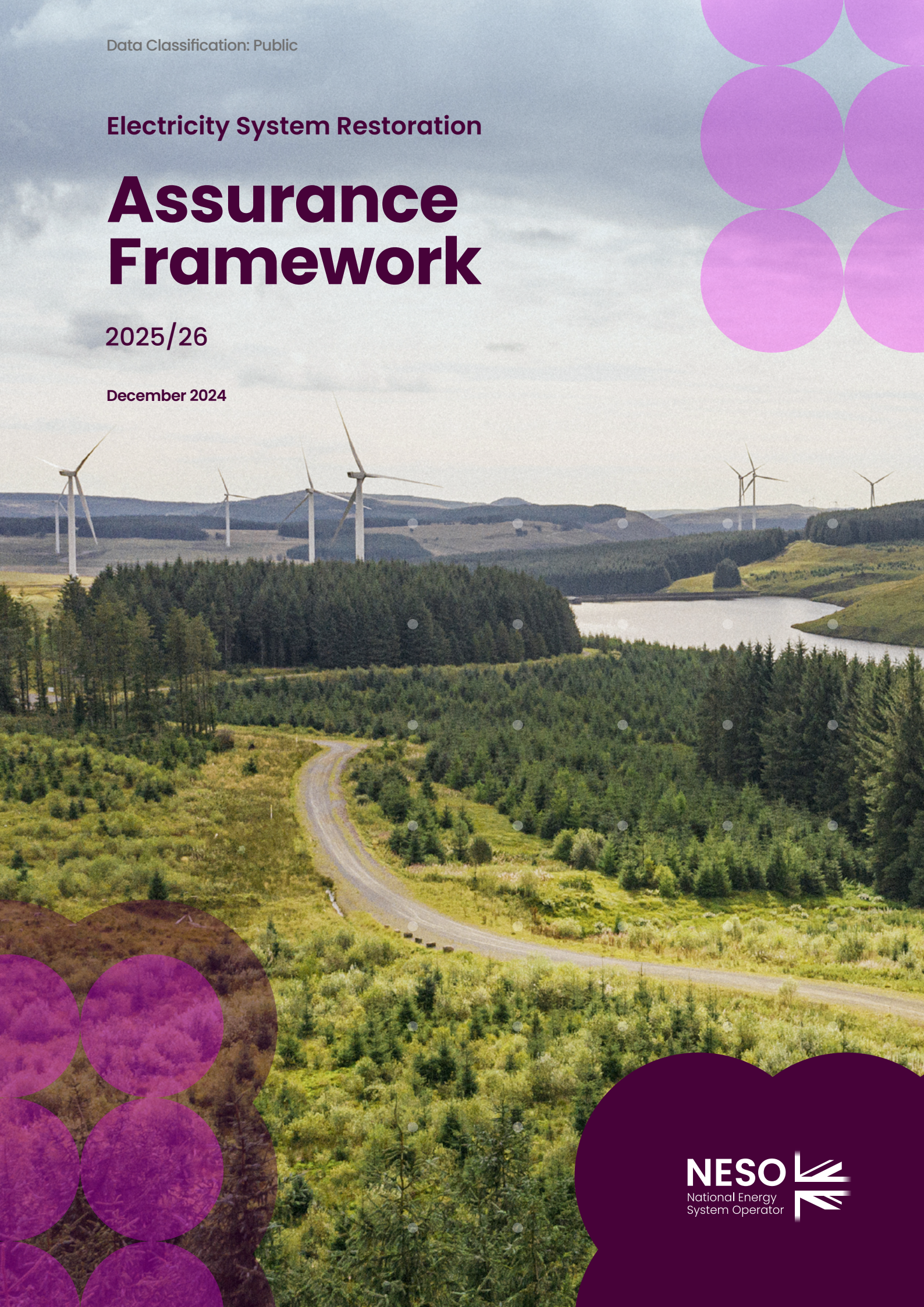
Data Classification: Public

Electricity System Restoration

Assurance Framework

2025/26

December 2024



NESO
National Energy System Operator

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Foreword

The National Energy System Operator (NESO) is responsible for ensuring that both NESO and the energy industry have the necessary tools to restore the electricity system in the event of a National Power Outage (NPO), however unlikely such an occurrence may be. From 31 December 2026, the new Electricity System Restoration Standard (ESRS) will take effect. This will require NESO, in the event of an NPO, to restore 60% of regional electricity demand within 24 hours and 100% of electricity demand within five days. To monitor progress and preparedness against these targets, NESO prepares and consults on an annual assurance framework, which is subsequently published and submitted to Ofgem for review and feedback.

The past year has marked significant progress in NESO's commitment to meeting the ESRS, as set out in the *Assurance Framework 2025/26*. Following industry consultation in December 2024 and submission to Ofgem on 27 March 2025, NESO undertook a comprehensive review of the end-to- end restoration process. This included extensive engagement with stakeholders to identify practical strategies for accelerating the restoration of regional electricity demand.

For completeness and transparency, and in line with NESO's licence obligations, pages 1–26 (excluding this page) were published in December 2024 for consultation. The publication date is clearly displayed in the footer on each page, enabling readers to distinguish easily between previously reviewed material and new content and helping to avoid unnecessary repetition. New information, updates and interim progress approved by Ofgem in September 2025 are contained in Appendix 3, with the publication date shown in the footer on each page to clearly distinguish the new content.

Appendix 3 sets out the collaborative work that has led to several targeted improvements. These include enhanced control room preparedness within NESO; parallel execution of Local Joint Restoration Plans (LJRPs) with Transmission Owners (TOs); faster demand block loading with Distribution Network Operators (DNOs); and improved secondary generator readiness to ensure generation availability following the enactment of LJRPs. Collectively, these actions will support the delivery of the restoration standard timings.

In January 2026, NESO will publish the consultation for the *Assurance Framework 2026/27*. NESO remains committed to working closely with all stakeholders to ensure the highest standards of system restoration and resilience. We look forward to continued collaboration as we progress towards the delivery of the new standard on 31 December 2026.

Executive Summary

The Electricity System Restoration Standard (ESRS), introduced in 2021 by the Department for Energy Security and Net Zero (DESNZ)[1], mandates the National Energy System Operator (NESO) to ensure sufficient capability to recover from a Partial or Total Shutdown of the National Electricity Transmission System (NETS).

These targets, effective by 31 December 2026, require:

- restoring 60% of National Demand within 24 hours across all 7 Restoration Regions[2]
- restoring 100% of National Demand within 5 days

We have Grid Code obligations (CC 6.3.5 and ECC 6.3.5) to ensure that, at all times, the NETS can be restored within the stipulated timeframes. This will be achieved by agreeing commercial contracts with Restoration Contractors who operate plants with self-starting capabilities at strategically located sites. For Restoration Contractors embedded in the distribution network, contract terms will be agreed between us, the relevant Network Operator and the Restoration Contractor.

Although a Total Shutdown in Great Britain has never occurred, it is classified as a high-impact, low-probability (HILP) risk in the National Risk Register due to its potentially severe consequences for the economy and society. Under ESRS, we are required to submit an assurance framework to the Office of Gas and Electricity Markets (Ofgem), outlining how we will meet these restoration targets.

This document serves as the Assurance Framework for 2025/26, the fourth report since the ESRS directive was issued.

While significant progress has been made towards implementing the ambitious ESRS targets, the Week 24 data submission rate, as mandated by the Data and Registration Code (DRC), was below expectations. Week 24 data is a key compliance benchmark, capturing vital metrics on system resilience and readiness, and must be submitted promptly by Connection and Use of System Code (CUSC) Parties. Survey responses showed only moderate engagement, highlighting the need for improvement. Full compliance with the 72-hour resilience requirement is critical for achieving effective and timely system restoration. Despite these challenges, the targets remain achievable if CUSC Parties and other stakeholders commit to sustained engagement and compliance.

As of the latest reporting, 61 of the 443 CUSC Parties (13.8%) have confirmed full compliance with all Assurance Activities, while 202 CUSC Parties (45.6%) have met the 72-hour resilience standard for the 2026 compliance target.

Ongoing collaboration with CUSC Parties, Transmission Owners (TOs), Distribution Network Operators (DNOs) and other stakeholders demonstrates a strong shared commitment to achieving ESRS targets.

1 North Scotland, South Scotland, North East, North West, Midlands, South East and South West

2 DESNZ was formally known as the Department for Business, Energy and Industrial Strategy (BEIS)

To support this effort, we will focus on key measures, including:

- providing enhanced guidance for CUSC Parties
- facilitating workgroups and frequent resilience Q&As
- organising collaborative workshops to address technical and operational needs

To further improve compliance, a new Data and Registration Code submission portal is scheduled for launch in 2025. This portal is expected to streamline and improve the accuracy of Week 24 submissions, supporting progress towards the ESRS objectives.

While substantial progress has been made in addressing this significant industry shift, continued collaboration and engagement across all parties will be essential to maintain momentum. To stay on track, we must intensify efforts to encourage adoption and address critical gaps. The following steps, outlined here and in Section 3, are crucial to achieving full ESRS compliance and meeting our objectives:

- Securing additional Restoration Contractors (RCs) from onshore, offshore and embedded Distributed Energy Resources (DERs)
- Continuing implementation of approved modifications for ESRS compliance, including Grid Code GC0156, System Operator Transmission Owner Code (STC) CM089 and CM091, and Security and Quality of Supply Standard (SQSS) GSR032
- Continuing collaboration with vendors to deliver the Restoration Decision Support Tool (RDST) on schedule to assist Control Engineers during restoration
- Conducting industry-wide compliance monitoring of ESRS Assurance Activities, including Week 24 submissions for existing Generators and Operational Notification Compliance Checklists (ONCC) for new connectees
- Providing targeted industry training and ongoing support to TOs and DNOs to identify specific network requirements supporting ESRS
- Monitoring and mitigating ESRS implementation risks to ensure timely progress

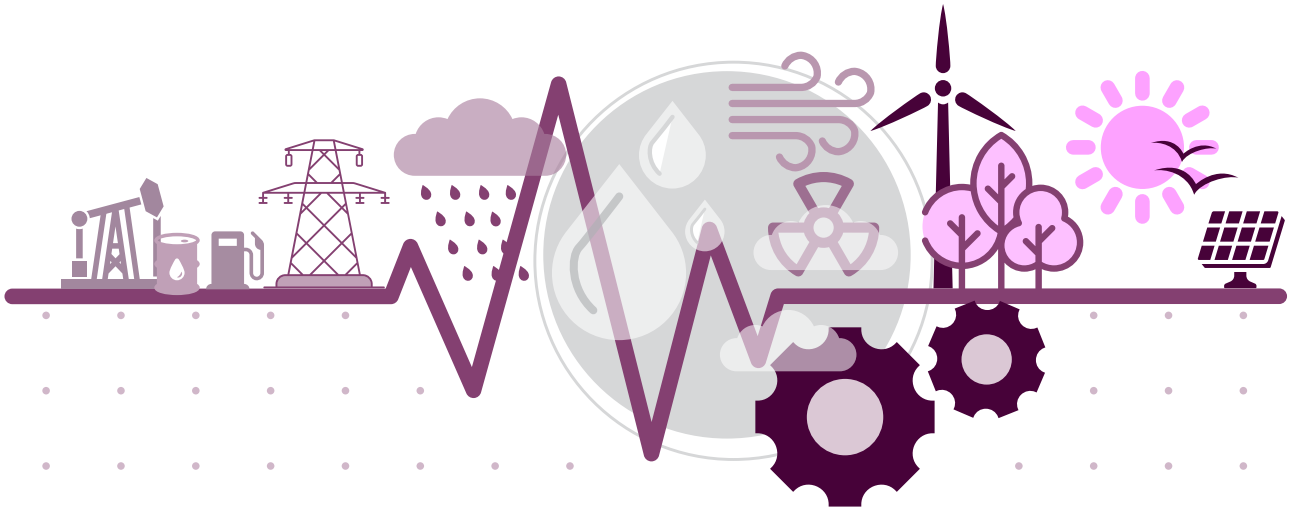
These actions, along with the continued commitment of all parties, will be crucial to achieving full readiness by the December 2026 deadline.

Vision

Our vision, as outlined in the RIIO-2 Business Plan 2023–2025 (published on 31 August 2022), includes the following goals:

- Develop new, competitive market services to support operational needs
- Maintain legacy systems while developing new systems and tools to future-proof the Electricity Network Control Centre (ENCC)
- Deliver the requirements of the new Electricity System Restoration Standard (ESRS)
- Lead deeper and faster reform of codes and regulatory frameworks
- Build on our system insights
- Improve visibility of DERs and focus on whole electricity system coordination
- Develop networks that are fit for the future and improve network access

We are fully committed to implementing the ESRS by 31 December 2026. To achieve this, we are investing in activities that will lead, organise and build consensus with the government, the Regulator and the wider industry, ensuring improvements to system restoration capability.



01

Progress to Date

This section provides updates on the progress towards the implementation of the ESRS.

1.1 Regulatory framework modification

To support the implementation of the ESRS, we proposed modifications to the Grid Code. These changes led to consequential modifications to other industry codes, including:

- System Operator Transmission Code/System Operator Transmission Code Procedures (STC/STCP)
- Security and Quality of Supply Standard (SQSS)
- Balancing and Settlement Code (BSC)
- Connection and Use of System Code (CUSC)

In addition, several important industry codes and standards were modified to align with these changes, such as:

- System Defence Plan
- System Restoration Plan
- System Test Plan
- Electrical Standards, including Control Telephony, Communication Standard and Distribution Restoration Zone Control System Standard

All these modifications were approved by Ofgem in 2024.

1.2 Training and sensitisation

As part of our strategy to comply with the ESRS, we have conducted and will continue to deliver industry-wide training and sensitisation sessions. In addition, we are providing specialised training for Electricity Network Control Centre (ENCC) Control Room Engineers to strengthen our ability to meet ESRS requirements. Table 1 shows our training and industry workshop plans, including major training already completed.

Key training activities include:

- **ENCC Control Room Engineers training**
  Control Room Engineers are trained in specific scenarios at the NESO Control Training Unit (CTU).
- **Industry engagement on Assurance Activity compliance (PCA.5.7.3)**
  The ESRS implementation team engages throughout the year with the industry through webinars, workshops, catch-up calls and a five-day-a-week email reply service.
- **Risk Assurance Subgroup**
  The ESRS Implementation team hosts a monthly Risk Subgroup with the industry to discuss risks related to ESRS implementation, identify mitigations and agree escalation routes. The NESO ESRS SteerCo reviews these risks quarterly.
- **Cross-industry training and benchmarking**
  In addition to NESO ENCC training, Control Engineers from Transmission Owners (TOs) such as NGET, SPT and SHE-T are invited to participate in simulation training at the NESO CTU. Other key players, including DNOs, National Gas, Elexon, and neighbouring System

Operators (SOs), are involved in combined training, workshops and benchmarking sessions. These sessions promote industry-wide understanding of restoration, highlight system restoration best practices and encourage collaboration to address key challenges.

- **Compliance seminar**
  A planned annual seminar will discuss key compliance processes and provide opportunities for industry stakeholders to engage with NESO teams through breakout sessions.

Table 1 : Training timelines

Training	Date
ENCC Control Engineers system restoration training	May 2025
Industry engagement on Assurance Activity compliance (PCA.5.7.3)	Ongoing
Generator compliance seminar	June 2024
Risk Assurance Subgroup	Monthly
Cross-industry training (business as usual team)	Ongoing

1.3 Tenders

Restoration services are primarily procured through fully competitive tender events, which are divided by Restoration Regions and invite submissions from a wide range of technologies. More recently, outputs from the Distributed ReStart project have led to the introduction of categories within tenders, enabling participation from both TO and DNO connected assets. This approach now forms a fundamental part of the procurement process.

We are also able to procure essential services through alternative procurement mechanisms or on a bi-lateral basis if a competitive method is not feasible or there is a critical need for a service.

Table 2 : Procurement activities to date

Procurement Activities	Regulatory Year 2025/26
Northern	The Northern tender covers North Scotland, South Scotland, North East and North West Restoration Regions. The tenders were launched in 2022, and contracts were awarded to successful participants in May 2024. Successful contractors will begin their service by November 2025.
SW and Midlands	The SW and Midlands tender was launched during the regulatory year 2024/25. Contracts will be awarded in November 2025, with services going live in August 2027.
South East	The South East tenders were launched in 2022. Nine contracts were awarded in December 2023, with services scheduled to go live in July 2025.
Wind – Great Britain	Wind-specific tenders were launched in 2022. However, no contracts were awarded as the solutions submitted were deemed neither economic nor efficient. NESO continues to encourage all technologies to participate in the Regional Restoration tenders.

1.4 Restoration Decision Support Tool (RDST)

As part of our strategy to implement the ESRS, we are developing the RDST. This tool will provide decision support capabilities and enhanced visualisation for Control Room Engineers during restoration events, helping to reduce restoration time and ease cognitive load.

The RDST will deliver these benefits by:

- integrating with existing control room systems, including iEMS, Balancing, Forecasting, Data Historian and pre-agreed plans such as the Local Joint Restoration Plan (LJRP), Distribution Restoration Zone Plan (DRZP) and Switching Strategy Workbook (SSW)
- processing inputs to enable route optimisation, running appropriate models and providing suggestions to Control Room Engineers
- forecasting the health of different zones to create situational awareness
- generating appropriate alarms during critical conditions
- providing a logging function for audit purposes
- offering a non-real-time simulation environment for Control Room Engineer training.

Key dates for the development of the tool can be found in Table 3.

Table 3 : RDST Project timelines

Project Activities	Timelines
RDST delivery	The first phase is scheduled for delivery in October 2025, followed by two phases in 2026.

1.5 Inter-Control Centre Communications Protocol (ICCP) links to DNO

Our strategy includes the creation of Distribution Restoration Zones (DRZs) that utilise embedded generation as Restoration Contractors. Currently, we lack the required visibility of the DNO networks to monitor the parameters necessary for operating the DRZs. To address this, the Distributed ReStart project recommended that we set up resilient communication links with all 6 DNOs, covering all 14 DNO licence areas.

The Regional Development Program (RDP) project, under investment INVP5527C RDP N–3 Intertripping Scheme, is delivering three new links to:

- UKPN – UK Power Networks
- SSED (Southern) – Scottish and Southern Electricity Networks Distribution
- NGED – National Grid Electricity Distribution (formerly Western Power Distribution)

For restoration purposes, three new ICCP links are being delivered under investment INV6667, including the takeover of the Southern Scottish Electricity Network Transmission (SSEN) – NESO PI link to share DRZ data. These links are being provided to:

- ENW – Electricity North West
- SPEN – Scottish Power Energy Networks
- NPG – Northern Powergrid

The existing PI link between SSEN Transmission and NESO will also be taken over to share DRZ data between Scottish Hydro Electric Power Distribution (SHEPD) and NESO.

Key dates for the delivery of the ICCP links are detailed in Table 4.

Table 4 : ICCP links to project timelines

Project Activities	Timelines
ENW	Built, tested and go-live in Q2 FY25 (June 2025)
SPEN	Built, tested and go-live in Q2 FY25 (June 2025)
NPG	Built, tested and go-live in Q2 FY25 (June 2025)
SHEPD	PI link available for restoration by March 2025

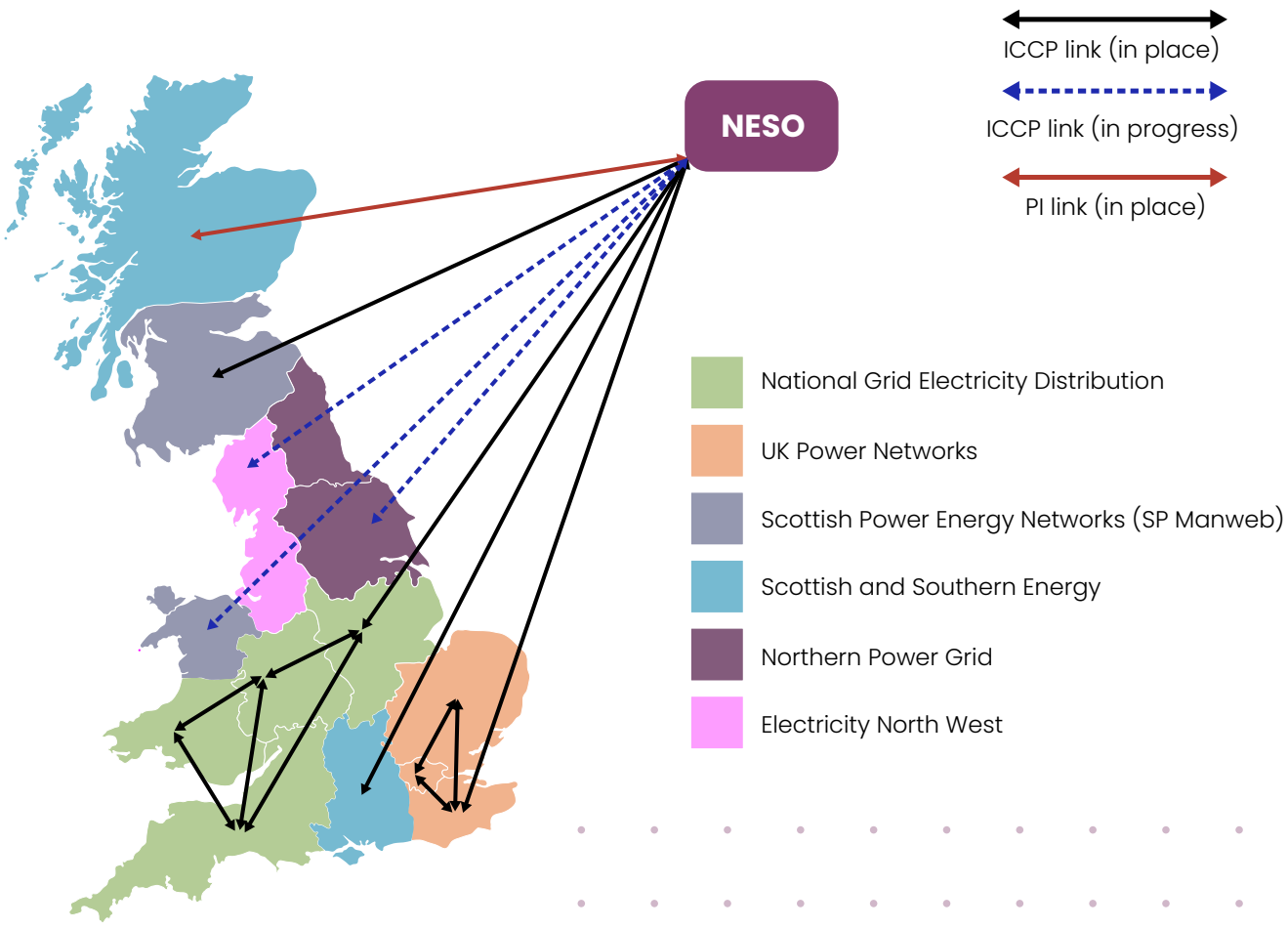


Figure 1: ICCP Link to DNOs

02

Restoration Strategy and Approach

On 9 August 2019, over 1 million customers were affected by a major power disruption across England, Wales and parts of Scotland. Although the disruption itself was relatively brief – all customers were restored within 45 minutes – the knock-on impacts on other services were significant. This was particularly true for rail services, which experienced severe delays that extended into Sunday, 11 August.

A Total System Shutdown has never occurred in Great Britain, making it challenging to test the real-time performance of our restoration capability and arrangements. As a result, we rely on probabilistic modelling to assess the effectiveness of our restoration strategies.

The latest modelling results indicate that, on average, it would take 33.7 hours to restore 60% of National Demand, whereas the ESRS requires 60% of National Demand to be restored within 24 hours across all regions.

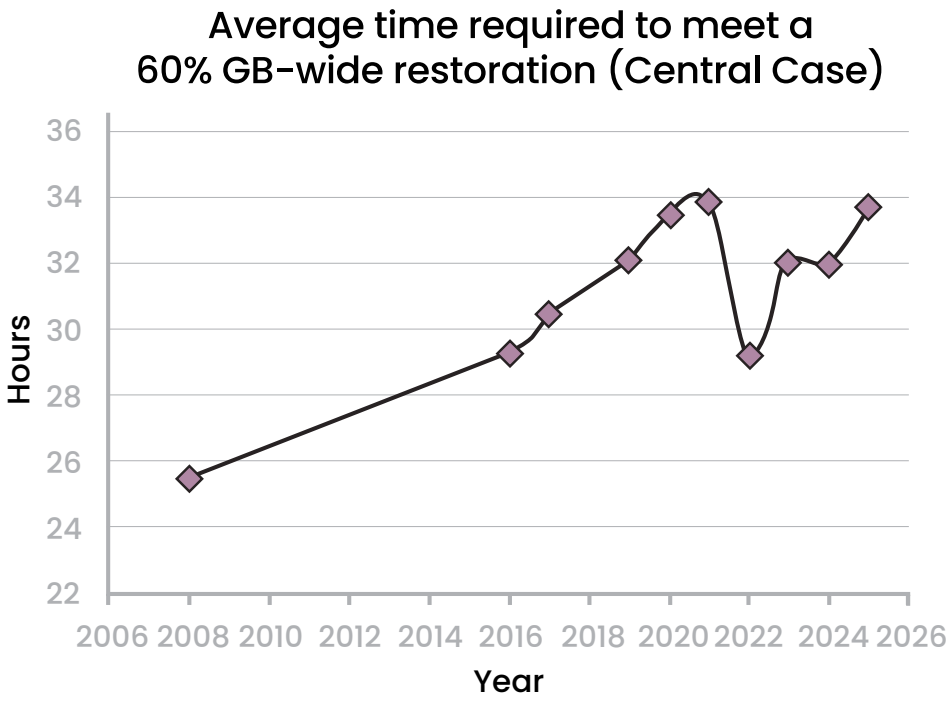


Figure 2: Modelled annual restoration times

We recognise that substantial work remains for all involved parties to achieve compliance with the ESRS by 31 December 2026. To support industry-wide compliance, we continue to implement our adopted strategy, as outlined in Figure 3.

Figure 3: ESRS implementation strategy

To achieve compliance with the ESRS, we are focusing on key measures to enhance restoration capability and encourage industry-wide collaboration:

- **Increase in tendering volumes for new Restoration Contractors:** Tenders are ongoing to contract more Restoration Contractors, including distributed restart services, using diverse technologies across the seven Restoration Regions . This approach aims to ensure uniform restoration across Great Britain and progress to date is summarised in Table 2.
- **Deliver the Restoration Decision Support Tool (RDST):** The RDST will provide decision support capabilities and enhanced visualisation for Control Room Engineers during restoration events, reducing restoration time and easing their cognitive load.
  - The tool will recommend quick, secure and efficient restoration routes to Control Engineers, supporting our ability to meet the ESRS. It will also facilitate faster and safer system restoration with minimal societal impact following a Partial or Total Shutdown.
  - The RDST will also provide real-time updates on restoration progress for both the transmission and distribution networks and log critical decisions made during the restoration process. The progress to date is summarised in Table 3.
- **Inclusion of offshore generation in the restoration process:** New requirements in the STC for developing an offshore transmission network have enabled offshore resources to participate in restoration.
- **Compliance progress monitoring:** We continue to coordinate industry-wide compliance with ESRS Assurance Activities by receiving, assessing and reporting on both compliance and noncompliance to Ofgem. We also report on our own activities to meet the ESRS, as outlined in Section 5, Monitoring and Controlling.

2.1 Restoration approach

The current approach to system restoration relies on a fleet of power stations and interconnectors contracted to provide restoration services. These contracted providers energise local parts of the of the transmission and distributed system, using local demand to establish stable power islands in line with pre-agreed Local Joint Restoration Plans (LJRPs) and Distribution Restoration Zone Plans (DRZPs). Once stable power islands are developed, they are expanded beyond the networks outlined in LJRP's to allow additional technologies such as further generators, demand blocks and reactive equipment, to join the growing system.

Power islands are expanded until they can synchronise with adjacent power islands. This process of expanding islands, restoring demand and synchronising power islands is repeated across Great Britain's network until the full restoration of the network is completed.

As the energy industry transitions to meet net zero targets, DERs are increasingly replacing traditional large fossil fuel-based power stations. To ensure that this transition does not negatively impact restoration capability, DERs must also be integrated into the restoration process. We are proposing a holistic restoration strategy that incorporates both a top-down and bottom-up approach to restoration.

2.1.1 Regulatory year – 2025/26

The upcoming regulatory year will focus on key activities to support ESRS compliance and enhance industry-wide collaboration:

- **Continued assurance submissions:** For the upcoming regulatory year, TOs, DNOs and CUSC Parties will continue submitting their Assurance Activities and compliance information through Week 24 submissions, as required by Schedule 16 of the Data and Registration Code. We assess and document these submissions, capturing evidence to confirm compliance as per PC.A.5.7.3 (see Monitoring and Control section for details).
- **Launch of a new submission portal:** A new Data and Registration Code submission portal is scheduled for launch in 2025. This portal is expected to streamline and improve the accuracy of Week 24 submissions, further supporting progress towards ESRS objectives.
- **Guidance for non-compliance:** In cases where compliance cannot be achieved, we will work closely with the relevant parties to follow Ofgem's derogation guidance. Additionally, we will directly report our own ESRS compliance status to Ofgem, ensuring transparent alignment with ESRS targets.
- **Compliance areas identification:** Figure 4 identifies the industry-wide compliance areas within the relevant codes.
- **Completion of ICCP links:** The development of ICCP links to ENW, SPEN and NPG will be completed.
- **Delivery of RDST Phase 1:** Phase 1 of the RDST will be delivered in October 2025. This first phase would be an operational tool launched in the Control Room.

- **Regional forecasting for restoration targets:** We will continue working with Elexon to publish peak day-ahead forecasts and demand by Restoration Region on the Insights Solution platform, which replaces the Balancing Mechanism Reporting Service (BMRS). This regional forecast will be used to determine restoration targets during a system restoration event. BSC Modification P480 was raised to enable this, with the draft modification report approved by the panel on 14 November 2024. The final modification report for P480 was published on 19 November 2024.
- **Enhancement of eNAMS platform:** We will continue modifying the Electricity Network Access Management System (eNAMS) within this regulatory year to allow TOs to indicate whether their planned outages will impact restoration plans.
- **Industry sensitisation:** We will continue raising awareness of ESRS requirements and obligations through workshops, seminars, Q&As and other communication channels.
- **Engagement with DNOs on DRZP outages:** We will continue engaging with DNOs regarding their obligation to report outages affecting DRZPs as outlined in Grid Code OC2.1.8. NESO's Network Access Management System (eNAMS) will be used as a common platform for DNOs to report the availability of their DRZPs. The eNAMS DRZP reporting feature is currently under development, to be available by June 2025.

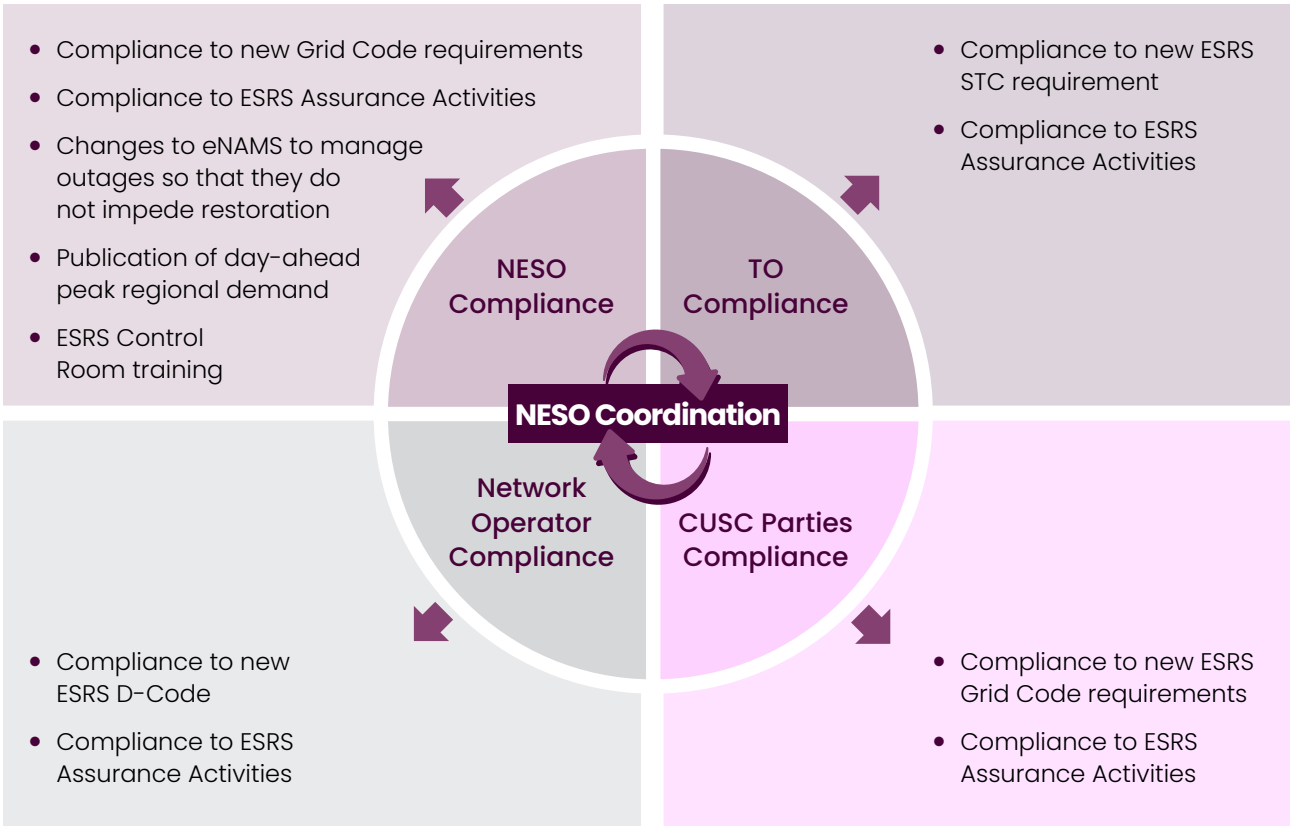


Figure 4: NESO's role in compliance progress monitoring

2.1.2 Regulatory year – 2026/27

As the ESRS compliance deadline falls within the regulatory year 2026/27, we have outlined the following key activities to ensure alignment and readiness:

- **Ongoing compliance monitoring:** We will continue to monitor both industry and internal compliance through Week 24 submissions. During this year, the focus of Week 24 submissions will shift from gathering evidence to confirming compliance with Assurance Activities under the Data Registration Code (DRC), Schedule 16.
- **Control Engineer training:** In collaboration with TOs, we will provide scenario-based simulation training for Control Engineers to prepare for achieving ESRS targets effectively.
- **Restoration Contractor readiness:** Restoration Contractors awarded contracts in the South East and Northern tender rounds are expected to be operational within this regulatory year. This will include the development of new LJRPs and the first DRZP.
- **Assurance Visits:** We will conduct ongoing assurance visits to Restoration Contractors, TOs and Network Operators to verify ESRS readiness and compliance.
- **RDST Tool Completion:** Phases 2 and 3 of the RDST will be completed during this regulatory year, providing full functionality for Control Engineers during restoration events.

2.1.3 Subsequent regulatory years (beyond 2027)

Following the 2026/27 regulatory year, the ESRS will be fully integrated into our normal business operations. Our post-compliance activities in the years beyond 2027 will include:

- **Securing additional Restoration Contractors:** We will continue to secure additional Restoration Contractors through competitive tendering processes to expand restoration capabilities as needed.
- **Ongoing ESRS Assurance Activities:** Week 24 submissions will confirm compliance with the Data Registration Code (DRC), Schedule 16, Parts i, ii and iii. These parts outline the data provision requirements, detailing the types of data each party must submit for system restoration planning and operation, along with processes for validating and maintaining data integrity.
- **eNAMS outage reporting:** We will utilise eNAMS outage reporting to gain early insight into outages LJRPs and DRZPs, ensuring proactive management of system restoration activities.
- **Maintaining the RDST Tool:** We will maintain the RDST and ensure its compatibility with Control Room restoration training exercises. Focus will be placed on improving the tool's usability and enhancing its role in training efforts.
- **Annual restoration training:** NESO will conduct annual restoration training sessions for Control Room staff, emphasising the achievement of ESRS restoration goals set by DESNZ. Training will prioritise the use of the RDST tool to assist Control Room staff throughout the restoration process.

2.2 Risks to strategy implementation

We have identified several risks associated with implementing our adopted strategy to meet the ESRS by 31 December 2026. Our mitigation strategy is to continuously analyse and assess all potential risks, identifying changes in their severity and propose appropriate mitigation measures. Table 5 outlines some of the identified risks to ESRS implementation and the actions planned to mitigate them.

Table 5: Risks affecting restoration strategy and mitigations

ESRS Strategy/ Delivery Areas	Risks	Mitigation
Quality and depth of tender providers	• NESO may not achieve intended service provision and ESRS targets if insufficient capability or volume of providers come forward for tender.	• Retain the right to procure ESR services through alternative methods including bilateral contracts. • Introduce more stringent evaluation and assurance within RCs delivery plans. • Continuously improve tender requirements and service terms to encourage increased participation from renewable technologies.
RDST	• Delays in project dependencies, such as the Network Control Management System (NCMS), could affect RDST project delivery. • The cost of delivering this project could exceed BP2 forecasts due to budget reductions from scope changes. • Potential delays caused by selected vendors' out of the box tools requiring extensive customisation and innovative design approaches.	• Conduct periodic reviews of project dependencies. • Regularly review forecasted costs and actual spend during the RIIO-2 period. • Define clear and well-aligned RDST requirements with vendor's understanding and capabilities. • Upfront evaluation, close collaboration, exploring alternatives, establishing a strong project management framework, and maintain open communication with stakeholders.

Table 5: Risks affecting restoration strategy and mitigations (continued)

ESRS Strategy/ Delivery Areas	Risks	Mitigation
CMP 398 claims	• Increased costs via CMP398 claims committee. • Expertise gaps in reviewing submissions.	• CMP 398 guidance note consulted on and agreed with industry, then published with defined thresholds and clear submission guidance. • Recruit technical experts in various technology areas with deep understanding of operations, economics and industry trends. • Host ongoing Q&As and workshops with industry, assessing pre-claim options before submissions.
System access	• Stakeholders may face challenges in complying with ESRS testing requirements due to conflicts with existing system access needs.	• We will continue to optimise system access to ensure ESR testing is not compromised.
Delay in CUSC Parties building 72-hour resilience	• Significant challenges in acquiring engineering resources to support the claims process may prevent many CUSC Parties from achieving 72-hour resilience by 31 December 2026.	• Provide support to CUSC Parties to address challenges related to the claims process and building resilience. • Use Week 24 submissions to request evidence toward compliance by 31 December 2026. • Publish guidance on the NESO website and host compliance seminars.

03

Monitoring Compliance

To ensure compliance with the ESRS, we have implemented a structured oversight framework, as shown in Figure 5. This framework includes monitoring industry-wide compliance by collecting and assessing Assurance Activities submitted by relevant parties through Week 24 submissions.

In line with the Data and Registration Code, Schedule 16, Part III, these reports specify the frequency and type of testing required to assess readiness for ESRS compliance.

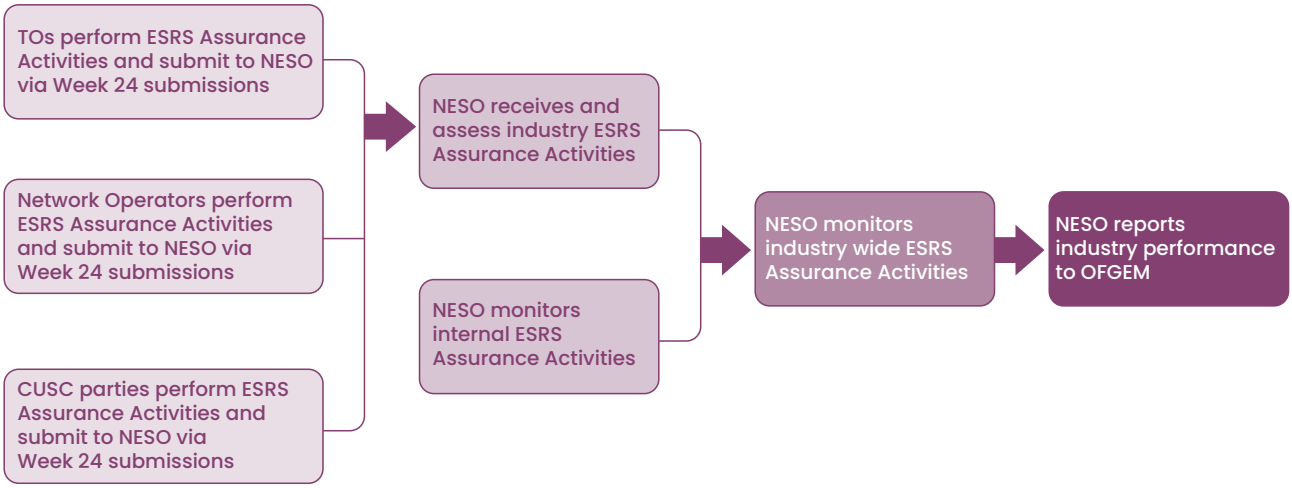


Figure 5 : Levels of Assurance Activities monitoring and reporting

In 2024, CUSC Parties, TOs and Network Operators were required to submit evidence showing their progress toward meeting ESRS requirements by 31 December 2026.

This requirement is outlined in PC.A.5.7.3:

> **...From 1st January 2024 until 31st December 2026, evidence to support the work Generators, HVDC System Owners, DC Converter owners, Non-Embedded Customers, and Network Operators are making to how they will achieve these requirements on or after 31st December 2026 shall be provided in their Week 24 submission.**

Through the Week 24 submissions, we have received 61 Schedule 16 submissions from CUSC Parties, representing approximately 13.8% of the expected submissions. The data provided is continuously collated, enabling us to assess the restoration capabilities of each region in detail.

Additionally, the requirement for TOs is captured in STCP 08–3, 3.1.5, which states:

> **...From 1st January 2024 until 31st December 2026, evidence to support the work TO's are making as to how they will satisfy these requirements shall be provided by submitting Part III of DRC Schedule 16 of the Grid Code... This data shall be provided in accordance with STCP 12–1 annually during calendar Week 24.**

Observations and challenges

The dashboard in Figure 6 illustrates the progress made by key industry players toward achieving ESRS compliance. However, we have observed a lower-than-expected response rate for the Week 24 submissions from CUSC Parties. It is believed that some CUSC Parties may have submitted their 72-hour resilience data via the Resilience Survey, perceiving the Week 24 submission as redundant.

We strongly encourage all CUSC Parties to meet the 2025 deadline for Week 24 submissions, as mandated by the Grid Code, to ensure full compliance and provide NESO with comprehensive data for accurate assessment and tracking.

Overall ESRS assurance compliance

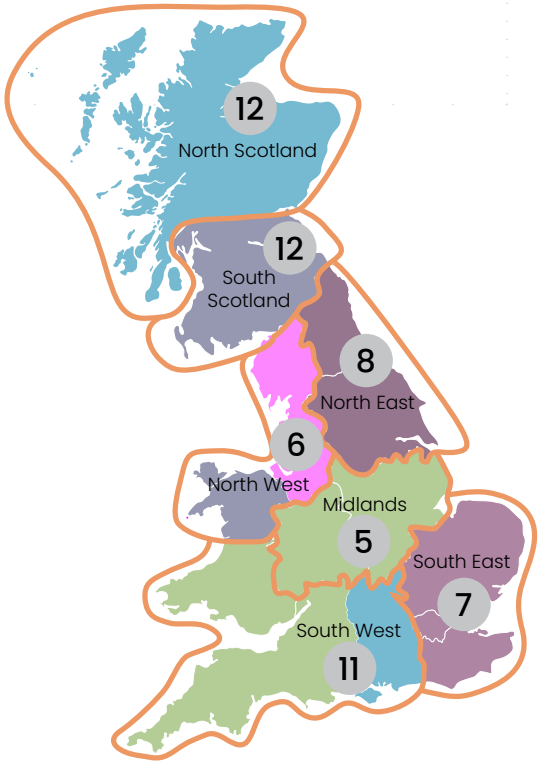
TO Overall ESRS Compliance

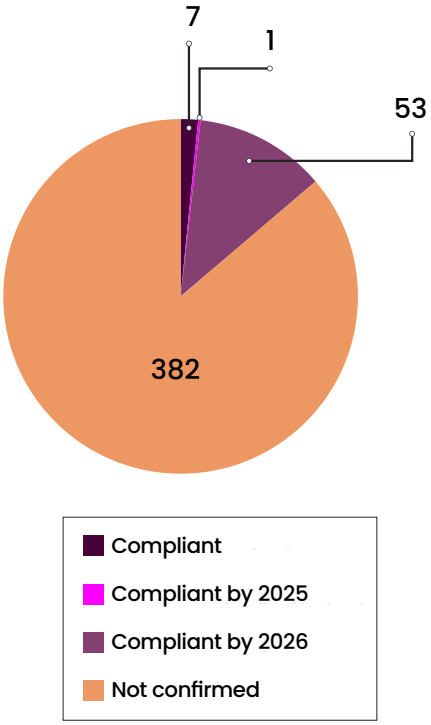
All 3 TOs have confirmed compliance.

DNO Overall ESRS Compliance

All 6 DNOs across all 14 license areas confirmed compliance by 2026.

CUSC Parties





Electricity Distribution Networks – A total of 61 CUSC Party responses were captured.

Figure 6: Industry assurance compliance

CUSC Parties Compliance to Assurance Activities per Region

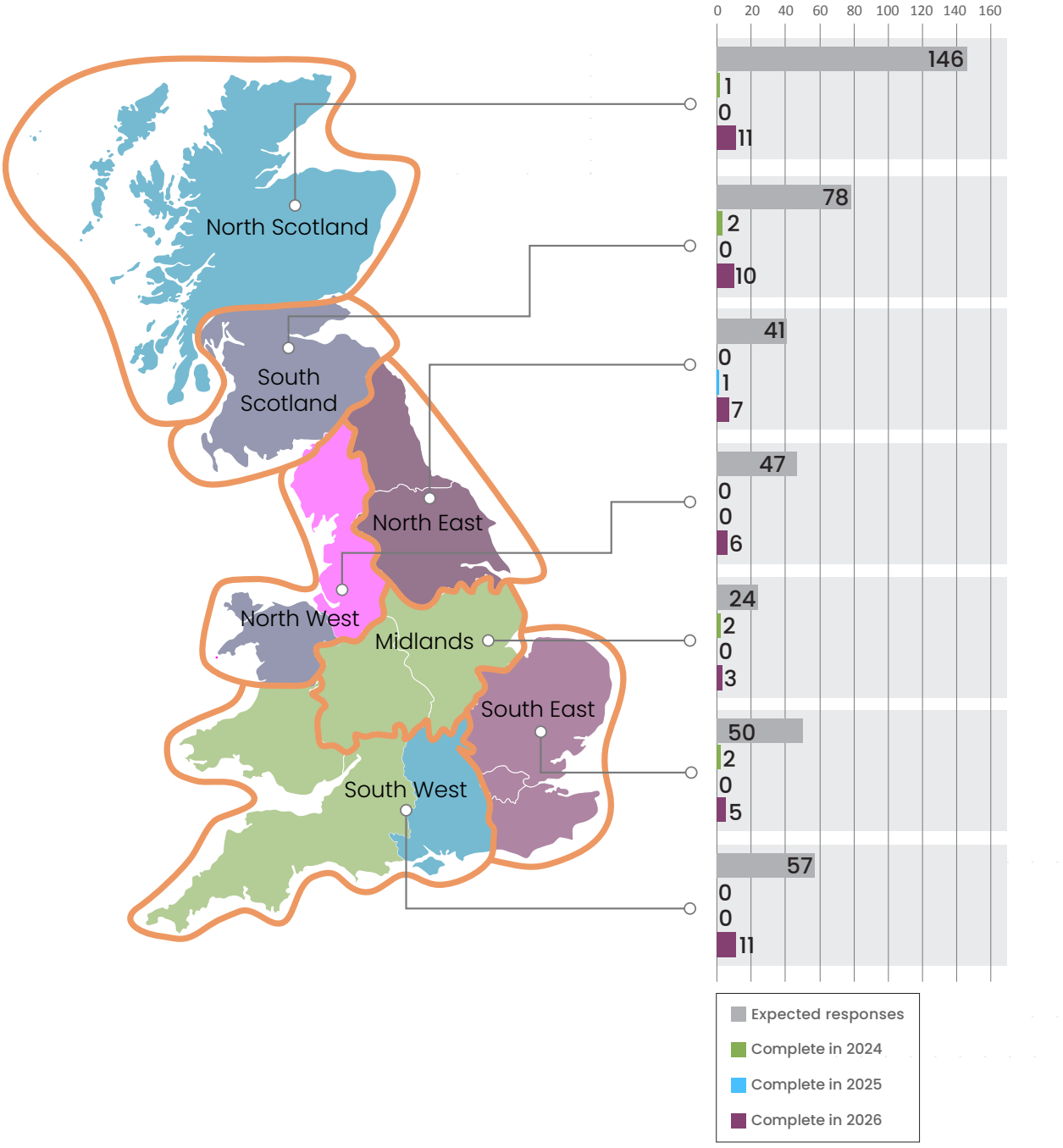


Figure 7: CUSC Party assurance compliance by Restoration Region

Appendices

Appendix 1: Restoration Regions

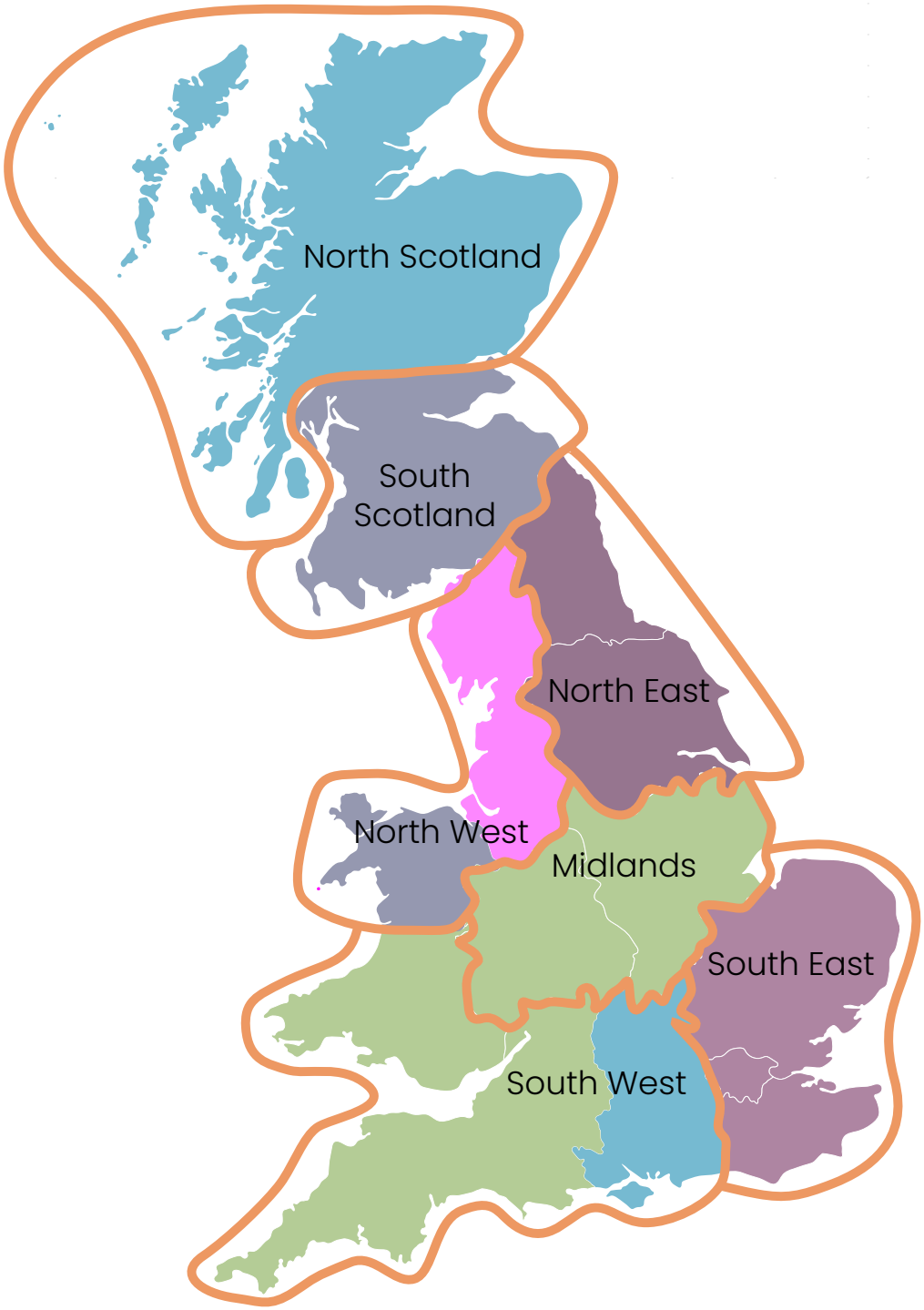


Figure 8: ESRS Restoration Regions

Appendix 2: Acronyms

Table 6: Acronyms

Acronym/key term	Meaning
NESO	National Energy System Operator
ESRS	Electricity System Restoration Standard
RDST	Restoration Decision Support Tool
DER	Distributed Energy Resource
BSC	Balancing and Settlement Code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DESNZ	Department for Energy Security and Net Zero
DNO	Distribution Network Operator
EU	European Union
GC	Grid Code
NETS	National Electricity Transmission System
OFTO	Offshore Transmission System
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
STCP	System Operator Transmission Owner Code Procedures
CTU	Control training unit
TO	Transmission Owner
BMRS	Balancing Mechanism Reporting Service
LJRP	Local Joint Restoration Plan
DRZP	Distribution Restoration Zone Plan
DRZ	Distribution Restoration Zone
NCMS	Network Control Management System

Appendix 3: Interim Update September 2025 (published Dec 2025)

Public

Electricity System Restoration

Assurance Framework 2025/26

Interim Update September 2025

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Context

The National Energy System Operator (NESO) serves a pivotal function in coordinating electricity system restoration efforts in response to partial or National Power Outage (NPO). While an NPO has never occurred in Great Britain, it remains classified as a high-impact, low-probability (HILP) risk within the National Risk Register due to its potentially significant consequences for both the economy and society. Recognising the substantial impact of an NPO and NESO's central role in system restoration, NESO was mandated in 2021 to comply with the new Electricity System Restoration Standard (ESRS) from 31 December 2026.

Since the introduction of the ESRS, NESO has collaborated with industry stakeholders to develop systems, tools, and plans that support the implementation of this new standard. Under the ESRS requirements, NESO must submit an assurance framework to the Office of Gas and Electricity Markets (Ofgem), detailing how restoration targets will be achieved. The most recent assurance framework was consulted on by industry prior to being submitted to the authority in Q4 2024/25.This document provided an overview of current performance and outlined the necessary action points to achieve full compliance with the ESRS. This interim update serves to provide progress since the main 2025/26 assurance framework document.

The ESRS requires NESO to be able to recover from a Partial or Total Shutdown of the National Electricity Transmission System (NETS). The targets are:

- Restore 60% of electricity demand within 24 hours across all seven Restoration Regions.
- Restore 100% of electricity demand within five days.

NESO currently evaluates its ability to meet restoration timelines using a probabilistic model that considers various restoration factors and scenarios. The assurance framework consultation published in December 2024 notes that, while some scenarios meet the new standard, the average time to reach 60% of electricity demand per region is projected at 33.7 hours and 100% of national demand in 97 hours. This exceeds the 24-hour period required by the standard for the 60% electricity demand per region. NESO have identified a number of key actions necessary to ensure compliance with the standard by December 2026.

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1 Interim progress

Following this year's Assurance framework submission on 27 March 2025[1], and a comprehensive analysis and review of the end-to-end restoration process with relevant stakeholders, NESO has identified several credible and achievable strategies to reduce the average time required for 60% electricity demand per region restoration. The findings suggest that improvements can be made by enhancing NESO control room preparedness, executing initial Local Joint Restoration Plans (LJRPs) in parallel, expediting demand block loading, strengthening power island stability, increasing Distribution Restoration Zone (DRZ) sizes, and advancing secondary generator readiness through rigorous assurance activities and enhanced restoration procedures.

Since the submission of the 2025/26 Assurance Framework, we have made progress in the following areas/deliverables that will further enable us to meet the standards.

- Engagement with network owners regarding demand block loading speed, demand block stability and Distribution Restoration Zone sizing.
- Modification proposal to Grid Code to support block loading speed.
- Planning additional restoration exercises for control room personal.

While significant progress has been made towards implementing the ambitious ESRS targets there is more to be done to achieve and sustain the targets. The below sections capture the priority actions coordinated by NESO and undertaken by all relevant stakeholders to ensure compliance.

[1] In accordance with Condition C4 NESO's Electricity System Operator ("ESO") Licence Conditions.

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2 NESO preparation

Electricity Network control Centre (ENCC)

NESO have training, policies, procedures and authorisations in place to ensure the control room is equipped to restore the system if required. However, as a prudent system operator, we undergo continuous training to maintain our readiness. The most recent exercises have highlighted areas where further improvements can be made. These exercises would be even more valuable if they were conducted end-to-end, involving network owners and other relevant parties. Periodic training sessions and readiness exercises should include Transmission Owners (TOs), Distribution Network Operators (DNOs), and, where possible, Restoration Contractors, to ensure all stakeholders are fully prepared and aligned for a restoration event.

NESO's ENCC training, conducted in the Control Room Unit (CTU), delivers value on multiple levels by:

- Scenario-Based Practice: The training places the control room in a National Power Outage (NPO) or related scenario to test and enhance the readiness of personnel, tools, and procedures for restoring the GB network enabling quicker restoration through familiarity with LJRPS and Regional Restoration Plans (RRPs) and in turn contributes to reducing system restoration times to reach 60% electricity demand per region and 100% national demand.
- Strategic Insight: The outcomes of the training provide valuable foresight into how the ENCC might address the challenges of an NPO in the future, live time trials also highlight time frames and areas where restoration time reduction can be exploited.
- Collaborative Learning: Engaging with Transmission Operators (TOs), Distribution Network Operators (DNOs), and Generators—by leveraging and contributing to the exercise outcomes—helps make future exercises more realistic and offers NESO critical insights into the restoration process. This also reduces restoration time in having all stakeholders familiarised with processes, actions and procedures during a restoration event. The model assumptions are directly influenced when reducing stakeholders' preparations and implementation times during restoration.
- Continuous Improvement: Future exercises will build on the outcomes of previous ones, incorporating fresh insights and experiences from all stakeholders. This ensures the ongoing development and refinement of the GB network restoration process.

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In order to further strengthen our readiness and preparedness beyond our annual exercises, we are scheduling the following supplementary training and exercise activities, with proposed dates subject to confirmation.

- Q3 2025 - Electricity National Control Centre (ENCC) training: ENCC training to evaluate performance against restoration target
- Q3 2025 - ENCC supports National Grid Electricity Transmission (NGET) internal restoration exercise -: focus on Local Joint Restoration Plan (LJRP) switching whilst taking instruction from ENCC Control Engineers.
- Q1 2026 - ENCC/NGET/SPT/SHET joint restoration exercise -: inter-party coordination with in-depth focus on all Regional Restoration Plans.
- Q2 2026 - Next ENCC focused exercise - to demonstrate capability to meet ESRS target 60% electricity demand restored per region in 24 hours.

Regional Demand Forecast

As part of ESRS, there is a requirement to publish the forecast peak regional demands daily for industry to have an overview of the targets for the new standard. On 26 June 2025, the Regional Demand Forecasting system was launched and is now fully operational. The system publishes daily forecasts of 60% and 100% of peak national demand for the following day under pre-system shutdown conditions to Balancing Mechanism Reporting Service (BMRS), in accordance with Grid Code OC1.7.1. By publishing the targets industry has a clear view of what needs to be achieved and can accurately measure how progress is being made toward meeting both the 60% electricity demand per region in 24 hours and 100% national demand in 5 days.

Restoration Decision Support Tool

The Restoration Decision Support Tool (RDST) is an innovative tool that is designed to help control engineers with cognitive load and assists in identifying effective strategy during system restoration. The RDST delivery proposal has been agreed with our selected delivery partner, and the first phase will be delivered in Q1 2026 for testing and a planned go-live in Q3 2026.

The RDST is developed to enhance the control room's operational effectiveness during system restoration by providing real-time decision support and situational awareness. It integrates data from multiple sources—including Integrated Energy Management System (IEMS), forecasting systems, data historians, and pre-agreed restoration plans (LJRPs, DRZPs, and SSWs)—to generate route recommendations and visualise the health of

different network zones. This capability was intended to reduce the cognitive load on control engineers by streamlining complex data into actionable insights. By reducing the cognitive load on control room engineers, this may help decrease resource fatigue and support restoration stability.

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3 Distribution Network Operators

Demand Block Loading Speed

Block loading is a term used to refer how demand is reconnected by Distribution Network Operators (DNOs) during system restoration. Prior to commencement of reenergisation, the DNOs segregate their network into pre agreed demand blocks. These blocks are then energised in synchronism with increasing generation level. This ensures that the power island grows in a steady and stable manner.

Speed of the reconnection of these demand blocks varies between DNOs dependent on network complexity, generator ramp rates, switching capability (i.e. remote switching vs onsite manual switching) etc. In accounting all these factors we assume a 25mins interval between each demand block switching in our assessment.

Our analysis demonstrates that shortening this interval has the potential to considerably reduce overall restoration time. For example, decreasing the interval to 10 minutes can lower the average time required to reach 60% of electricity demand per region by approximately 33% versus existing capability, whereas an interval of 20 minutes would result in a reduction of about 9% versus existing capability. Consequently, identifying strategies to minimize the duration between block loads represents a credible and feasible approach for achieving ESRS targets.

Discussions have been held regarding the feasibility of achieving 10-minute block loading with DNOs, resulting in a positive response. While Grid Code clause ECC/CC 7.11.4 states that network companies shall support NESO by providing adequate demand reconnection speed to meet ESRS requirements, there is currently no formal agreement designating 10 minutes as the standard reference. To address this, a minor amendment to the Grid Code is being proposed as part of the upcoming modification, which is expected to be completed prior to the ESRS launch. Additionally, formal requests have been sent to all DNOs seeking their support to enable adjustments to the assumptions used in our model.

The estimated modification timelines (based on historic similar modifications) in table 1 below.

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Table 1 Estimated modification timelines

Milestone	Timeline
Formal Letters sent to DNOs	31 July 2025
DNOs inclusion in modification workgroup	2 September 2025
DNOs responses for letters due	30 September 2025
Proposal	November 2025
Workgroup Consultations	February 2026
Work group report	March 2026
Code administrator consultation	April 2026
Draft final modification report	June 2026
Final modification report	July 2026
Implementation	31 December 2026

Demand Block Stability

It is critical that reconnected demand block stays stable specially in the early phases of restoration. Unstable demand (i.e. the Megawatts level fluctuates unpredictably) can lead to a power island to collapse requiring a restart which would delay restoration further.

The increase in Distributed Energy Resources (DERs) and Consumer Energy Resources (CERs) in the DNO network has made it more challenging to predict demand blocks, which could result in a higher rate of demand rejection[2]. The elevated levels of DER and CER could also make reactive power flow unpredictable at the Grid Supply Points, potentially causing voltage stability problems at transmission network that might lead to power island collapse. These issues can slow down the restoration process.

The model applies occasional random faults as block loads are applied to islands. This reflects the risk of tripping the island when closing each circuit breaker. The risk is greatest

[2] Demand rejection is an event when a block of demand significantly deviating from the estimation when switching in, can lead to the power island to collapse.

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in the initial stages but decays as power islands grow because subsequent block loads represent an ever-smaller proportion of the island. This decay is captured in the model.

The baseline assumption is that there is a 1 in 20 (5%) chance of tripping for the first block load and if tripped, this cascades the trip to all units connected. There are many factors which influenced the choice of 5% which was settled on and discussed in the Black Start Task Group (BSTG) deliberations.

The current restoration model assumes 1 in 20 demand block load rejection rates. However, analysis suggests that reducing this rate to 1 in 100 could shorten the time required to achieve 60% electricity demand per region restoration by approximately 24% versus existing capability . We recognise achieving this would be an industry effort with a long lead time beyond implementation date. Therefore, we are starting to collaborate with relevant industry stakeholders to implement this within the next few years, thereby ensuring that ESRS remains sustainable amidst an evolving landscape.

Engagements with the DNOs have commenced to verify the current demand block rejection rate and to reach agreement on a solution aimed at reducing this rate to 1 in 100. This initiative is around sustainability and will not be in place before implementation of ESRS.

We are working with Distribution Network Operators (DNOs) to assess and mitigate the risk of demand block rejection within their licensed areas, aiming to reduce – to 1 in 100 or eliminate this risk by December 2026. Our analysis indicates that the primary factors influencing block loading rejection are the levels of Distributed Energy Resources (DERs) and Consumer Energy Resources (CERs). Engagements with DNOs have highlighted that NESO's policy regarding the role of DERs during system restoration is crucial to the eventual demand block rejection rate. Implementing policies that disconnect or limit DERs during restoration could significantly impact rejection rates.

Our next step will be to define, clarify, and communicate NESO's DER policy for restoration by Q4 2025. We anticipate that, for some DNOs, this will substantially reduce the risk of demand block rejection. Additionally, we are working with DNOs to initiate projects aimed at improving their ability to forecast and understand DER behaviour during restoration events. We expect these projects to be completed by Q3 2026, by which time the risk of demand block rejection rate should be substantially reduced.

Public

Distribution Restoration Zone Sizes

In addition to restoration plans developed around transmission-connected generators, the distributed re-start project[3] demonstrated the viability of also utilising distribution connected generators. NESO has now formulated restoration plans based on generators connected to the distribution network. These plans are known as Distribution Restoration Zones Plans (DRZPs). We have procured distribution restoration providers via recent tenders and DRZPs are currently under development. Sensitivity analysis indicates that the megawatts delivered by a DRZP in each restoration region can influence the time required to achieve 60% of electricity demand across all regions. The analysis suggests that a firm DRZP response of 1GW in each restoration region will reduce the time to 60% target by approximately21% versus existing capability, while a firm response of 500MW will reduce this time by approximately12% versus existing capability. It is likely that the generators within the DRZP are very small (potentially just tens of Megawatts), thus necessitating strategies to increase the Megawatts output from a DRZP beyond the contracted value so that they have more impact on restoration times.

By December 2026 only a few DNOs will have a DRZP in their licence area and NESO has commenced engagement with the DNOs on DRZ expansion. So far, we have proposal from one DNO to expand DRZ to include non-contracted generators and deliver over 1GW during restoration. There are regular discussions with this DNO to develop the specifics of this plan; however, completion of this project is not anticipated before 2028. We are also discussing with the rest of the DNOs to develop other arrangements to use DRZP to expand DRZs that can be in place by 2028. We recognise that more lead time is required, given that DERs are not subject to Grid Code requirements and currently lack shutdown resilience and robust communication capabilities. Addressing these issues is expected to support system restoration efforts over the long term.

[3] Link to Distributed ReStart project information, Distributed ReStart | National Energy System Operator

Public

4 Generators

Secondary Generator preparedness

Secondary generation refers to Connection and use of system Code signees (CUSC) generators that will join Local Joint Restoration Plans (LJRP) once enacted to form power islands. LJRPs have restoration contractors with self-start capabilities and are contracted to start up by NESO instruction in the unlikely event of a national power outage.

Secondary generators must be fully prepared for restoration, as their operational readiness is essential once LJRPs and DRZPs are implemented. Integration of these generators into the overall restoration plan is imperative to a successful restoration with in ESRS Targets.

Secondary generators are used during the restoration process after a national power outage. They contribute by joining power islands formed through Local Joint Restoration Plans (LJRP) and by expanding and stabilizing these power islands. By adding generation capacity, secondary generators help the system meet increasing demand as more areas are reconnected, supporting the achievement of ESRS targets for timely and effective restoration. The operational readiness and integration of secondary generators are important for maintaining system stability, reducing the risk of further outages, and enabling a coordinated response during restoration. Their inclusion increases the resilience and adaptability of the restoration strategy, allowing electricity supply to be restored throughout the network. To support secondary generators in their operational readiness for restoration, we will be hosting a series of preparedness webinars in the third quarter. These sessions are designed to provide practical guidance and address key aspects related to generator participation during a National Power Outage event.

The proposed webinar dates are:

18th November 2025

25th November 2025

3rd December 2025

9th December 2025

These webinars are aligned to prepare generators for an NPO event. Some of the areas of discussion will be:

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- Communication during a restoration event.
- System Checks during a restoration event.
- Assurance activities during a restoration event.
- NESO ENCC coordination during a restoration event.
- Data Submission during a restoration event.
- Compliance with Part 1 and Part 3 of the schedule 16 of the data and registration code use in system restoration.

Assurance activities and week 24 submissions

Secondary generators are required to be compliant with GC0156 specifically Part 1 and part 3 of the Data and Registration Code (DRC) Schedule 16.

Schedule 16 Part 1 requires Generators to supply the cold start time of the generator assuming the generator was running immediately prior to the Total Shutdown or Partial Shutdown and an event of loss of all external power supplies.

The information provided in DRC Schedule 16 part 1 pertains specifically to a Restoration event. This differs from the typical cold start times declared during routine operations, such as when a plant returns from an outage or has not been operational for some time.

Part 3 describes assurance activities that are derived from the requirements specified in GCO156. The assurance activities include:

- Resilience to Total or Partial Shutdown (72 hours)
- Voice Systems Resilience test or equivalent
- Critical Tools and Facilities Control Systems Resilience Demonstration (72 Hours)
- Cyber-Security Confirmation
- Telephony services test
- Restoration Procedure review

To date, week 24 submissions and surveys show that 83% (60GW of 72GW) of generator capacity under NESO agreements will have 72-hour resilience for external supply loss. While 77% of generator capacity has confirmed full compliance with all assurance activities by 31 December 2026 (56GW of 72GW).

Current fully compliant generators are sufficient to meet ESRS restoration targets. This excludes Offshore generation as GC0156 72-hour resilience is not retrospective in application to offshore generators.

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Week 24 Submissions are mandatory for all Grid Code users, and we request that all generators confirm their compliance accordingly. At the close of week 24 submissions (end August 2025) NESO contacted all generators that have not yet confirmed resilience and will next consider options available via the generator compliance process to non-conforming generators.

NESO proposed generator engagements:

- Week 24 engagements ongoing
- CMP 398 engagements ongoing (weekly) next claims window December 2026.
- 2025 Q2 Generator compliance seminar
- 2025 Q3 Secondary Generator Preparedness Webinars

Public

5 Innovation initiatives

Battery Reserve for resilience

NESO has initiated an innovation project through which we plan to explore and demonstrate the benefits of Battery technology for resilience and restoration. We understand the need for innovation to support system restoration in the context of a rapidly evolving electricity grid. The grid is undergoing a significant transformation with the increasing integration of renewable energy and distributed generation, gradually replacing traditional centralized systems. Each year, more transmission-level generation is being supplanted by distribution-level sources. Battery Energy Storage Systems (BESS) have advanced significantly, both in battery technology and in power electronics, particularly grid-forming capabilities.

The Battery Reserve for Resilience concept explores the potential of coordinating existing BESS installations and Vehicle-to-Grid (V2G) resources to support restoration activities. By leveraging assets already embedded within the distribution network, the system could assist with faster block loading and contribute to block stabilisation during restoration sequences. It may also provide distributed grid-forming services, facilitate sectional energization, and support voltage and frequency stabilization in the absence of synchronous generation. The coordinated use of these technologies offers additional longer-term potential to reduce reliance on fossil-based reserves and improve restoration agility, aligning with the broader decarbonization and resilience objectives of the power system.

National Power outage demand estimation

One of the most significant challenges in restoration planning is the lack of visibility into what electricity demand will look like immediately following a National Power Outage (NPO). Unlike routine operations, post-outage demand is shaped by unpredictable consumer behaviour, embedded generation variability, and regional recovery dynamics The biggest challenge is that we currently have no reliable understanding of what demand will look like immediately after an NPO event. Traditional forecasting methods, which rely on business-as-usual distribution-level projections, are insufficient in capturing the unique characteristics of post-outage demand behaviour. Our objective is to forecast the NPO regional demand target with greater accuracy, recognising that innovation will be required to develop a scaling factor that reflects changes in usage patterns compared to normal operating conditions.

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The NPO Demand Calculation project aims to build a statistically demand model that accounts for embedded generation, distribution variability, and behavioural shifts in electricity consumption following restoration. This model has the potential to inform generator sizing, block loading strategies, and restoration sequencing. Longer-term, it may support the development of scalable forecasting tools that adapt to evolving demand patterns, such as increased electrification of transport and heating, and enhance coordination between NESO and DNOs for more resilient restoration planning. Subject to procurement activities, it is our intention to deliver within six months of contract award, targeting mid-2026 for completion.

Empirical Restoration Framework-Conclusion

These initiatives were identified through the newly started and ongoing Empirical Restoration Framework (ERF) project, which provides a system-level analysis of restoration challenges, combining high-level strategic insight with granular operational detail. The ERF is currently being developed to map out restoration gaps and propose targeted innovation pathways, with a focus on improving restoration sustainability and readiness. Both the Battery Reserve for Resilience and the NPO Demand Calculation projects emerged from this framework as priority areas requiring new approaches to support restoration agility and long-term system resilience.

These initiatives are expected to influence key restoration performance metrics, including improved block loading speed, enhanced system stability, and more realistic regional demand targets. A better understanding of post-outage demand will reduce the risk of switching into unknown load conditions, thereby lowering the likelihood of generator trips and enabling faster, more secure restoration sequences. These improvements will support the refinement of ESRS targets and contribute to a more predictable and resilient restoration process. The projects are subject to internal approval, and while measurable benefits may be difficult to realise before the end of 2026, initial outputs could begin to materialise by mid-Q2 2026. Wider implementation is expected from 2027 onwards.

Public

6 Probabilistic Modelling

This modelling process has been developed by NESO on behalf of wider industry owing to our central role and access to relevant sensitive information. The results have been determined through Monte Carlo simulation techniques to explore the range of possible outcomes for a set of Central Case circumstances. These results represent a feedback loop to help guide overall industry provision for Restoration capability and help meet stated requirements.

ESRS planning relies on this probabilistic modelling, which shapes compliance expectations and targets. Since model parameters are regularly updated by stakeholders, the baseline for measuring compliance can change, making delivery less certain even though targets stay the same.

Performance assessments currently depend on evolving assumptions from external stakeholders, which may not always match engineering realities.

Because many of the model's activity and timeline assumptions for NESO, network owners, and generators have persisted for years, we propose validating them annually. This will help identify discrepancies, improve the model, and clarify regulatory processes.

An annual assumptions framework involving all stakeholders will be introduced next year.

Whilst the modelling produces a distribution of possible outcomes, the simplest representative measure which has been adopted to date is the average time (in hours) to restore enough generation/demand to meet 60% of the electricity demand per region from the day in which the NPO occurred. The 60% is used as a proxy for the 'welfare' needs on the nation and covers the activities over which industry participants have the greatest influence and control.

Public

7 Roadmap

The ESRS team is collaborating with colleagues from NESO and industry partners to meet the established targets, following a structured roadmap that outlines the key workstreams required to demonstrate confidence in achieving the restoration goals. The comprehensive roadmap spans through December 2026 and beyond. Details regarding the status and dependencies of these workstreams are provided in the appendix.

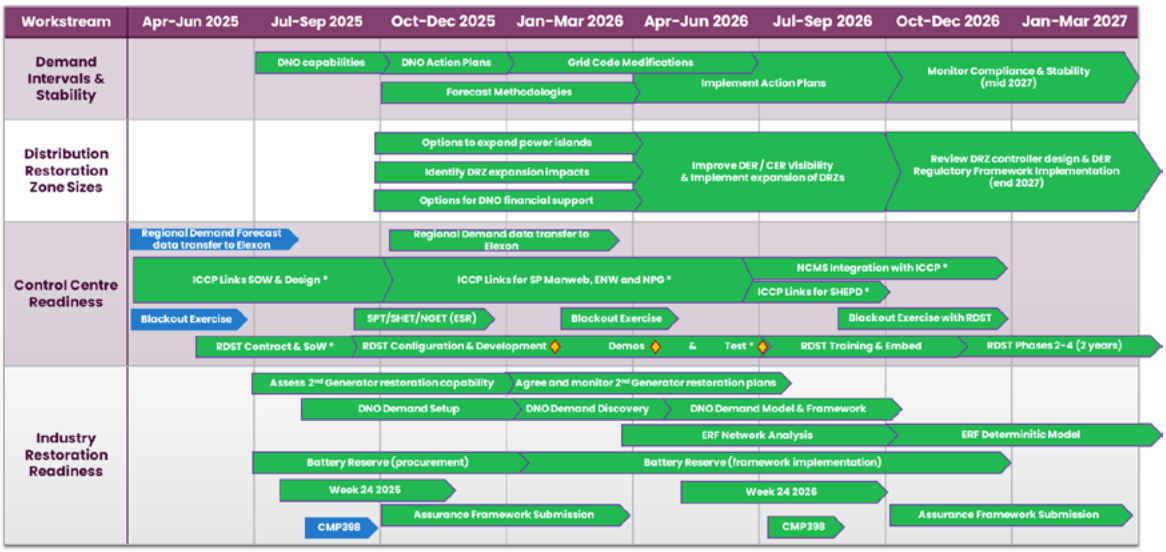

Figure 1 High level Roadmap

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8 Conclusion

NESO, with industry partners, has developed and continues to improve regulatory, technical, and commercial capabilities to meet ESRS requirements. However, the Assurance Framework 2025/26 assessment shows more action is needed for full compliance with ESRS standards.

To conclude, delivering on the restoration strategy will require unwavering focus on several key areas:

- Securing a consistent 10-minute demand block loading speed across all DNO regions,
- Resolving demand block stability challenges to reduce rejection rates,
- Expanding and scaling Distribution Restoration Zones by integrating distributed resources, which now comprise roughly a third of Britain's installed capacity,
- Continuing robust regulatory engagement, technical trials, and commercial innovation. Equally vital is leveraging data analytics to enhance forecasting and restoration processes, with transparent, regular progress reviews to enable timely course corrections.

Achieving these outcomes will depend on active collaboration and engagement with DNOs, NESO, Ofgem, DESNZ, and industry partners. Crucially, this also requires rigorous testing and regular exercising of restoration plans to ensure preparedness and resilience in real-world scenarios. Collectively, these efforts underpin both operational and policy alignment—ensuring the industry is equipped to meet ESRS standards and deliver resilient, effective system restoration.

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