



Scheduling and Dispatch Audit
Period Ending 31 December 2024

9 March 2026

Notice re Distribution and Publication

This notice concerns the Scheduling and Dispatch Audit Report to EirGrid Plc and SONI Limited (together the System Operators (the SOs)) on the Scheduling and Dispatch Audit for the 12 months ended 31 December 2024 dated 9 March 2026 (the “Report”).

This notice does not apply to the SOs (including their employees acting within the scope of their employment duties).

The requirement for the Scheduling and Dispatch Audit is set out in Paragraph 9 of Condition 10A and Condition 22A of the Transmission System Operator Licences for EirGrid Plc and SONI Limited respectively. This Report was prepared by Deloitte Ireland LLP (a limited liability partnership registered in Northern Ireland with its registered office at The Ewart, 3 Bedford Square, Belfast, BT2 7EP, Northern Ireland) (“Deloitte”).

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1. Introduction

1.1. Background

Scheduling and Dispatch (“S&D”) is the process by which an Electricity System Operator plans and controls the operation of units on the power system in order to operationally match supply and demand. For the island of Ireland, the S&D processes are delivered by the two System Operators – EirGrid Plc and SONI Limited – and operate within the wider market and regulatory arrangements outlined in the all-island Single Electricity Market and dual-regulatory structure provided by the Commission for Regulation of Utilities (CRU) and Northern Island Utility Regulator (UR) (together the “Regulatory Authorities” or “RAs”).

The specific requirements which are followed by the SOs are set out in their respective Grid Licences, select aspects of the Single Electricity Market (SEM) Trading and Settlement Code and other decision documents issued by the SEM Committee including SEM-011-062 “Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code SEM Committee Decision Paper”. The specific Licence and Code requirements within the scope of the Scheduling and Dispatch Audit are included in Appendix A.

The SOs have engaged Deloitte as Scheduling and Dispatch Auditor to undertake a Reasonable Assurance Engagement to assess whether the SOs have complied with the applicable requirements, as set out within the Terms of Reference (“ToR”) dated 30 August 2024 “Annual Audit of the Scheduling and Dispatch Process” produced by the SOs and approved by the RAs. The ToR require that the assurance be provided as a Reasonable Assurance Engagement under ISAE 3000 (Revised) *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*.

The Terms of Reference establish seven ‘pillars’ in respect of the scope and activities of the Scheduling and Dispatch Audit, as follows:

1. Priority Dispatch
2. Cross Zonal Actions
3. Dispatch Instructions
4. Merit Orders
5. Operational Constraints
6. Constraint Flagging
7. IT General Controls required to support the areas noted in items 1-6 above

Note that, as per the ToR, the testing and associated reporting for Pillar 2 – Cross Zonal Actions – has been separately performed and reported and is not included in this document. The Pillar numbering has been retained to provide alignment with the Terms of Reference.

Unless otherwise specified, words and expressions used in this document have the same meaning as defined in the Transmission System Operator Licences and SEM Trading and Settlement Code.

1.2. Requirement for Scheduling and Dispatch Audit

The requirement for a Scheduling and Dispatch Audit are set out in Paragraph 9 of Condition 10A and Condition 22A of the Transmission System Operator Licences of EirGrid Plc and SONI Limited (respectively) (together, 'the Conditions'). The Conditions set out that the SOs must arrange for a periodic audit of the Scheduling and Dispatch process, its operation and implementation in accordance with directions given to it from time to time by the RAs in respect of such matters as the RAs considers appropriate.

The ToR sets out that the Scheduling and Dispatch Audit report covers the 12 months from 1 January 2024 to 31 December 2024.

1.3. Report Structure

Section 2 contains our Assurance Report, including our formal conclusion under ISAE 3000 (Revised) in accordance with the Terms of Reference.

Section 3 provides a summary of our approach and work performed by Pillar.

Section 4 contains details of findings identified in relation to particular aspects of the engagement which, whilst not material in the context of the engagement, are included to assist the SOs and RAs to judge for themselves the relative significance of all findings reported. Qualitative and quantitative factors were taken into account when determining whether issues identified should be included in this section of the report. From a qualitative perspective, we consider a range of factors including the number and type of parties affected, cause of the issue, duration of the issue and whether this had already been identified by the SOs. The response for each of these points was provided by the SOs.

Appendix A contains the Criteria applicable to our Assurance Conclusion – as set out in Section 2 below.

2. Assurance Report

Independent Scheduling and Dispatch Auditor's Assurance Report to the Directors of EirGrid Plc and SONI Limited

2.1. Scope

We have been engaged by EirGrid Plc and SONI Limited to perform procedures to allow us to provide reasonable assurance over the extent to which the System Operators have complied with the requirements of their respective Transmission System Operator Licences, Grid Codes, Trading and Settlement Code and other decisions published by the SEM Committee insofar as they relate to the operation of the Scheduling and Dispatch processes operated by the System Operators during the 12 month period ending 31 December 2024 as set out in the Terms of Reference published 30 August 2024.

The engagement has been performed in accordance with ISAE 3000 (Revised) "Assurance Services Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000") issued by the International Auditing and Assurance Standards Board. In the context of this engagement, the terms "Audit" and "Scheduling and Dispatch Audit" mean a reasonable assurance engagement performed in accordance with ISAE 3000.

In the context of this Report, the operation of the Scheduling and Dispatch process by the System Operators is the "Subject Matter" and the specific elements of the Transmission System Operator Licences, Grid Codes, Trading and Settlement Code and other decisions published by the SEM Committee listed in Appendix A form the "Applicable Criteria" against which the Subject Matter has been evaluated.

As set out in Section 4 of the ToR the following aspects of the Scheduling and Dispatch process are not included in the scope of our work:

- The algorithms associated with the optimization engines, which produce the Long-Term Scheduling ("LTS"), Real Time Commitment ("RTC") and Real-Time Dispatch ("RTD") schedules, used in the scheduling and dispatch process.
- The Imbalance Pricing process which takes place after the scheduling and dispatch process has ended.
- Validation of data submitted to the Transmission System Operators by participants.
- Inputs such as forecasts which are provided by third parties.
- Inputs such as transmission and generator outage plans.
- The derivation of operational constraints.
- Actions taken with market participants by the Transmission System Operators to resolve performance issues during the scheduling and dispatch process.
- An assessment of the compliance of the Transmission System Operators in relation to any regulations other than those specifically referenced in the table included in Appendix A.
- Any regulations which are cross referenced within the regulations listed as the criteria but not specifically identified as criteria themselves, other than those specifically referenced in the table in Appendix A.

- Validation that data published in relation to the specified elements of the scheduling and dispatch process on the System Operators and Market Operator websites is complete and accurate unless specifically included in testing procedures.

ISAE 3000 requires us to determine and consider materiality when planning and performing our engagement, and when evaluating the impact of any issues identified in performing our testing. For the purposes of this engagement, we have assessed that materiality should be set at 0.5% of the total imperfections charge for the period on the basis that the financial impact of decisions in the Scheduling and Dispatch process are funded through the imperfections charge within the SEM. For the period end 31 December 2024, the imperfections charge was €478.5m and hence a materiality of €2.4m has been applied.

For the purpose of our conclusion, a qualification, in terms of material non-compliance with the Applicable Criteria, arises if the quantitative impact of errors identified individually or in aggregate exceeded the materiality value as set out above, or where we considered the breach to be of such significance that it undermined the robust operation of the Scheduling and Dispatch process.

2.2. Respective Responsibilities

The System Operators, collectively as the Responsible Party are responsible for operating the Scheduling and Dispatch process in accordance with the requirements of the Applicable Criteria, including designing and executing such processes and controls required to reduce the likelihood that errors or irregularities will occur and remain undetected.

Our responsibility is to assess the operation of the Scheduling and Dispatch process by the System Operators against the requirements in the Applicable Criteria and to independently express a conclusion as to whether the Scheduling and Dispatch process operated by the System Operators complies with the requirements of the Applicable Criteria. Other than as outlined in section 2.3, Work Performed, we did not audit or otherwise test or verify the information given to us in the course of the Services.

We were not required to carry out an audit conducted in accordance with International Standards on Auditing (Ireland). Consequently, our conclusion is not expressed as an audit opinion.

2.3. Work Performed

We conducted our work in accordance with ISAE 3000. That standard requires that we comply with ethical requirements, including independence requirements, and plan and perform our work to obtain appropriate evidence about the subject matter of the engagement sufficient to support a conclusion providing reasonable assurance.

An outline of the work we performed is as follows, with further detail broken down by the Pillars set out in the Terms of Reference included in section 3 below:

- Determined the specific requirements that applied to the System Operators as per the Applicable Criteria.
- Performed walkthrough of key processes and controls operated by the System Operators for the purposes of performing the Scheduling and Dispatch process.
- Tested the operation of key system-based and manual process controls applicable to the Scheduling and Dispatch process including general IT controls, monitoring of key

data interfaces, review and approval of the determination of weekly system constraints and training/certification of control room engineers.

- Assessed, on a sample basis, key judgements made by System Operator staff including in particular dispatching decisions including the decision to curtail or constraint units with priority dispatch with reference to the Applicable Criteria.
- Developed automated scripts to recalculate / reperform key systemic calculations including the calculation of merit orders and the application of the SEM Flagging and Tagging rules.

Except to the extent expressly stated, we did not subject the information given to us by the System Operators to checking or verification procedures. The procedures we performed were not designed to and are not likely to reveal fraud.

2.4. Basis for Conclusion

We believe that the work we performed and the evidence we obtained provides a reasonable basis for our conclusion. Our assurance report has been produced under our letter of engagement with the System Operators dated 3 June 2025.

In addition, we have prepared a Report of Findings in Section 4 which is attached to this conclusion setting out findings identified in relation to particular aspects of the engagement. Our conclusion should be read in conjunction with the Report of Findings, but is not qualified in respect of items contained within the Report of Findings.

2.5. Conclusion

Based on the procedures performed and the evidence obtained, in our opinion, the System Operators have, in all material respects, complied with the Applicable Criteria as set out in the Appendix to this report in operating the Scheduling and Dispatch processes during the period 1 January 2024 to 31 December 2024.

2.6. Inherent Limitations

There are inherent limitations in assurance engagements that include testing of controls as because of their nature they may not detect all errors or omissions in processing or reporting of transactions.

Many of the activities operated by the System Operators in the scheduling and dispatch process involve real-time decision making – particularly in respect of dispatching decisions, including decisions regarding curtailment or constraint of priority dispatch units – by the responsible engineer within the control centre at the time the decision is made. Although some records are retained to document the most significant decisions within control room logs, significant elements of our testing were based on retrospective review of the decision with reference to the principles of scheduling and dispatch as set out in the Applicable Criteria. In such cases, we have assessed decisions made against the Applicable Criteria but are unable to evidence that this was the underlying basis of the decision reached at the time it was made by the control room engineer.

The conclusions expressed herein only relate to the period under review, and as at the period end date specified and do not provide assurance in relation to any future period or date as changes to systems or controls subsequent to the period covered by this report may alter the validity of our opinions.

2.7. Independence

In conducting our engagement, we have complied with the Code of Ethics issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

2.8. Quality Control

The firm applies International Standard on Quality Management 1 and accordingly maintains a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

2.9. Use of Report

Our Report has been prepared for the exclusive use of the System Operators in accordance with the scope agreed within our engagement letter dated 3 June 2025. Our work has been undertaken solely for the purpose of assessing the operation of the Scheduling and Dispatch process by the System Operators against the Applicable Criteria (outlined in Section 2.1 above). Our work was not planned or conducted with any other objective in mind and so cannot be relied upon for any other purposes.

Save that a copy of our report may be published in full on the System Operators websites (or alternatively on the Single Electricity Market website) in order to meet the requirement to make publicly available within the ToR, our Report is not to be used for any other purpose, recited or referred to in any document, copied or made available (in whole or in part) to any other person without our prior written express consent. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the System Operators for this report or for the conclusions we have formed.



James Schmidt

Partner

For and on behalf of Deloitte Ireland LLP

Dublin, Ireland

9 March 2026

3. Outline of Approach

Our testing approach included a combination of testing, on a sample basis, of controls operated by the SOs; using data analytics to profile data to identify items of interest; using data analytics to reperform key system-based calculations; and direct testing of specific outcomes of the scheduling and dispatch process. A summary of the work performed by Pillar (as set out in the Terms of Reference) is outlined below. Note: Pillar 2 (Cross Zonal Actions) is not included within the scope of this report in accordance with the ToR.

Pillar	Overview of Testing Approach
1: Priority Dispatch	<ul style="list-style-type: none"> i. Obtained a copy of the resource balancing table and market registration data for the in-scope period. Reconciled the two datasets and assessed whether all units recorded as having Priority Dispatch in the resource balancing table are eligible for this status based on the market registration data, and vice versa. ii. Selected a sample of Curtailment and Constraint Events that occurred across the testing period, and for each event: <ul style="list-style-type: none"> o Assessed whether all units expected were included in each event and whether the set point was appropriately calculated. o Obtained support for why the curtailment / constraint was applied and assess whether consistent with the Applicable Criteria. iii. Assessed whether the recording of wind units against the three category types outlined within SEM-011-062 agreed between the data within the Wind Dispatch tool and reported in the monthly controllability report published by the SOs.
3: Dispatch Instructions	<ul style="list-style-type: none"> i. Obtained extracts of key data relating to system activity over the full year including system frequency, dispatch instructions, renewable energy output and control room logs. ii. Analysed data to identify events with a greater risk of requiring dispatch away from market schedules. iii. Selected a random sample of days identified as having one or more events of greater risk and, separately, an additional randomly selected date. iv. For each date selected in (iii), reviewed specific dispatch decisions related to the event identified and assessed whether dispatching was consistent with the Applicable Criteria, including SEM-011-062. For the randomly selected date, selected dispatch decisions at random and performed the same assessment. In each case, obtained explanations from the SOs as required. v. For each date included in the sample in step (iii), verified that the Scheduling and Dispatch policy parameters configured

Pillar	Overview of Testing Approach
	<p>within the MMS system agreed to the published decision paper.</p> <ul style="list-style-type: none"> vi. Assessed the design, determined the implementation and operating effectiveness of controls over key data interfaces into the MMS including Wind / Solar forecasts, Interconnector Reference programs and participant data provided via the Market Participant Interface (MPI).
4: Merit Orders	<ul style="list-style-type: none"> i. For the sample of dates tested under Pillar 3, item (iii), developed and applied data analytics scripts to recalculate the four merit orders that correspond to each Real-Time Dispatch schedule tested. ii. Compared the results from (i) to the merit orders calculated by the SOs and assessed any differences identified.
5: Operational Constraints	<ul style="list-style-type: none"> i. For the weeks corresponding to the dates sampled as part of the testing approach (iii) for Pillar 3 assessed whether the weekly constraint report was approved and published as per required timelines. ii. For each sample, assessed whether constraints in MMS are configured to reflect the published report. iii. Identified where updated version of reports were published for the same week. For a sample of republished reports, assessed whether the updated constraints were reflected in MMS.
6: Constraint Flagging	<ul style="list-style-type: none"> i. Developed scripts to apply flags as per documented methodology and relevant input data. ii. For the sample of dates tested under Pillar 3, item (iii) applied the scripts to determine System Operator tag and flags applied. iii. Compared the results from (ii) to the tagging and flagging calculated by the SOs and assessed any differences.
IT General Controls required to support the areas noted in items 1-6 above	<ul style="list-style-type: none"> i. Assessed the design, determined the implementation and operational effectiveness of key controls relating to IT Security, Change Management and Operations for the in-scope applications Market Management System (“MMS”), Electronic Dispatch Instruction Logger (“EDIL”), Wind Dispatch Tool (“WDT”) and Interconnector Management Platform (“ICMP”).f

4. Report of Findings

The following table provides details of matters identified during the course of the engagement which, while not material in the context of our conclusion, may represent actual or potential non-compliance with the Applicable Criteria. The responses have been provided by the System Operators and have not been subject to testing. Except where otherwise stated the findings set out below apply to both System Operators.

Scope Pillar	Issue	Effect	SOs Response
1. Calculation of Individual Unit Set Points			
Priority Dispatch	<p>Our testing of Scope Area 1 (Priority Dispatch) includes, inter alia, testing of curtailment and constraint events – i.e. decisions made to reduce the output of controllable wind and solar generators, where necessary, to maintain system security or respond to local transmission restrictions.</p> <p>Individual curtailment or constraint events are executed by the System Operator engineer, based on a total dispatch target for a group of units within the “Wind Dispatch Tool” (WDT) based on pre-configured groupings (“Constraint Groups”), maintained by the SOs to reflect specific transmission / regional constraints (or in the case of curtailment groups, that represent all applicable units in the relevant jurisdiction). The WDT subsequently calculates unit set point for each unit within the applicable group and produces the associated dispatch instructions with the intention that the total reduction in output is pro-rated</p>	<p>The System Operator cannot directly verify specific set point calculations due to limitations in the time granularity of historic data available and limited documentation and working knowledge of the system calculations performed.</p> <p>Given the bespoke nature of the WDT, the SOs should maintain sufficient knowledge and documentation of the methodology and calculations to allow them to verify that the WDT calculations continue to operate as expected, including to support testing of changes to the system.</p> <p>Our other testing for Scope Area 1 (as outlined in section 3 above) did not identify any exceptions in respect of the decision to apply a curtailment / constraint, the group of units selected or the determination of the overall dispatch target.</p>	<p>Detailed design and testing of the WDT’s required functionality, including all embedded calculations, are completed prior to deployment in the control room. Only after successful and rigorous testing is any new WDT functionality approved for implementation in the NCC/CHCC. During the period covered by the 2024 Audit, no changes were made to the WDT’s functionality.</p> <p>SONI and EirGrid demonstrated that the calculations performed by the WDT operated as designed. The tool uses 4 second data to calculate its setpoints; however, data at this resolution is not retained historically. To evidence correct WDT operation, SMEs manually replicated the</p>

Scope Pillar	Issue	Effect	SOs Response
	<p>across the applicable units as outlined in the Balancing Market Principles Statement.</p> <p>Detailed documentation or working knowledge of the exact WDT Calculations was not available from the SOs, requiring them to seek clarification from the system vendor to confirm the specific calculations performed.</p> <p>The clarification included the fact that the calculation utilises near real-time data for unit availability and output (updated every 4 seconds) within the WDT. This data is not retained by the SOs.</p> <p>As the near real-time data was not retained by the System Operators, we were unable to fully test the calculation for the sample of events selected for testing. We were able to confirm the calculation operated as expected within a test environment. In addition, the System Operator was able to provide availability and actual output data recorded at 15-second intervals (rather than 4-second intervals). Using this, we were able to test the sampled events within a tolerance of +/-1 MW at an individual set point level.</p>		<p>WDT’s calculation processes. They demonstrated that increasing the resolution of the input data reduces variance when compared with actual WDT outputs.</p> <p>This validation was carried out first using 1 minute average data and subsequently using 15 second spot resolution data. As expected, the higher resolution dataset produced improved accuracy. The results were shown to fall within acceptable tolerances relative to the WDT outputs, with any remaining variance attributable to the higher granularity used by the WDT itself.</p> <p>The TSOs will explore the business case for retaining higher granularity data for future WDT output validation, taking into consideration the materiality of the observation and the costs and technical implications of associated IT system change requests.</p>

Scope Pillar	Issue	Effect	SOs Response
2. Non-Issuance of Individual Curtailment Dispatch Instruction			
Priority Dispatch	<p>Our testing identified a single instance where a unit within the Northern Ireland jurisdiction was not issued with a curtailment instruction when a curtailment was applied to the Northern Ireland jurisdiction.</p> <p>The operation of the WDT allows individual units to be temporarily excluded by the Control Room Engineer from receiving dispatch instructions, however it is not possible to retrospectively confirm that this is the reason for the lack of curtailment instruction.</p>	<p>This issue had no direct impact as the unit was already fully constrained off through previously issued instructions. In addition, the curtailment occurred at 00:56 and as the unit was a Solar PV unit, the unit availability was zero.</p> <p>Notwithstanding this, a curtailment instruction should have been issued based on the dispatching rules to allow for the scenario of the curtailment continuing to apply once the unit was able to generate and was not also constrained.</p>	<p>The unit has been removed over the course of the year because it failed to follow dispatch. Regardless of this, it is accepted the unit should have been issued a curtailment instruction for the identified instance.</p>
3. Review of Wind Constraint Group Changes			
Priority Dispatch	<p>For each change of the configuration of a Constraint Group within ROI, the change should be subject to a review by a separate individual to the one making the change. We identified 2 instances out of 5 samples selected where no secondary review of changes took place in July and August 2024.</p> <p>We understand from discussion with the SOs that there was no qualified secondary reviewer in place between July 2024 and March 2025 and therefore the secondary review was not completed for any change during this period.</p>	<p>There is a risk that changes to the Constraint Groups might be incorrectly recorded within the Wind Dispatch Tool.</p> <p>Deloitte confirmed for the specific cases noted that the update had been made as expected.</p>	<p>There was a temporary constraint of resources with required certification. However, this has been resolved, and Wind Constraint Groups have been updated and independently reviewed.</p>

Scope Pillar	Issue	Effect	SOs Response
4. Differences in Merit Order Calculation			
Merit Order	<p>The merit order is used by the Control Room Engineer when making dispatching decisions to identify the most cost-effective units to dispatch when required. Errors in the merit order calculation could result in the selection of units for dispatch that are not the most cost-effective option or, where units are not included in the merit order, units not being selected for dispatch even if the most cost-effective option.</p> <p>Our independent recalculation of the merit orders for a sample of five dates identified the following differences:</p> <ul style="list-style-type: none"> • For all five of the sample of offline merit orders we identified there were between 1 and 5 Demand Side Units ('DSU') that were not included in the offline fast merit order produced by the System Operator. • For one of the sample dates there were two units that were included in the online incremental merit order and were not included in the offline merit orders despite the units not operating. 	<p>We note in the specific instances noted, the units were amongst the highest cost units in the respective merit order and so the likelihood of being selected for dispatch is considered remote.</p>	<p>Due to the high costs of DSU units, no impact is expected. However, SONI & EirGrid have contacted the application vendor to address the identified discrepancies.</p>

Scope Pillar	Issue	Effect	SOs Response
5. Publication Errors			
Operational Constraints	<p>We identified 3 errors out of 10 samples selected relating to the publishing of the Weekly Operational Constraints Update reports on the SEMO website:</p> <ol style="list-style-type: none"> i. The Week 29 report did not include the dates 20th and 21st July 2024 and these were not included in another weekly report. ii. The Week 51 report should have been published on Friday 13th December 2024 but was not published until Monday 16th December 2024. iii. The Week 38 revision 2 report included decommissioned units as part of the System Stability (S_NBMIN_ROImin) constraint information. 	<p>This issue has an impact on market participant transparency.</p>	<p>The instances were linked to process deviations. SONI and EirGrid will take measures to ensure such occurrences are minimised in future.</p>
6. User Access Review – Self-Approval			
IT General Controls	<p>Quarterly access reviews are completed for the four in-scope IT Systems. Our testing identified:</p> <ul style="list-style-type: none"> • For the EDIL Q1 and Q3 user access reviews, two reviewers approved their own access rights. • For the EMS Q1 and Q4 user access reviews, one reviewer approved their own access rights. 	<p>Whilst the access of the users was appropriate, this constitutes a segregation of duties (SoD) violation, potentially undermining the integrity and effectiveness of the access review process by compromising independent oversight.</p>	<p>Accepted for EDIL. Process to be further enhanced in future to mitigate against potential incidences of self-approval.</p> <p>Accepted for EMS. Going forward, the process will be improved to ensure future incidences of self-approval do not occur.</p>

Scope Pillar	Issue	Effect	SOs Response
7. Configuration of System Password Parameters			
<p>IT General Controls</p>	<p>We identified weaknesses in the configuration of system enforced password settings in relation to password age, re-use, complexity and lockout settings. A number of specific weaknesses were identified across the EDIL and ICMP applications, the MMS and EDIL databases and MMS server operating system.</p> <p>Whilst system enforced controls are in place, these were not all aligned to System Operator IT Security Policies.</p> <p>As part of our testing, we identified nine service accounts where passwords had not been regularly changed in line with System Operator IT Security Policies.</p>	<p>Non-compliance with System Operator documented IT Security Policy.</p> <p>This issue had no direct impact on the scheduling and dispatch process.</p>	<p>For EDIL lockout, further investigation will occur in the future, in order to rectify appropriately. A review will be carried out with the vendor, to fortify the system.</p> <p>The ICMP password age will be investigated and rectified appropriately, following a review with the vendor to determine how it can be strengthened.</p> <p>Passwords for MMS DB + OS and EDIL DB, are stored in EPM (Password storage tool), where resources with required privileges can access them. This will further be reviewed with the vendor to layout the process for service account password change, in line with security policies.</p>

Appendix A – Applicable Criteria

The Criteria refer to a number of documents which are publicly available from the EirGrid (www.eirgridgroup.com), SONI (www.soni.ltd.uk), SEMO (www.sem-o.com) and SEM Committee (www.semcommittee.com) websites.

#	In Scope Items	Criteria EirGrid	Criteria SONI
1	Priority Dispatch	<p>EirGrid TSO License Condition 10A – Para. 4(a)/(b) 0 5(f), (i)</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Resource balancing table • Curtailment Events • Constraint Events • Wind logs <p>Other requirements:</p> <p>SEM-11-062 Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code SEM Committee Decision Paper.</p>	<p>SONI TSO License Condition 22A – Para. 4(a)/(b) 0 5(f), (i) Condition 9A</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Resource balancing table • Curtailment Events • Constraint Events • Wind logs <p>Other requirements:</p> <p>SEM-11-062 Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code SEM Committee Decision Paper.</p>
3	Dispatch Instructions	<p>EirGrid TSO License Condition 10A – Para. 2, 4 and 5</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Frequency (Condition 10A Para 2, EirGrid Grid Code CC. 8.2.1) 	<p>SONI TSO License Condition 22A – Para. 2, 4 and 5</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Frequency (Condition 22A Para 2, SONI Grid Code CC. 5.3.1)

#	In Scope Items	Criteria EirGrid	Criteria SONI
		<ul style="list-style-type: none"> Physical Notifications (Condition 10A Para 2(a)(i), 4 and 5(b)) Generators declaring unavailable (Condition 10A Para 2(a)(ii)) Generation units not subject to central dispatch (Condition 10A Para 2(a)(iv)) Transmission System Outage (Condition 10A Para 2(b)) Daily forecast demand (Condition 10A Para 4 and 5(a)) Scheduling and Dispatch Policy Parameters (Condition 10A Para 4 and 5(c)) Generators Technical Offer data (Condition 10A Para 4 and 5(e)) Interconnector Reference Programs (“ICRPs”) (Condition 10A Para 4 and 5(f)) <p>Other requirements:</p> <p>For 2024 Audit Period: SEM-23-052 Trading and Settlement Code</p> <p>Scheduling & Dispatch Parameters 2024 Decision Paper</p> <p>2025 Scheduling and Dispatch Parameters consultation has not yet taken place.</p> <p>EirGrid Grid Code CC. 8.2.1</p>	<ul style="list-style-type: none"> Physical Notifications (Condition 22A Para 2(a)(i), 4 and 5(b)) Generators declaring unavailable (Condition 22A Para 2(a)(ii)) Generation units not subject to central dispatch (Condition 22A Para 2(a)(iv)) Transmission System Outage (Condition 10A Para 2(b)) Daily forecast demand (Condition 10A Para 4 and 5(a)) Scheduling and Dispatch Policy Parameters (Condition 22A Para 4 and 5(c)) Generators Technical Offer data (Condition 22A Para 4 and 5(e)) Interconnector Reference Programs (“ICRPs”) (Condition 22A Para 4 and 5(f)) <p>Other requirements:</p> <p>For 2024 Audit Period: SEM-23-052 Trading and Settlement Code</p> <p>Scheduling & Dispatch Parameters 2024 Decision Paper</p> <p>2025 Scheduling and Dispatch Parameters consultation has not yet taken place.</p> <p>SONI Grid Code CC 5.3.1</p>
4	Merit Orders	EirGrid TSO License Condition 10A – Para. 3	SONI TSO License Condition 22A – Para. 3

#	In Scope Items	Criteria EirGrid	Criteria SONI
		<p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Online Merit Orders • Offline Merit Orders <p>Other requirements:</p> <p>EirGrid Grid Code SDC 1.4.7.3 / SDC1.4.7.4 and SDC2.4.2.14</p>	<p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • Online Merit Orders • Offline Merit Orders <p>Other requirements:</p> <p>SONI Grid Code SDC 1.4.8.3 / SDC1.4.8.4 and SDC2.4.2.14</p>
5	Operational Constraints	<p>EirGrid TSO License Condition 10A – Para. 4(a)(b) & 5(d)</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • System reserves • Inertia • Operating limits • Tie Line Values 	<p>SONI TSO License Condition 22A – Para. 4(a)(b) & 5(d)</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • System reserves • Inertia • Operating limits • Tie Line Values
6	Constraint Flagging	<p>Trading and Settlement Code – Part B Flagging of Accepted Bids and Offers E.3.3.1</p> <p>Trading and Settlement Code Part B Appendices, APPENDIX N: Flagging and Tagging, System Operator and Non-Marginal Flagging Paragraph 1-5</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • System Operator flags (Methodology for Determining System Operator and Non-Marginal Flags (2.1,2.2)) • Non-Marginal flags (Methodology for Determining System 	<p>Trading and Settlement Code – Part B Flagging of Accepted Bids and Offers E.3.3.1</p> <p>Trading and Settlement Code Part B Appendices, APPENDIX N: Flagging and Tagging, System Operator and Non-Marginal Flagging Paragraph 1-5</p> <p>The areas included, but not limited to:</p> <ul style="list-style-type: none"> • System Operator flags (Methodology for Determining System Operator and Non-Marginal Flags (2.1,2.2)) • Non-Marginal flags (Methodology for Determining System

#	In Scope Items	Criteria EirGrid	Criteria SONI
		<p>Operator and Non-Marginal Flags (2.3))</p> <p>Methodology reference: Methodology for determining system operator and non-marginal flags.</p>	<p>Operator and Non-Marginal Flags (2.3))</p> <p>Methodology reference: Methodology for determining system operator and non-marginal flags.</p>
7	IT General Controls required to support the areas noted in items 1-6 above	<p>While not specifically discussed in the regulations, the TSO’s maintenance of IT General Controls over key systems supporting items 1-6 above is key to the overall testing approach. The testing focused on the following areas, where applicable, in respect of controls owned and operated by the Transmission System Operators over the in-scope systems – being; Market Management System (“MMS”), Electronic Dispatch Instruction Logger (“EDIL”), Wind Dispatch Tool (“WDT”) and Interconnector Management Platform (“ICMP”).</p>	



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