

Public

Grid Code Review Panel

Thursday 24 July 2025

Faraday House

Public

WELCOME

Purpose of Panel & Duties of Panel Members

The **Panel** shall be the standing body to carry out the **functions** referred to in the Governance Rules **(GR3.1.1)**

Functions (GR.3.2)

The **Panel** shall endeavour at all time to operate:

- In an **efficient, economical and expeditious manner**, taking account of the complexity, importance and urgency of particular Modification Proposals; and
- With a view to ensuring that the **Grid Code** facilitates **achievement of the Grid Code Objectives**.

Duties of Panel Members & Alternates (GR.3.3)

1. Shall act **impartially** and in accordance with the requirements of the **Grid Code**; and
2. Shall not have any **conflicts of interest**.

Shall not be representative of, and shall act without undue regard to the particular interests of the persons or body of persons by whom he/she was appointed as Panel Member and any Related Person from time to time.

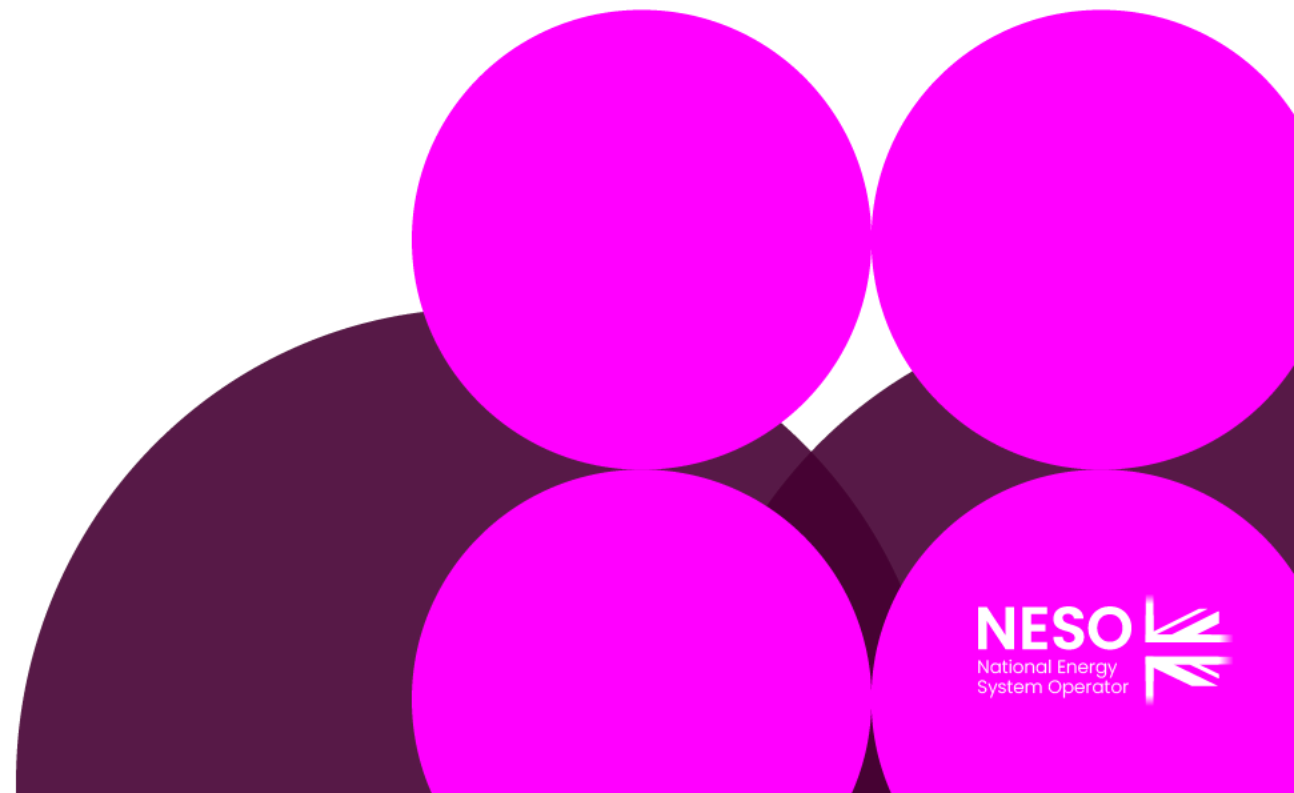
Approval of Panel Minutes

Approval of Panel Minutes from the Meeting held on 26 June 2025

Action Log

Action No.	Status	Action	Date raised	Owner	Due	Comments and Updates
456	Open	Ofgem ECR team to be invited to a future Grid Code Review Panel to provide update around milestones	30/05/2024	GS/SC	Ongoing	At the February 2025 Grid Code Review Panel, the Chair asked that the Authority keep the Panel informed of the expectations of them during the transition to Energy Code Reform. The Authority also agreed to provide an update to the Panel on SDS timescales
465	Open	To provide a general update at a future Panel on the wider work going on in relation to Bilateral Embedded Generation Agreements (BEGA's)	26/09/2024	CN	July 2025	Awaiting outcome of GC0117. Due date updated to reflect current expected decision date.
468	Open	Investigate scope and timings of new modifications for Holistic Network Design	22/05/2025	CN	July 2025	
469	Open	Provide update on GC0178 in relation to Iberian Power Outage and whether this modification should be higher priority	26/06/2025	CN	July 2025	
470	Open	Present Code Administrator recommendation of the Prioritisation Stack to Panel	26/06/2025	LT	July 2025	To be presented at Special Panel on 17 July 2025

Chair's Update



Authority Decisions and Update (as of 16 July 2025)

Decisions Received since last Panel Meeting

Modification	Decisions	Implementation Date
EU NCER System Test Plan	On 07 July 2025 the Authority approved the EU NCER System Test Plan, which has been <u>updated</u> on the NESO website.	14 July 2025

Decisions Pending

Modification	Final Modification Report Received	Expected Decision Date
GC0117 ' <u>Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of Power Station requirements</u> '	14 May 2024	18 July 2025

Received Final Modification Reports since last Panel Meeting

Modification	Final Modification Report Received	Expected Decision Date
GC0166 ' <u>Introducing new Balancing Mechanism Parameters for Limited Duration Assets</u> '	08 July 2025	TBC

The Authority's publication on decisions can be found on their website below:

<https://www.ofgem.gov.uk/publications/code-modificationmodification-proposals-ofgem-decision-expected-publication-dates-timetable>

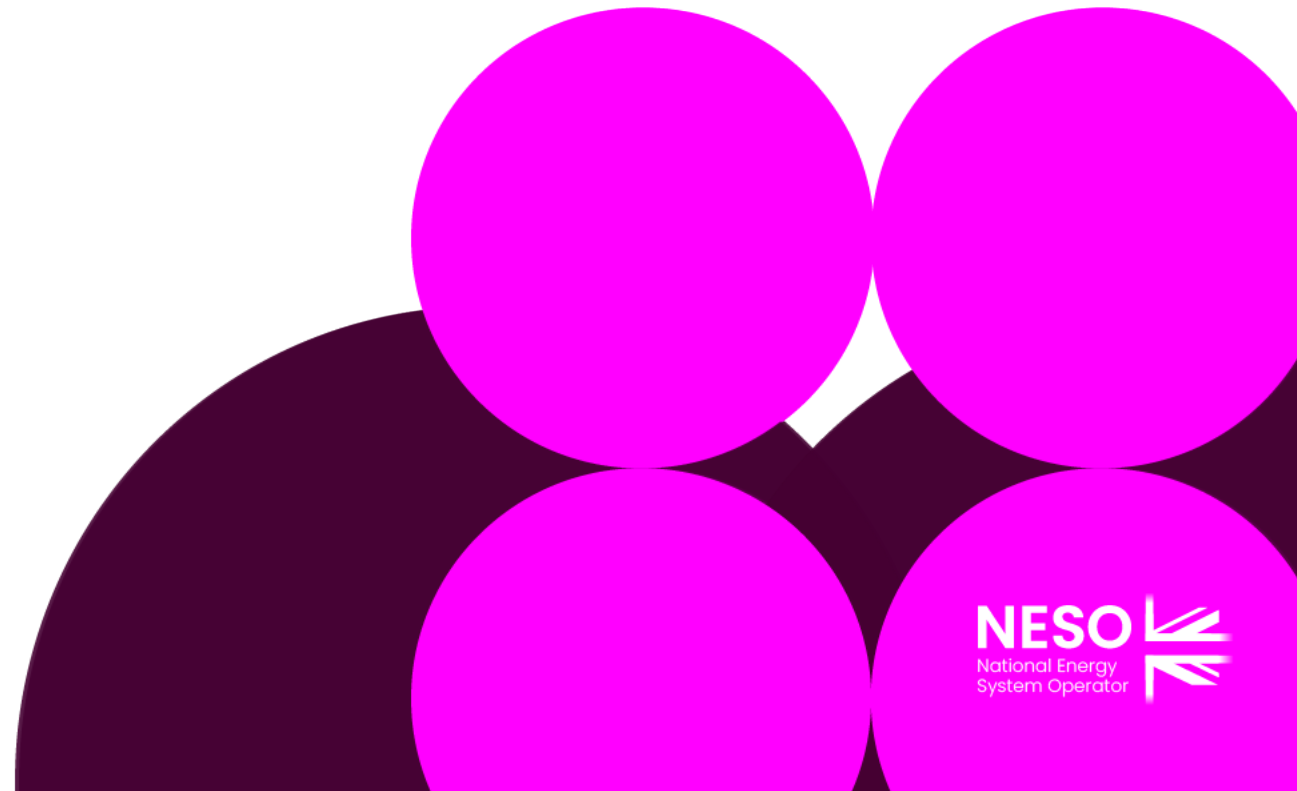
New Modifications

- GC0181: Enhance the Effectiveness of System Incidents Reporting
- GC0182: Standardisation of Power Flow Metering Polarity

New Modification

GC0181: Enhance the Effectiveness
of System Incidents Reporting

Sabiha Farzana, Statkraft



GC0181 Critical Friend Feedback

Code Administrator comments	Amendments made by the Proposer
Code Administrator suggested including the legal text draft in the Solution	Proposer updated the Solution with draft legal text
Code Administrator suggested a revised timeline	Proposer accepted revised timeline
Code Administrator suggested typographical and grammatical amendments and text formatting	Proposer accepted amendments made by the Code Administrator
Code Administrator queried the interactions	Proposer clarified the interactions
Code Administrator requested additional industry engagement information	Proposer provided GCDF presentation slides

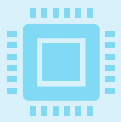


GC0181: Enhance the Effectiveness of System Incidents Reporting

SABIHA FARZANA



Aims of this Presentation



Reports are available for industry and the Grid Code Panel to monitor the effectiveness of technical requirements in the Grid Code and Distribution Code – GC105 and GC151 which are published on the NESO website. However, no evidence seen that NESO has considered or reviewed this data.



The need to analyse these vast amount of data & understand the trend is discussed here.

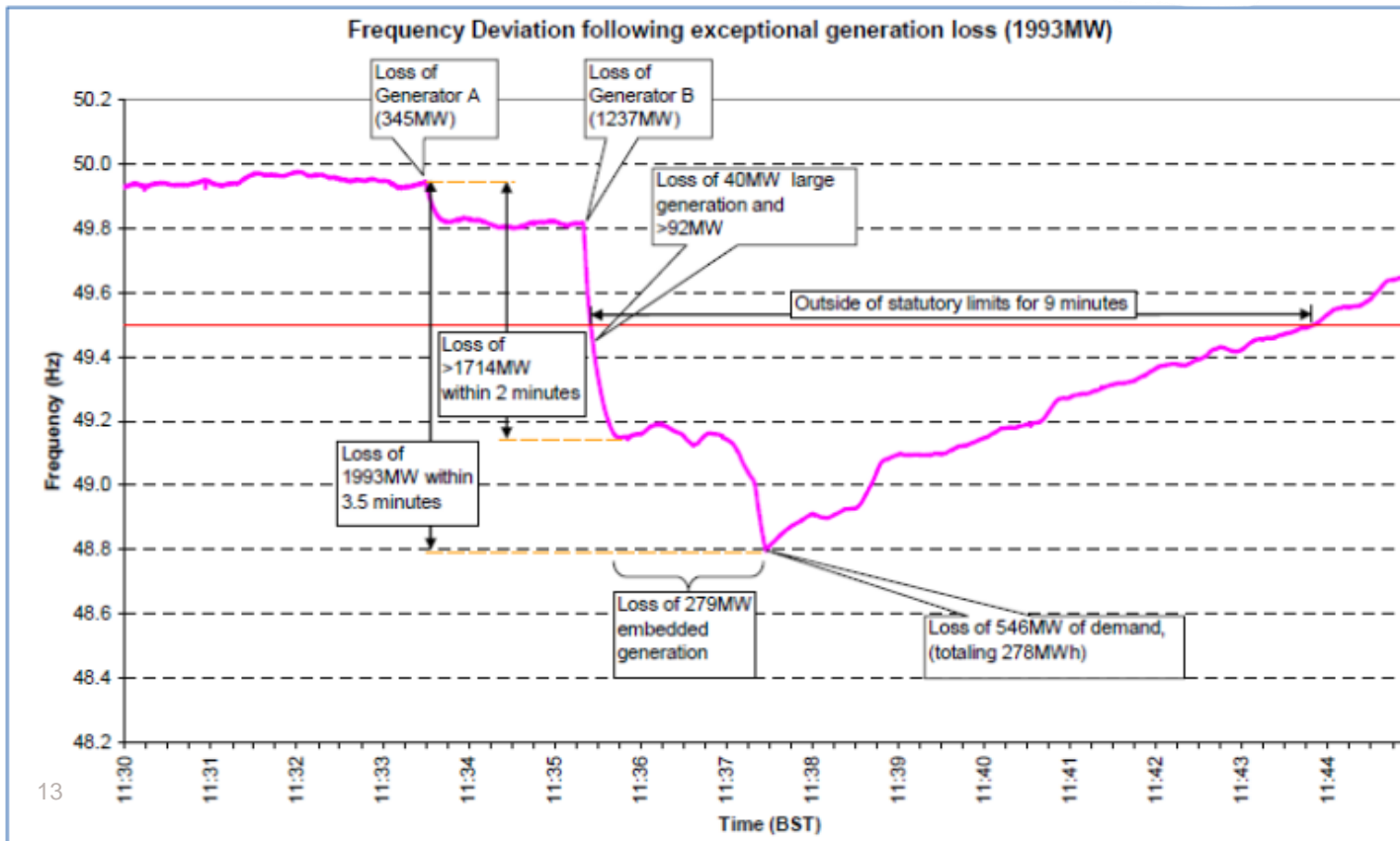


Recommend possible future changes to the Grid Code to enhance the effectiveness of the data that is currently produced in relation to incident reporting.

Background

Report of the National Grid Investigation into the Frequency Deviation and Automatic Demand Disconnection that occurred on the 27th May 2008

Issued: February 2009



Under the auspices of the GB Grid Code Review Panel, a reporting procedure was established in 1997 where the DNOs are required to provide National Grid with information on embedded generation that may have tripped in the event of a significant incident on the GB transmission system including generation trips causing large frequency deviations.

1. Grid Code established this reporting procedure, but it wasn't encoded in the grid code system.
2. Grid Code modification raised in Oct 2017.
3. GC105 & GC151 established in June 2020.

GCRP January 2016 pp16/19
NEW INCIDENTS

Inc Date	Inc Time	DoW	ToD	Size Loss (MW)	Reported Generation Lost (MW)	RoCoF (Hz/s)	Starting F (Hz)	Estimated Residual H Equivalent (s)	Demand (MW)	Min/ Max Freq	Event
24 Dec 2013	01:12	Tue	Night	-925	-	-0.135	50.05	0.199	29137	49.73	IFA Bipole 1 following Dung-Sell 2 trip and co-incident with Dung-Ninf 2 trip
24 Dec 2013	03:32	Tue	Night	-925	-	-0.145	50.11	0.198	25248	49.79	IFA Bipole 1 co-incident with Dung-Sell 2 trip
25 Jan 2014	08:06	Sat	Day	-1000	-	-0.087	50	2.880	33716	49.68	IFA-Bipole 2
20 Mar 2014	23:06	Thu	Night	500						50.26	Dinorwig 1 & 6 tripped while in pumping mode
16 Apr 2014	20:35	Wed	Eve	-800						49.67	Shutdown of Northwest SHETL group; 1000MW lost generation (500mW wind, 250MW hydro, 100MW Glendoe, 150MW Foyers 1) and 200MW lost demand
27 Apr 2014	11:37	Sun	Day	-1000	-	-0.104	49.98	1.773	32946	49.57	IFA Bipole 2 followed by Dungeness 2 (545MW) at 11:38
01 May 2014	09:52	Thu	Day	-1280						49.56	All 4 Staythorpe units
08 May 2014	18:17	Thu	Eve	-1000			-			49.63	IFA Bipole 2
16 Oct 2014	09:06	Thu	Day	-1000	-	-0.081	49.93	1.434	39793	49.56	IFA Bipole 2
09 Jan 2015	15:56	Fri	Day	-830						49.7	Spalding North
13 Jan 2015	02:31	Tue	Night	-285						49.8	Dinorwig moving to Spin Pump later than expected, frequency trace suggests some other events may have followed this
05 Jun 2015	14:55	Fri	Day	-950	-	-0.077	49.98	3.268	31471	49.68	IFA Bipole 2
21 Jul 2015	15:28	Tue	Day	-748						49.96	IFA Bipole 2
06 Aug 2015	06:21	Thu	Night	-1000	-	-0.103	50.02	3.329	24528	49.69	IFA Bipole 2
11 Nov 2015	01:54	Wed	Night	-991	-	-0.119	50	2.921	22727	49.6	IFA Bipole

Power Available



System Performance Reports



Balancing services performance monitoring report



Data finder and explorer



Forecast volumes and costs



GB Electricity System Operator Daily Reports

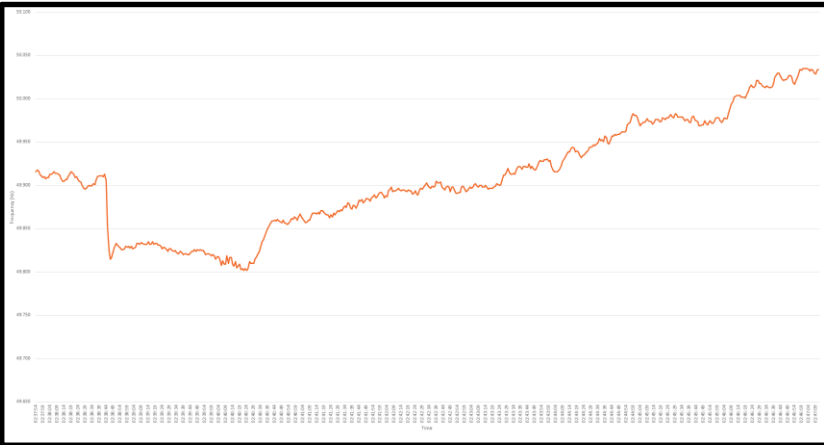


System Performance Reports

At NESO, we're committed to being transparent and sharing information with our partners in the energy industry.

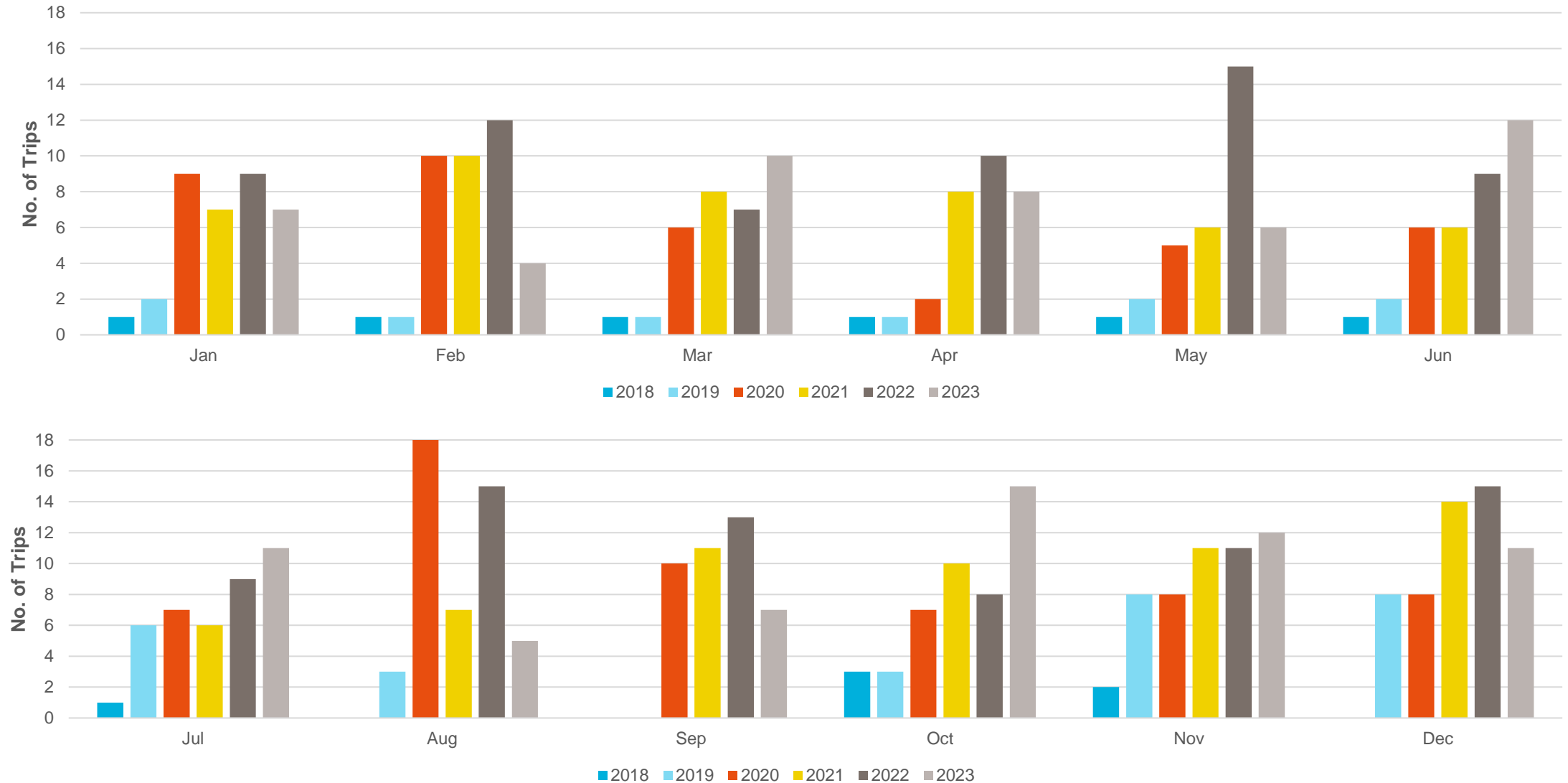
On this page, you will find reports that NESO publishes as required for:

- GB National electricity transmission system performance as required by Transmission Licence Standard Condition C17: Transmission System Security Standard and Quality of Service.
- Reports for industry and the Grid Code Panel to monitor the effectiveness of technical requirements in the Grid Code and Distribution Code – GC105 and GC151
- UK Statutory Instrument – Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations – Article 15 and 16.
- UK Statutory Instrument – The Electricity and Gas (Internal Markets and Network Codes) (Amendment) (EU Exit) Regulations – Clean Energy Package Article 13.

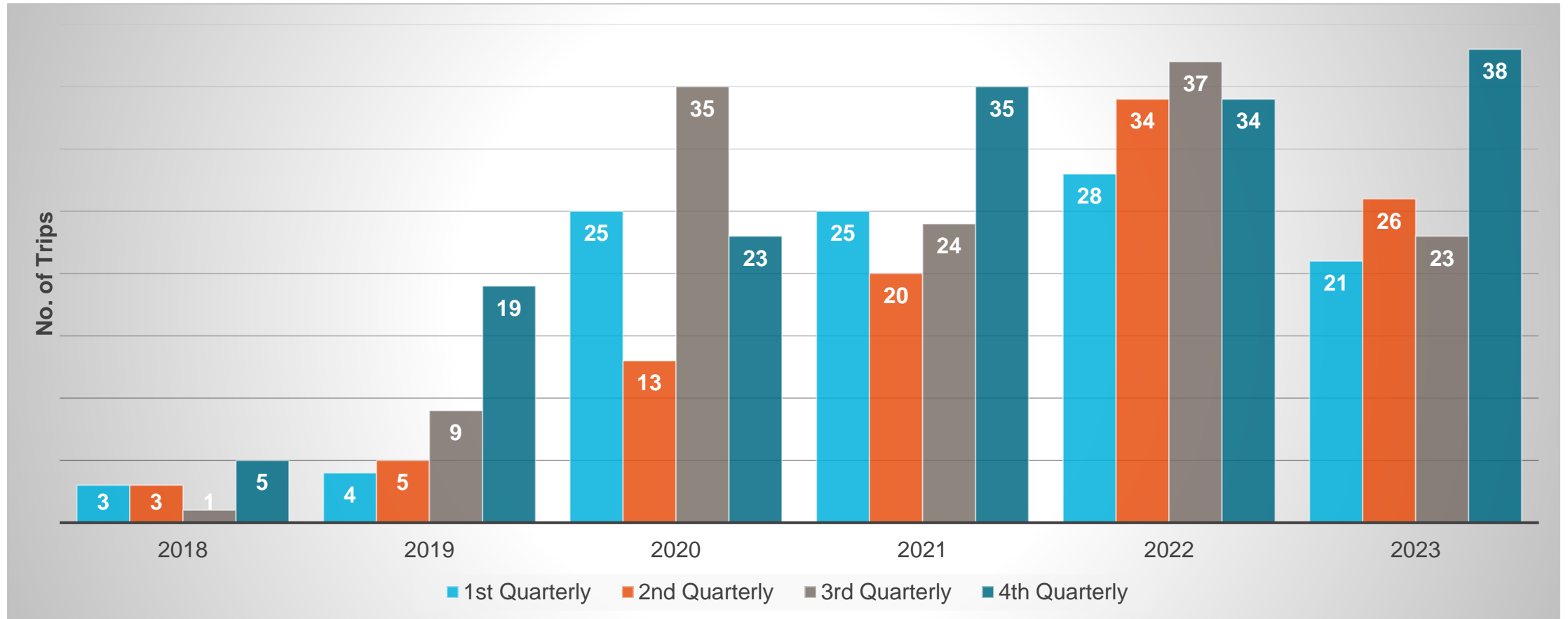


	A		B	D	E	F	G	H	I	J	K	L	M
1				Date and time of the incident	System frequency trace (1-second interval) for the incident	System frequency immediately before the incident	System frequency immediately after the incident	Maximum/Minimum rate of change of frequency (RoCoF) of the incident	System inertia at the time of the incident	Where known, MW trip/loss of all generation/interconnection related to the incident		Where known, MW trip/loss of all Embedded Generation(EG) related to the incident	
2	Reference	Name		Date Time	System Frequency (Refer to sheet)	Pre-Event Frequency (Hz)	Post-Event Frequency (Hz)	RoCoF (Hz/s)	System Inertia (GVAs)	Generation/Interconnection (MW)		EG (MW)	
3	20240702-1	Trip of IFA2		02/07/2024 07:06:00	20240702-1	49.90	49.68	-0.164	159	IFA2	992.35		
4	20240705-1	Trip of STAY-2		05/07/2024 17:06:00	20240705-1	50.06	49.87	-0.076	184	STAY-2	396.08		
5	20240706-1	Loss of Supply at Glenniston 33kV substation		06/07/2024 17:47:00	20240706-1				128				
6	20240717-1	Trip of PEMB-11		17/07/2024 00:33:40	20240717-1	49.93	49.82	-0.029	151	PEMB-11	436.80		
7	20240722-1	Trip of DRAXX-4		22/07/2024 17:24:00	20240722-1	50.02	49.81	-0.088	197	DRAXX-4	641.48		
8	20240723-1	Trip of DAMC-1		23/07/2024 17:27:00	20240723-1	50.02	49.89	-0.045	206	DAMC-1	344.44		

Monthly Analysis of No. of Trips from 2018-2023



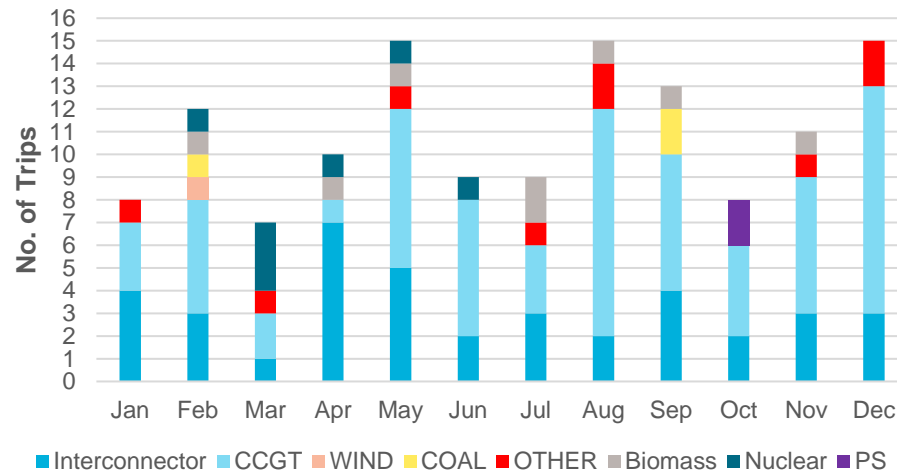
No. of Trips Analysis in Quarterly Basis (Jan 2018- Dec 2023)



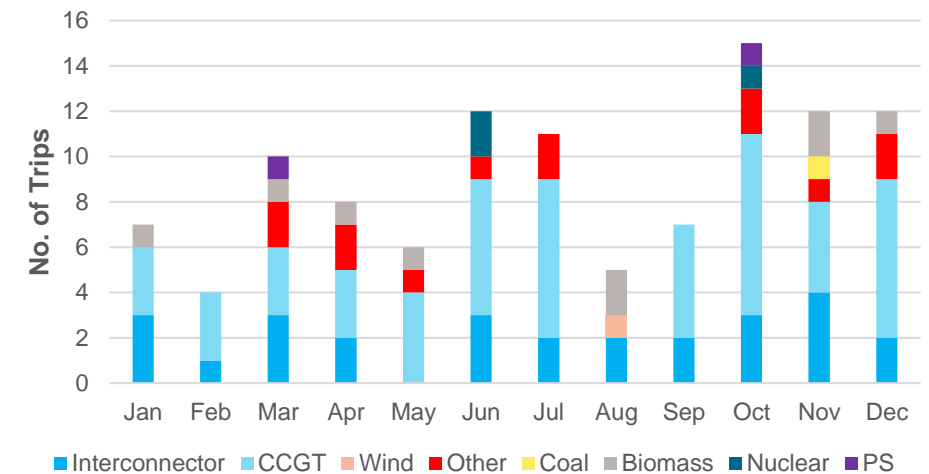
What's causing the trips?

	Interconnector	CCGT	Wind	Coal	Other	Biomass	Nuclear	PS
Total No. of Trips	81	136	4	4	26	22	11	5

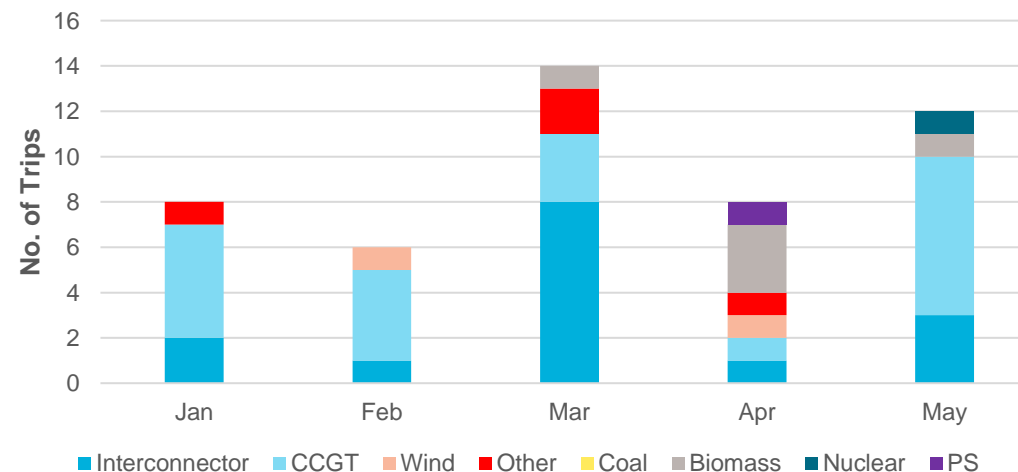
2022



2023



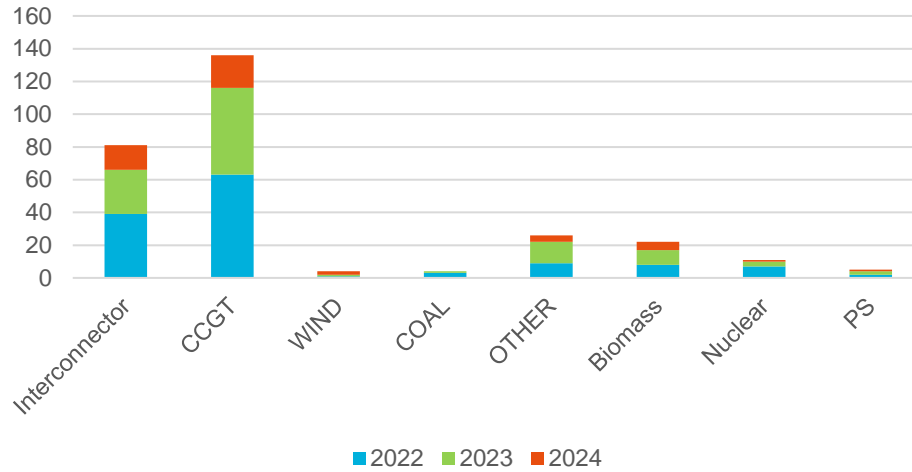
2024



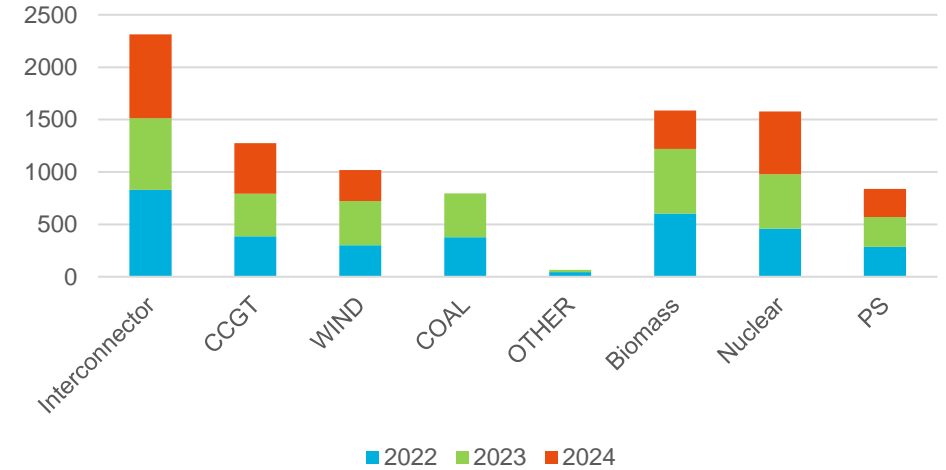
Other-Transmission/network losses like loss of supply at substations, low frequency deviation, demand loss, busbar & circuit trips.

Extent of Trips

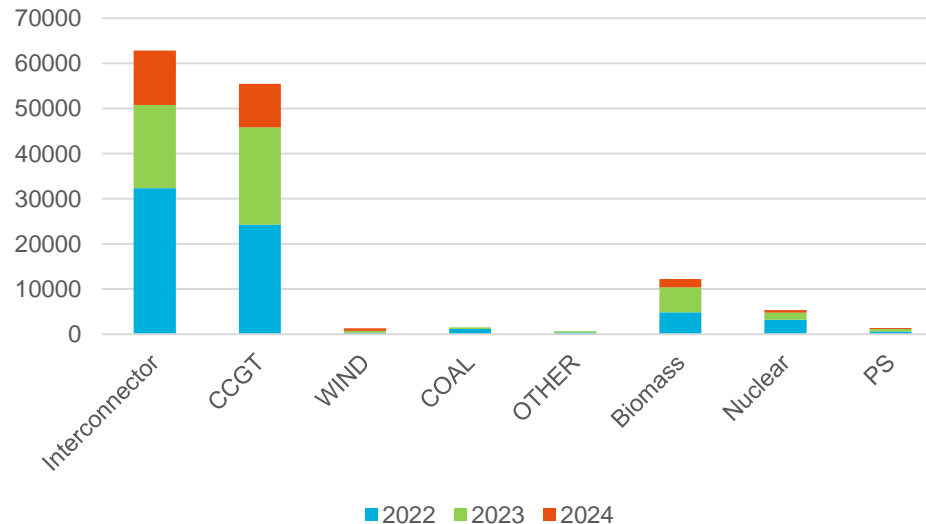
Total No. of Trips



Avg loss(MW)/event



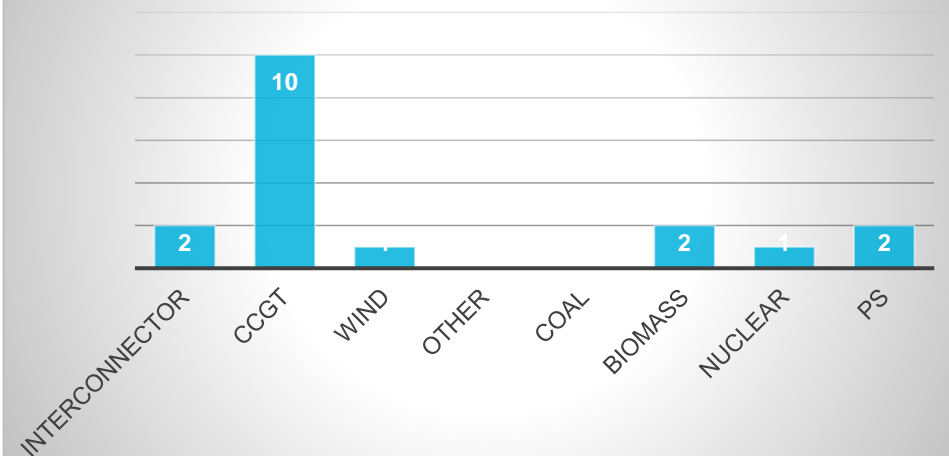
Total Loss(MW)



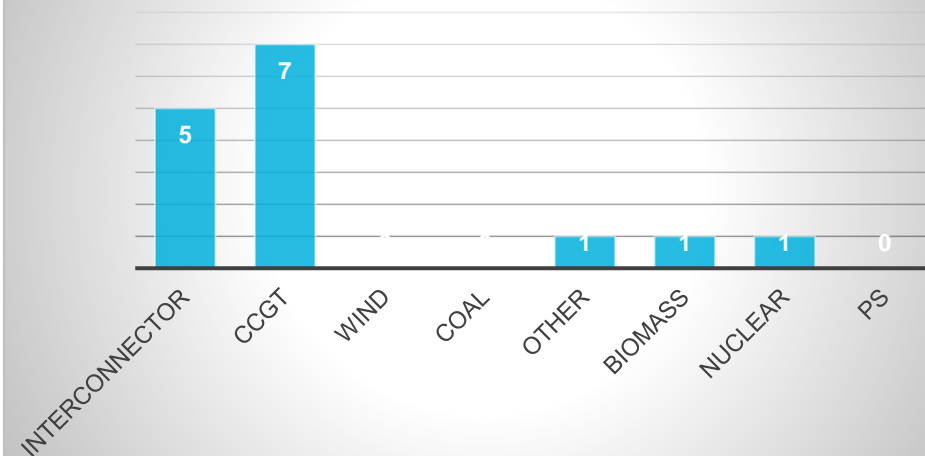
Other-Transmission/network losses like loss of supply at substations, low frequency deviation, demand loss, busbar & circuit trips.

Analysis of months with maximum number of trips

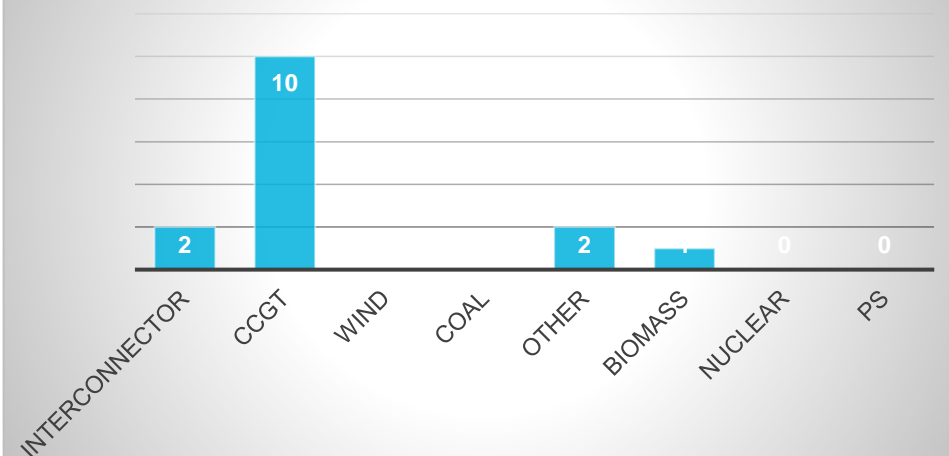
No. of Trips in Aug 2020



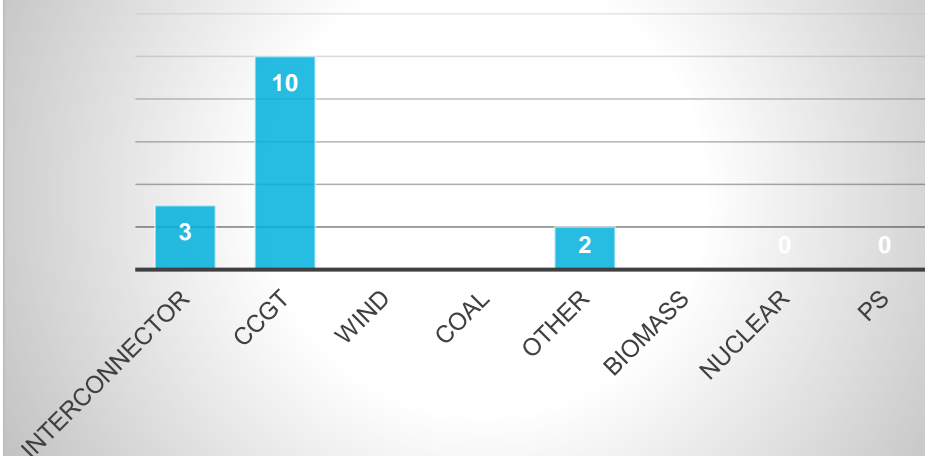
No. of Trips in May 2022



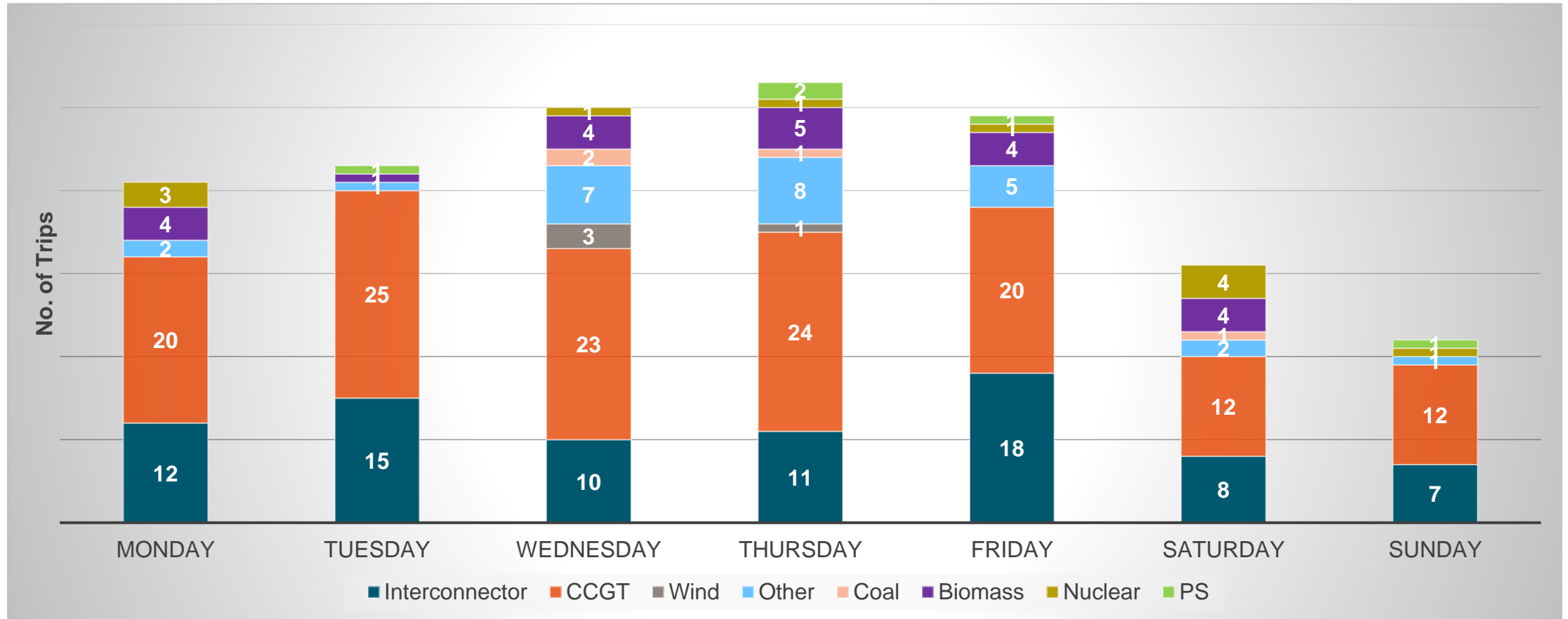
No. of Trips in Aug 2022



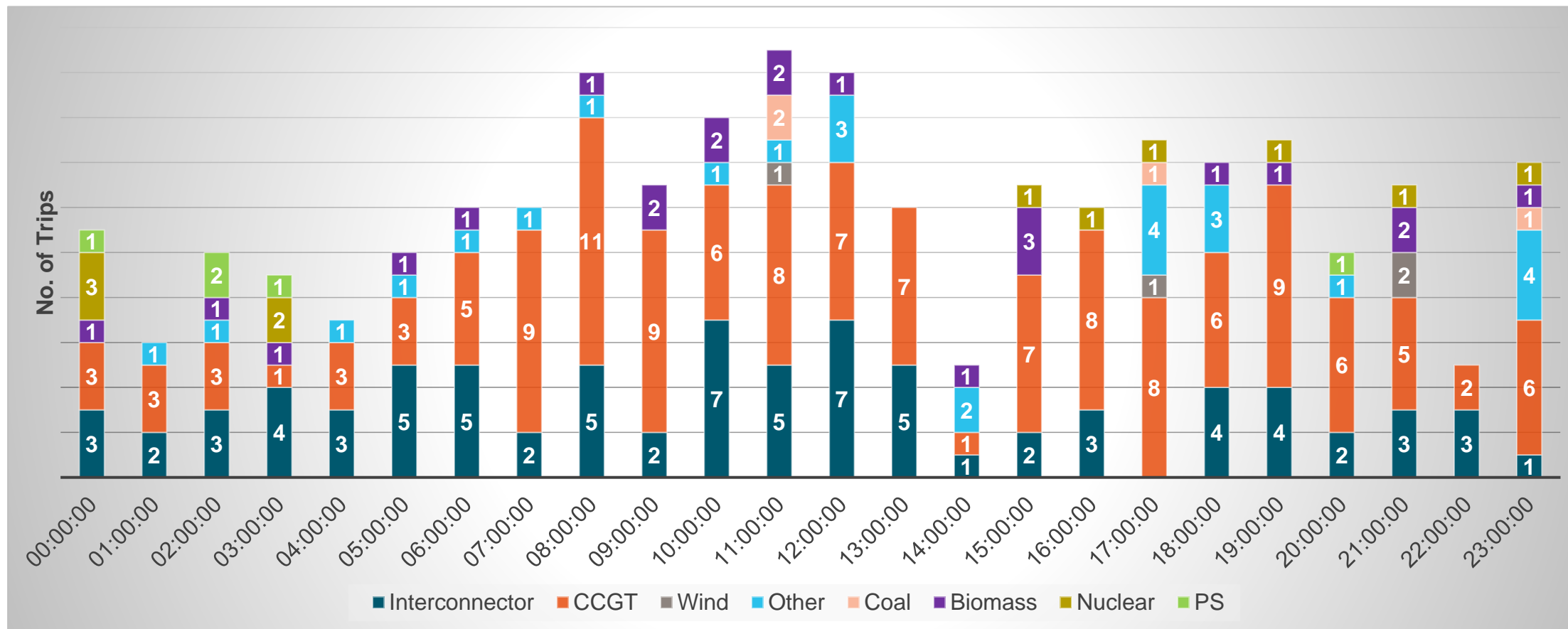
No. of Trips in Dec 2022



No. of Trips Analysis against the Days of the Week (Jan 2022- May 2024)



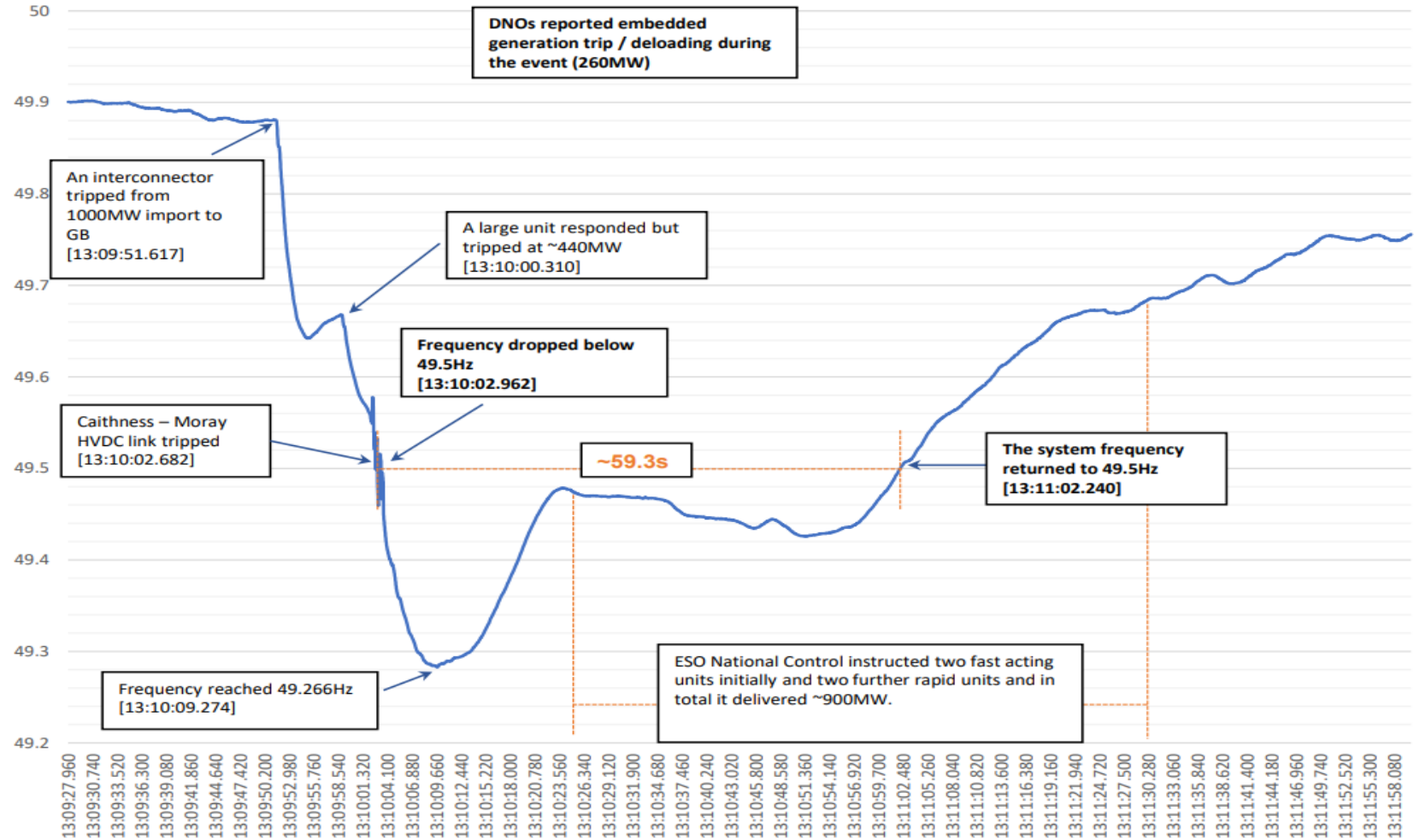
No. of Trips Analysis against the Time of the Day (Jan 2022- May 2024)



Analysing the 22nd Dec 2023 event at 13:09

Sli.do code #OTF

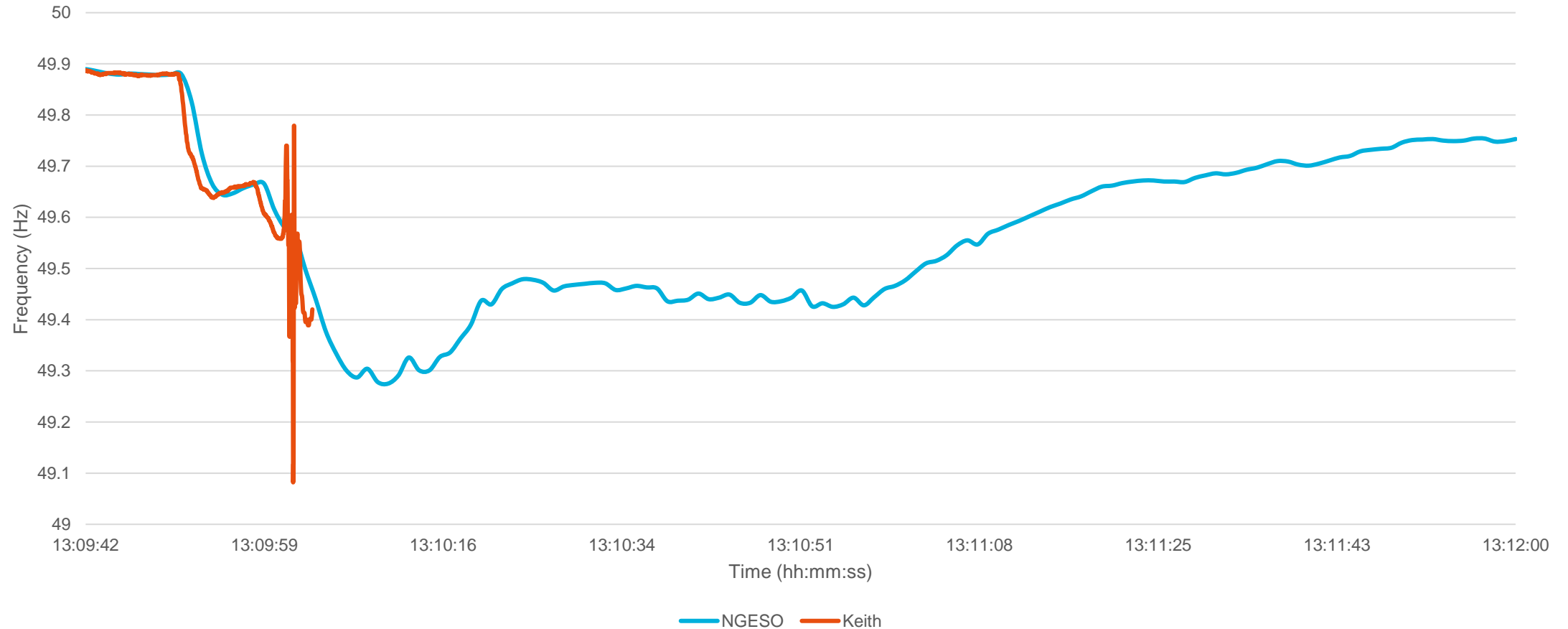
Annotated Frequency Trace of the Events



* Note: the graph is based on currently available data

ESO

Comparison between NGESO frequency & Keith frequency during the incident



NESO, Keith & MODO Analysis.xlsx

RoCoF calculation in 2 ways

Using Equation & values from NESO website

$$\text{RoCoF} = \frac{P(\text{loss of generation in MW}) \times F_i(\text{initial frequency in Hz})}{2E_o(\text{Inertia in MWS})}$$

- RoCoF of the Interconnector trip = $\frac{1000 \times 49.826}{2 \times 161 \times 1000} = -0.155 \text{ Hz/s}$
- RoCoF of the CDCL unit trip = $\frac{440 \times 49.666}{2 \times 161 \times 1000} = -0.068 \text{ Hz/s}$
- RoCoF of the HVDC link trip = $\frac{260 \times 49.564}{2 \times 161 \times 1000} = -0.04 \text{ Hz/s}$

Using data from graph

$$\text{RoCoF} = \frac{F_2 - F_1 (\text{in Hz})}{T_2 - T_1 (\text{in s})}$$

- RoCoF of Interconnector trip = $\frac{49.724 - 49.826}{13:09:53 - 13:09:52} = -0.102 \text{ Hz/s}$
- RoCoF of the CDCL unit trip = $\frac{49.615 - 49.666}{13:10:00 - 13:09:59} = -0.051 \text{ Hz/s}$
- RoCoF of the HVDC link trip = $\frac{49.498 - 49.564}{13:10:03 - 13:10:02} = -0.066 \text{ Hz/s}$

Comparison between the theoretical & graphical RoCoF values

- Ratio(Interconnector) = $(155 - 102) / 102 = 52\%$ ► Theoretical RoCoF is 52% higher than graphical value.
- Ratio(CDCL unit) = $(68 - 51) / 51 = 33\%$ ► Theoretical RoCoF is 33% higher than graphical value.
- Ratio(HVDC link) = $(66 - 4) / 66 = 94\%$ ► Graphical RoCoF is 94% higher than theoretical value.

Understanding the power loss for the HVDC Link incident

Applying these ratios to 3rd incident (HVDC Link) means the ROCOF could be:

- i. $0.066 \times 1.52 = 0.100$
- ii. $0.066 \times 1.33 = 0.088$

Based on these ROCOFs what would the MW loss have been?

- i. For 0.100 Hz/s

$$\begin{aligned} P(\text{loss of generation in MW}) &= \frac{RoCoF \times 2Eo(\text{Inertia in MWs})}{Fi(\text{initial frequency in Hz})} \\ &= (0.1 \times 2 \times 161 \times 1000) / 49.564 = 649 \text{ MW} \end{aligned}$$

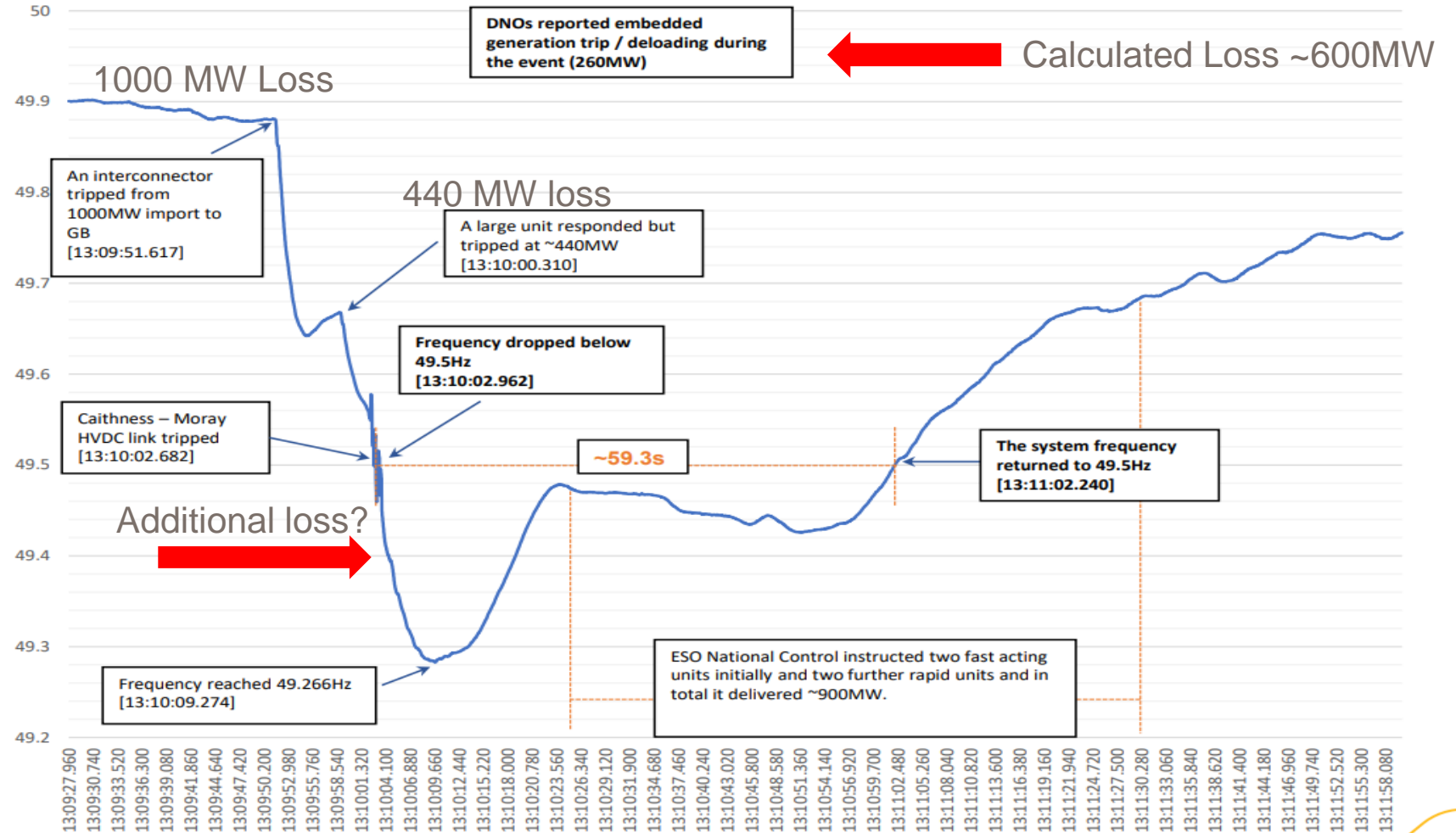
- i. For 0.088 Hz/s

$$\begin{aligned} P(\text{loss of generation in MW}) &= \frac{RoCoF \times 2Eo(\text{Inertia in MWs})}{Fi(\text{initial frequency in Hz})} \\ &= (0.088 \times 2 \times 161 \times 1000) / 49.564 = 571 \text{ MW} \end{aligned}$$

Analysing the 22nd Dec 2023 event at 13:09

Sli.do code #OTF

Annotated Frequency Trace of the Events



* Note: the graph is based on currently available data

ESO

Possible future changes to the grid code relating to this data / part of the grid code



1. Improving the reporting time e.g. from 3 months to 1 month or 1 week.
Advantage- it would be easier to access data from other parties soon after the event than 3 months later.



2. Getting more granular data at a higher sampling rate (ie. faster than 0.5s) to analyse events more effectively.



3. Getting data from different locations in GB to better see any regional variations.

**The proposer would welcome comments,
suggestions, feedback or any improvements.**

Sabiha Farzana

Grid Stability Analyst Intern, Statkraft UK

Sabiha.Farzana@statkraft.com

GC0181 Proposed Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	24 July 2025	Code Administrator Consultation	02 February 2026 to 02 March 2026
Workgroup Nominations (15 business days)	30 July 2025 to 20 August 2025	Draft Self Governance Final Modification Report (DFMR) issued to Panel (5 business days)	18 March 2026
Workgroup 1 – 3 Initial discussion of the Proposal Update legal text Review Workgroup Consultation Report	09 September 2025 01 October 2025 21 October 2025	Panel undertake Draft Self Governance Modification Report determination vote	26 March 2026
Workgroup Consultation (15 business days)	27 October 2025 to 17 November 2025	Final Self Governance Modification Report issued to Panel to check votes recorded correctly	31 March 2026 to 09 April 2026
Workgroup 4 – 5 Review Consultation feedback Review Workgroup Report and Workgroup Vote	08 December 2025 12 January 2026	Appeals Window	10 April 2026 to 01 May 2026
Workgroup report issued to Panel (5 business days)	21 January 2026	Implementation Date	18 May 2026
Panel sign off that Workgroup Report has met its Terms of Reference	29 January 2026		

GC0181 Asks of Panel

- **AGREE** that this Modification has a clearly defined defect and scope
- **AGREE** that this Modification meets the Self-Governance Criteria (Panel decision) rather than Standard Governance (Ofgem decision)
- **AGREE** that this Modification should proceed to Workgroup
- **NOTE** that there appear not to be any impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the proposed timeline

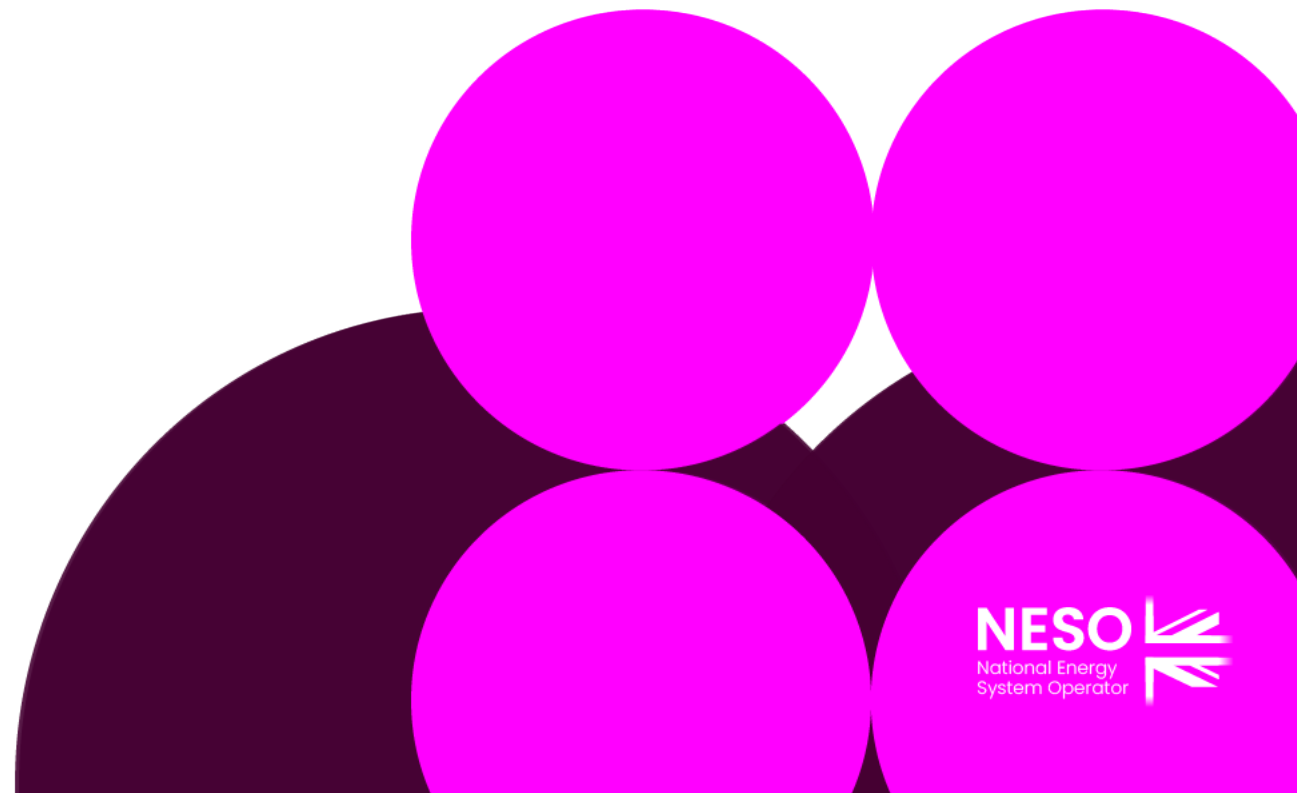
Grid Code Self-Governance Criteria

Self-Governance Criteria	<p>A proposed Modification that, if implemented,</p> <p>(a) is unlikely to have a material effect on:</p> <ul style="list-style-type: none">(i) existing or future electricity consumers; and(ii) competition in the generation, storage, distribution, or supply of electricity or any commercial activities connected with the generation, storage, distribution or supply of electricity; and(iii) the operation of the National Electricity Transmission System; and(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and(v) the Grid Code's governance procedures or the Grid Code's modification procedures, and <p>(b) is unlikely to discriminate between different classes of Users.</p> <p>(c) other than where the modification meets the Fast Track Criteria, will not constitute an amendment to the Regulated Sections of the Grid Code.</p>
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New Modification

GC0182: Standardisation of Power Flow
Metering Polarity

Jay Chandarana, NESO



GC0182 Critical Friend Feedback

Code Administrator comments	Amendments made by the Proposer
<p>Implementation date requires amending.</p> <p>Minor grammar and punctuation errors amended, and acronym meanings put in place.</p> <p>Comments to be removed from the statement document.</p> <p>Further clarity required on questions and feedback from industry members at the first GCDF.</p> <p>Reference to section of the Grid Code being changed to be added to the solution.</p> <p>Include all acronyms and meanings in the final table.</p>	<p>Proposer accepted all amendments and suggestions made by the Code Administrator</p>

Public What is the Issue?

- **Issue**
 - “Incorrect/inconsistent” polarity for operational power flow metering data fed into the NESO SCADA system, for example negative instead of positive flow
- **Impact for NESO**
 - Deteriorating accuracy in NESO management system
 - Reduced State Estimation reliability impacting situational awareness
 - Reduced system security and potential SQSS breach due to less effective contingency analysis
 - Additional balancing costs incurred by less efficient output from downstream NESO balancing and forecast systems
- **Impact for other stakeholders**
 - Delay in setting up metering for new connections
 - Increased workload due to updating and correcting metering polarity
 - Delay in NESO’s decision making for outages and commissioning
 - Potential billing errors for settlements between NESO and energy providers

Current Status and Effort

- **Current Status**

- No clear and unified power flow polarity standard in Grid Code for power flow data sent to NESO
- No clauses in the Grid Code or licence obligations requesting parties to follow a power flow polarity standard and parties may choose their own convention which is inconsistent with other parts of the network
- No clauses in the Grid Code requesting parties sending power flow metering with “incorrect” polarity to fix the issue

- **Current Effort**

- NESO regularly audits, investigates and fix meters with incorrect polarity internally, but any workaround fix is temporary and not sustainable
- NESO tries to establish communication channels with relevant parties to investigate and resolve the issues
- NESO has set up an informal working group aiming to seek solutions in terms of code, standard, policy and process changes

Proposed Solution and Benefits

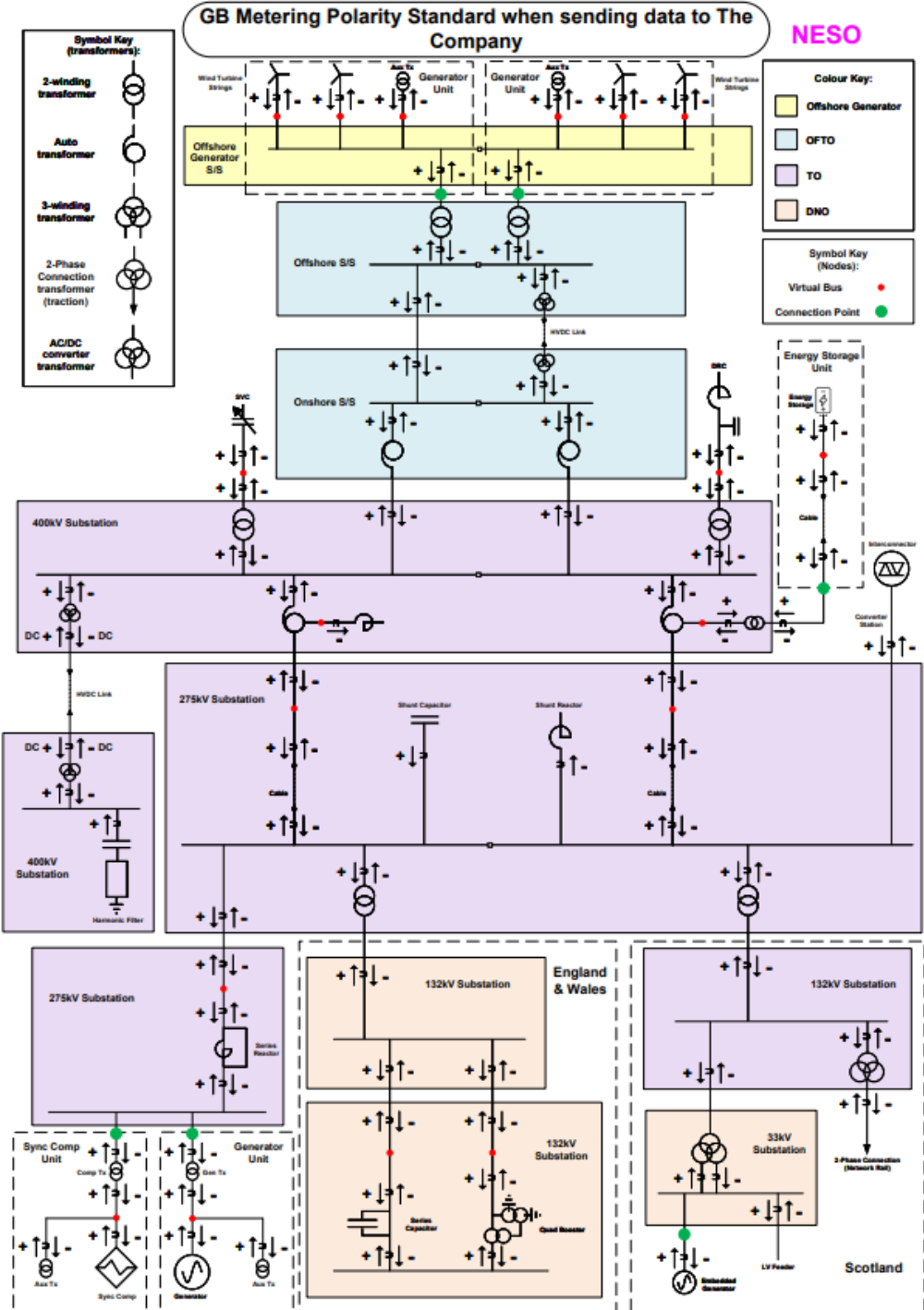
Proposed Solution

- To develop a unified power flow polarity standard in the form of a diagram with an explanatory description
- To publish the diagram and description as an Electrical Standard, which will be referred in the relevant Grid Code clause (other codes will refer to the Grid Code)
- To improve/modify processes between NESO and other parties so that the standard will be followed and referenced when setting up new metering connections to NESO SCADA
- To ensure the polarity standard is followed during ongoing operation
- To implement for new connections only at this stage

Benefits

- Improved situational awareness, system security, better forecasts and reduced balancing costs
- Reduce and/or mitigate iterations and delays for setting up new connections and approval for outage and commissioning
- Improved coordination, efficiency and transparency between NESO and other parties following the unified polarity standard and standardised process

Metering Polarity Standard



NESO

GC0182 Proposed Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	24 July 2025	Code Administrator Consultation (1 month)	29 May 2026 to 29 June 2026
Workgroup Nominations (15 Business Days)	29 July 2025 to 18 August 2025	Draft Final Modification Report (DFMR) issued to Panel	22 July 2026
Workgroup 1 – Consider Proposal Workgroup 2 – Develop solution and draft Legal Text Workgroup 3 – Review consultation	15 September 2025 20 October 2025 25 November 2025	Panel undertake DFMR recommendation vote	30 July 2026
Workgroup Consultation (more than 15 Business Days due to holiday period)	09 December 2025 – 09 January 2026	Final Modification Report issued to Panel to check votes recorded correctly	31 July 2026 – 10 August 2026
Workgroup 4 – Review consultation responses Workgroup 5 – Finalise solution and Legal Text Workgroup 6 – Review and Finalise Workgroup Report, Terms of Reference and Vote	20 January 2026 04 March 2026 14 April 2026	Final Modification Report issued to Ofgem	11 August 2026
Workgroup report issued to Panel (5 Business Days)	13 May 2026	Ofgem decision	TBC
Panel sign off that Workgroup Report has met its Terms of Reference	21 May 2026	Implementation Date	10 Business Days after Authority Decision (01 September 2026 requested by Proposer or as soon as possible)

GC0182 Asks of Panel

- **AGREE** that this Modification has a clearly defined defect and scope
- **AGREE** that this Modification should follow Standard Governance (Ofgem decision) rather than the Self-Governance Criteria (Panel decision)
- **AGREE** that this Modification should proceed to Workgroup
- **AGREE** Workgroup Terms of Reference
- **NOTE** that there appear not to be any impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the proposed timeline

Inflight Modification Updates

- Modification Timeline Update: GC0155: Clarification of Fault Ride Through Technical Requirements
- Modification Timeline Update: GC0164: Simplification of Operating Code No.2
- Modification Timeline Update: GC0176: Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code

GC0155: Clarification of Fault Ride Through Technical Requirements Timeline Update

	Workgroup Report issued to Panel	DFMR issued to Panel	FMR issued to Ofgem	Decision Date	Implementation Date
Previous timeline	17 September 2025	03 December 2025	22 December 2025	TBC	10 BD after Decision
New timeline	18 February 2026	15 April 2026	07 May 2026	TBC	10 BD after Decision

Rationale: A timeline extension is required for GC0155 as an additional Workgroup meeting is required prior to the Workgroup Consultation being published. Post consultation the Workgroup will also need meetings to review consultation responses, agree legal text and hold their Workgroup vote.

Workgroups Remaining: 5

GC0155– the asks of Panel

- **AGREE** revised timeline

GC0164: Simplification of Operating Code No.2 Timeline Update

	Code Administrator Consultation	DFMR issued to Panel	FMR issued to Ofgem	Decision Date	Implementation Date
Previous timeline	TBC	TBC	N/A	N/A	TBC
New timeline	26 August 2025 to 26 September 2025	22 October 2025	12 November 2025	TBC	10 Business Days after Decision

Rationale:

A second Code Administrator Consultation will take place once Workgroup members have agreed upon the legal text and the Grid Code Panel has reviewed and confirmed their approval of the Code Administrator Consultation.

As the Governance route has now been altered to “Standard Governance,” the Final Modification Report (FMR) will be submitted to the Authority following the Grid Code Panel’s recommendation vote.

Workgroups Remaining: 1

GC0164 – the asks of Panel

- **AGREE** revised timeline

GC0176: Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code Timeline Update

	Workgroup Report issued to Panel	DFMR issued to Panel	FMR issued to Ofgem	Decision Date	Implementation Date
Previous timeline	24 July 2025	25 September 2025	08 October 2026	TBC	10 BD after Decision
New timeline	22 October 2025	21 January 2026	11 February 2026	TBC	10 BD after Decision

Rationale: The modification requires more legal text changes than initially anticipated, and the Workgroup would like additional time to review the legal text to ensure it is robust and fit for purpose.

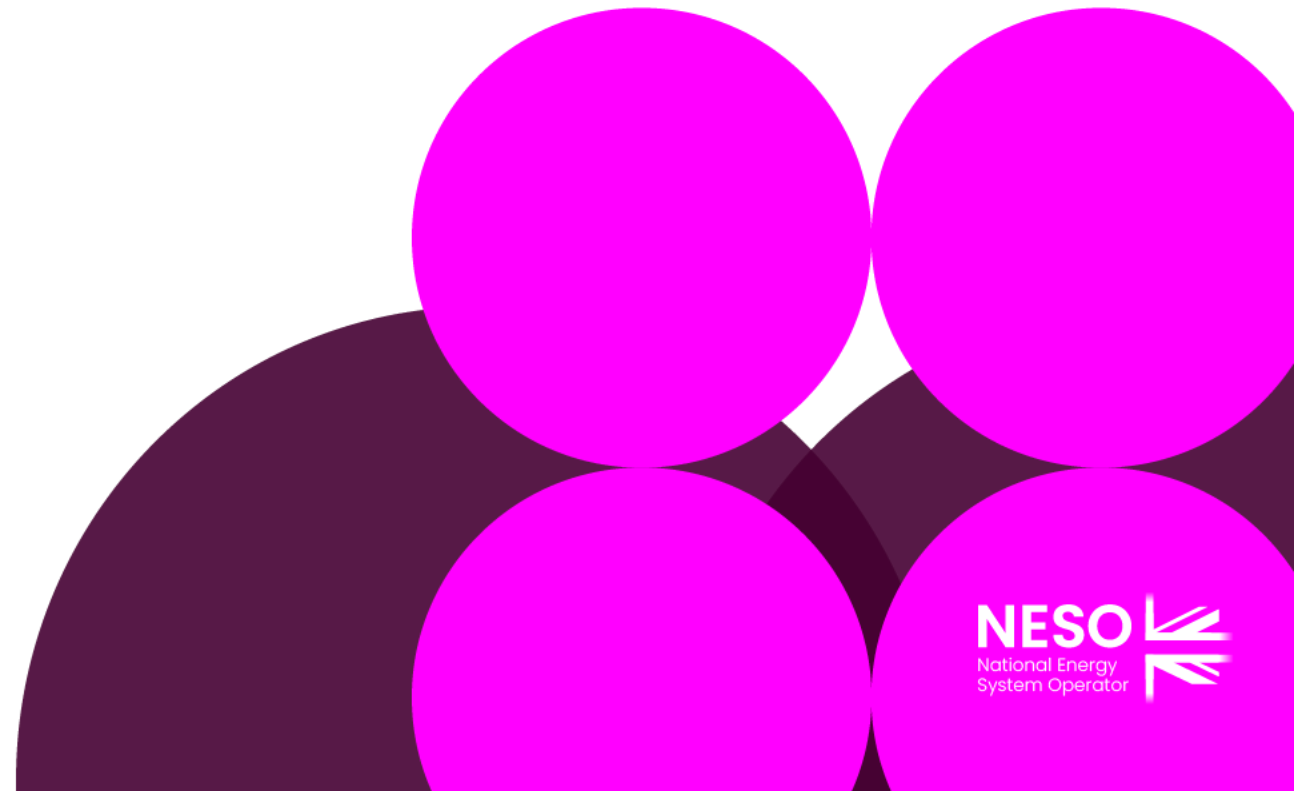
Workgroups Remaining: 3

GC0176 – the asks of Panel

- **AGREE** revised timeline

Panel Modification Tracker

Lizzie Timmins, Code Administrator



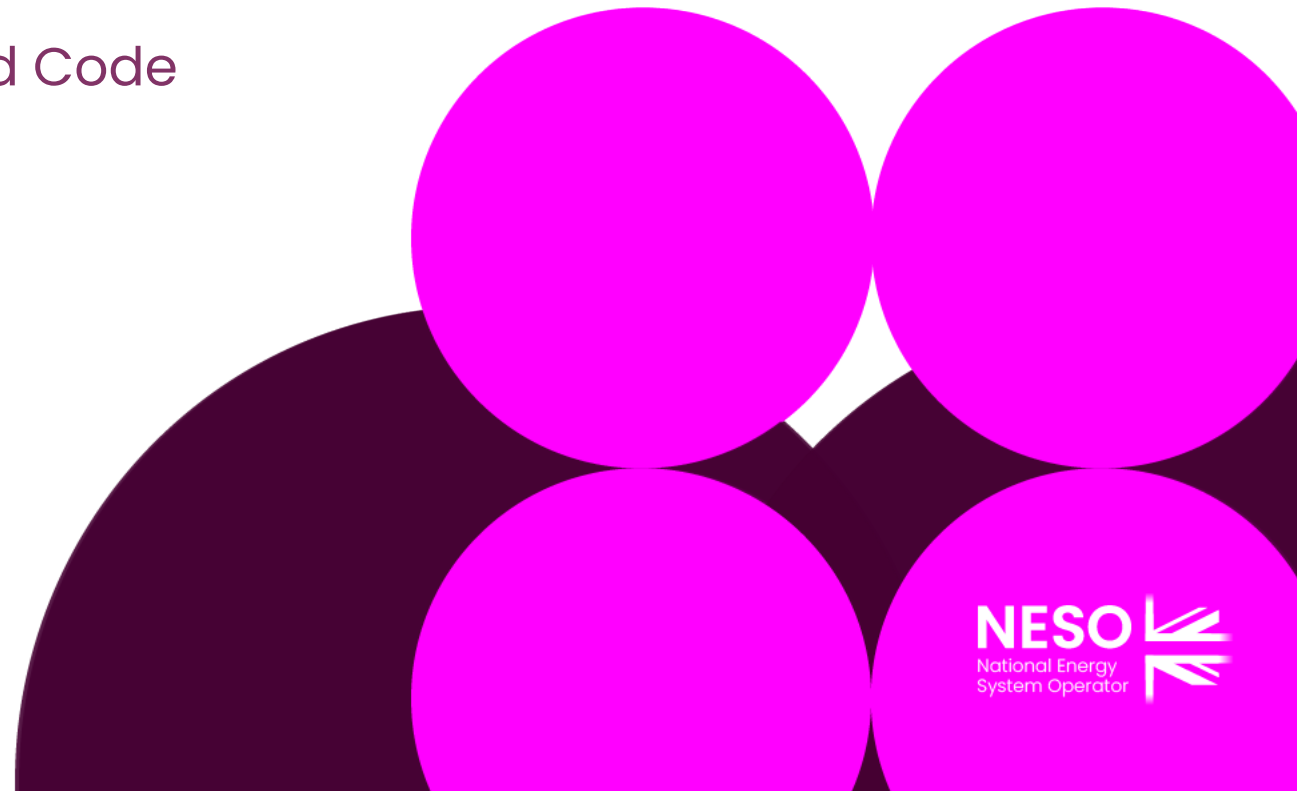
Workgroup Reports

- GC0169: Material changes arising from Grid Code Modification GC0136
- GC0173: Consistency of Technical and Compliance Requirements between GB and European Users

Workgroup Report

GC0169: Material changes arising from Grid Code
Modification GC0136

Matthew Larreta, Code Administrator



Solution and Workgroup Vote

Solution:

- This modification seeks to address outstanding issues identified during Grid Code modification GC0136, ensuring consistency and clarity in definitions and terms related to the Grid Code. The proposed solution includes assessing specific terms, improving certain clauses, and ensuring alignment with existing regulations. Additionally, a review of Balancing Code 2.13 regarding interconnector transfer times and associated defined terms, checks to ensure alignment with Engineering Recommendation G99, and a review of related sections of the General Conditions was also undertaken.

Summary of Workgroup Vote:

- The Workgroup concluded unanimously that the Original Solution better facilitated the Applicable Grid Code Objectives than the Baseline.

Terms of Reference

The Workgroup conclude that they have met their Terms of Reference, and the references can be located below:

Workgroup Term of Reference	Location in Workgroup Report
a) Implementation and costs;	Consideration of the Proposer's solution (Page 7)
b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text;	Consideration of the Proposer's solution (Page 6, 7) Workgroup Consultation Summary (Page 8) Annex 3 – Legal text
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report;	Workgroup Consultation Summary (Page 8)
d) Consider implications to sections linked to the Regulated Sections of the Grid Code; and	Consideration of the Proposer's solution (Page 6, 7)
e) Ensure that the workgroup considers the outstanding issues of GC0136 within their area of expertise as stated in Annex 1 of the Proposal Paper.	Annex 4 – Summary of changes post GC0136 in scope of GC0169

GC0169 Asks of Panel

- **AGREE** that the Workgroup have met their Terms of Reference
- **AGREE** that this Modification can proceed to Code Administrator Consultation
- **NOTE** that this Modification does impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the ongoing timeline

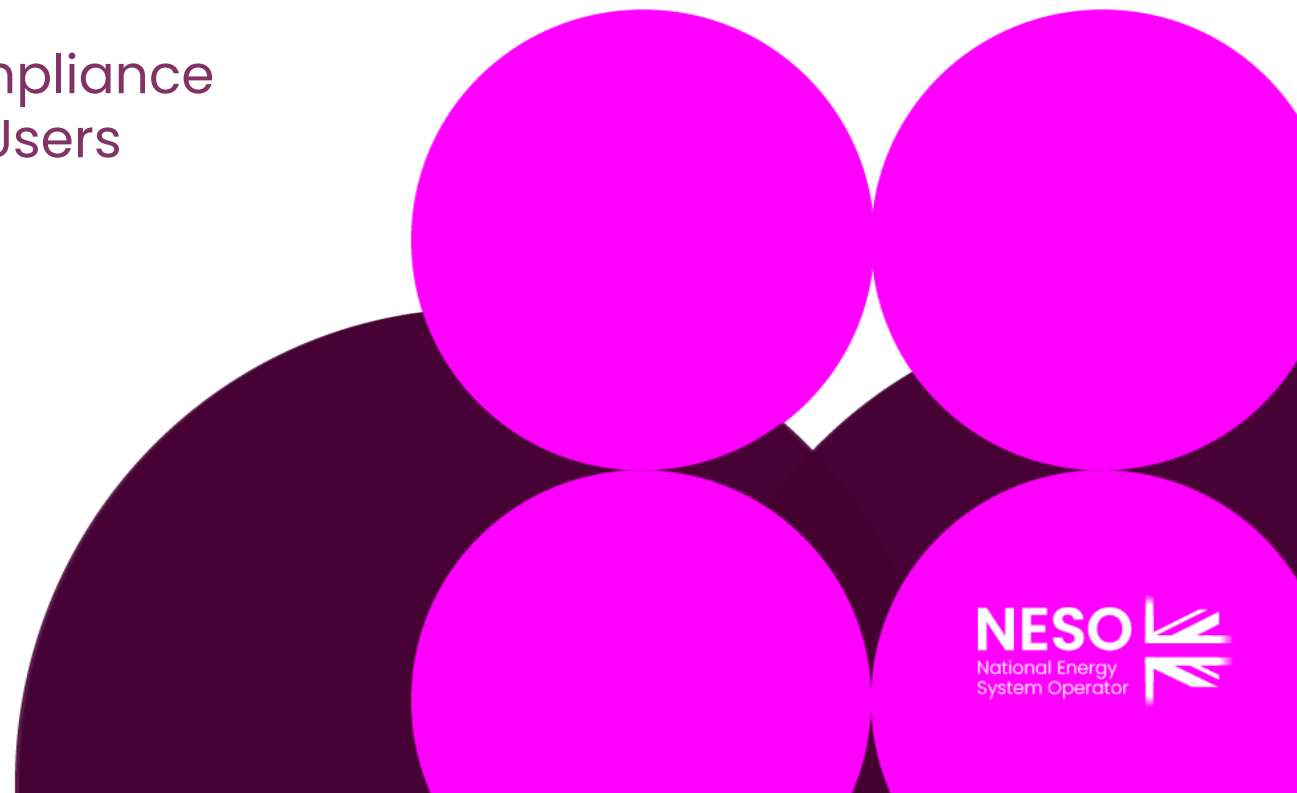
GC0169 Next Steps

Milestone	Date
Code Administrator Consultation (1 Month)	30 July 2025 – 30 August 2025
Draft Final Modification Report issued to Panel	17 September 2025
Draft Final Modification Report presented to Panel	25 September 2025
Final Modification Report issued to Panel to check votes recorded correctly (5 Business Days)	29 September 2025 – 06 October 2025
Submission of Final Modification Report to Ofgem	07 October 2025
Ofgem decision date	TBC
Implementation Date	10 Business Days after Authority decision

Workgroup Report

GC0173: Consistency of Technical and Compliance
Requirements between GB and European Users

Matthew Larreta, Code Administrator



Solution and Workgroup Vote

Solution:

- The proposed solution addresses several high-level issues, including the removal of references to thermal storage technologies in the Grid Code, adjustments to terminology for Generators, and updates to the application of frequency relays. It seeks to clarify ancillary service requirements for different power stations, amend specific clauses to eliminate contradictions and enhance clarity, and define obligations for Embedded Medium Power Stations. Additionally, there are clarifications for voltage control testing requirements, fault ride-through requirements, and correction of typographical errors.

Summary of Workgroup Vote:

- The Workgroup concluded unanimously that the Original Solution better facilitated the Applicable Grid Code Objectives than the Baseline.

Terms of Reference

The Workgroup conclude that they have met their Terms of Reference, and the references can be located below:

Workgroup Term of Reference	Location in Workgroup Report
a) Implementation and costs;	Consideration of the Proposer's solution (Page 8)
b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text;	Consideration of the Proposer's solution (Page 6, 7) Workgroup Consultation Summary (Page 8, 9) Annex 3 – Legal Text Annex 4 – Summary table outlining high-level Legal Text changes
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report;	Consideration of the Proposer's solution (Page 8)
d) Consider implications to sections linked to the Regulated Sections of the Grid Code;	Consideration of the Proposer's solution (Page 6, 7, 8)
e) Ensure that the workgroup address the inconsistencies between the Connection Conditions, European Connection Conditions, Compliance Processes, European Compliance Processes and G99 as stated in the proposal; and	Consideration of the Proposer's solution (Page 6, 7, 8) Annex 4 – Summary table outlining high-level Legal Text changes
f) Ensure the workgroup review the applicability of storage data for thermal storage units which are not believed to have an impact on the Total System.	Consideration of the Proposer's solution (Page 6) Annex 3 – Legal Text

GC0173 Asks of Panel

- **AGREE** that the Workgroup have met their Terms of Reference
- **AGREE** that this Modification can proceed to Code Administrator Consultation
- **NOTE** that this Modification does impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the ongoing timeline

GC0173 Next Steps

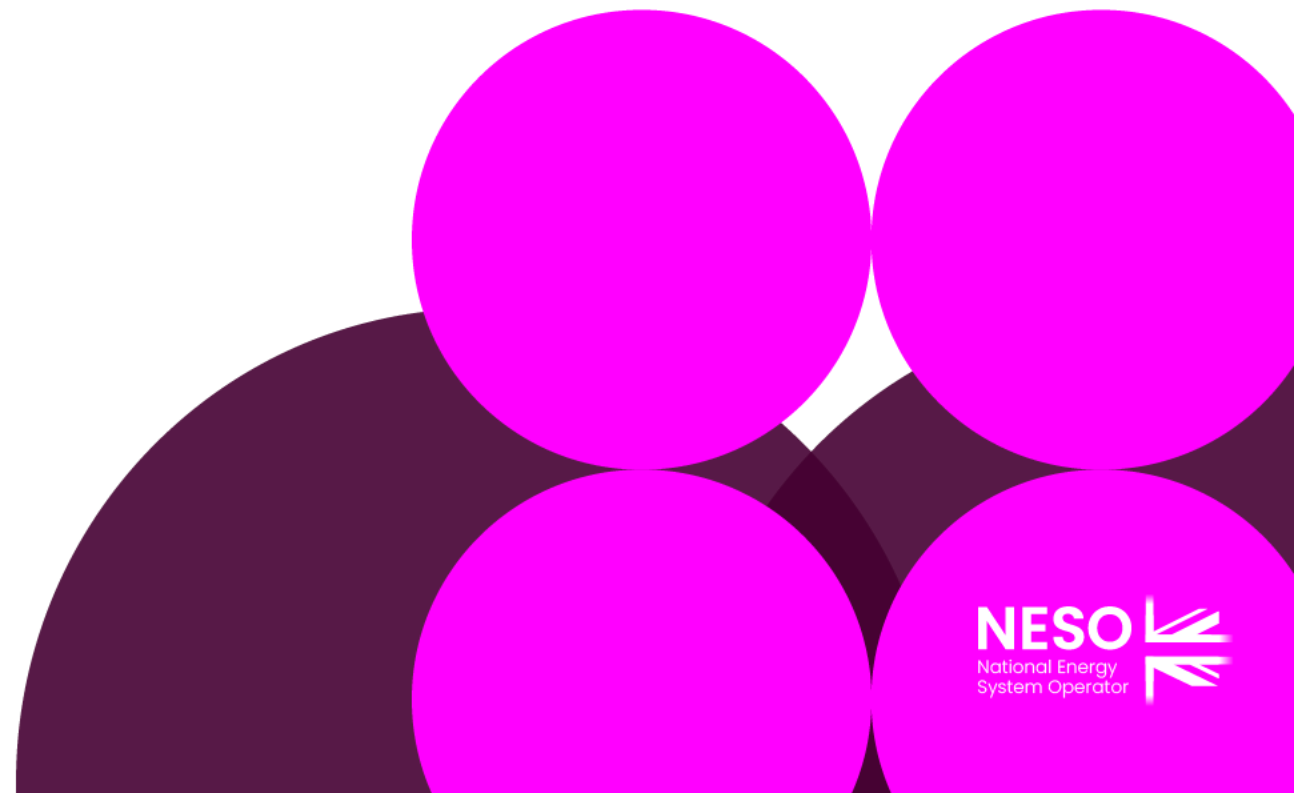
Milestone	Date
Code Administrator Consultation (1 Month)	30 July 2025 – 30 August 2025
Draft Final Modification Report issued to Panel	17 September 2025
Draft Final Modification Report presented to Panel	25 September 2025
Final Modification Report issued to Panel to check votes recorded correctly (5 Business Days)	29 September 2025 – 06 October 2025
Submission of Final Modification Report to Ofgem	07 October 2025
Ofgem decision date	TBC
Implementation Date	10 Business Days after Authority decision

Prioritisation Stack

Mod Number	Previous Priority No:	Priority No	Title
GC0139	1	1	Enhanced Planning Data Exchange to Facilitate Whole System Planning
GC0155	2	2	Clarification of Fault Ride Through Technical Requirements
GC0176	3	3	Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code
GC0178	4	4	Temporary Overvoltage – Specification of Limits and Clarification of Obligations
GC0168	5	5	Submission of Electro Magnetic Transient (EMT) Models
GC0174	6	6	Removal of obligation to provide EU Transparency Availability Data as specified in OC2.4.7
GC0169	7	7	Material changes identified from Grid Code Modification GC0136 and Consistency of requirements between the Connection Conditions and European Connection Conditions
GC0173	7	7	Consistency of Technical and Compliance Requirements between GB and European Users
GC0164	8	8	Simplification of Operating Code No.2
GC0103	9	9	The introduction of harmonised Applicable Electrical Standards in GB to ensure compliance with the EU Connection Codes
GC0179	10	N/A	Removal of Balancing Code No.4 from the Grid Code
GC0140	11	10	Grid Code Sandbox: enabling derogation from certain obligations to support small-scale trials of innovative propositions

Governance Update

Lizzie Timmins, Code Administrator



Public

Grid Code Development Forum – Update

Claire Newton, NESO

The GCDF meeting on 02 July covered the following topics:

1. New industry protocol for space weather
2. Code Administrator Update
3. Power Park Module (PPM) Reactive Power Provision Below Rated MW Output
4. GC0166 Implementation preparation: Trial/proof of concept to collect real data and test the NESO optimiser
5. Standardisation of Power Flow Metering Polarity when Sending Data to NESO
6. Guidance Notes for Co-location of Different Technologies – Issue 3
7. Recent Electronic Dispatch Logging (EDL) / Electronic Data Transfer (EDT) Outage

The next GCDF will take place on Wednesday 06 August

Deadline for August Agenda items – 25 July

Final Agenda items TBC.

Presentation items and Minutes from the 02 July GCDF meeting can be found [here](#)

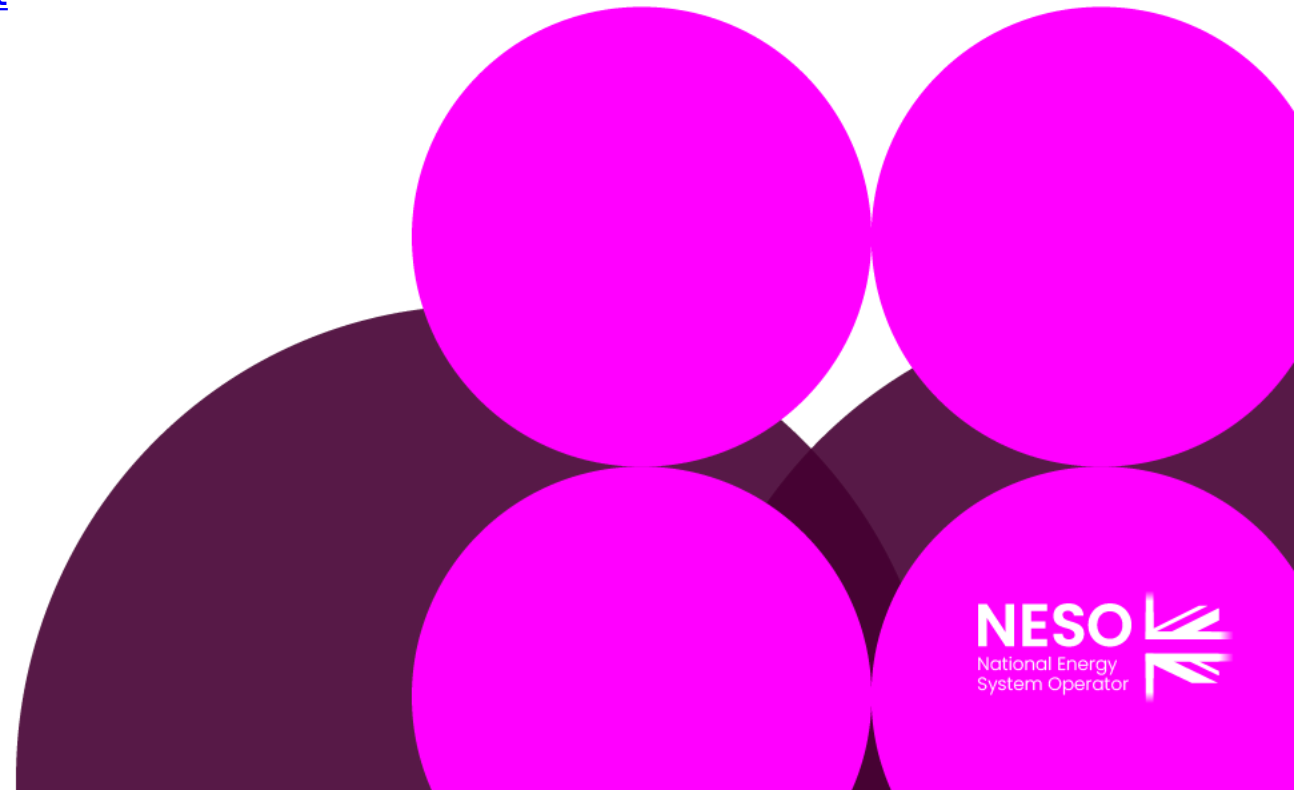
Standing Items

Updates on all developments relevant to Grid Code Panel e.g. potential for future governance changes or modifications

- Distribution Code Panel update (Alan Creighton)
- JESG Update (information only)
 - Previous meeting – 08 July 2025 [Meeting materials and Headline Report](#)
 - Next meeting – 09 September 2025 (August meeting cancelled)

Updates on other industry codes

27 June 2025 CUSC [Panel Papers and Headline Report](#)



Any other business

Feedback on structure of Workgroup Reports

System Access Reform modifications

Activities ahead of the next Panel Meeting

Grid Code Development Forum	06 August 2025
Modification Proposal Deadline for August Panel	06 August 2025
Papers Day	13 August 2025
Panel Meeting	21 August 2025 Teams

Close

Penny Garner

Acting Independent Chair,
Grid Code Review Panel