

Guideline for Dispatchable Load Purchaser Audits

Version 2.1
Guidelines

16 May 2017



Version control

Version	Date amended	Comments
1.0	20 June 2014	First version
2.0	28 February 2017	Updated to reflect new audit regime for 1 June 2017
2.1	16 May 2017	Final version for new audit regime 1 June 2017

Executive summary

The Electricity Authority (Authority) provides this guideline to promote a better understanding of, and to encourage consistency in, the methodology and processes surrounding dispatchable load purchaser audits. This guideline is intended to provide a structured approach to audits for auditors and participants that is fair and consistent. It outlines dispatchable load purchasers' Electricity Industry Participation Code 2010 (Code) obligations, and auditors' requirements when carrying out dispatchable load purchaser audits.

This guideline describes what dispatchable load purchasers and auditors should do when carrying out audits under the Code, and the obligations of dispatchable load purchasers under the Code that they must be audited against. However, the information in this guideline does not replace the requirement for participants to know and comply with their obligations under the Code. This guideline reflects the Authority's view of best practice.

The information in this guideline is not necessarily definitive of the obligations of dispatchable load purchasers and auditors under the Code, and the responsibilities of auditors when undertaking an audit. It should not be used instead of legal advice. If there is any inconsistency between this information and the Code, the Code takes precedence.

Contents

Executive summary	ii
Introduction	1
Appendix A Appendices – Function and processes	4
Function 1– Administrative tasks	4
Pre-audit	4
Function 2 – Operational infrastructure	6
Process 2A: Operational infrastructure	6
Function 3: Gathering and storing raw meter data from dispatch-capable load station metering	9
Function 4: Creating and managing of volume information for DCLS metering installations	14
Function 5: Provision of metering information to the pricing manager	18
Function 6: Preparation of dispatchable load information for reconciliation (clause 15.5A to 15.5D)	20
Table 1: Indicative audit frequency	23
Appendix B Audit glossary of abbreviations and terms	24

Introduction

1. Dispatchable load purchasers must be certified under clause 15.38(1A) of the Code to carry out the functions within Parts 15, 13A, and relevant sections of Part 1 of the Code.
2. “Dispatchable load purchaser” is defined in Part 1 of the Code as a purchaser that purchases electricity from a dispatch-capable load station.¹
3. A dispatchable load purchaser must be certified to carry out the following reconciliation process functions outlined in clause 15.38(1A)² of the Code:
 - (a) gathering and storing raw meter data
 - (b) creating and managing (including validating, estimating, storing, correcting, and archiving) volume information and dispatchable load information
 - (c) providing dispatchable load information.
4. A dispatchable load purchaser must arrange for regular audits in respect of its obligations under the Code, including:³
 - (a) an initial audit completed not later than four months after the date on which the system operator approves the first device or group of devices in respect of the dispatchable load purchaser as a dispatch-capable load station under clause 13.3A; and
 - (b) further audits as specified by the Authority under clause 16A.14.
5. In addition, the Authority may at any time decide to carry out an audit in respect of a dispatchable load purchaser’s obligations under the Code. The Authority may also carry out such an audit at the request of another participant.
6. Clause 16A.3 requires each participant to ensure its audit is conducted by the Authority or an approved auditor from the list of auditors published by the Authority.
7. Dispatchable load purchasers are required to give the Authority or an auditor full access to all information that may be required for the purposes of the audit, at no charge and no later than 15 business days after receiving a request for the information.⁴
8. An auditor must carry out the audit of a dispatchable load purchaser’s compliance with the relative parts of the Code within a period specified by the Authority. This period must be no earlier than three months, but no more than 36 months, after the completion date of the audit report for the reconciliation participant’s previous audit.
9. The matters that must be covered by an audit of a dispatchable load purchaser can be grouped into certain functions, which include, but are not limited to the following:

¹ A dispatch-capable load station means a device or a group of devices approved as a dispatch-capable load station under clause 13.3A.

² For the purposes of subclause (1A) each reference to a reconciliation participant in schedule 15.1 is to be read as a reference to a dispatchable load purchaser.

³ Clause 15.37A.

⁴ Clause 16A.4.

- (a) **Function 1:** Administrative tasks - Obligations regarding arranging for and submitting applications for approval.
 - (b) **Function 2:** Operational infrastructure - Obligations regarding requirements, such as tools, transmission and security.
 - (c) **Function 3:** Gathering and storing raw meter data from dispatch-capable load station metering)
 - (d) **Function 4:** Creation and maintenance of volume information– Obligations to have robust systems and processes to support requirements including methodologies set out in the Code for:
 - i. error handling
 - ii. estimation and validation
 - iii. storage, archiving and audit trails
 - (e) **Function 5:** Provision of metering information to the pricing manager - Obligations to have reporting processes and systems in place to produce and supply required reports under subpart 4 of Part 13 for pricing information⁵.
 - (f) **Function 6:** Provision for the preparation of dispatchable load information for reconciliation in accordance with the Code.
10. The audit requirements for each of the above functions are described in detail in the Appendices by reference to the relevant Code provisions.
11. The list of Authority-appointed auditors can be found on the Authority's website at <https://www.ea.govt.nz/dmsdocument/6129>
12. The participant audit regime uses a risk-based approach to planning audits. The following three documents are integral to this approach:
- (i) *Risk and materiality guideline*

This sets out how to assess risk, the process for applying risk to focus audit effort and how to assess the materiality and likelihood of a risk.
 - (ii) *Auditor protocol*

This sets out audit standards and the Authority's expectations of auditors when performing audits.
 - (iii) *Inherent risk register*

This sets out the risks inherent in a participant's functions and processes that are audited. The auditor uses these inherent risks as a starting point for determining an audited participant's residual risk. Residual risk is used by the auditors to determine audit priority and effort.
13. The *Risk and materiality guideline*, *Auditor protocol*, and inherent risk registers are available on the Authority's website at: <https://www.ea.govt.nz/operations/retail/audits-approvals-and-certification/>

⁵ Clause 13.138A

14. Where a dispatchable load purchaser is required to carry out an audit for one or more of the roles it is responsible for as an industry participant, that dispatchable load purchaser must arrange for the completion of a separate audit report in respect of its obligations for each of those roles.⁶ An example of the requirement for a separate audit is where that participant is responsible for metering as an MEP.
15. If a dispatchable load purchaser uses an agent to perform any of its obligations under the Code, the dispatchable load purchaser is still responsible for the obligations and must ensure that the agent is audited with the requirements of the Code.⁷ An agent's audit must also fit within the required time frames stipulated for audits under Part 16. Dispatchable load purchasers are responsible for their agents and contractors compliance and obligations under the Code.⁸

⁶ Clause 16A.8.

⁷ Clause 16A.10.

⁸ Clause 15.34.

Appendix A Appendices – Function and processes

Function 1– Administrative tasks

Pre-audit

Code reference	Description of obligations of dispatchable load purchasers	Notes
Part 16A	<p>The dispatchable load purchaser must appoint an auditor. The dispatchable load purchaser and the auditor should enter into a contract for the provision of auditing services. The auditor should be clear on the scope and reporting of the audit with the dispatchable load purchaser, including the:</p> <ul style="list-style-type: none"> • process and procedures to be audited • Code obligations to be audited • specific emphasis or scope that has been determined by the Authority • the reason(s) for the audit. <p>The auditor may request the following types of supporting information from the dispatchable load purchaser:</p> <ul style="list-style-type: none"> • a copy of its last two audit reports • a copy of any agents audit report where an agent is engaged, if there is a separate report, that is relative to the functions to be audited • correspondence supporting its last two audit reports • information regarding the dispatchable load purchaser’s company structure, and the names of contractors and service providers that assist with, or are used in, the functions to be audited • a list of manufacturers of the hardware and software that assist or are used in the process that is being audited. <p>The auditor obtains a letter from the dispatchable load purchaser authorising the collection of information from other parties agreed in the audit scope, and requests the necessary information for the audit from those parties.</p> <p>The auditor must obtain from the Authority copies of any alleged, under investigation, or closed breaches that have occurred in the past twelve months that relate to the processes being audited.</p>	<p>Refer to audit obligations under:</p> <ul style="list-style-type: none"> • clause 15.38 Part 15, • schedule 15.1 Part 15

Post-audit

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Code reference	Description of obligations of dispatchable load purchasers	Notes
Clause 16A.12(1)(b)	The auditor must send a draft audit report setting out the provisional findings of the audit to the dispatchable load purchaser and give the dispatchable load purchaser a reasonable opportunity to comment on the draft audit report.	More detailed processes and requirements for auditors are included in the <i>Auditor protocol</i> .
Clause 16A.12(1)(c) and (d)	The auditor must provide the final audit report to the dispatchable load purchaser after considering any comments from the dispatchable load purchaser on the draft audit report.	
Clause 16A.12(1)(e)	The final audit report must specify the following: <ul style="list-style-type: none"> • the extent to which the dispatchable load purchaser has failed to comply with the provisions of the Code • any conditions that the auditor considers the dispatchable load purchaser must satisfy in order to comply with the Code • recommendations • any action that the dispatchable load purchaser has taken in respect of those conditions • a recommended date for the next audit • any of the dispatchable load purchaser's comments on the draft audit report that the auditor considers relevant 	
Clause 16A.13	The dispatchable load purchaser must give the final audit report to the Authority no later than the date by which the audit is due. If the final audit report identifies any breach or potential breach of the Code, the dispatchable load purchaser must provide a compliance plan to the Authority when it submits the final audit report. The compliance plan must specify the actions the dispatchable load purchaser intends to take to address any breach (or potential breach) of the Code and time frames within which the dispatchable load purchaser intends to complete those actions.	
Clause 16A.14	An audit is complete when the participant that is subject to the audit gives the Authority the final audit report and compliance plan (if any).	
Clause 16A.15	The Authority must publish the final audit, compliance plan, and the date by which the next audit must be completed, no later than 20 business days after advising the participant of the date of the next audit.	

Function 2 – Operational infrastructure

Process 2A: Operational infrastructure

A.1 This table describes the Code obligations of dispatchable load purchasers (or participants) in respect of operational infrastructure. The participant is responsible for the security of metering information transmitted or transferred to other participants. This includes the maintenance of audit trails and communication logs.

Relevant provisions of the Code

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 15.2	<p>A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 15 is:</p> <ul style="list-style-type: none"> • complete and accurate • not misleading or deceptive • not likely to mislead or deceive. <p>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.</p>	Applies to provision of information under Part 15.
Clause 15.35	<p>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. The participant must deliver the information in the format determined from time to time by the Authority.</p>	

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 20 of Schedule 15.2	Transmissions and transfers of data related to metering between dispatchable load purchasers 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.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 21(1) and (2) of Schedule 15.2	Each dispatchable load purchaser (must ensure that a complete audit trail exists for all data gathering, validation, and processing functions of the dispatchable load purchaser.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
	<p>The audit trail must include details of information:</p> <ul style="list-style-type: none"> • provided to and received from the reconciliation manager • provided and received from other dispatchable load purchasers and their agents. <p>The audit trail must cover all archived data in accordance with clause 18.</p>	
Clause 21(3) and (4) of Schedule 15.2	<p>The logs of communications and processing activities must form part of the audit trail, including if automated processes are in operation.</p> <p>Logs must be printed and filed as hard copy or maintained as data files, in a secure form, along with other archived information.</p>	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
	<p>The logs must include (at a minimum) the following:</p> <ul style="list-style-type: none"> • an activity identifier (clause 21(4)(a)) • the date and time of the activity (clause 21(4)(b)) • the operator identifier (clause 21(4)(c)). 	

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Function 3: Gathering and storing raw meter data from dispatch-capable load station metering

- A.1 This table describes the Code obligations of dispatchable load purchasers (or participants) in respect of gathering and storing raw meter data from dispatch-capable load stations. In summary, the dispatchable load purchaser is responsible for gathering raw meter data, including the application of accurate compensation factors to compensate for internal site losses where the meter is not located at the customers point of connection to the network.
- A.2 The dispatchable load purchaser is also responsible for maintaining appropriate information regarding alterations made to raw meter data. If data is corrected or altered, a journal must be generated containing information in accordance with the Code.

Relevant provisions of the Code

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 7 of Schedule 13.8	The system operator may impose conditions on any approval it grants a dispatchable load purchaser.	Check the conditions for approval from the system operation. This may include conditions such as the location of the DCLS metering.
Clause 15.5B(3)	The dispatchable load purchaser must ensure there is a certified metering installation for each dispatch-capable load station.	Only applies if clause 15.5B(1) applies. Review metering installation certification records to ensure that inspections and certifications are current. It is expected that if clause 15.5A applies, the same metering used for reconciliation will be used for dispatchable load.

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 2 of Schedule 15.2	<p>The dispatchable load purchaser must obtain raw meter data used to determine volume information (clause 2(2)):</p> <ul style="list-style-type: none"> • from the services access interface of the meter; or • if the raw meter data can only be obtained from the metering equipment provider's back office, from the metering equipment provider. 	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>
	<p>The dispatchable load purchaser must ensure the interrogation cycle is such that it does not exceed the maximum interrogation cycle on the registry (clause 2(3)).</p>	
	<p>The dispatchable load purchaser must interrogate the meter at least once every maximum interrogation cycle (clause 2(4)).</p>	
	<p>When electronically interrogating the meter, the dispatchable load purchaser must (clause 2(5)):</p> <ol style="list-style-type: none"> (a) ensure the system is to within +/- 5 seconds of NZST or NZDT (b) compare the metering installation time to the system time (c) determine the time error of the metering installation (d) if the time error is equal or less than the maximum permitted error, correct the metering installation's clock (e) if the time error is greater than the maximum permitted error then: <ol style="list-style-type: none"> (i) correct the metering installation's clock (ii) compare the metering installation's time with the system's clock (iii) correct any affected raw meter data (f) download the event log 	
	<p>The dispatchable load purchaser must record in the interrogation and processing system logs (clause 2(6)):</p> <ul style="list-style-type: none"> • the time • the date • the extent of any change made to the metering installation's clock. 	

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 3(1) of Schedule 15.2	All meter readings must, in accordance with the participant's 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.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 3(2) of Schedule 15.2	All validated meter readings must be derived from meter readings.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 11(1) of Schedule 15.2	A dispatchable load purchaser must obtain raw meter data from all electronically interrogated metering installations via the services access interface. This may be carried out by a portable device or remotely.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 11(2) of Schedule 15.2	The following information must be collected by the dispatchable load purchaser during each electronic interrogation:	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.

Code ref	Description of obligations of dispatchable load purchasers	Notes
	<ul style="list-style-type: none"> • the unique identifier of the data storage device (clause 11(2)(a)) • 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 (clause 11(2)(b)) • 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 (clause 11(2)(c)) • the event log, which may be limited to the events information accumulated since the last interrogation (clause 11(2)(d)) • for all metering information, an interrogation log generated by the interrogation software to record details of all interrogations. The interrogation log must be examined by the dispatchable load purchaser responsible for collecting the data and appropriate action must be taken if problems are apparent or an automated software function flags exceptions (clause 11(2)(e)). 	
Clause 11(3) of Schedule 15.2	<p>The interrogation log forms part of the interrogation audit trail and must contain the following as a minimum:</p> <ul style="list-style-type: none"> • the date of interrogation (clause 11(3)(a)) • the time of commencement of interrogation (clause 11(3)(b)) • the operator identification (if available) (clause 11(3)(c)) • the unique identifier of the data storage device (clause 11(3)(d)) • the time errors outside the range specified in Table 1 of clause 2 (clause 11(3)(e)) • the method of interrogation (clause 11(3)(f)) • the identifier of the reading device used for interrogation (if applicable) (clause 11(3)(g)). 	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>

Code ref	Description of obligations of dispatchable load purchasers	Notes
Clause 13 of Schedule 15.2	The trading period duration, normally 30 minutes, must be within $\pm 0.1\%$ (± 2 seconds).	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 18(1) of Schedule 15.2	A dispatchable load purchaser 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.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 18(2) of Schedule 15.2	Each dispatchable load purchaser must ensure procedures are in place to ensure that raw meter data cannot be accessed by unauthorised personnel.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 18(3) of Schedule 15.2	Each dispatchable load purchaser must ensure that meter readings cannot be modified without an audit trail being created.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.

Function 4: Creating and managing of volume information for DCLS metering installations

A.3 This table describes the Code obligations of dispatchable load purchasers in respect of creating and managing of volume information for DCLS metering installations. In summary, the dispatchable load purchaser is responsible for maintaining the appropriate information regarding alterations made to raw meter data.

Relevant provisions of the Code

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 19(2) of Schedule 15.2	<p>If the dispatchable load purchaser detects errors during validation of half hour meter readings, the meter readings must be corrected by the dispatchable load purchaser as follows:</p> <ul style="list-style-type: none"> • if a check meter or data storage device is installed at the metering installation, data from this source may be substituted (clause 19(2)(a)) • in the absence of any check meter or data storage device, data may be substituted from another period if the total of all substituted intervals matches the total consumption recorded on the meter, if available, and the pattern of consumption is considered materially similar to the period in error (clause 19(2)(b)). 	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>
Clause 19(3) Of Schedule 15.2	<p>If the dispatchable load purchaser carries out error compensation and loss compensation as part of the process of determining accurate data, the compensation process must be documented and must comply with audit trail requirements.</p>	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>
Clause 3(3) of Schedule 15.2	<p>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.</p>	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>

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Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 3(4) of Schedule 15.2	<p>Volume information must be directly derived, in accordance with Schedule 15.2, from:</p> <ul style="list-style-type: none"> • validated meter readings (clause 3(4)(a)) • estimated readings (clause 3(4)(b)) • permanent estimates (clause 3(4)(c)). 	<p>This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>
Clause 15(1) of Schedule 15.2	<p>If a dispatchable load purchaser is unable to interrogate an electronically interrogated metering installation before the deadline for providing dispatchable load information, the dispatchable load purchaser must submit its best estimate of the quantity of electricity that was purchased in each trading period during any applicable consumption period for that metering installation.</p>	<p>This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p> <p>The dispatchable load purchaser is encouraged to use reasonable endeavours to ensure that estimated dispatchable demand information is within the percentage specified by the Authority.</p>
Clause 17 of Schedule 15.2	<p>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 logger before the data is overwritten within the data logger and before this data can be used for any purpose under the Code.</p>	<p>This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>

Code ref	Description of obligations of dispatchable load purchaser	Notes
	<p>Each validity check of a meter reading obtained by electronic interrogation or an estimated reading must include:</p> <ul style="list-style-type: none"> • checks for missing data (clause 17(4)(a)) • checks for invalid dates and times (clause 17(4)(b)) • checks of unexpected 0 values (clause 17(4)(c)) • comparison with expected or previous flow patterns (clause 17(4)(d)) • comparisons of meter readings with data on any data storage device registers that are available (clause 17(4)(e)) • a review of meter and data storage device event log. Any event that could have affected the integrity of metering data must be investigated (clause 17(4)(f)). 	
<p>Clause 22(1) of Schedule 15.2</p>	<p>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.</p>	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 22(2) of Schedule 15.2	<p>If a reconciliation participant corrects or alters data, the reconciliation participant must generate and archive a journal with the raw meter data file. The journal must contain the following:</p> <ul style="list-style-type: none"> • the date of the correction or alteration (clause 22(2)(a)) • the time of the correction or alteration (clause 22(2)(b)) • the operator identifier of the dispatchable load purchaser (clause 22(2)(c)) • the half-hour metering data corrected or altered, and the total difference in volume of such corrected or altered data (clause 22(2)(d)) • the technique used to arrive at the corrected data (clause 22(2)(e)) • the reason for the correction or alteration. (clause 22(2)(f)). 	<p>This clause does not apply if clause 15.5B applies.</p> <p>If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.</p>

Function 5: Provision of metering information to the pricing manager

A.4 This table describes the Code obligations of dispatchable load purchasers in respect of the provision of metering information to the pricing manager. In summary, the dispatchable load purchaser must provide DCLS half hour metering information to the pricing manager and the grid owner connected to the relevant local network in accordance with the Code.

Relevant provisions of the Code

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 13.138A	<p>The dispatchable load purchaser must provide half-hour metering information to the relevant grid owner for each of its DCLS.</p> <p>This information must be provided:</p> <ul style="list-style-type: none"> • adjusted for losses • in the manner and form advised by the grid owner • by 0500 hours each trading day for each trading period of the previous trading day. 	<p>Losses should be calculated back to the NSP as follows:</p> <ul style="list-style-type: none"> • where the customers premise is a direct connection to the grid, and the DCLS metering is also performed by the grid exit point metering, the GXP volumes • where the customers premise is a direct connection to the grid, and the DCLS metering is internal to the customers premise, the DCLS metered volume adjusted for internal site losses • where the customers premise is at an ICP and the DCLS metering is also performed by the ICP metering, the GXP volumes adjusted for the relevant declared local network losses for that ICP • where the customers premise is at an ICP and the DCLS metering is internal to the customers premise, the DCLS volumes adjusted for internal site losses and the relevant declared local network losses for that ICP. <p>If the half-hour metering information is not available, the dispatchable load purchaser should</p>

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Code ref	Description of obligations of dispatchable load purchaser	Notes
		provide the pricing manager and the relevant grid owner a reasonable estimate of such data.
Clause 13.140	If the dispatchable load purchaser provides half-hourly metering information to a grid owner, it must also, by 0500 hours on that day, advise the relevant grid owner of the provision of that information.	

Function 6: Preparation of dispatchable load information for reconciliation (clause 15.5A to 15.5D)

A.5 This table describes the Code obligations of dispatchable load purchasers in respect of the preparation of dispatchable load information for reconciliation. In summary, the dispatchable load purchaser is responsible for preparation of dispatchable load information in accordance with the Code.

Relevant provisions of the Code

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 15.5D	Each dispatchable load purchaser must provide to the reconciliation manager dispatchable load information for each GXP at which the dispatchable load purchaser has purchased electricity for a DCLS during the consumption period immediately before each reconciliation period. If the dispatchable load purchaser has previously provided dispatchable load information and that information has changed, revised information must be provided.	Information must be provided: <ul style="list-style-type: none"> for dispatchable load information by 16:00 on the 4th business day of each reconciliation period for updated dispatchable load information by 16:00 on the 13th business day of each reconciliation period.
Clause 15.36(1), (2), and (3)	Submission information provided to the reconciliation manager must be adjusted for NZDT.	This adjustment must follow: <ul style="list-style-type: none"> the trading period run on technique; or the trading period move technique.
Clause 15.12	If the dispatchable load purchaser has provided information and then subsequently obtained more accurate information, the dispatchable load purchaser 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 15.5D and 15.20A).	
Clause 4(1) of Schedule 15.2	Only dispatchable load 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).	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 4(2) of Schedule 15.2	Volume information created using estimated readings must be replaced at the earliest opportunity by the dispatchable load purchaser with volume information that has been created using validated meter readings or permanent estimates by, at the latest, the month 14 revision cycle.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 4(3) of Schedule 15.2	A dispatchable load purchaser may use a permanent estimate in place of a validated meter reading only if a dispatchable load purchaser, despite having used reasonable endeavours, has been unable to obtain a validated meter reading.	This clause does not apply if clause 15.5B applies. If clause 15.5B applies, auditors should comment on the dispatchable load purchaser's alignment with this requirement.
Clause 15.5A	Each dispatchable load purchaser must prepare dispatchable load information. For each DCLS that has a metering installation at a point of connection (i.e. it does not fall within the scope of clause 15.5B), the dispatchable load purchaser must use volume information prepared under Schedule 15.2.	A DCLS that has a metering installation that is at a point of connection (ICP, NSP, GXP) must use volume information prepared under Schedule 15.2.
Clause 15.5B(1)	Each dispatchable load purchaser (apart from those that are at a point of connection) must prepare dispatchable load information in accordance with clause 15.5B.	This clause applies to DCLS metering installations that are within premises that are directly connected to a point of connection (ie, where only a portion of the load at the ICP / NSP / GXP will be dispatched).
Clause 15.5B(2)(a)	If clause 15.5B(1) applies then the dispatchable load information must be prepared using volume information derived from raw meter data.	

Code ref	Description of obligations of dispatchable load purchaser	Notes
Clause 15.5B(2)(b)	<p>The dispatchable load purchaser must adjust the dispatchable load volume information derived from raw meter data using an accurate compensation factor to compensate for internal site losses between the meter installation and:</p> <ul style="list-style-type: none"> (i) the grid (if the premises is directly connected to the grid) (ii) the local network (if the premises is directly connected to the local network) (iii) the embedded network (if the premises are directly connected to the embedded network). 	<p>Where the DCLSs metering installation is internal to a customer premises, a compensation factor to reference the dispatchable load information to the customer's point of connection must be applied. The calculation of the compensation factor is covered in function 3.</p>
Clause 15.5C	<p>A dispatchable load purchaser must aggregate dispatchable load information to the following aggregation criteria:</p> <ul style="list-style-type: none"> (i) NSP code (ii) dispatch-capable load station identifier (iii) loss category code; and (iv) trading period. <p>The dispatch-capable load station identifier must be the identifier that has been assigned by the system operator to the DCLS.</p> <p>In the case of ICP connected customer premises, the NSP code and loss category code must be sourced from the registry records for that ICP.</p>	<p>In the case of a grid connected customer premises:</p> <ul style="list-style-type: none"> • the NSP code is expected to be the NSP that the DCLS is electrically connected to • the loss category code should be "GRID". <p>Where there are multiple metering installations to a DCLS, the dispatchable load information may be aggregated at the trading period level.</p> <p>Where the DCLS metering installations are internal to a customer premises, and there are different compensation factors that apply to each metering installation, the aggregation should be after the application of the compensation factor</p>
	<p>Dispatchable load information must be rounded to 2 decimal places.</p>	<p>Rounding should follow clause 15.5C(1)(b)(ii) and round up if the digit in the third decimal place is greater than or equal to 5, and down if the third decimal place digit is less than 5.</p>

Audit frequency guidance

An auditor must recommend a date by which the dispatchable load purchaser must have completed its next audit and audit report.⁹ This provides a range from 3 months to 36 months between audits. This is to allow for a higher level of surveillance of dispatchable load purchasers that do not have fully functional processes and a consequent lower level of compliance.

In accordance with the risk and materiality guidelines and auditor protocol, each non-compliance identified in the dispatchable load purchaser's most relevant audit report will be assessed by the auditor and given a breach risk rating in accordance with the risk and materiality guidelines. The sum of the breach risk ratings determines the future risk rating. The future risk rating is used to determine the indicative audit frequency.

This “indicative audit frequency” has been specifically calculated for dispatchable load purchasers and is not intended to be applied to other participant types.

Auditors should use Table 1 to calculate the indicative audit frequency.

Table 1: Indicative audit frequency

Future risk rating	0	1	2–3	4–7	8–15	16+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

The decision on the recommended audit date is a matter of the auditor's opinion but it should take into consideration:

- the indicative audit frequency
- the participant’s proposed resolution of breaches (including breaches that have been cleared during the audit)
- breaches that are outside of the participant’s control (either due to needing improvements in the wording of the Code, or are due to the actions of another participant)
- any instances that pose a risk of a future breach of the Code.

⁹ Clause 16A.12(1)(e)(v).

Appendix B **Audit glossary of abbreviations and terms**

Authority	Electricity Authority
Board	Electricity Authority Board
Code	Electricity Industry Participation Code 2010s
DCLS	Dispatch capable load station
GIP	Grid injection point
GXP	Grid exit point
HHR	Half-hour
ICP	Installation control point
MEP	Metering Equipment Provider
NHH	Non half-hour
NSP	Network supply point
NZDT	New Zealand Daylight Time
NZST	New Zealand Standard Time
POC	Point of Connection
RM	Reconciliation Manager