## Benchmarking of audit regime against audit best practices

## Introduction

- In February 2015, the Authority engaged PA Consulting Limited (PA Consulting) to develop a comparison framework to allow the Electricity Authority (Authority) to evaluate its audit regime against international best practices in electricity industry auditing.
- 2. In developing the framework, PA Consulting considered international practices in electricity industry auditing and noted that there is variation in auditing practices across markets because:
  - (a) compliance risks can vary significantly by audited entity and by market
  - (b) governance of audited entities can vary by market.
- When specifying best practice for the New Zealand audit regime, it is important to consider the practices that are most appropriate in the context of the New Zealand regime.
- 4. PA Consulting's audit comparison built on its analysis of international practices by:
  - (a) identifying auditing best practice in the New Zealand context
  - (b) developing an audit comparison framework under which the Authority can review the existing audit regime.
- 5. The Authority has applied the audit comparison framework to the existing audit regime in order to identify opportunities that may exist to improve the audit regime.
- 6. The purpose of this exercise was not to fully align the existing audit regime with PA Consulting's definition of auditing best practice. Rather, Authority staff applied the audit comparison framework to guide any changes to the audit regime so they align with the Authority's statutory objectives. Authority staff consider this approach will improve efficiency in the market and deliver long-term benefits to consumers.

## The audit comparison framework

- 7. PA Consulting developed the audit comparison framework by:
  - (a) setting out six dimensions of auditing best practice
  - (b) defining auditing best practice in the New Zealand context with respect to the six dimensions of auditing practice
  - (c) developing a scoring framework to enable the Authority to benchmark and evaluate the audit regime against the best practice framework.
- 8. The six dimensions of auditing practice that best practices can be specified against are summarised in Table 1.

Table 1: Dimensions of auditing practice

Dimension	Question	Subcategories	
Principles and objectives	What should the overarching goal of the audit regime be?	<ul><li>high level principles</li><li>audit objectives</li></ul>	
Scope of regime	What aspects of participant operations should an audit cover?	<ul> <li>audited entities</li> <li>scope of audit activities: <ul> <li>operational compliance</li> <li>market software compliance</li> <li>IT systems and procedures review</li> </ul> </li> </ul>	
Assurance	How can the integrity of the audit process be assured?	<ul><li>governance of audit process</li><li>formal assurance requirements</li></ul>	
Audit approach	How should the audit be carried out from a methodological perspective?	<ul> <li>approach used to focus audit effort</li> <li>approach used to evaluate compliance</li> </ul>	
Classification and reporting of audit findings	How should audit findings be classified and reported?	<ul> <li>approach used to define materiality of breaches and general audit findings</li> <li>manner in which audit findings are reported</li> </ul>	
Logistics	How should the audit be carried out from a logistical perspective?	<ul><li>appointment of auditors</li><li>frequency of audits</li><li>timing of audits</li></ul>	

9. The definition of best practice with respect to each of the dimensions and subcategories in Table 1 is summarised in Table 2.

Table 2: Specification of auditing best practice

Dimension	Subcategories	Best practice specification
Principles and objectives	High level principles	At a high level an audit regime should:  • provide market stakeholders with assurance that the market is operating properly and in accordance with the market objectives, rules, and subsidiary

Dimension	Subcategories	Best practice specification
		<ul> <li>documents.</li> <li>promote compliance with the Code and good industry behaviour.</li> <li>improve the operational efficiency of the market.</li> </ul>
	Audit objectives	<ul> <li>The audit regime should:</li> <li>provide assurance that participants (responsible for the provision of any data or supporting information that impacts on settlement or other financial market outcomes) are compliant with their obligations and have appropriate procedures/systems/controls to mitigate compliance risk.</li> <li>inform the Authority when making Code required certification, approval and next audit date decisions.</li> <li>provide audited entities with education and information that enables them to improve compliance, mitigate</li> </ul>
	Audited entities	compliance risk, and understand their role in the context of the wider market.  The entities audited as part of an audit regime should include:  • metering equipment providers  • data providers/settlement agents  • meter testing houses
Scope of regime	Scope of audit activities	Audit activities should include:  operational compliance audits.  software/tool compliance audit.  IT review of data providers focused on software management, information security, and selected interfaces.
Assurance	Governance of audit process	<ul> <li>The governing body should specify high level requirements with respect to audit scope and approach.</li> <li>The governing body should approve audit plans for specific audits before they commence. Audit plans should, at a minimum, specify areas of audit focus and proposed approach.</li> </ul>

Dimension	Subcategories	Best practice specification
		The governing body should reserve the right to prescribe audit reporting requirements (in terms of content, format, etc).
	Formal assurance requirements	<ul> <li>The governing body should have the right to prescribe formal assurance requirements (aligned with internationally accepted auditing standards (eg, ISAE 3000)) relating to audit scope, approach and quality control, and auditor independence and competence, etc.</li> <li>The governing body should require auditors to be rotated from time to time. Auditor rotation can be specified either through the appointment of new audit firm, or through the appointment of a new lead auditor from an existing audit firm.</li> </ul>
	Approach used to focus audit effort	<ul> <li>A risk-based approach should be used when determining auditing focus.</li> <li>Areas of audit focus in low to medium risk areas should be rotated over multiple audits.</li> </ul>
Audit approach	Approach used to evaluate compliance	<ul> <li>The auditor should have a clear understanding of the audited entity's obligations under the Code in the areas that are covered by audit scope and focus.</li> <li>Compliance testing and audit should be conducted in accordance with the relevant assurance standard</li> <li>Assessment of business processes areas in focus should enable the auditor to evaluate the level of compliance risk in that area.</li> </ul>
Classification and reporting of audit findings	Approach used to define materiality of breaches and general audit findings	<ul> <li>Materiality ratings for breaches and audit findings should be recommended by the auditor and approved by the governing body prior to the audit commencing.</li> <li>An ordinal rating based on risk and materiality should be adopted to classify breaches and audit findings.</li> </ul>
	Manner in which audit findings are reported	<ul> <li>The auditor should provide an opinion letter that sets out the scope and findings of the audit.</li> <li>The auditor should provide the audited entity and governing body with more detailed audit reports (as required).</li> </ul>

Dimension	Subcategories	Best practice specification		
		<ul> <li>The governing body should reserve the right to specify mandatory content and formatting requirements for all audit opinions and reports.</li> </ul>		
		<ul> <li>The governing body should appoint auditors to review the compliance of the audited entities.</li> </ul>		
	Appointment of auditors	<ul> <li>The governing body should select a single auditor for a group of entities where it deems that the appointment of a single auditor will lead to economies of scale (and therefore lower cost), consistency of approach, and a helicopter view of compliance across a group of audited entities.</li> </ul>		
	Frequency of audits	<ul> <li>Audit frequencies of metering services providers should be set at the discretion of the governing body based on level of risk associated with audited entity as evidenced by:</li> <li>the risk inherent in the audited entities obligations</li> </ul>		
Logistics		<ul> <li>past compliance performance of the audited entity (and therefore the level of risk posed by the audited entity taking into account controls).</li> </ul>		
	Timing of audits	Compliance testing (requiring observed evidence of compliance) and compliance risk assessments of metering services providers should be undertaken during the course of the audit period (as opposed to once the audit period has ended).		
		<ul> <li>Audit activities which require information covering the entire audit period (eg, change management records providing evidence that the audited entity has met software management obligations compliantly throughout the audit period, and has system logs covering the audit period) should be conducted after the end of the audit period.</li> </ul>		

10. The scoring system used to benchmark and evaluate the current audit regime against the best practice specifications defined in Table 2 is summarised in Table 3.

Table 3: Benchmark categories for comparison framework

Score
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0	Does not meet best practice specification
1	Meets some of the requirements in the best practice specification
2	Meets most of the requirements in the best practice specification
3	Completely meets best practice specification

**Electricity Authority** 

## Application of the audit comparison framework

- 11. Authority staff have benchmarked and evaluated the existing audit regime using the comparison framework. This evaluation is detailed in Table 4 and summarised in Figure 1 below.
- 12. The dimensions of the New Zealand audit regime scored highly (score of 3: completely meets best practice specification) against best practice, including:
  - (a) **Scope of audit regime**: The scope of the audit regime includes all parties that can affect the wholesale settlement of the electricity market.
  - (b) **Logistics frequency**: The frequency of most audits is set at the discretion of the Authority. The Authority considers risk posed by the relevant audited entity and their past compliance performance when setting audit frequency.
- 13. The areas in which the New Zealand audit regime scored poorly (score of 0: does not meet best practice specification) against best practice included:
  - (a) **Assurance governance of audit process**: The Authority does not specify audit scope or requirements and does not approve audit plans for specific audits.
  - (b) **Assurance formal assurance requirements**: The Authority does not require auditors to follow any formal assurance requirements and does not require audited entities to change lead auditors after a period of time.
  - (c) **Logistics appointment of auditors**: The Authority does not appoint the auditor for each audited entity and does not seek to achieve a reduction in costs through a competitive tender process for audit services.
- 14. The remaining aspects of, the New Zealand audit regime scored 1 (meets some of the requirements in the best practice specification) against other dimensions and sub-categories. This indicates that the audit regime has some aspects of best practice in these dimensions but obvious opportunities exist to improve the audit regime in these areas.

Figure 1 Summary of best practice comparison framework against current audit regime

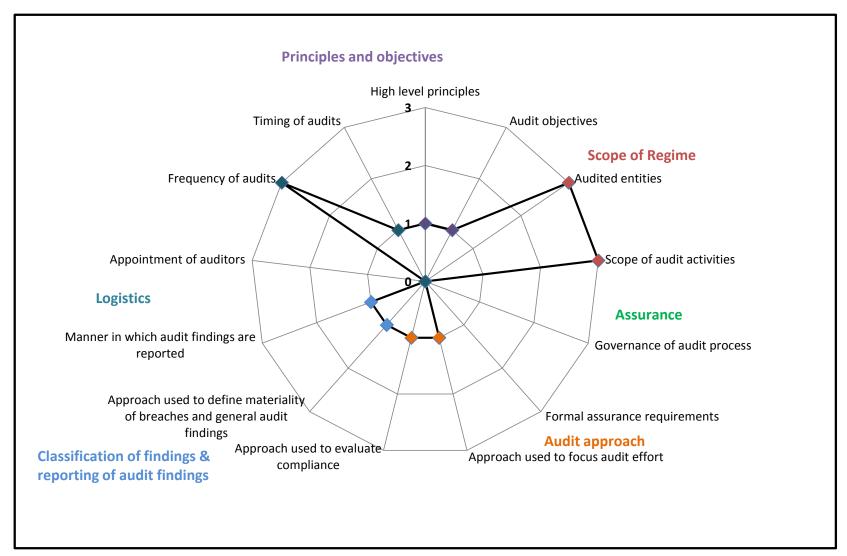


Table 4: Detailed evaluation of New Zealand audit regime against best practice

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
	High level principles	At a high level an audit regime should:  1. provide market stakeholders with assurance that the market is operating properly and in accordance with the market objectives, rules, and subsidiary documents  2. promote compliance with the Code and good industry behaviour  3. improve the operational efficiency of the market.	1	NZ audit regime meets at least one of the principles fully or at least two partially.	The audit process currently promotes compliance with the Code, therefore there is an intention to improve the operational efficiency of the market.
Principles and objectives	Audit objectives	<ol> <li>The audit regime should:</li> <li>provide assurance that participants (responsible for the provision of any data or supporting information that impacts on settlement or other financial market outcomes) are compliant with their obligations and have appropriate procedures/systems/controls to mitigate compliance risk</li> <li>inform the Authority when making Code required certification, approval and next audit date decisions</li> <li>provide audited entities with education</li> </ol>	1	NZ audit regime meets at least one of the principles fully or at least two partially.	Current audits provide assurance that participants are compliant with their obligations.  Audit reports provide a decision-making process.  Participant education is limited and ad hoc.

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
		and information that enables them to improve compliance, mitigate compliance risk and understand their role in the context of the wider market.			
Scope of	Audited entities	The entities audited as part of an audit regime should include:  • metering equipment providers  • data providers/settlement agents  • meter testing houses.	3	NZ audit regime includes all three audited entities.	Current regime meets all best practice requirements.
regime	Scope of audit activities	<ul> <li>Operational compliance audits.</li> <li>Software/tool compliance audit.</li> <li>IT review of data providers focussed on software management, information security, and selected interfaces.</li> </ul>	3	NZ audit regime includes scope for auditing aspects of all three activities.	Current regime meets all best practice requirements.
Assurance	Governance of audit process	<ol> <li>The governing body should specify high level requirements with respect to audit scope and approach.</li> <li>The governing body should approve audit plans for specific audits before they commence. Audit plans should, at a minimum, specify areas of audit focus</li> </ol>	0	NZ audit regime meets one of the specified governance requirements but only partially.	The Authority does not specify audit scope or approach.  The Authority does not approve audit plans.  The Code provides the Authority with the right to

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
		and proposed approach.  3. The governing body should reserve the right to prescribe audit reporting requirements (in terms of content, and format, etc).			prescribe audit reporting requirements. However this right has not been exercised.
	Formal assurance requirements	1. The governing body should have the right to prescribe formal assurance requirements (aligned with internationally accepted auditing standards (eg, ISAE 3000)) relating to audit scope, approach and quality control, and auditor independence and competence, etc.	0	NZ audit regime meets none of the specified assurance requirements.	The current audit regime does not require auditors to follow formal assurance standards.  Auditors are not rotated.
		2. The governing body should require auditors to be rotated from time to time. Auditor rotation can be specified either through the appointment of new audit firm, or through the appointment of a new lead auditor from an existing audit firm.			
Audit approach	Approach used to	A risk-based approach should be used when determining auditing focus.	1	NZ audit regime only partially	All audits under the regime use risk to focus audit

<sup>&</sup>lt;sup>1</sup> Clause 10(a) of Schedule 15.1

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
	focus audit effort	Areas of audit focus in low to medium risk areas should be rotated over multiple audits.		meets this requirement.	effort, but the approach is ad hoc and not transparent. In addition, the metering equipment provider audits are the only audits that consider compliance risk when determining next audit dates (whereby audited entities who pose a greater level of risk (as evidenced by audit findings) would be audited at greater frequency than those who pose a lower level of risk).
	Approach used to evaluate compliance	<ol> <li>The auditor should have a clear understanding of the audited entity's obligations under the Code in the areas that are covered by audit scope and focus.</li> <li>Compliance testing and audit should be conducted in accordance with the relevant assurance standard.</li> <li>Assessment of business processes areas in focus should enable the auditor to evaluate the level of compliance risk</li> </ol>	1	NZ audit regime meets at least one best practice specification fully or at least two partially.	Auditors use published guidelines to determine process areas to focus on.  No compliance testing or standards are applied.  No assessment of business process areas in focus or evaluation of compliance risk in audited areas.

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
		in that area.			
Classificati on and reporting of audit	Approach used to define materiality of breaches and general audit findings	<ol> <li>Materiality ratings for breaches and audit findings should be recommended by the auditor and approved by the governing body prior to the audit commencing.</li> <li>An ordinal rating based on risk and materiality should be adopted to classify breaches and audit findings.</li> </ol>	1	NZ audit regime includes some consideration of materiality when reporting findings; however approach to defining materiality is ad hoc, not transparent, and ratings are not ordinal.	Materiality ratings are set in guidelines and are based on directly measurable financial impact on audited entity of failing to comply with Code.
findings	Manner in which audit findings are reported	<ol> <li>The auditor should provide an opinion letter that sets out the scope and findings of the audit.</li> <li>The auditor should provide the audited entity and governing body with more detailed audit reports (as required).</li> <li>The governing body should reserve the right to specify mandatory content and formatting requirements for all audit opinions and reports.</li> </ol>	1	NZ audit regime meets at least one of the reporting requirements completely	The auditor does not provide and opinion letter.  The auditor produces a detailed audit report that the audited entity must provide to the Authority.  The Code requires that audits must be in the prescribed form however it does not include an audit

Dimension	Sub- categories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
					opinion.
Logistics	Appointment of auditors	<ol> <li>The governing body should appoint auditors to review the compliance of the audited entities.</li> <li>The governing body should select a single auditor for a group of entities where it deems that the appointment of a single auditor will lead to economies of scale (and therefore lower cost), consistency of approach, and a helicopter view of compliance across a group of audited entities.</li> </ol>	0	NZ audit regime meets none of the specified appointment requirements.	The Authority approves auditors but does not appoint an auditor for an audit.
	Frequency of audits	Audit frequencies of metering services providers should be set at the discretion of the governing body based on level of risk associated with audited entity as evidenced by:  • the risk inherent in the audited entities obligations  • past compliance performance of the audited entity (and therefore the level of risk posed by the audited entity taking into account controls).	3	Both considerations are used fully when setting audit frequency.	The audit frequency for metering equipment providers, reconciliation participants, dispatchable load purchasers and test houses can vary based on the risk inherent in the audited parties obligations and past compliance performance.

 Sub- ategories	Best practice specification	Current NZ audit regime score (0-3)	Assessment of current NZ audit regime	Reasoning
Timing of audits	<ol> <li>Compliance testing (requiring observed evidence of compliance) and compliance risk assessments of metering services providers should be undertaken during the course of the audit period (as opposed to once the audit period has ended).</li> <li>Audit activities which require information covering the entire audit period (eg, change management records providing evidence that the audited entity has met software management obligations compliantly throughout the audit period, system logs covering the audit period) should be conducted after the end of the audit period.</li> </ol>	1	A small number of compliance tests (requiring observation) are undertaken during the audit period.	The current regime partially meets the best practice specification in that audit activities which require information covering the entire year are conducted after the end of the audit period.