



We are the National Energy System Operator for Great Britain, making sure that Great Britain has the essential energy it needs by ensuring supply meets demand every second of every day.

The National Energy System Operator (NESO) was created as a result of the UK's 2023 Energy Act, an act that paved the way for Great Britain's journey to cleaner energy.

Building on our previous experience as the Electricity System Operator (ESO), where we had extensive expertise in balancing electricity supply and demand 24/7, while making sure the networks we operated and the markets we served were prepared for the future, the Resilience and Emergency Management (R&EM) directorate provides whole system coordination and analysis to strengthen system resilience and prepare for emergencies across Great Britain's energy industry.

The Department for Energy Security and Net Zero (DESNZ), released a [Policy Statement](#) setting out the need to strengthen the current regulatory framework by introducing a legally binding target for the restoration of electricity supplies in the event of a nationwide or partial power outage on the national electricity system – a new Electricity System Restoration Standard (ESRS).

This new ESRS obligates¹ NESO to have sufficient capability and arrangements in place to restore 60% peak National Demand across each of the seven restoration regions in 24 hours, and 100% of peak National Demand within five days. NESO must ensure that everything is in place to comply with this standard by no later than 31st December 2026.

To implement the ESRS, Industry working groups deduced the requirements for ESRS and these requirements were implemented through modification of GC0156 which led to consequential modifications of other industry codes. Under Schedule 16 part 3, the assurance activities as set out from the requirements of GC0156 for non-restoration contractors are:

- Quick resynchronisation unit test for EU Generators Type C and D.
- Training coordinated by NESO.
- Resilience to Total or Partial Shutdown for up to 72 hours.
- Voice Systems Resilience test for minimum 72 hours.

¹ Link to system operator license conditions: [Special Conditions - ESO](#)



- Critical Tools and Facilities Control Systems Resilience Demonstration for minimum 72 hours.
- Cyber-Security Confirmation and compliance with Network & Information Systems (NIS). Telephony services test as per CC/ECC.6.5.4.
- Restoration Procedure review for Generators.

Secondary generator refers to generators that are Connection and use of system Code (CUSC Parties) 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 within ESRS Targets.

As part of ESRS preparedness we would like to engage with you to make sure you fully understand the key requirements to participate in a restoration event such as but not limited to:

- Communication setup during an NPO
- System checks
- Testing and validation
- Coordination with Neso
- Data submission
- Compliance with the DRC schedule 16 part 1 and 3.

In addition, NESO is working on Regional Restoration Plans in collaboration with industry that will focus on providing guidance in restoring the Energy System in line with the ESR Standards. These documents will consider the regional characteristics and priorities of restoring the Energy System, including the availability and capability of both ESR contracted and non-ESR contracted Generators, and we would welcome your knowledge and experience. This integrated approach not only reinforces technical compliance across all parties but also supports strategic collaboration, enabling the system to recover quickly and efficiently in the event of a partial or total shutdown.

As part of the engagement, the ESRS team will be presenting on the secondary generator preparedness in the compliance forum seminar in October to discuss the necessary compliance activities and gain a better understanding of restoration readiness.



Resilience and Emergency Management

Following this, we will invite you to share your thoughts during our upcoming webinar sessions later in the year. If you have any questions in the meantime or would like to find out more on how we could work together, please contact esrsimplementation@neso.energy and we will be happy to support you.