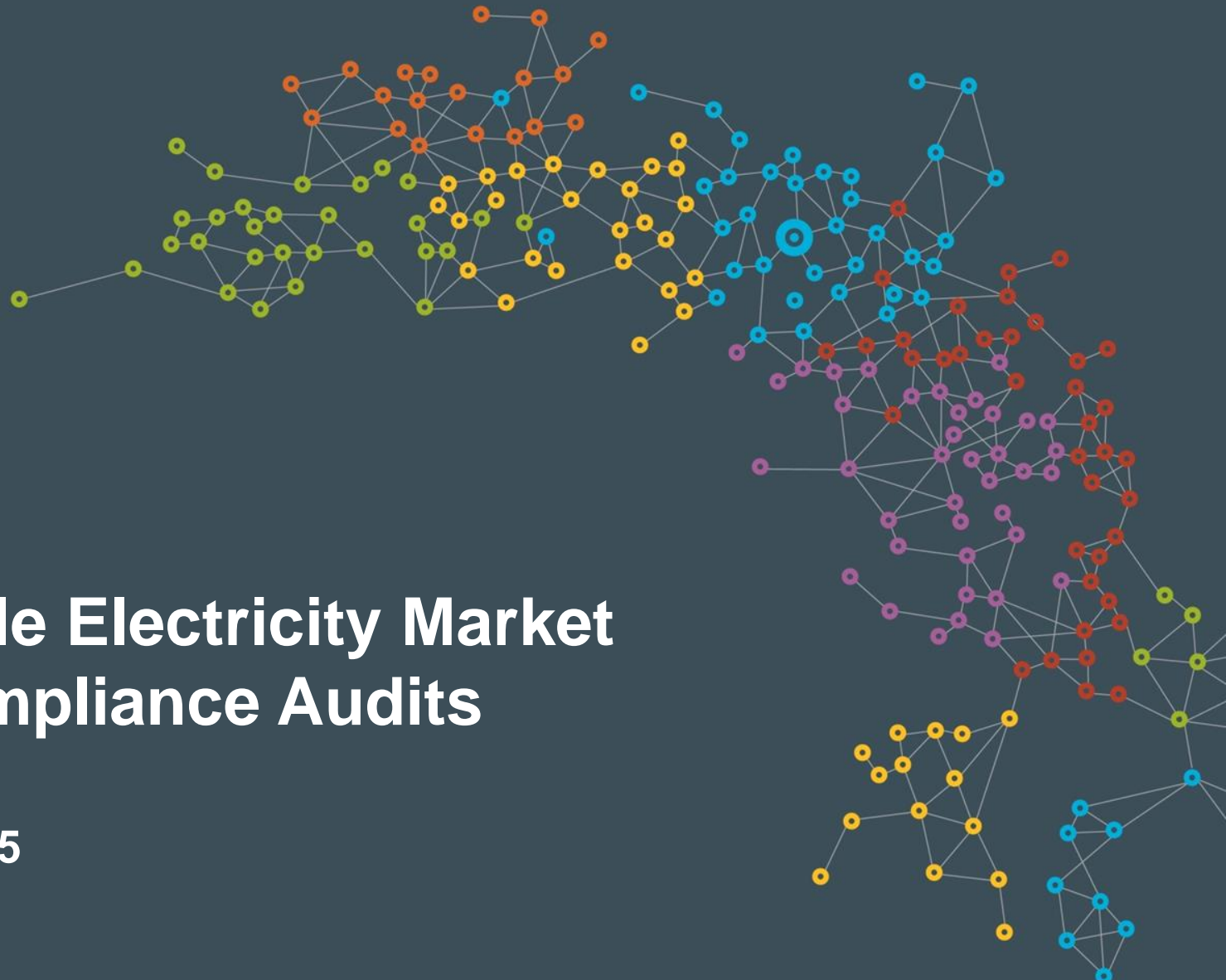




INDEPENDENT
MARKET
OPERATOR



Wholesale Electricity Market 2014 Compliance Audits

18 March 2015

What this session will cover

- Audit formalities
- Scope of 2014 audits
- IMO audit preparation
- Market Auditor's key findings

Audit formalities

Requirements and process

- IMO must appoint Market Auditor – PA Consulting Group
- Annual requirement
- IMO audit must cover:
 - the compliance of the IMO's internal procedures and business processes with the market rules
 - the IMO's compliance with the market rules and market procedures
 - the IMO's market software systems and processes for software management
- IMO requires System Management to be audited to verify compliance with market rules and market procedures
- Audit reports:
 - accept or prepare own report
 - published on the IMO's website
- Reports to the Minister

Scope

Type of audit and approach

- Audit period 10 August 2013 to 31 July 2014
- Incremental audit
 - partial assessment of whether the IMO or System Management (as the case may be) has complied with its obligations under the market rules and market procedures during the audit period.
 - the relevant obligations for the purposes of an incremental compliance audit:
 - are new or have been amended since the most recent annual compliance audit; or
 - relate to areas of recorded breaches since the most recent annual compliance audit
- Limited exception - IMO's internal procedures were comprehensively audited

Scope

IMO compliance

- Examined changes to the market rules that commenced during the audit period, and how these have been incorporated into market procedures and the IMO's internal procedures
- Examined breaches of the market rules recorded by the IMO during the audit period
- Compliance tested areas of the IMO's business operations that PA considered may have posed a compliance risk

IMO software management processes

- Examined the IMO's documented processes for software management
- Compared the documented processes to operational practices
- Reviewed the compliance of operational practices with the market rules

IMO software changes

- Reviewed all system changes implemented during the audit period
- Assessed whether those changes had potential for material impact on prices and quantities
- Reviewed whether those changes were certified as required under the market rules
- Reviewed all rule changes that commenced during the audit period
- Assessed whether any rule changes required system changes
- Assessed whether any changes were not implemented

Scope

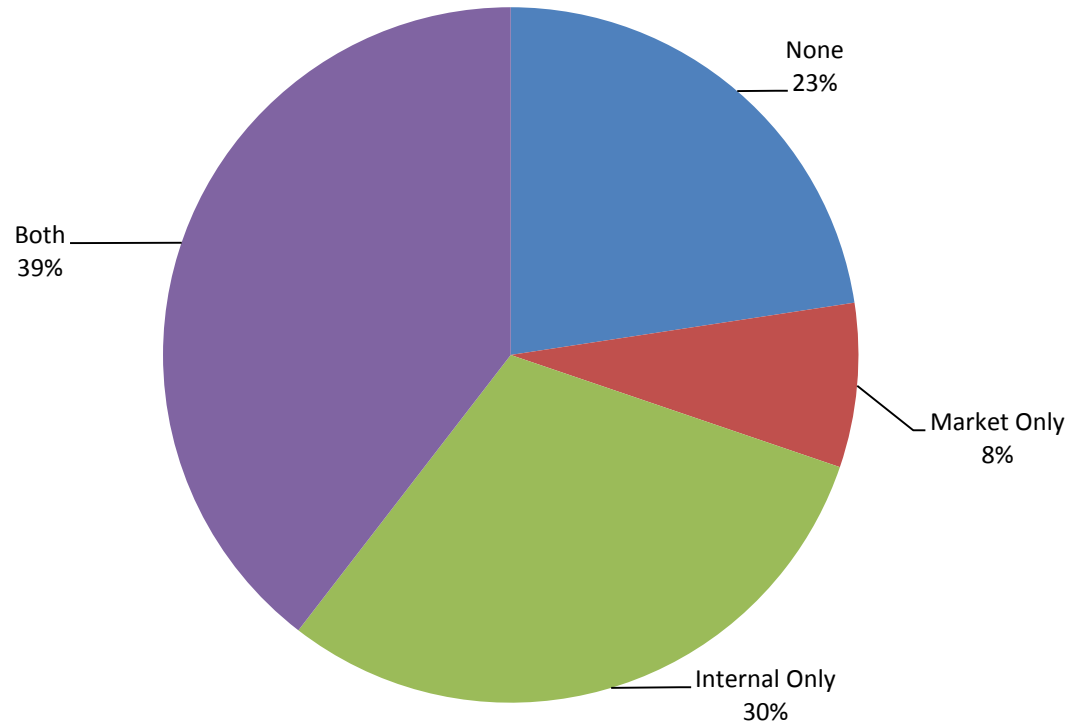
System Management

- Examined changes to the market rules that commenced during the audit period, and how these have been incorporated into Power System Operation Procedures and System Management's internal procedures
- Examined breaches of the market rules identified by System Management and the IMO during the audit period
- Examined System Management business functions that relate to areas of non-compliance identified in previous audits

IMO audit preparation

IMO obligations

- IMO has approximately 1,000 obligations under the market rules
- 77% require some form of documentation



IMO audit preparation

Audit readiness project

- Commenced December 2013
- Two phases:
 - Mapping Phase
 - Identified the IMO's obligations under the market rules
 - Mapped each obligation to the relevant internal procedure, market procedure or software
 - Identified any gaps (e.g. which obligations should be documented and are not, or have not been documented properly)
 - Documentation Phase
 - Addressed documentation gaps by developing new internal procedures or amending existing procedures (documentation gaps increase non-compliance risk)
- Created an Obligations Report during Mapping Phase

Market auditor's key findings

IMO Compliance Audit

- 20 market rules breached (some multiple times)
- Majority of breaches were technical and will be addressed through rule changes
eg MR 9.4.7 – failure to acknowledge Capacity Credit Allocation submissions by telephone within 30 minutes – the IMO uses an automated confirmation system
- PA found one material breach
IMO incorrectly calculated RCOQ on business days for two DSPs between January 2013 and November 2013 due to a software defect. The financial impact of the breach was \$26,000. In other words, due to the software defect, the IMO had collected \$26,000 more in refunds from the two DSPs than it should have. The IMO has since returned the \$26,000 to the affected participants, and has corrected the software defect
- PA selected a further 36 obligations on the IMO for compliance testing. Of those obligations, PA identified minor non-compliances in respect of six obligations

Market auditor's key findings

IMO Compliance Audit (cont'd)

- Other findings related to compliance risk
 - IMO has identified or implemented remedial actions in respect of each breach
 - Marked improvement in the quality of controls being used by the IMO to manage non-compliance risk
 - Significant improvement in the coverage and quality of the IMO's internal procedures
 - Except for a relatively small number of obligations, the IMO's internal procedures capture all of its obligations under the market rules
- IMO's market procedures and internal procedures comply with the market rules in all material respects

Market auditor's key findings

IMO Software Compliance Audit

- Two non-material breaches relating to software release processes
- PA found that the IMO's software correctly implements the calculations embodied in the market rules – with one limited exception
 - Calculation of capacity refunds for partially commissioned intermittent generator under clause 4.26.1A(a)(ivA)
 - Addressed in production release November 2014
- IMO has continued to improve its software management processes, and has increased the level of automation in the WEMS build and release process, which reduce the risk of non-compliance
- WEMS change, test and release processes continue to perform well

Market auditor's key findings

System Management

- 27 market rules breached (some multiple times)
- PA found material breaches of six market rules relating to implementing market dispatch, and developing and publishing critical market information
- In summary, PA found instances of where System Management did not:
 - issue dispatch advisories “as soon as practicable after System Management becomes aware of a situation requiring the release of a dispatch advisory
 - issue dispatch advisories when significant outages of generation transmission or customer equipment are occurring or expected to occur
 - include particular information in dispatch advisories
 - provide correct LFAS enablement quantities to the IMO
 - provide the IMO with best estimate load forecast
 - use facilities for LFAS in accordance with the LFAS merit order
- PA analysed a sample of data and did not find any systemic issues with dispatch out of merit

Market auditor's key findings

System Management

- Other findings related to compliance risk
 - PA has noted that compliance self-reporting practices still appear to be robust, with staff proactively notifying potential compliance issues
 - Need for System Management to define a robust service level agreement for support of its planning, scheduling and dispatch systems
 - Need clearer definition of how System Management and other parts of Western Power interact across the ring-fence
 - Minimal progress on improving and reorganising internal procedures, with ownership and governance of control room procedures currently unclear
 - PA identified difficulties in monitoring compliance in relation to balancing portfolio dispatch including auditing forced outage notifications (due to lack of records other than phone records)