statuses

No ICPs currently have disconnected status.

Deep Energy's disconnection process documentation includes a step for John Candy Consulting to be advised disconnection is complete and update the registry. The "Disconnection – Business Rules" are compliant with the requirements of the Code for disconnections.

There was one "inactive" status update to "inactive – ready for decommissioning" status from 2 December 2021 for ICP 0000183281UN447. The ICP was later decommissioned by the network from 2 December 2021. Review of disconnection paperwork confirmed that Deep Energy's "inactive" status event was correct.

Inactive consumption

MEPs continue to provide readings for "active vacant" and "inactive" ICPs. "Inactive" ICPs with consumption are identified through the NHH read validation process and John Candy Consulting's pre submission checks. If "inactive" consumption is found, the registry status records are corrected to

"active" for the affected period, and all consumption is submitted. If it is not possible to change the status to "active", permanent estimates will be applied to force the consumption into an "active" period.

ICP 0000183281UN447 was disconnected and then decommissioned. Review of raw meter data and submission information found that 1.772 kWh was recorded for trading periods 1-5 on 2 December 2021 but was omitted from submission because the ICP had "decommissioned" status on that day. There was zero I flow on 2 December 2021.

No NHH settled ICPs were disconnected or decommissioned during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.9 With: Clause 19 of schedule 11.1 From: 02-Dec-21 To: 02-Dec-21	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Potential impact: Low Actual impact: Low Audit history: None 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. The missing HHR submission for ICP 0000183281UN447 was caused by Vector updating the status on the day decommissioning physically occurred.

Actions taken to resolve the issue	Completion date	Remedial action status
Comments in section 2.1.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Comments in section 2.1.	completed	

3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)

Code reference

Clause 15 of schedule 11.1

Code related audit information

If an ICP has had the status of "new" or "ready" for 24 calendar months or more, the distributor must ask the trader whether it should continue to have that status and must decommission the ICP if the trader advises the ICP should not continue to have that status.

Audit observation

The new connection processes were examined, including review of the new connections process flowchart and "New Connections" procedure. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not initiated or completed any new connections to date, and no ICPs have "new", "ready" or "inactive - new connection in progress" status.

Once the distributor has created a new ICP and moved it to "ready" status, Deep Energy will claim the ICP in the registry at "inactive – new connection in progress" status.

Any requests from distributors on ICPs which have been at "new" or "ready" status for more than two years will be investigated and responded to when they are received.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 of schedule 11.3

Code related audit information

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

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

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

Audit observation

The switch gain process was examined to determine when Deep Energy deem all conditions to be met. All transfer switches were checked to determine compliance and the "creating new client" procedure document and "Switching – Business Rules" were reviewed.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements.

Customer applications are received by telephone or online, and the application details are entered into Deep Energy's Billing Suite. ICP information is prefilled from the registry and validated to ensure that the network, MEP, metering, profile, status and ANZSIC code are consistent with Deep Energy's requirements. Applications for ICPs with unmetered load, "inactive" ICPs, non-AMI meters, or ICPs with MEPs or networks Deep Energy does not have arrangements with are detected and declined.

Deep Energy's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are created using the registry web interface as soon as all pre-conditions are met. The withdrawal process is used if the customer changes their mind.

As part of the application process, the customer is asked to provide a copy of a recent invoice if they are transferring between retailers at an ICP, or confirmation of their ICP number and move in date if they are moving in. The "Switching – Business Rules" state that transfer switch type is applied where a customer has an existing relationship with another trader at the ICP.

Deep Energy is aware of the requirement to issue an NT within two business days of pre-conditions being cleared. The 12 transfer switch NTs were issued on time.

11 of the 12 transfer switch NTs had the correct switch type. A wrong switch type withdrawal was received from CTCT for ICP 0000231979UN4B7 in July 2024. Deep Energy issued an AW accepting the NW on time, and immediately reissued the NT with the correct switch type.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 2 of schedule 11.3 From: 07-Jul-24 To: 09-Jul-24	ICP 0000231979UN4B7's NT was issued with an incorrect switch type and was reissued with the correct switch type once a wrong switch withdrawal was completed. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating
Low	The controls are strong because the exception was isolated. The impact is low because the switch was withdrawn and re-requested with the correct switch type.

Actions taken to resolve the issue	Completion date	Remedial action status
DEEP issued an NT with the correct switch type on receiving NW from CTCT.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
The agent is aware of the issue, this was an isolated instance and should not occur again.	completed	

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

Code reference

Clauses 3 and 4 of schedule 11.3

Code related audit information

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

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

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

Audit observation

The process to send AN files was reviewed, including the "Switching – Business Rules" and all transfer switch AN files.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for AN files.

The timeliness of switching files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

Three transfer switches were completed. One had an AN and CS file issued, and the other two had CS files only. All of the files were issued on time, with compliant proposed event dates. The AN file response codes were correctly applied.

Audit outcome

Compliant

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

Code reference

Clause 5 of schedule 11.3

Code related audit information

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

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

Audit observation

The process to send CS files was reviewed, including the "Switching – Business Rules" and all transfer switch CS files.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for CS files.

The timeliness of switching files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

CS timeliness

All three transfer CS files were issued within five business days of the event date.

CS content

The content of the three CS files was checked and the following inaccuracies were identified:

- ICP 0008660592HB867 (CS event 12 July 2021) had a last actual read date of 12 July 2021, which is outside of Deep Energy's period of supply; 11 July 2021 was expected to be applied, and
- ICP 0000866060HB7F0 (CS event 12 July 2021) had an actual switch event read type recorded in the CS file, but the switch event reading was estimated; the average daily consumption was 17 kWh in the CS file but the average daily consumption between the previous two actual reads (29 and 30 June 2023) was 3.73 kWh.

All other CS content was confirmed to be accurate and compliant event dates were applied.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.3 With: Clause 5 of schedule 11.3 From: 12-Jul-21 To: 12-Jul-21	The CS file for 0008660592HB867 (CS event 12 July 2021) had an incorrect last actual read date. The CS file for ICP 0000866060HB7F0 (CS event 12 July 2021) had an incorrect switch event read type and incorrect average daily kWh. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are moderate as two manually produced CS files contained minor errors. The impact is low based on the number and type of discrepancies. Both errors occurred over two years ago.

Actions taken to resolve the issue	Completion date	Remedial action status
No correction could be made once the files were sent and accepted by the gaining retailer.	na	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
These issues were due to human error in the manual update process. The agent is fully aware of the requirements.	July 2021	

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

Code reference

Clause 6(1) and 6A of schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read change requests was reviewed, including the "Switching – Business Rules". All switching activity was checked, and incoming and outgoing switches were checked to confirm that the correct switch event reads were applied for submission.

Audit commentary.

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for RR and AC files. Agreed switch readings are imported into the RM tool from the registry.

The timeliness of AC files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

RR

No RR files were issued.

AC

No AC files were issued.

Incoming CS files

For all incoming transfer switches, the event read applied for submission was consistent with the CS reading.

Outgoing CS files

For all outgoing transfer switches, the event read applied for submission was consistent with the CS reading.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) of schedule 11.3

Code related audit information

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

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

Audit observation

The process for the management of read change requests was examined and the "Switching – Business Rules" were reviewed. All switching activity was checked.

Audit commentary

Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for RR files issued under clause 6(2) and (3) of schedule 11.3. No read renegotiations occurred.

Audit outcome

Compliant

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

Code reference

Clause 7 of schedule 11.3

Code related audit information

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

Audit observation

All switching activity was checked.

Audit commentary

No read renegotiations occurred.

Audit outcome

Compliant

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

Code reference

Clause 9 of schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

The switch gain process was examined to determine when Deep Energy deem all conditions to be met. All switch moves were checked to determine compliance and the "creating new client" procedure document and "Switching – Business Rules" were reviewed.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements.

Customer applications are received by telephone or online, and the application details are entered into Deep Energy's Billing Suite. ICP information is prefilled from the registry and validated to ensure that the network, MEP, metering, profile, status and ANZSIC code are consistent with Deep Energy's requirements. Applications for ICPs with unmetered load, "inactive" ICPs, non-AMI meters, or ICPs with MEPs or networks Deep Energy does not have arrangements with are detected and declined.

Deep Energy's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are created using the registry web interface as soon as all pre-conditions are met. The withdrawal process is used if the customer changes their mind.

As part of the application process, the customer is asked to provide a copy of a recent invoice if they are transferring between retailers at an ICP, or confirmation of their ICP number and move in date if they are moving in. Switch move is applied where the customer does not have an existing arrangement with another trader at the ICP.

Deep Energy is aware of the requirement to issue an NT within two business days of pre-conditions being cleared. One switch move NT was issued on time and with the correct switch type.

A transfer switch NT was originally issued for ICP 0000231979UN4B7 in July 2024 and then a wrong switch type withdrawal was received from CTCT. Deep Energy issued an AW accepting the NW on time, and immediately reissued the NT with the correct switch type. Non-compliance is recorded in **section 4.1** for the incorrect transfer switch NT.

Audit outcome

Compliant

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

Code reference

Clause 10(1) of schedule 11.3

Code related audit information

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

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

Audit observation

The process to send AN and CS files was reviewed, including the "Switching – Business Rules" and all switch move AN and CS files.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for AN and CS files.

The timeliness of switching files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

One switch move was completed, and AN and CS files were issued on time. The proposed event date and switch completion date were consistent with the gaining trader's requested date and compliant.

The content of the AN and CS files was accurate.

Audit outcome

Compliant

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

Code reference

Clause 10(2) of schedule 11.3

Code related audit information

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

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

Audit observation

All switch moves were checked to determine compliance with this clause.

Audit commentary

One switch move was completed. The proposed event date and switch completion date were consistent with the gaining trader's requested date and compliant.

Audit outcome

Compliant

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

Code reference

Clause 11 of schedule 11.3

Code related audit information

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

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

Audit observation

The process to send CS files was reviewed, including the "Switching – Business Rules" and all switch move CS files.

Audit commentary

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for CS files.

The timeliness of switching files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

One switch move CS file was issued. The CS content was confirmed to be accurate, and a compliant event date was applied.

Audit outcome

Compliant

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

Code reference

Clause 12 of schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read change requests was reviewed, including the "Switching – Business Rules". All switching activity was checked, and incoming and outgoing switches were checked to confirm that the correct switch event reads were applied for submission.

Audit commentary.

John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements. Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for RR and AC files. Agreed switch readings are imported into the RM tool from the registry.

The timeliness of AC files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

RR

No RR files were issued.

AC

No AC files were issued.

Incoming CS files

For the one incoming switch move, the event read applied for submission was consistent with the CS reading.

Outgoing CS files

For the one outgoing switch move, the event read applied for submission was consistent with the CS reading.

Audit outcome

Compliant

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

Code reference

Clause 14 of schedule 11.3

Code related audit information

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

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

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

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

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

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

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

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

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

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

Audit observation

All registry activity was reviewed.

Audit commentary

No ICPs with metering categories above two have been supplied, and no HH switches have occurred.

Audit outcome

Compliant

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

Code reference

Clause 15 of schedule 11.3

Code related audit information

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

> *15(a) - provide to the registry manager a valid switch response code as approved by the Authority; or*
>
> *15(b) - provide a request for withdrawal of the switch in accordance with clause 17.*

Audit observation

All registry activity was reviewed.

Audit commentary

No ICPs with metering categories above two have been supplied, and no HH switches have occurred.

Audit outcome

Compliant

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

Code reference

Clause 16 of schedule 11.3

Code related audit information

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

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

> *16(a)- give the losing trader or the MEP for the ICP an opportunity to interrogate the metering installation immediately before the ICP is electrically disconnected or the metering equipment is removed; or*
>
> *16(b)- carry out an interrogation and, no later than five business days after the metering installation is electrically disconnected or removed, advise the losing trader of the results and metering component numbers for each data channel in the metering installation.*

Audit observation

All registry activity was reviewed.

Audit commentary

No ICPs with metering categories above two have been supplied, and no HH switches have occurred.

Audit outcome

Compliant

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

Code reference

Clauses 17 and 18 of schedule 11.3

Code related audit information

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

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

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

Audit observation

The process to manage withdrawals was reviewed, including the "Switching – Business Rules". All NW and AW activity was reviewed.

Audit commentary

Deep Energy's "Switching – Business Rules" are aligned with the requirements of the Code for NW and AW files. John Candy Consulting creates all switching files as Deep Energy's agent; and is experienced and aware of switching file content and timeliness requirements.

The timeliness of switching files due will be monitored by John Candy Consulting using a weekly switch breach history report. The frequency of monitoring will increase if switching activity increases.

NW

Two withdrawals were issued by Deep Energy, and they were on time with the correct withdrawal advisory code applied.

AW

A wrong switch withdrawal was received from CTCT for ICP 0000231979UN4B7 in July 2024. Deep Energy issued an AW accepting the NW on time and immediately reissued the NT with the correct switch type.

Audit outcome

Compliant

4.16. Metering information (Clause 21 Schedule 11.3)

Code reference

Clause 21 of schedule 11.3

Code related audit information

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

> *21(a)- the trader who carries out the interrogation, switch event meter reading must ensure that the interrogation is as accurate as possible, or that the switch event meter reading is fair and reasonable.*
>
> *21(b) and (c) - the cost of every interrogation or switch event meter reading carried out in accordance with clauses 5(b) or 11(b) or (c) must be met by the losing trader. The costs in every other case must be met by the gaining trader.*

Audit observation

The meter reading process in relation to meter reads for switching purposes was examined.

Audit commentary

The reads applied in switching files were examined in **section 4** and confirmed to be accurate, and all switch event readings were accurately recorded in the RM Tool and applied for submission.

Deep Energy's policy regarding the management of meter reading expenses is compliant.

Customers are only charged for meter readings if they request a special meter reading.

Audit outcome

Compliant

4.17. Switch protection (Clause 11.15AA to 11.15AB)

Code reference

Clause 11.15AA to 11.15AC

Code related audit information

A losing retailer (including any party acting on behalf of the retailer) must not initiate contact to save or win back any customer who is switching away or has switched away for 180 days from the date of the switch.

The losing retailer may contact the customer for certain administrative reasons and may make a counteroffer only if the customer initiated contacted with the losing retailer and invited the losing retailer to make a counteroffer.

The losing retailer must not use the customer contact details to enable any other retailer (other than the gaining retailer) to contact the customer.

Audit observation

Win-back processes were checked. NW activity was checked to identify all withdrawn switches with a CX code where Deep Energy was the losing trader.

Audit commentary

Deep Energy does not complete win-backs, and customers are not contacted when an NT is received.

No NWs were issued where Deep Energy was the losing trader.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

> *11.14(2) - The distributor must give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.*
>
> *11.14(3) - A trader who receives such a notification from a distributor must give written notice to the distributor if it wishes to add or omit any ICP from the ICPs across which unmetered load is to be shared.*
>
> *11.14(4) - A distributor who receives such a notification of changes from the trader under (3) must give written notice to the registry manager and each trader responsible for any of the ICPs across which the unmetered load is shared.*
>
> *11.14(5) - If a distributor becomes aware of any change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must give written notice to all traders affected by that change as soon as practicable after that change or decommissioning.*
>
> *11.14(6) - Each trader who receives such a notification must, as soon as practicable after receiving the notification, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP.*
>
> *11.14(7) - A trader must take responsibility for shared unmetered load assigned to an ICP for which the trader becomes responsible as a result of a switch in accordance with Part 11.*
>
> *11.14(8) - A trader must not relinquish responsibility for shared unmetered load assigned to an ICP if there would then be no ICPs left across which that load could be shared.*
>
> *11.14(9) - A trader can change the status of an ICP across which the unmetered load is shared to inactive status, as referred to in clause 19 of schedule 11.1. In that case, the trader is not required to give written notice to the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.*

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not supplied any ICPs with unmetered load. Processes to monitor ICPs for additions and changes to unmetered load details are discussed in **section 3.7**.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not supplied any ICPs with unmetered load. Processes to monitor ICPs for additions and changes to unmetered load details are discussed in **section 3.7**.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not supplied any ICPs with unmetered load. Processes to monitor ICPs for additions and changes to unmetered load details are discussed in **section 3.7**.

Audit outcome

Compliant

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

Code reference

Clause 11 of schedule 15.3, clause 15.37B

Code related audit information

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

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

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

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry.

Audit commentary

Deep Energy has not supplied any ICPs with unmetered load. Processes to monitor ICPs for additions and changes to unmetered load details are discussed in **section 3.7**.

Audit outcome

Compliant

6. GATHERING RAW METER DATA

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

Code reference

Clauses 10.13, 10.24 and 15.13

Code related audit information

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

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

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

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

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

Audit observation

Processes to ensure metering is installed and unmetered load is quantified were examined. All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Metering installations installed

All "active" ICPs have an MEP recorded, at least one meter register and no unmetered load connected. No ICPs have submission information determined by subtraction.

Deep Energy's new connection process includes a check that metering is installed before electrical connection occurs. No new connections have been completed.

Distributed generation

As part of the application process, ICPs are checked on the registry to determine whether distributed generation is connected, so that they can ensure that I flow metering is present and the correct profiles are applied.

Registry validation is completed weekly by John Candy Consulting, including checks of network data changes such as additions and changes to distributed generation details. Any issues found are discussed and resolved with Deep Energy.

ICP 0000183281UN447 had distributed generation added by the distributor on 25 April 2021. I flow metering was already present and the ICP began to export energy on 16 July 2021. Deep Energy changed the ICP's profile and submission type to HHR effective from 1 July 2021 and reported HHR X and I flow volumes from July 2021 onwards.

No other ICPs have distributed generation recorded by the trader or distributor.

Bridged meters

No bridged meters were identified during the audit period. All ICPs with" active" status have volumes recorded.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

The participant responsible for the metering installation must:

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

Audit observation

The NSP table was reviewed.

Audit commentary

Review of the NSP table confirmed that Deep Energy is not responsible for any GIPs.

Audit outcome

Compliant

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

Code reference

Clause 33 of schedule 10.7 and clause 2(2) of schedule 15.3

Code related audit information

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

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

Audit observation

All ICPs supplied by Deep Energy since 3 March 2020 were checked on the registry to determine compliance.

Audit commentary

Deep Energy has only used the RPS and HHR profiles, and control devices are not used for reconciliation purposes.

Audit outcome

Compliant

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

Processes relating to defective metering were examined. No examples of defective meters were identified during the audit period.

Audit commentary

Defective meters are typically identified through the meter reading validation process, or from information provided by the meter read provider.

Upon identifying a possible defective meter, Deep Energy will raise a field services job for the MEP to investigate. No defective meters were identified during the audit period, so it was not possible to review examples of this process.

Audit outcome

Compliant

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

Code reference

Clause 2 of schedule 15.2

Code related audit information

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

> *2(2) - The reconciliation participant must collect raw meter data used to determine volume information from the services interface or the metering installation or from the MEP.*
>
> *2(3) - The reconciliation participant must ensure the interrogation cycle is such that is does not exceed the maximum interrogation cycle in the registry .*

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

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

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

2(6) – The interrogation systems must record:

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

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843, which is read manually by Deep Energy's director and validated by his agent.

Collection of data and clock synchronisation was reviewed as part of the MEP audits, and a sample of clock synchronisation events received by Deep were reviewed.

Audit commentary

All information used to determine volume information is collected from the services interface or the metering installation by the MEP. Fulfilment of the interrogation systems requirements, and clock synchronisation was examined as part of the MEP audits.

I requested information on time differences received during July 2024, and John Candy Consulting confirmed that no time differences requiring action occurred.

Audit outcome

Compliant

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

Code reference

Clauses 3(1), 3(2) and 5 of schedule 15.2

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

- *a) obtain the meter register,*

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

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

Audit observation

The data collection process was examined.

Audit commentary

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843 which was supplied from 22 December 2020 to 11 July 2021. At least monthly, the Director of Deep Energy checked the condition of the meter and sent a reading and/or photo to John Candy Consulting so that the reading could be used for reconciliation. I spot checked a sample of these readings and confirmed that they were correctly applied for submission.

Deep Energy does not intend to accept customer readings, but if they are required in the future they will be validated against a set of actual readings from another source if they are to be used for reconciliation.

Audit outcome

Compliant

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

Code reference

Clause 6 of schedule 15.2

Code related audit information

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

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

Audit observation

The process of the application of meter readings was examined. The process to determine switch event reads was reviewed, including the "Switching – Business Rules" and all CS files. All switch event readings and profile changes were checked.

Audit commentary

NHH readings apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation except in the case of a switch event meter reading which applies to the end of the day prior to the event date for the losing trader and the start of the event date for the gaining trader as required by this clause.

All AMI systems have a clock synchronisation function, which ensures correct timestamping. Manual readings taken by Deep Energy's director are applied correctly.

NHH reading application

Application of reads was reviewed as part of the historic estimate checks in **section 12.11** and found to be compliant.

Switching file content

The content of CS and RR files was examined in **sections 4** and the event reading values were confirmed to be correct in both the switching files and RM Tool. The "Switching – Business Rules" document specifies the correct date and time logic for event reads for incoming and outgoing switches.

Upgrades and downgrades

ICP 0000183281UN447 had its profile and submission type upgraded from NHH-RPS to HHR-HHR effective from 1 July 2021. The ICP had actual AMI data before and after the change, and the change was made effective from midnight. ICP days and submission information were correctly reported.

Audit outcome

Compliant

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

Code reference

Clause 7(1) and (2) of schedule 15.2

Code related audit information

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

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

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

Audit observation

The process to manage missed reads was reviewed. Read and submission data was reviewed to confirm that all ICPs had at least one actual reading during their period of supply.

Audit commentary

A validated meter reading must be obtained in respect of every meter register for every non-half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

The NHH meter reading frequency guidelines published by the Electricity Authority define "exceptional circumstances" as meaning "circumstances in which access to the relevant meter is not achieved despite the reconciliation participant's best endeavours". "Best endeavours" is defined as:

"Where a reconciliation participant failed to interrogate an ICP as a result of access issues, the reconciliation participant had made a minimum of three attempts to contact the customer, by using at least two methods of communication".

John Candy Consulting creates meter reading frequency reports each month and provides a copy of the report to Deep Energy, so that they can manage missing reads by following up with the customer and/or MEP. The MEP also advises Deep Energy if a meter cannot be read. Where Deep Energy contacts a customer or MEP to resolve meter reading issues they keep records.

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843 which was supplied from 22 December 2020 to 11 July 2021. Review of reading and submission information confirmed that all ICPs had at least one actual reading during the period of supply.

Audit outcome

Compliant

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

Code reference

Clause 8(1) and (2) of schedule 15.2

Code related audit information

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

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

Audit observation

John Candy Consulting creates meter reading frequency reports each month and provides a copy of the report to Deep Energy, so that they can manage missing reads by following up with the customer and/or MEP. A sample of the reports were reviewed to determine compliance.

Audit commentary

The meter reading frequency reports generated by John Candy consulting were consistent with the requirements of this clause, and no alleged breaches were recorded for late provision of meter read frequency information.

Review of the reports for March 2020 to August 2023 confirmed that all ICPs were interrogated at least annually. As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment.

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Mar-20	-	-	-	-
Apr-20	-	-	-	-
May-20	-	-	-	-
Jun-20	-	-	-	-
Jul-20	-	-	-	-
Aug-20	-	-	-	-
Sep-20	-	-	-	-
Oct-20	-	-	-	-

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Nov-20	-	-	-	-
Dec-20	-	-	-	-
Jan-21	-	-	-	-
Feb-21	-	-	-	-
Mar-21	1	-	-	100.000%
Apr-21	1	-	-	100.000%
May-21	1	-	-	100.000%
Jun-21	1	-	-	100.000%
Jul-21	1	-	-	100.000%
Aug-21	1	-	-	100.000%
Sep-21	1	-	-	100.000%
Oct-21	1	-	-	100.000%
Nov-21	1	-	-	100.000%
Dec-21	1	-	-	100.000%
Jan-22	1	-	-	100.000%
Feb-22	1	-	-	100.000%
Mar-22	1	-	-	100.000%
Apr-22	-	-	-	-
May-22	-	-	-	-
Jun-22	-	-	-	-
Jul-22	-	-	-	-
Aug-22	-	-	-	-
Sep-22	1	-	-	100.000%
Oct-22	1	-	-	100.000%
Nov-22	1	-	-	100.000%
Dec-22	1	-	-	100.000%

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Jan-23	1	-	-	100.000%
Feb-23	1	-	-	100.000%
Mar-23	1	-	-	100.000%
Apr-23	1	-	-	100.000%
May-23	1	-	-	100.000%
Jun-23	1	-	-	100.000%
Jul-23	1	-	-	100.000%
Aug-23	1	-	-	100.000%
Sep-23	-	-	-	-
Oct-23	-	-	-	-
Nov-23	-	-	-	-
Dec-23	-	-	-	-
Jan-24	-	-	-	-
Feb-24	-	-	-	-
Mar-24	-	-	-	-
Apr-24	-	-	-	-

No reports have been required since ICPs began to switch back in during July 2024 as no ICPs have been continuously supplied for at least 12 months.

Audit outcome

Compliant

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

Code reference

Clause 9(1) and (2) of schedule 15.2

Code related audit information

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

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

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

Audit observation

John Candy Consulting creates meter reading frequency reports each month and provides a copy of the report to Deep Energy, so that they can manage missing reads by following up with the customer and/or MEP. A sample of the reports were reviewed to determine compliance.

Audit commentary

The meter reading frequency reports generated by John Candy consulting were consistent with the requirements of this clause, and no alleged breaches were recorded for late provision of meter read frequency information.

Review of the reports for March 2020 to August 2023 confirmed that all ICPs were interrogated at least every four months. As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	ICPs unread for 4 months	Overall percentage read
Mar-20	-	-	-	-
Apr-20	-	-	-	-
May-20	-	-	-	-
Jun-20	-	-	-	-
Jul-20	-	-	-	-
Aug-20	-	-	-	-
Sep-20	-	-	-	-
Oct-20	-	-	-	-
Nov-20	-	-	-	-
Dec-20	-	-	-	-
Jan-21	-	-	-	-
Feb-21	-	-	-	-
Mar-21	1	-	-	100.000%
Apr-21	2	-	-	100.000%
May-21	2	-	-	100.000%
Jun-21	2	-	-	100.000%

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	ICPs unread for 4 months	Overall percentage read
Jul-21	2	-	-	100.000%
Aug-21	2	-	-	100.000%
Sep-21	2	-	-	100.000%
Oct-21	2	-	-	100.000%
Nov-21	1	-	-	100.000%
Dec-21	1	-	-	100.000%
Jan-22	1	-	-	100.000%
Feb-22	1	-	-	100.000%
Mar-22	1	-	-	100.000%
Apr-22	-	-	-	-
May-22	-	-	-	-
Jun-22	-	-	-	-
Jul-22	-	-	-	-
Aug-22	-	-	-	-
Sep-22	1	-	-	100.000%
Oct-22	1	-	-	100.000%
Nov-22	1	-	-	100.000%
Dec-22	1	-	-	100.000%
Jan-23	1	-	-	100.000%
Feb-23	1	-	-	100.000%
Mar-23	1	-	-	100.000%
Apr-23	1	-	-	100.000%
Jun-23	1	-	-	100.000%
Jul-23	1	-	-	100.000%
Aug-23	1	-	-	100.000%

No reports have been required since ICPs began to switch back in during July 2024 as no ICPs have been continuously supplied for at least four months.

Audit outcome

Compliant

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

Code reference

Clause 10 of schedule 15.2

Code related audit information

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

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

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

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

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

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843 which was supplied from 22 December 2020 to 11 July 2021 and was read by Deep Energy's director.

Audit commentary

No ICPs have NHH meter interrogation logs.

Audit outcome

Compliant

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

Code reference

Clause 11(1) of schedule 15.2

Code related audit information

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

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

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843. Data collection was reviewed as part of the MEP audits.

Audit commentary

HHR data is collected by the MEP, and their processes were reviewed as part of their MEP audits.

Audit outcome

Compliant

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

Code reference

Clause 11(2) of schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843. Interrogation was reviewed as part of the MEP audits.

Audit commentary

HHR data is collected by the MEP, and their processes were reviewed as part of their MEP audits.

Audit outcome

Compliant

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

Code reference

Clause 11(3) of schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843. Interrogation logs were reviewed as part of the MEP audits.

Audit commentary

HHR data is collected by the MEP, and their processes were reviewed as part of their MEP audits.

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 of schedule 15.2

Code related audit information

The trading period duration, normally 30 minutes, must be within ±0.1% (±2 seconds).

Audit observation

All ICPs have HHR or AMI metering with readings provided by the MEP apart from 0008660601HB843. Trading period duration was reviewed as part of the MEP audits.

Audit commentary

Trading period duration is the responsibility of the MEP, and their processes were reviewed as part of their MEP audits.

Audit outcome

Compliant

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

Code reference

Clause 18 of schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes to archive and store raw meter data were reviewed. Audit trails were reviewed in **section 2.4**.

Audit commentary

All raw reading files will be retained by John Candy Consulting for the foreseeable future, and I confirmed that data is retained for at least 48 months.

Review of audit trails in **section 2.4** confirmed that reads cannot be modified without an audit trail being created. Access to modify readings is restricted through log on privileges.

Audit outcome

Compliant

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

Code reference

Clause 21(5) of schedule 15.2

Code related audit information

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

Audit observation

Deep Energy does not deal with any non-metering information.

Audit commentary

Deep Energy does not deal with any non-metering information.

Audit outcome

Compliant

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

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

Code reference

Clause 19(1) of schedule 15.2

Code related audit information

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

> *19(1)(a) - confirm the original meter reading by carrying out another meter reading,*
>
> *19(1)(b) - replace the original meter reading the second meter reading (even if the second meter reading is at a different date),*
>
> *19(1A) if a reconciliation participant detects errors while validating non half hour meter readings, but the reconciliation participant cannot confirm the original meter reading or replace it with a meter reading from another interrogation, the reconciliation participant must:*
>
> - *substitute the original meter reading with an estimated reading that is marked as an estimate; and*
> - *subsequently replace the estimated reading in accordance with clause 4(2).*

Audit observation

Processes for the correction of NHH meter readings were reviewed, and correction processes are discussed in **section 2.1**.

Audit commentary

Read files are sent directly to John Candy Consulting by the MEPs and agents and switch event readings are obtained directly from the registry by John Candy Consulting.

Where errors are detected in the validation process discussed in **section 9.5**, John Candy Consulting consults with Deep Energy to determine whether the reading is inaccurate and should be excluded from reconciliation. If Deep Energy finds a reading is incorrect through their own billing validation process or information received from the customer, John Candy Consulting is advised.

NHH corrections are processed by John Candy Consulting as Deep Energy's agent, and the processes discussed in **section 2.1** achieve compliance.

Audit outcome

Compliant

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

Code reference

Clause 19(2) of schedule 15.2

Code related audit information

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

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

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

(i) The total of all substituted intervals matches the total consumption recorded on a meter, if available; and

(ii) The reconciliation participant considers the pattern of consumption to be materially similar to the period in error.

Audit observation

ICP 0000183281UN447 was HHR settled from 1 July 2021 until it was decommissioned on 2 December 2021. Processes for the correction of HHR meter readings were reviewed.

Audit commentary

Where errors are detected in the validation process discussed in **section 9.5**, John Candy Consulting consults with Deep Energy to determine whether the reading is inaccurate and should be excluded from reconciliation. If Deep Energy finds a reading is incorrect through their own billing validation process or information received from the customer, John Candy Consulting is advised.

HHR corrections are processed by John Candy Consulting as Deep Energy's agent. Corrections are created based on the best information available. Where readings are available, they are used in conjunction with a profile to back fill missing data, and where readings are unavailable an estimate is created based on historic information.

The estimates are created in an Excel tool then imported into the RM tool and labelled as "E" for estimated. The RM tool contains a record of file name, date, and time. Estimates are recorded at trading period level not daily level.

No HHR corrections were processed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 19(3) of schedule 15.2

Code related audit information

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

Audit observation

The physical meter location point is not specifically mentioned in Deep Energy's terms and conditions for electricity supply, but the existing practices in the electrical industry achieve compliance.

Audit commentary

Deep Energy only supplies ICPs with metering category 1 or 2 and compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 19(4) and (5) of schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Corrections are discussed in **sections 2.1**, **8.1** and **8.2**, which confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data retention for the MEPs and agents was reviewed as part of their own audits.

Audit commentary

Raw meter data is held by the MEPs and compliance was confirmed as part of their MEP audits.

John Candy Consulting only corrects working data and keeps an appropriate audit trail.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

Code reference

Clause 3(3) of schedule 15.2

Code related audit information

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

Audit observation

A sample of reads and volumes were traced from the source files to the RM Tool submission data in **section 2.3**. Provision of estimated reads to other participants during switching was reviewed in **section 4**.

Audit commentary

Estimates readings are identified as required by this clause.

The readings reviewed during this audit were correctly classified apart from ICP 0000866060HB7F0 (CS event 12 July 2021) which had an actual switch event read type recorded in the CS file, but the switch event reading was estimated.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 9.1 With: Clause 3(3) of schedule 15.2 From: 12-Jul-21 To: 12-Jul-21	ICP 0000866060HB7F0 (CS event 12 July 2021) had an actual switch event read type recorded in the CS file, but the switch event reading was estimated. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are strong, the incorrect reading appears to be a manual data processing error. The impact is assessed to be low because the reading was a reasonable estimate, and no actual reading was available.

Actions taken to resolve the issue	Completion date	Remedial action status
Same comments as section 4.3. This issue was due to human error when manually processing the switch.	July 21	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
This has been discussed with our agent and more care will be taken in future with manual input.	completed	

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

Code reference

Clause 3(4) of schedule 15.2

Code related audit information

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

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

3(4)(b) - estimated readings,

3(4)(c) - permanent estimates.

Audit observation

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

Audit commentary

Review of submission data confirmed that it is based on readings as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 3(5) of schedule 15.2

Code related audit information

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

Audit observation

A sample of submission data was reviewed in **sections 11** and **12**, to confirm that volume was based on readings as required. I traced a sample of raw data from the MEPs and agents to the RM tool submission data in **section 2.3**.

Audit commentary

The MEP or agent retains raw, unrounded data. Compliance was demonstrated by the MEPs during their own audits.

Data provided by the MEPs and agents is not rounded or truncated until the point of submission. Submission data is rounded to two decimal places.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 of schedule 15.2

Code related audit information

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

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

Audit observation

ICP 0000183281UN447 was HHR settled from 1 July 2021 until it was decommissioned on 2 December 2021. Processes for the estimation of HHR meter readings were reviewed.

Audit commentary

Estimates are created based on the best information available by John Candy Consulting. Where readings are available, they are used in conjunction with a profile to back fill missing data, and where readings are unavailable an estimate is created based on historic information.

Estimates are created in an Excel tool then imported into the RM tool and labelled as estimated at trading period level. The RM tool contains a record of file name, date, and time. Estimates are recorded at trading period level not daily level.

Three estimates were provided by John Candy Consulting. The estimates were calculated using readings and profiles, and the reasonable endeavours requirements were met.

Audit outcome

Compliant

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

Code reference

Clause 16 of schedule 15.2

Code related audit information

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

> *16(2)(a) - confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register,*
>
> *16(2)(b) - checks for invalid dates and times,*
>
> *16(2)(c) - confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern, or trend,*
>
> *16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected zero values.*

Audit observation

I conducted a walkthrough of the validation processes. The John Candy Consulting RM Submission Process documentation was reviewed.

Audit commentary

The read validation process was reviewed.

Confirmation that the meter reading relates to the correct ICP meter register and has a valid date and time (a and b)

Confirmation that the meter reading relates to the correct ICP meter register and has a valid date and time is conducted by John Candy Consulting when data is loaded into the RM tool. Loading cannot occur unless there is an ICP, meter, register and date match. The RM tool also identifies missing start and end reads.

Confirmation that the reading lies within an acceptable range and confirmation data is not corrupted (c and d)

Deep Energy completes a review of consumption against expected patterns as part of their invoicing process. If any errors or discrepancies are found, Deep Energy will advise John Candy Consulting.

The RM Tool identifies inactive, excessive, negative, and zero consumption examples which are reported to Deep Energy. I checked the March 2020 to July 2024 submission summaries. No ICPs had negative or inactive consumption.

Audit outcome

Compliant

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

Code reference

Clause 17 of schedule 15.2

Code related audit information

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

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

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

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

17(4)(c) - checks of unexpected zero values,

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

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

17(4)(f) - a review of the meter and data storage device event log for any event that could have affected the integrity of metering data,

17(4)(g) – a review of the relevant metering data where there is an event that could have affected the integrity of the metering data.

If there is an event that could affect the integrity of the metering data (including events reported by MEPs, but excluding where the MEP is responsible for investigating and remediating the event) the reconciliation must investigate and remediate any events.

If the event may affect the integrity or operation of the metering installation the reconciliation participant must notify the metering equipment provider.

Audit observation

John Candy Consulting validates HHR data as an agent.

ICP 0000183281UN447 was settled as HHR from 1 July 2021 until it was decommissioned on 2 December 2021. I reviewed John Candy Consulting's HHR validation processes, including meter event logs and validation checks.

Apart from 0008660601HB843 which was read manually, the NHH settled ICPs had AMI meter data available including meter and clock synchronisation events.

Audit commentary

HHR volume validation

John Candy Consulting checks for missing data, invalid dates and times, unexpected zeros, and register readings are compared to the sum of intervals for HHR data.

Deep Energy completes a review of consumption against expected patterns as part of their invoicing process. If any errors or discrepancies are found, Deep Energy will advise John Candy Consulting.

Meter events

Meter event log files are received via SFTP from AMI MEPs however these are not actively reviewed by John Candy Consulting. Where a consumption volume exception is detected by John Candy Consulting, all meter reads and meter event log details for the ICP are retrieved and reviewed to determine if the exception is genuine and requires escalation to Deep Energy and the MEP for further investigation. While the volume exception reporting currently in place is robust there is still a risk that a meter accuracy issue may be intermittent and not easily identified via consumption volume exception reporting.

Description	Recommendation	Audited party comment	Remedial action
Review of meter events which could affect meter accuracy	To achieve compliance, the meter event reports should be periodically checked for events which could affect accuracy, and these events should be followed up with the MEP. The MEPs can provide guidance on the event types that they report on, and what action they believe is appropriate - given the number of ICPs, a monthly check of the event data provided should be sufficient.	DEEP will take this recommendation into consideration.	Investigating

Compliance is recorded because no meter events requiring action were identified during this audit.

Audit outcome

Compliant

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

Deep Energy may consider establishing a solar farm in the future. They are aware that a material change audit will be required before this occurs.

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Deep Energy is not responsible for any NSPs. No information is provided to the grid owner in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.137

Code related audit information

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Deep Energy is not responsible for any NSPs. No information is provided to the grid owner in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.138

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Deep Energy is not responsible for any NSPs. No information is provided to the grid owner in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.140

Code related audit information

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Deep Energy is not responsible for any NSPs. No information is provided to the grid owner in accordance with this clause.

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

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

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

Audit observation

The registry list file and registry information were reviewed to identify the profiles used during the audit period.

Audit commentary

Deep Energy used the RPS and HHR profiles during the audit period. Trading notifications were not required.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

> *15.6(1)(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period,*
>
> *15.6(1)(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

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

Audit observation

ICP days files are prepared, validated and submitted by John Candy Consulting.

I checked the process for the calculation of ICP days submissions by reviewing all ICP days submissions for periods from March 2020 until July 2024, and the GR100 ICP days comparison files from March 2020 to August 2023.

Audit commentary

The Authority did not record any alleged breaches for late submission information.

John Candy Consulting produces the AV110 submissions using the RM Tool. Aggregation factors are determined from registry information. I checked all submissions and confirmed that the HHR and NHH ICP days were reported correctly. Deep Energy validates AV110 submissions against their records to confirm ICP days are reported as expected.

The following table shows the ICP days difference between Deep Energy's database and the RM return file (GR100) for March 2020 to August 2023. There was one difference for the November 2020 initial submission where the GR100 incorrectly reported zero NHH ICP days at SVL0331. Deep Energy's AV110 submission file was correct.

Month	Initial	R1	R2	R7	R8	R14
Mar-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Apr-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
May-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jun-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jul-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Aug-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Sep-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Oct-2020	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nov-2020	100.00%	0.00%	0.00%	0.00%	-	0.00%
Dec-2020	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jan-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Feb-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Mar-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Apr-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
May-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jun-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jul-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Aug-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Sep-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Oct-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Nov-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%
Dec-2021	0.00%	0.00%	0.00%	0.00%	-	0.00%

Month	Initial	R1	R2	R7	R8	R14
Jan-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Feb-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Mar-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Apr-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
May-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jun-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Jul-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Aug-2022	0.00%	0.00%	0.00%	0.00%	-	0.00%
Sep-2022	0.00%	0.00%	0.00%	0.00%	-	-
Oct-2022	0.00%	0.00%	0.00%	0.00%	-	-
Nov-2022	0.00%	0.00%	0.00%	0.00%	-	-
Dec-2022	0.00%	0.00%	0.00%	0.00%	-	-
Jan-2023	0.00%	0.00%	0.00%	0.00%	-	-
Feb-2023	0.00%	0.00%	0.00%	0.00%	-	-
Mar-2023	0.00%	0.00%	0.00%	0.00%	-	-
Apr-2023	0.00%	0.00%	0.00%	-	-	-
May-2023	0.00%	0.00%	0.00%	-	-	-
Jun-2023	0.00%	0.00%	0.00%	-	-	-
Jul-2023	0.00%	0.00%	0.00%	-	-	-
Aug-2023	0.00%	0.00%	-	-	-	-

Audit outcome

Compliant

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

Code reference

Clause 15.7

Code related audit information

A retailer must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each NSP, aggregated by invoice month, for which it has provided submission information to the

reconciliation manager, including revised submission information for that period as non- loss adjusted values in respect of:

> *15.7(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period,*
>
> *15.7(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

Audit observation

Electricity supplied submissions are completed by John Candy Consulting as an agent. The process for the calculation of "as billed" volumes was examined by checking a sample of AV120 data against invoice data, and reviewing GR130 reports to evaluate differences between billed and submission data.

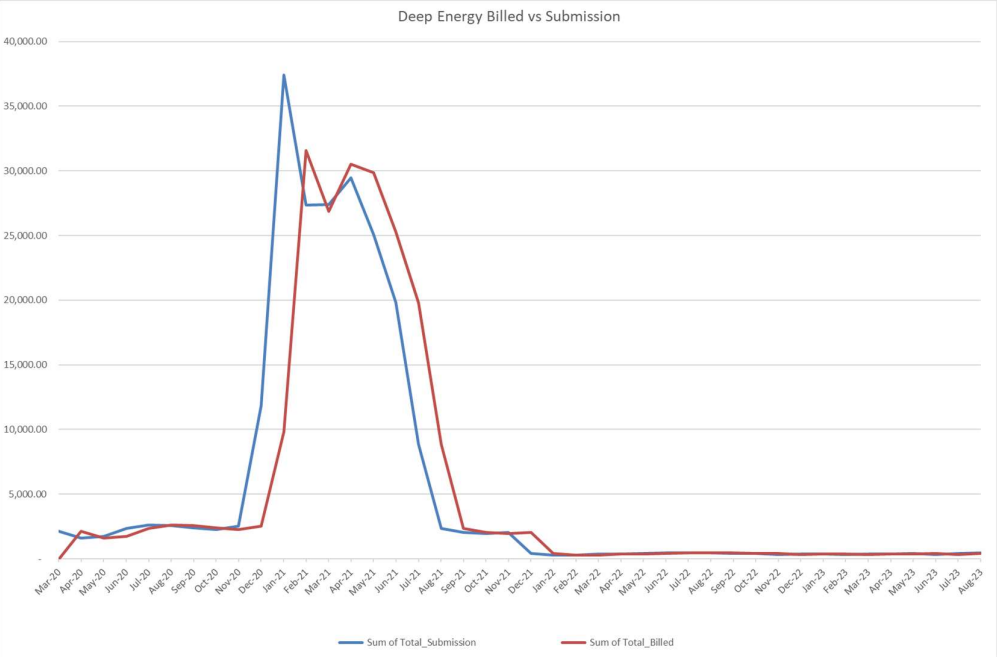
Alleged breaches were reviewed to determine whether any submissions were made late.

Audit commentary

John Candy Consulting provides a monthly file of proposed billed volumes to Deep Energy. Deep Energy validates the proposed bill volumes against the ICP's meter history and MEP meter data and then generates invoices. Deep Energy provides a file of the final billed volumes to John Candy Consulting, who uses the data to produce the AV120 submissions. Deep Energy validates the AV120 information against their invoiced volumes to confirm that both are accurate.

I checked the AV120 submission for July 2024 and confirmed that it was correct because no invoices were issued. The AV120 submissions for June 2023 to August 2023 were checked with Deep Energy and confirmed to be correct.

I also checked the difference between submission and electricity supplied from March 2020 onwards, and the results are shown in the chart below. Across the whole period of supply here is a 2.3% difference with submission data higher than billed. For the year ending August 2023 submitted data was 0.2% higher than the billed data. The relationship between billed and submitted data appears reasonable.



The Authority did not record any alleged breaches for late submission information.

Audit outcome

Compliant

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

Code reference

Clause 15.8

Code related audit information

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

> *15.8(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period,*
>
> *15.8(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

Audit observation

HHR volumes and aggregates files are prepared, validated and submitted by John Candy Consulting.

ICP 0000183281UN447 was HHR settled from 1 July 2021 until it was decommissioned on 2 December 2021. I confirmed the process for the calculation and aggregation of HHR data for July 2021 to December 2021 by matching submission files to raw data from FCLM and estimates prepared by John Candy Consulting, and registry information.

Audit commentary

John Candy Consulting prepares submission information using the RM tool, and aggregation factors are determined from the registry. Prior to submission data is validated against previous submissions to determine whether it appears reasonable, and any exceptions are discussed with Deep Energy. Deep Energy also validates the submission information against their volume records to confirm that both are accurate.

The raw meter data and estimates were consistent with the submission data except 1.772 kWh of X flow which was omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status.

The ICP aggregation factors were correctly recorded in the report, and no ICPs were incorrectly included or excluded in the reports reviewed.

The HHR aggregates submissions were consistent with the HHR volumes with small rounding differences of up to ±0.14 kWh when compared at submission and flow direction level.

The Authority did not record any alleged breaches for late submission information.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 11.4 With: Clause 15.8	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status.

From: 02-Dec-21 To: 02-Dec-21	Potential impact: Low Actual impact: Low Audit history: None 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. The missing HHR submission for ICP 0000183281UN447 was caused by Vector updating the status on the day decommissioning physically occurred. The October 2021 revision 14 error was resolved as soon as Deep Energy was made aware of it, and there was no market impact.

Actions taken to resolve the issue	Completion date	Remedial action status
Comments in section 2.1.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Comments in section 2.1.	completed	

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

Daylight savings processes for MEPs and agents were reviewed as part of their audits.

Audit commentary

Compliance has been demonstrated by the MEPs as part of their MEP audits.

ICP 0000183281UN447 was HHR settled from 1 July 2021 until it was decommissioned on 2 December 2021. I checked HHR data for the commencement of daylight savings in September 2021 and confirmed that the correct number of trading periods were included in the submission data.

Audit outcome

Compliant

12.2. Creation of submission information (Clause 15.4)

Code reference

Clause 15.4

Code related audit information

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

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

Audit observation

NHH submission information is created and validated by John Candy Consulting as an agent, using the RM Tool. Submission data generation processes were checked, and submission data was checked for completeness and accuracy.

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late.

Audit commentary

The Authority did not record any alleged breaches for late submission information.

John Candy Consulting prepares submission information using the RM tool, and aggregation factors are determined from the registry.

NHH submission

NHH submission processes were found to be compliant.

To confirm the completeness and accuracy of submission information I:

- traced a sample of readings used to calculate volumes from raw MEP files, emails of readings taken by the director of Deep Energy and switch event files to the submission calculations, which confirmed they were correctly applied,
- checked ICPs included in the AV080, profiles and aggregation factors for a sample of submissions which confirmed they were correct,
- checked the historic and forward estimate processes are operating as expected, including testing all scenarios available, and
- confirmed that no unmetered load, vacant consumption, inactive consumption or distributed generation was present for NHH settled ICPs.

HHR submission

HHR submission processes were found to be compliant.

To confirm the completeness and accuracy of submission information I:

- confirmed that the raw meter data and estimates were consistent with the submission data except for 0000183281UN447 X flow on 2 December 2021 where 1.772 kWh was recorded for trading periods 1-5 on 2 December 2021 but was omitted from submission because the ICP had "decommissioned" status on that day (there was zero I flow on 2 December 2021),
- checked that the ICP aggregation factors were correctly recorded in the report, and no ICPs were incorrectly included or excluded in the reports reviewed, and
- checked that all HHR aggregates submissions were consistent with the HHR volumes with small rounding differences of up to ±0.14 kWh when compared at submission and flow direction level.

Delivery of submission data for all ICPs that Deep Energy is responsible for

Submission information was found to be complete and accurate except:

- 1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status, and
- alleged breach 2001DEEP1 was recorded because incorrect AV090 HHR volumes submission information was provided for October 2021 revision 14:
    - the error was accidental,
    - corrected submission data was provided as soon as Deep Energy was alerted,
    - there was no market impact, and
    - the breach was closed by the Authority without a warning.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 12.2 With: Clause 15.4	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was closed by the Authority without a warning. Potential impact: Low

From: 02-Dec-21 To: 09-Jan-23	Actual impact: Low Audit history: None 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. The missing HHR submission for ICP 0000183281UN447 was caused by Vector updating the status on the day decommissioning physically occurred. The October 2021 revision 14 error was resolved as soon as Deep Energy was made aware of it, and there was no market impact.

Actions taken to resolve the issue	Completion date	Remedial action status
Comments in section 2.1.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Comments in section 2.1.	Completed	

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in **section 2.1**. Processes to generate and validate submission data were checked.

Audit commentary

John Candy Consulting prepares submission information using the RM tool, and aggregation factors are determined from the registry. Prior to submission data is validated against previous submissions to determine whether it appears reasonable, and any exceptions are discussed with Deep Energy. Deep Energy also validates the submission information against their volume records to confirm that both are accurate.

NHH

The process for aggregating the AV080 was examined by checking the total submitted against detailed ICP level information for the most recent submission for months between March 2020 and July 2024. The detail matched the summarised data to 2 decimal places.

Review of a sample of submissions confirmed that aggregation factors were correctly applied and all expected ICPs and NSPs were included. Other consumption validation checks are discussed in **section 9.5**.

HHR

HHR aggregation was reviewed in **section 11.4** and found to be compliant.

Audit outcome

Compliant

12.4. Grid owner volumes information (Clause 15.9)

Code reference

Clause 15.9

Code related audit information

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

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

Audit observation

Review of the NSP table confirmed that Deep Energy is not a grid owner.

Audit commentary

Deep Energy is not a grid owner.

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Deep Energy does not own any local or embedded networks and is not required to provide NSP submission information.

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Deep Energy is not a grid connected generator.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

NHH submission information is created and validated by John Candy Consulting as an agent, using the RM Tool. Submission data generation processes were checked, and submission data was checked for completeness and accuracy.

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late.

Audit commentary

The Authority did not record any alleged breaches for late submission information.

John Candy Consulting prepares submission information using the RM tool, and aggregation factors are determined from the registry.

NHH submission

NHH submission processes were found to be compliant. To confirm the completeness and accuracy of submission information I:

- traced a sample of readings used to calculate volumes from raw MEP files, emails of readings taken by the director of Deep Energy and switch event files to the submission calculations, which confirmed they were correctly applied,
- checked ICPs included in the AV080, profiles and aggregation factors for a sample of submissions which confirmed they were correct,
- checked the historic and forward estimate processes are operating as expected, including testing all scenarios available, and
- confirmed that no unmetered load, vacant consumption, inactive consumption or distributed generation was present for NHH settled ICPs.

HHR submission

HHR submission processes were found to be compliant. To confirm the completeness and accuracy of submission information:

- confirmed that the raw meter data and estimates were consistent with the submission data except for 0000183281UN447 X flow on 2 December 2021 where 1.772 kWh was recorded for trading periods 1-5 on 2 December 2021 but was omitted from submission because the ICP had "decommissioned" status on that day (there was zero I flow on 2 December 2021),
- checked that the ICP aggregation factors were correctly recorded in the report, and no ICPs were incorrectly included or excluded in the reports reviewed, and
- checked that all HHR aggregates submissions were consistent with the HHR volumes with small rounding differences of up to ±0.14 kWh when compared at submission and flow direction level.

Submission accuracy issues

Submission information was found to be complete and accurate except:

- 1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status, and
- alleged breach 2001DEEP1 was recorded because incorrect AV090 HHR volumes submission information was provided for October 2021 revision 14:
    - the error was accidental,
    - corrected submission data was provided as soon as Deep Energy was alerted,
    - there was no market impact, and
    - the breach was closed by the Authority without a warning.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 12.7 With: Clause 15.12 From: 02-Dec-21 To: 09-Jan-23	1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status. Alleged breach 2001DEEP1, which had no market impact and was closed by the Authority without a warning. Potential impact: Low Actual impact: Low Audit history: None 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. The missing HHR submission for ICP 0000183281UN447 was caused by Vector updating the status on the day decommissioning physically occurred. The October 2021 revision 14 error was resolved as soon as Deep Energy was made aware of it, and there was no market impact.

Actions taken to resolve the issue	Completion date	Remedial action status
Comments in section 2.1.	completed	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Comments in section 2.1.	completed	

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

Code reference

Clause 4 of schedule 15.2

Code related audit information

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

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

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

Audit observation

I reviewed all AV080 reports from March 2020 to July 2024 to determine whether forward estimate remained at revision 14.

Audit commentary

The quantity of historical estimates is contained in the submission file and is not a separate report.

No forward estimate remained after revision 1 for any submission period. 100% historic estimate was reported for all periods where a revision 14 had been produced.

Audit outcome

Compliant

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

Code reference

Clause 2 of schedule 15.3

Code related audit information

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

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

Audit observation

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

Compliance with this clause was assessed:

- all ICPs have metering category 1 or 2 and are submitted as NHH or HHR,
- no unmetered load is supplied,

- no profiles requiring a certified control device are used,
- no loss or compensation arrangements are required, and
- aggregation of the AV080, AV090 and AV140 reports is compliant.

Audit outcome

Compliant

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

Code reference

Clause 3 of schedule 15.3

Code related audit information

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

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

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

Audit observation

I reviewed all AV080 submissions to date to confirm that historic estimates are included and identified.

Permanence of meter readings is reviewed in **section 12.8**. The methodology to create forward estimates is reviewed in **section 12.12**.

Audit commentary

I reviewed AV080 submissions for a diverse sample of months and revisions and confirm that forward and historic estimates are included and identified as such.

Audit outcome

Compliant

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

Code reference

Clauses 4 and 5 of schedule 15.3

Code related audit information

The methodology outlined in clause 4 of schedule 15.3 must be used when preparing historical estimates of volume information for each ICP when the relevant seasonal adjustment shape is available, and the reconciliation participant is not using an approved profile in accordance with clause 4A.

If the Authority has approved a profile for the purpose of apportioning volume information (in kWh) to part or full consumption periods, a reconciliation participant may use the profile despite the relevant seasonal adjustment shape being available; and if it uses the profile, must otherwise prepare the historical estimate in accordance with the methodology in clause 4.

*If a seasonal adjustment shape is not available, and the **reconciliation participant** is not using an approved **profile** under clause 4A, the methodology for preparing an historical estimate of volume*

information for each ICP must be the same as in clause 4, except that the relevant quantities kWh_{Px} must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by kWh_{Px}.

Audit observation

I reviewed the registry list, event detail report and submission information to identify ICPs where the scenarios listed below applied, and manually recalculated submission data using the readings and seasonal adjusted daily shape values for the corresponding submissions. I compared my recalculation to the RM Tool results.

Audit commentary

The table below shows that all scenarios which occurred during the audit period are calculated as expected and correct SASV (seasonal adjusted shape values) are applied.

Test	Scenario	Test Expectation	Result
a	ICP becomes "active" part way through a month	Consumption is only calculated for the Active portion of the month.	Has not occurred
b	ICP becomes "inactive" part way through a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
c	ICP become "inactive" then "active" again within a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Has not occurred
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant for ICP 0000183281UN447 April 2020 (the only example)
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Has not occurred
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Has not occurred

Test	Scenario	Test Expectation	Result
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Has not occurred
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Has not occurred
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Has not occurred
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Has not occurred
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant for ICP 0008660601HB843 (the only ICP with a multiplier)

Audit outcome

Compliant

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 of schedule 15.3

Code related audit information

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

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

Audit observation

The process to create forward estimates was reviewed. Forward estimates were checked for accuracy by analysing the GR170 file for variances between revisions for 20 months.

Audit commentary

Forward estimate is calculated by John Candy Consulting based on the average daily consumption for the previous read to read period for each meter register. If previous read period information is not available, the forward estimate consumption is based on the estimated daily consumption provided by the previous retailer in the CS file.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within 15%. The table below shows the number of balancing areas where this target was not met.

All differences over ±15% were checked and caused by forward estimate reported in the initial submission being higher or lower than the actual volumes, which were confirmed once later readings were received.

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Mar-20	-	-	-	-	-	-	-	-	1
Apr-20	-	-	-	-	-	-	-	-	1
May-20	-	-	-	-	-	-	-	-	1
Jun-20	-	-	-	-	-	-	-	-	1
Jul-20	-	-	-	-	-	-	-	-	1
Aug-20	-	-	-	-	-	-	-	-	1
Sep-20	-	-	-	-	-	-	-	-	1
Oct-20	-	-	-	-	-	-	-	-	1
Nov-20	-	-	-	-	-	-	-	-	1
Dec-20	-	1	1	1	-	-	-	-	2
Jan-21	1	1	1	1	-	-	-	-	2
Feb-21	-	-	-	-	-	-	-	-	2

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Mar-21	-	-	-	-	-	-	-	-	2
Apr-21	-	-	-	-	-	-	-	-	2
May-21	-	-	-	-	-	-	-	-	2
Jun-21	-	-	-	-	-	-	-	-	2
Jul-21	-	-	-	-	-	-	-	-	2
Aug-21	-	-	-	-	-	-	-	-	2
Sep-21	-	-	-	-	-	-	-	-	2
Oct-21	-	-	-	-	-	-	-	-	2
Nov-21	-	-	-	-	-	-	-	-	2
Dec-21	-	-	-	-	-	-	-	-	2
Jan-22	-	-	-	-	-	-	-	-	2
Feb-22	-	-	-	-	-	-	-	-	2
Mar-22	-	-	-	-	-	-	-	-	2

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Apr-22	-	-	-	-	-	-	-	-	2
May-22	-	-	-	-	-	-	-	-	2
Jun-22	-	-	-	-	-	-	-	-	2
Jul-22	-	-	-	-	-	-	-	-	2
Aug-22	-	-	-	-	-	-	-	-	2
Sep-22	-	-	-	-	-	-	-	-	2
Oct-22	-	-	-	-	-	-	-	-	2
Nov-22	-	-	-	-	-	-	-	-	2
Dec-22	-	-	-	-	-	-	-	-	2
Jan-23	-	-	-	-	-	-	-	-	2
Feb-23	-	-	-	-	-	-	-	-	2
Mar-23	-	-	-	-	-	-	-	-	2
Apr-23	-	-	-	-	-	-	-	-	2

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
May-23	-	-	-		-	-	-		2
Jun-23	-	-	-		-	-	-		2
Jul-23	-	-	-		-	-	-		2
Aug-23	-	-	-		-	-	-		2

The total variation between revisions at an aggregate level is shown below.

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Mar-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Apr-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-
May-20	-0.2%	-0.1%	0.0%	0.0%	3.13	0.90	0.32	0.36
Jun-20	-0.1%	-0.5%	-0.5%	-0.5%	2.33	11.07	10.92	10.90
Jul-20	0.1%	0.1%	0.1%	0.1%	-2.89	-2.80	-2.76	-2.82
Aug-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Sep-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Oct-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Nov-20	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Dec-20	0.0%	20.7%	20.0%	20.4%	-	-2,029.78	-1,966.88	-2,002.63
Jan-21	20.7%	18.6%	18.7%	18.7%	-6,539.03	-5,852.69	-5,891.86	-5,884.36
Feb-21	1.2%	1.7%	1.8%	1.8%	-313.93	-463.61	-496.14	-489.23
Mar-21	-10.8%	-10.3%	-10.3%	-10.3%	3,301.41	3,145.96	3,132.68	3,133.37
Apr-21	-0.3%	-1.2%	-1.2%	-1.2%	75.77	352.60	371.93	370.74
May-21	0.0%	-0.8%	-0.8%	-0.9%	-11.21	210.99	213.79	218.04
Jun-21	-0.4%	-0.3%	-0.3%	-0.3%	81.89	62.30	54.50	55.73
Jul-21	-0.4%	-0.4%	-0.4%	-0.4%	24.78	26.49	25.52	25.82
Aug-21	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Sep-21	0.0%	0.0%	0.0%	0.0%	-	-	-	-

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Oct-21	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Nov-21	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Dec-21	0.0%	0.0%	0.0%	0.0%	-	-	-	-
Jan-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Feb-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Mar-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Apr-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
May-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Jun-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Jul-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Aug-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Sep-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Oct-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Nov-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Dec-22	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Jan-23	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Feb-23	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Mar-23	0.00%	0.00%	0.00%	0.00%	-	-	-	-
Apr-23	-0.05%	0.01%	0.01%	0.01%	0.18	-0.03	-0.03	-0.03
May-23	0.05%	0.07%	0.07%		-0.21	-0.29	-0.29	
Jun-23	0.00%	0.00%	0.00%		-	-	-	
Jul-23	0.00%	0.00%	0.00%		-	-	-	
Aug-23	0.00%	0.00%	0.00%		-	-	-	

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 12.12 With: Clause 6 of schedule 15.3 From: 01-Dec-20 To: 31-Jan-21	Some revision differences over 15% occurred for December 2020 and January 2021. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong because almost all submissions fell within the accuracy thresholds. The differences occurred because a small number of estimates differed from actual data which was received after the initial submission. The impact is low because the total difference was less than 8000 kWh.

Actions taken to resolve the issue	Completion date	Remedial action status
This was due to the meter wasn't remotely communicating in rural area because of signal issue and the MEP had tried a few times to fix it. By the time we got manual read some variation had been submitted based on estimation. It had been solved after March 2021 when we arranged a person to manually read at the end of the months.	April 21	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
If remote reading is unavailable in the future we would arrange manual reading earlier. The submissions will be monitored regularly.	Ongoing	

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

Code reference

Clause 7 of schedule 15.3

Code related audit information

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

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

Audit observation

The registry list and registry information were reviewed to identify all ICPs which had a profile change during the audit period.

Audit commentary

Deep Energy changed the ICP 0000183281UN447's profile and submission type to HHR effective from 1 July 2021. The change occurred on actual readings.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 of schedule 15.3

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in **section 2.1**.

Aggregation of NHH volumes is discussed in **section 12.3**, and aggregation of HHR volumes is discussed in **section 11.4**.

Audit commentary

Submission information is provided to the reconciliation manager in the appropriate format and is aggregated to the following level:

- NSP code,
- reconciliation type,
- profile,
- loss category code,
- flow direction,
- dedicated NSP, and
- consumption period.

NHH volumes and HHR volumes aggregation was confirmed to be compliant.

Audit outcome

Compliant

13.2. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 of schedule 15.3

Code related audit information

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

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

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

Audit observation

I reviewed the rounding of data on the AV080, AV090, and AV140 reports as part of the aggregation checks.

Audit commentary

Submissions are correctly rounded to two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 of schedule 15.3

Code related audit information

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

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

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

Audit observation

The timeliness of submissions of historic estimate was reviewed in **section 12.2**. I reviewed all AV080 reports from March 2020 to July 2024.

Audit commentary

The quantity of historical estimates is contained in the submission file and is not a separate report.

No forward estimate remained after revision 1 for any submission period. The historic estimate thresholds were met for all submissions from March 2020 to July 2024.

Audit outcome

Compliant

CONCLUSION

Deep Energy engages John Candy Consulting to maintain registry information and perform customer switching, gather and store raw meter data, and create validate and deliver all submission information. Deep Energy also engages Momentous Consulting to provide advice and support. Bluecurrent Assets NZ Limited (NGCM), Influx Energy Data Limited (FCLM) and Intellihub Limited (BOPE) provide meter readings for Deep Energy's ICPs as MEPs.

John Candy Consulting completes most compliance activities, and their processes were assessed during this audit and found to be compliant.

In addition to the late provision of this audit report, a small number of minor non-compliances were identified:

- one status update to "inactive" status was one business day late due to late notification that the ICP was disconnected,
- ICP 0000231979UN4B7's NT was issued with an incorrect switch type and was reissued with the correct switch type once a wrong switch withdrawal was completed,
- the CS file for 0008660592HB867 (CS event 12 July 2021) had an incorrect last actual read date, and the CS file for ICP 0000866060HB7F0 (CS event 12 July 2021) had an incorrect switch event read type and incorrect average daily kWh,
- 1.772 kWh of X flow omitted from the AV090 HHR volumes submissions for December 2021 because it occurred on a day when ICP 0000183281UN447 had "decommissioned" status; Vector had changed the ICP to "decommissioned" status on the date it was physically decommissioned, but some consumption occurred prior to the decommissioning time,
- Some NHH revision differences outside the allowable thresholds, and
- alleged breach 2001DEEP1 was recorded because incorrect AV090 HHR volumes submission information was provided for October 2021 revision 14; the error was accidental, and corrected submission data was provided as soon as Deep Energy was alerted - there was no market impact, and the breach was closed by the Authority without a warning.

Although there were only six non-compliances, some caused non-compliance in several report sections resulting in 11 non-compliances and an audit risk rating of 14. Based on this, the Electricity Authority's guidance recommends that the next audit is completed in 18 months. I agree that this is reasonable based on the findings of this audit.

PARTICIPANT RESPONSE

We thank Tara for conducting this audit for us. We note that we had some noncompliance and would like to assure the Authority that we are committed to ensuring compliance. We are now fully aware of our audit obligations and will ensure the next audit is booked once we have a confirmed next audit date.