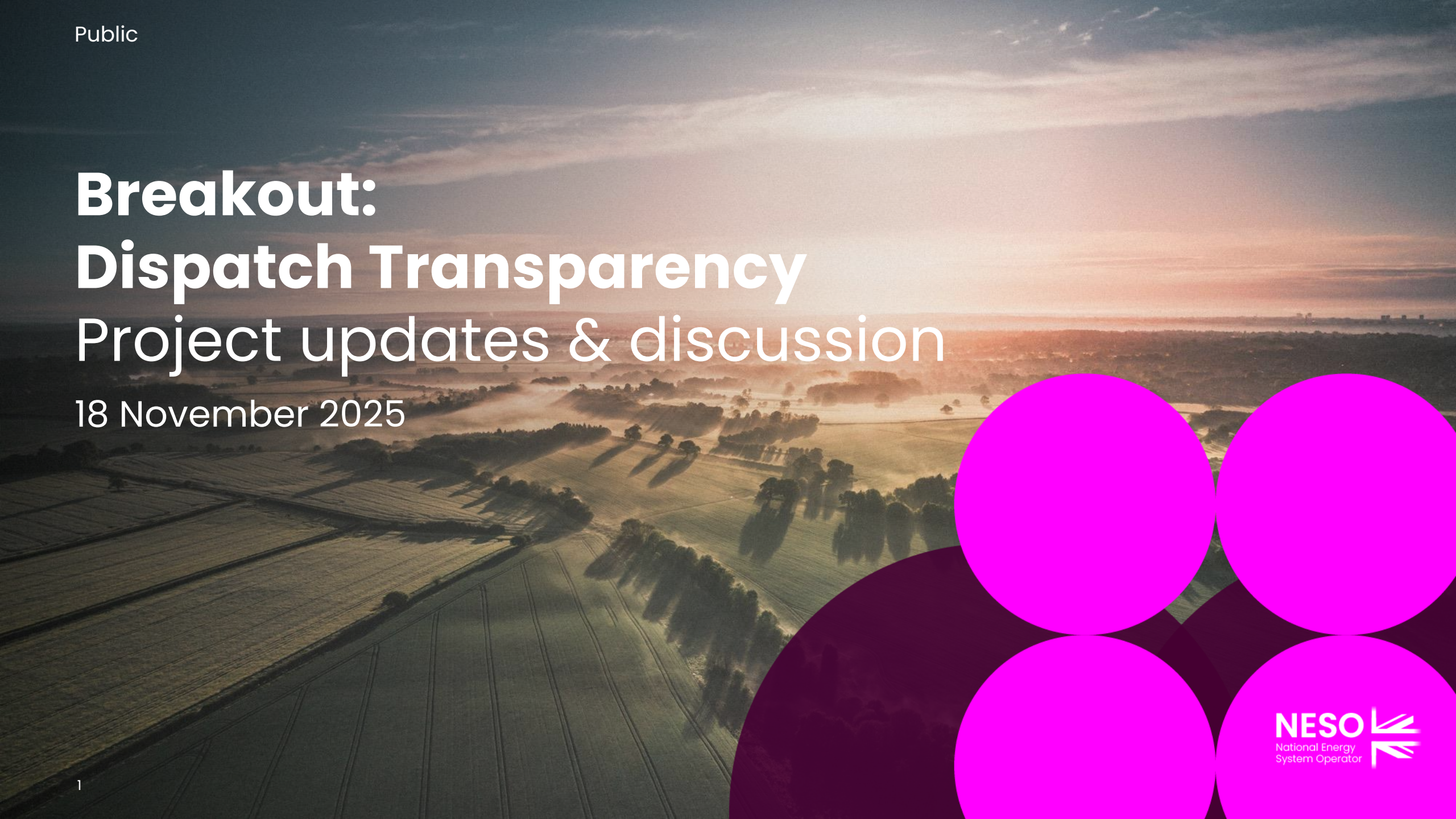

Breakout: Dispatch Transparency

Project updates & discussion

18 November 2025

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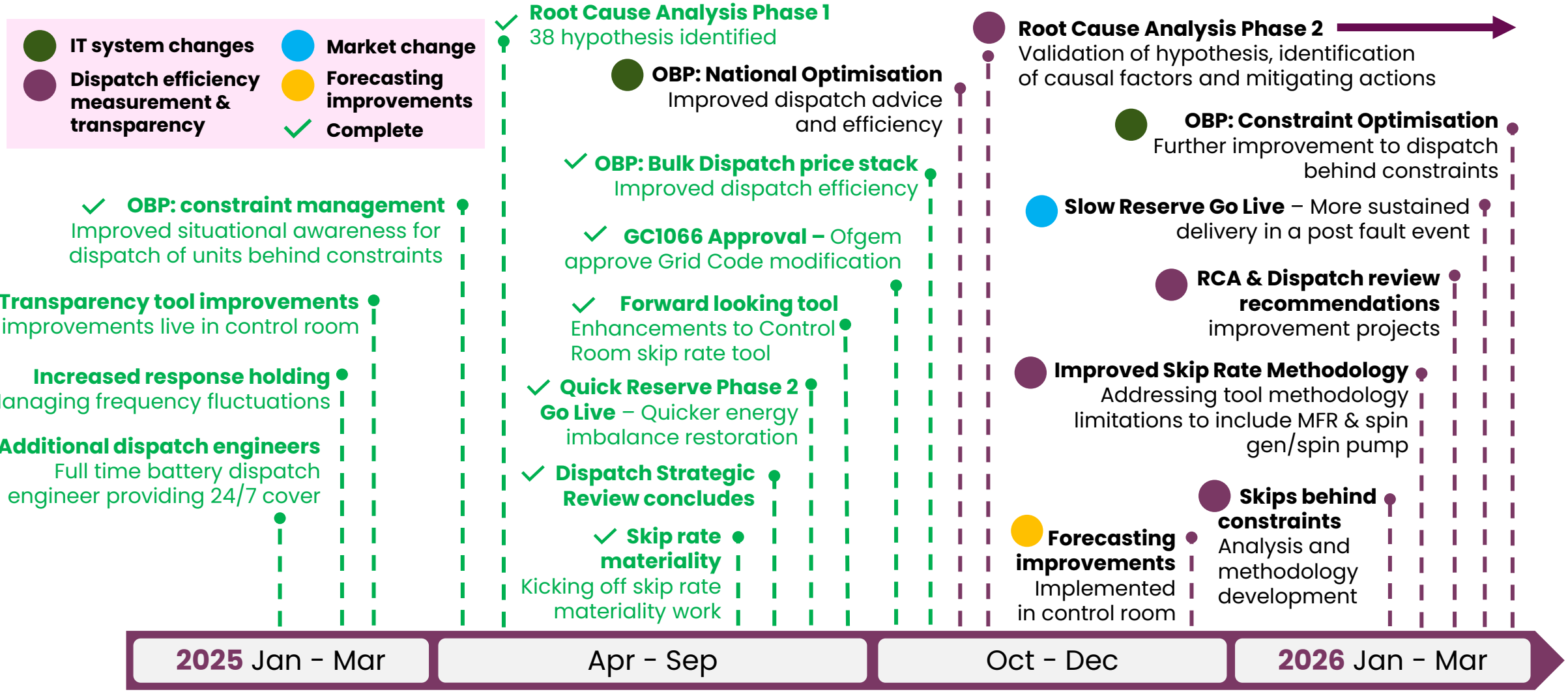
Welcome

Breakout agenda	Presenters
Roadmap review Skips behind constraints | Root Cause Analysis | Dispatch Strategic Review | Grid Code modification GC0166	Hannah Kirk-Wilson Katherine Munns Will Seward
Discussion: Target for reduction of skip rates What should a target be based on?	
Invitation for feedback What else should we be considering for addressing skip rates?	

Roadmap review

Delivery: commitments & success measures



Skips behind Constraints

Context

- When constraints are active, NESO Control Room engineers dispatch units to alleviate flow across the boundary.
- A ‘skip’ might occur when a more expensive unit is dispatched in place of a cheaper one.
- Current skip rate method only assesses economic efficiency of energy dispatch decisions. Actions taken to manage the constraints are excluded from the methodology.

Objectives

- Identify and analyse skips that occur behind constraints.
- Develop a methodology to assess and measure skips within constraint boundaries, accounting for:
  - Nested constraints
  - Complimentary constraints
- Provide transparency on dispatch decisions made for units behind a constraint.

We have committed to developing a methodology and agreeing it with industry by April 2026.

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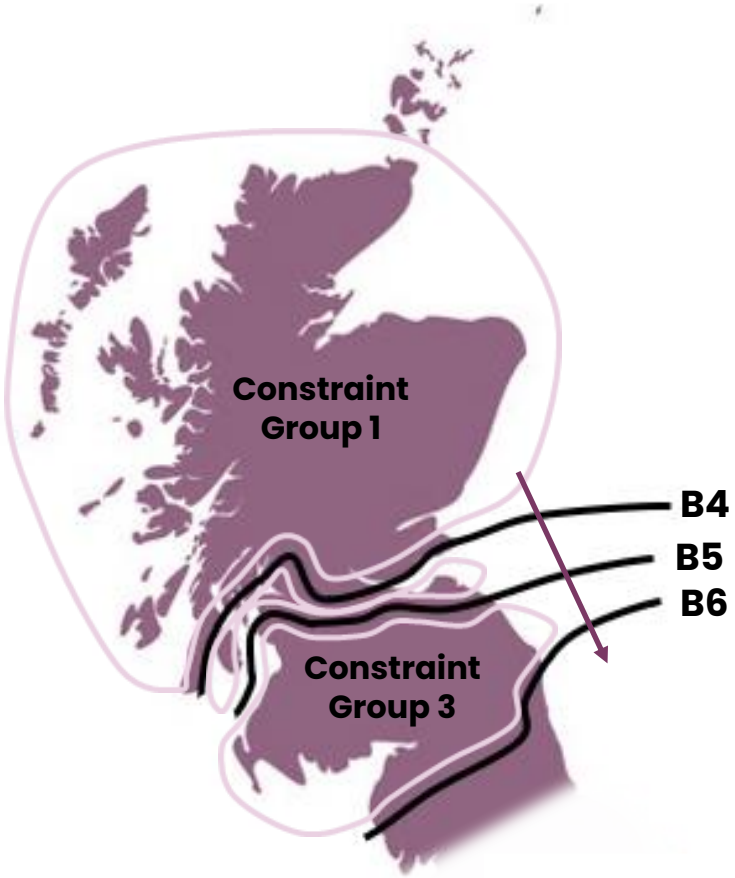
Understanding skips behind constraints

Analysis approach

- Apply logic consistent with the existing skip rate method.
- Identify constraint groups within nested constraints.
- Select the most cost-efficient units to alleviate constraints.
- Compare the actual and ideal dispatched units.

Considerations

- **Nested Constraints Complexity:** When multiple constraints are active, taking a seemingly more expensive action can be more optimal, as resolving one constraint may relieve the other.
- **Economic vs Systemic Optimality:** Evaluations based solely on price may overlook wider network benefits. A higher-price BMU could have been taken for reasons such as inertia or voltage, and therefore necessary for system security.



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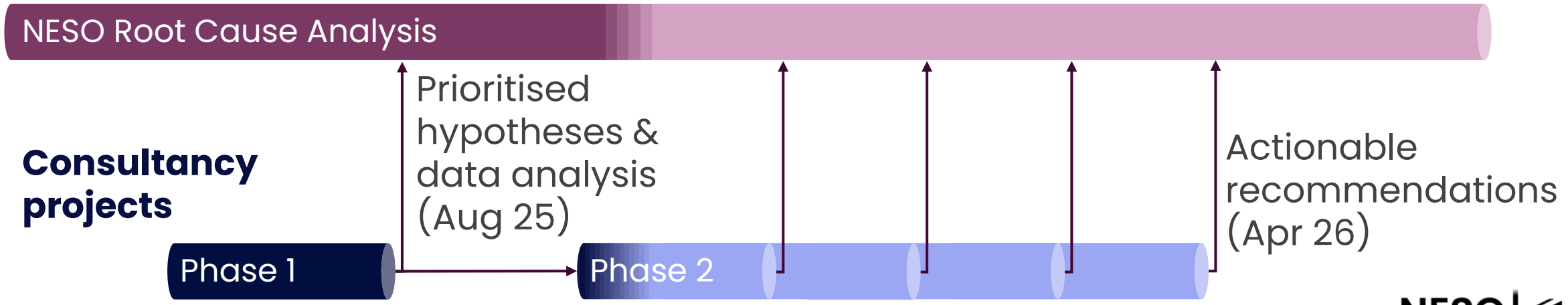
Introduction to Root Cause Analysis

Focused on balancing skips:
Stage 5 Post-System Action (PSA)

Purpose: Understand why skips occur in the Balancing Mechanism and how to reduce them.

Objectives:

- Identify root causes of skips
- Improve transparency
- Develop actionable recommendations



Root Cause Analysis hypotheses

Categories

- Market Impacts
- Operational Discretion
- Methodological Limitations
- System Errors
- Forecasting Errors
- Technical Limitations

38 hypotheses across **6 categories**, prioritised using **qualitative** and **quantitative** evidence

Example: **Methodological Limitations**

"BMUs that actively hold **Mandatory Frequency Response** (**MFR)** have a higher likelihood of being skipped compared to other units to maintain capacity to provide response, with other units accepted out of merit."

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Dispatch Strategic Review (DSR)

Profound transformation of the GB energy system is creating new operational challenges for the Electricity National Control Centre (ENCC):

- Rapid decarbonisation
- Integration of renewable generation
- Electrification of demand
- Increasing system complexity

We must ensure that our processes, systems and culture remain robust and adaptable to future needs.

We therefore commissioned an independent review of Control Room processes, systems and operational model associated with energy scheduling and dispatch.

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DSR aims, objectives and methodology

Key Aim

Recommend changes to tools, processes or operating model to make the ENCC ready to meet 2030 energy system challenges

Completed

- Independent Review during the summer including:
  - Control Room shadowing
  - Analysis of Control Room processes
  - Data analysis of scheduling vs outturn performance
- List of recommendations to meet 2030 energy system challenges
  - Some shorter-term
  - Others need more analysis, longer-term development

Next steps

- Internal review of outputs and recommendations
- Prioritise initiatives – focus on impact and ease of delivery
- Develop roadmap indicating when certain recommendations could/should be actioned
- Identify ‘quick wins’ for immediate action at low cost
- Finalise roadmap and include in Business Plan

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GC0166 Grid Code changes

- Ofgem has approved changes to the Grid Code, modification GC0166 - decision confirmed on Ofgem website
- Change introduces new parameters to allow better use of electricity storage modules in the Balancing Mechanism
- Start date (implementation) for the Grid Code change – **5 Nov 2025**
- NESO expects to be ready to receive GC0166 data via EDL from April 2026 but will use it **from June 2026**, when publication of this data is available to all parties
- NESO will agree a time and date to switch each unit from current arrangement – unit by unit, not all at once
- Latest information presented at webinar 3 Nov
- Further information on GC0166 on NESO website
- Balancing Programme event Sep 2025 – Proof of Concept Testing (slides 37 to 43)
- Will share more information in December – date tbc

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Discussion: Target for reduction of skip rates

Skip Rate reduction target

Stakeholder engagement plan

Oct 25	Nov	Dec	Jan 26	Feb
Consultation Progm leads joining stakeholder meetings hosted by: • Assoc for Decentralised Energy (ADE) • Energy Storage Network (ESN) • Energy UK • Flexible Generators Group (FGG), Waters Wye	**Discussion** • Base target on frequency, volume or cost? • Present draft proposal • Discuss rationale	**Draft proposal** • Published on Skip Rates webpage • News article with link to proposal • Email to core stakeholders with links to website	**Refinement** • Announcement – at in-person Forum, 28 Jan • Acknowledge different opinions, explain decisions • Q&A	**Final proposal** • Confirmation of target with description and rationale • Published on Skip Rates webpage • Email to core stakeholders with links

△ Update also provided in webinar 3 Nov, and discussion opportunity in breakout session at Bal Progm Forum 18 Nov

Recording & slides published on Skip Rates webpage

Send us your suggestions: box.SkipRates@neso.energy

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Skip Rate target: Aims

What should be the aims of having a skip rate target?

- **Reduce costs to consumers** – implement strategies and efficiencies that aim to reduce costs passed on to the consumer, ensuring affordability and value
- **Technology/unit-agnostic & focus on capability** – Emphasise capability rather than specific technologies or units, allowing flexibility and adaptability across various platforms and systems
- **Within NESO control** – concentrate efforts on aspects that are within NESO control to effectively manage resources and optimise operations, rather than specific technologies or units, allowing flexibility/adaptability across platforms/systems

***NB** – all assumes compliance with statutory requirements and obligations*

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Skip Rate target: Options

Based on aims, some current options under consideration

- **Percentage of total balancing cost of day** – better understand and manage financial efficiency
- **Skip rate percentage target** – reduce skips that are uneconomic and within our control to a minimum level (will never be zero)
- **Within tech type comparison (even/level)** – ensure an even or level playing field, facilitating fair assessment and decision-making
- **Differential in cost** – minimise to get close to zero (or as close as we can)
- **Percentage reduction on previous year** – strive for percentage reduction in rate or cost compared to previous year to demonstrate continuous improvement and progress

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Skip Rate target: Discussion

Open discussion on what should be included in a target

- What factors should be included in a target?
- What are your biggest pain points on skip rates?
- What are your expectations of a target?
- How would you see a target evolving?

Send us your suggestions:
box.SkipRates@neso.energy

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Invitation for additional feedback

What else should we be considering for addressing skip rates?

Brief feedback survey

Sli.do #DTP

Please assist us

- We have not received much feedback this year
- Essential for us to understand how our plans and deliveries are being received
- Respondents will not be visible to each other
- Individual responses will not be shared during the event or published afterwards
- We will repeat this survey over time to monitor perceptions, identify trends and guide our focus

Engage with us

Previous events – recordings

Battery & Skip Rates webinar (27 Feb) including methodology & data interpretation

Skip Rate Forum (1 May) – Project updates, Engagement & Code activity & breakouts: Datasets | Methodology | Materiality

Operational Transparency Forum (OTF) weekly updates, including deep dive (16 Jul) on definitions & calculations

Webinar (7 Aug) – skip rates data interpretation (dashboard), constraints and other updates

Webinar (3 Nov) - Stage 5 & 6 data, Materiality, GC0166, Dispatch Strategic Review, Root Cause Analysis, skips behind constraints, and target for skip rate reduction

Skip Rates webpage

Overview & data dashboard | Technical information | Link to data portal | Event recordings & slides | Progress updates | Q&A

Future events

Dec *tbc*	Webinar(s) on GC0166, Materiality & Skip Rate reduction target
28 Jan	Dispatch Transparency Forum

Mailbox – Send us your questions and comments: box.SkipRates@neso.energy