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for energy consumers

To all interested parties

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Date: 2 July 2021

Dear Colleagues,

Statutory Consultation on licence amendments to facilitate the introduction of an Electricity System Restoration Standard

We are issuing a Statutory Consultation on licence amendments to facilitate the introduction of an Electricity System Restoration Standard and further align the regulatory framework for procurement of restoration services with that of balancing services. Responses to this statutory consultation should be submitted on or before **2 August 2021**, and we welcome responses from all industry stakeholders. Following consideration of responses, we will issue a direction to amend the licences by the beginning of September 2021.

Background

In April 2021, the Department for Business, Energy and Industrial Strategy ("BEIS") released a Policy Statement¹ 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 National Electricity Transmission System ("NETS") failure. BEIS's new policy is called the Electricity System Restoration Standard ("ESRS").² As a consequence of BEIS's policy statement, in April 2021, we performed an initial consultation on licence amendments to facilitate the introduction of an ESRS, and to align the regulatory framework for procurement of restoration services with that of other balancing services.³

¹ BEIS' Policy Statement is available at the following address:

<https://www.gov.uk/government/publications/introducing-a-new-electricity-system-restoration-standard>

² The terms "ESRS" and "restoration standard" are referred to interchangeably within this document. For the avoidance of doubt they mean the same thing for the purposes of this consultation.

³ Our initial consultation on licence amendments to facilitate the introduction of an Electricity System Restoration Standard can be found at the following address: <https://www.ofgem.gov.uk/publications-and-updates/consultation-licence-amendments-facilitate-introduction-electricity-system-restoration-standard>

Having further reviewed all licence conditions and the responses we received during our initial consultation, we consider that the following licences require modification:

- Special Condition (“SpC”) 1.1, 2.2 and 4.2 of National Grid Electricity System Operator’s (“NGESO”) Electricity Transmission Licence;
- Standard Condition (“StC”) C1 and C16 of the Electricity Transmission Licence;
- StC 1 and 31E of the Electricity Distribution Licence; and,
- SpC 1.1 and 3.14 of National Grid Electricity Transmission (“NGET”) Plc, Scottish Power Transmission Limited (“SPT Ltd”), and Scottish Hydro Electric Transmission (“SHET”) plc’s Electricity transmission licences.

Consultation documents

Annex 1 (at the end of this letter) summarises the responses we received during our initial consultation and also sets out Ofgem’s response to stakeholders feedback. The following documents, including statutory consultation notices and amended licence conditions, are also annexed alongside this letter:

Statutory consultation notices

- Statutory consultation notice – Electricity Transmission Licence Special Conditions for NGESO, NGET plc, SHET plc and SPT Ltd (Annex 2)
- Statutory consultation notice – Electricity Transmission Licence Standard Conditions (Annex 3)
- Statutory consultation notice – Electricity Distribution Licence (Annex 4)

Licence Conditions

- Electricity Transmission Licence Special Conditions for NGESO (Annex 5 and 5a)
- Electricity Transmission Licence Standard Conditions (Annex 6 and 6a)
- Electricity Transmission Licence Special Conditions for NGET Plc, SPT Ltd and SHET Plc (Annex 7a, b, and c)
- Electricity Distribution Licence (Annex 8)

Proposed changes

In our initial consultation on the licence amendments needed to facilitate the introduction of an Electricity System Restoration Standard, we proposed the following changes (1-6) as set out in the table below. Having further reviewed all licence conditions, and having taken account of the responses we received during our informal consultation, we have made some changes to our proposed licence amendments which are now reflected in this statutory consultation. These are summarised in the table below.⁴

⁴ For a full account of the changes made, please see the annexed licence conditions.

No.	Licence amendments proposed in our initial consultation	Further changes to our proposed licence amendments in statutory consultation
1	<p>SpC 2.2</p> <ul style="list-style-type: none"> • Introduce the concept of an ESRS, linking to a direction from the BEIS Secretary of State (“SoS”) who will set the ESRS 	<ul style="list-style-type: none"> • Editorial changes to Paragraph 2.2.2 of SpC 2.2; • Replace the use of the term “Relevant Year” with “Regulatory Year” in SpC 2.2. • Amendment to the term “Electricity Restoration Standard” to reflect the fact that it will be directed by the BEIS SoS; • Flexibility added for the ESO to demonstrate why it may be unable to comply with the ESRS for reasons outside the reasonable control of the ESO;
2	<p>SpC 2.2</p> <ul style="list-style-type: none"> • Replace the concept of a ‘Black Start Strategy’ with an obligation to produce an ESR Assurance Framework that is approved by Ofgem and incorporates the relevant obligations associated with the previous strategy into the requirements for producing an ESR Assurance Framework • As part of the assurance framework, the ESO must also perform ex-ante and ex-post modelling of Restoration Times using credible Electricity System data. 	<ul style="list-style-type: none"> • Additional editorial changes.
3	<p>SpC 2.2</p> <ul style="list-style-type: none"> • Introduce an obligation for the ESO to submit a report by an independent auditor to Ofgem, assessing the Restoration Model’s⁵ input data, technical assumptions, and calculations 	<ul style="list-style-type: none"> • The licensee must publish the report by the independent auditor on its website as soon as is reasonably practicable following approval. • The licensee must seek the Authority’s approval to publish a redacted version of the report by the independent auditor.
4	<p>StC C16</p> <ul style="list-style-type: none"> • Consolidate the reporting requirements in StC C16 to report on both balancing and restoration services procurement and costs within one annual process 	<ul style="list-style-type: none"> • Extension of the deadline to produce an end of year report from 1 month to 2 months to reduce the ESO’s resourcing constraints.

⁵ The model used by the licensee to assess the capabilities of the electricity system and provide a range of credible restoration timeframes.

5 StC C1

- Introduce the definition of “restoration services” in StC C1 and amend the definition of balancing services to include “restoration services”.⁶

- Deleting the term “balancing costs” as it is no longer used in C16.
- Editorial changes to the definition of total costs.

- Additional editorial changes.

6 Definition of “black start”

Replace all references to “black start” with “Electricity System Restoration” in the Electricity Transmission Licence, including in the ESO’s Special Licence Conditions, to align the licence terminology with BEIS’s policy.

Replacing references to “black start” with “Electricity System Restoration” in the following licence conditions as well:

- SpC 4.2 of NGESO’s Transmission Licence;
- SpC 1.1 and 3.14 of NGET Plc, SPT and SHET Plc’s Transmission Licence; and
- StC 1 and 31E of the Electricity Distribution Licence.

Next Steps

We invite stakeholders to submit consultation responses on or before **2 August 2021**. We expect to issue our final modification direction in August 2021. Please send all questions about this statutory consultation and all consultation responses to Alastair Owen at ESOperformance@ofgem.gov.uk.

Yours faithfully,

Alastair Owen

Senior Manager – ESO Regulation

⁶ Consequently, the relevant content of the “black start procurement methodology” would be then incorporated into the C16 statements.

Annex 1: Summary of consultation responses

A summary of responses to each of the questions asked in our initial consultation are included below, along with Ofgem's response to the stakeholder feedback.

Question 1: Do you agree that we should modify the ESO's licences to allow the BEIS SoS to set an obligation on the ESO to comply with an ESRS

Summary of responses:

We received 6 responses to question 1. All of the respondents were generally supportive of our proposal.

The ESO welcomed the changes but stated obligations to comply with the ESRS should not be limited to the ESO. They believe that if parties underperform for reasons outside of the ESO's control, then the ESO should not be found to be in breach of its licence.

The other main challenges to our proposal centred around ensuring that the solution implemented allows companies to recover the costs associated with implementation. These respondents expressed concerns that generators who do not hold a contract for a restoration service will be placed at a commercial disadvantage.

One respondent also stated that should NGESO identify the need for primary network investment then the processes needed to trigger this within the networks does not currently exist, and that this would need to be considered as modifications to industry codes are developed. This respondent also expressed concern that the timescales involved in achieving any necessary network investment, additional resource and training could be challenging for a 2026 overall outcome.

Finally, SSE stated that restoration service providers cannot carry out the necessary steps without knowing what the exact codified obligations are going to be, noting that Ofgem should not underestimate the time necessary to undertake these steps. This respondent further noted that it will be necessary for NGESO to submit an updated version of the Terms and Conditions ("T&Cs") for restoration service providers under the Network Code on Electricity Emergency and Restoration ("NCER") Regulation.⁷ They suggested that the Authority should reject the outstanding proposal prior to an updated submission. The need for clarity on this was also echoed by Energy UK.

⁷ The NCER Regulation, as amended by the Electricity Network Codes and Guidelines (System Operation and Connection) (Amendment etc.) (EU Exit) Regulations 2019, is available at the following address: <https://www.legislation.gov.uk/uksi/2019/533>

Ofgem's response to stakeholders:

We understand the ESO's concerns with the licence condition as it was initially proposed. We understand that there may be a circumstance in which the ESO cannot comply with the ESRS for reasons outside of its reasonable control. As a result, we have amended the proposed licence condition to take account of that. Nevertheless, we believe that there is a distinction between an unforeseeable/uncontrollable event that leads to non-compliance, and a challenging multi-party process. We expect the ESO to drive forward progress and ensure that it is doing all it can to build consensus amongst stakeholders. We will be closely monitoring progression during the implementation period to ensure that is the case.

We also agree with the ESO that it should not be the only party with obligations on it. As set out in our initial consultation, we expect the ESO to lead the development of obligations on other industry parties via modifications to the industry codes, as well as the development of new restoration services. We believe that the development of code modifications and restoration services will ensure that parties will have appropriate restoration obligations placed on them.

In our initial consultation we stated that generators that do not hold a contract to provide restoration services will bear the costs of maintaining the level of resilience and restoration capability required by the GB codes and standards. We would like to clarify that this statement was intended to reflect the status quo at the time of publication, and was not intended to represent an expectation of future arrangements. We would also like to direct stakeholders to StC C28 (4)(h) and (i) that works to ensure that the ESO's procurement of balancing services is subject to transparent, non-discriminatory and market-based procedures. Finally, we note that modifications to industry codes are subject to consultation, oversight from a panel of industry representatives, and unless a modification proceeds via self-governance, approval by the Authority. Therefore, we do not believe that there is a material risk of some companies being placed at a commercial disadvantage.

We understand the stakeholder's concerns around the trigger for network investment and the timescales for implementation. The BEIS SoS will have responsibility for setting the length of the implementation period, and we currently understand that this will end on 31 December 2026. We agree with the stakeholder's view that triggers for network investment will need to be considered during the development of industry code modifications related to the ESRS. We believe that the development of a standardised format for ESO requests (e.g. through the System Operator Transmission Owner Code), including the justification, could be beneficial and have the potential to streamline reopeners for Medium Sized Investment

Projects (“MSIP”) which cover ESR Projects.⁸ Furthermore, we invite TOs to contact us directly to further explain any issues that they may face in achieving any necessary network investment in the required timescales.

Finally, with regard to the T&Cs for restoration service providers required by the NCER, we will consider the feedback provided by stakeholders when issuing our decision on these.

Question 2: Do you agree that SpC 2.2 should focus primarily on obligations to implement the ESRS and obligations to demonstrate the ESO’s compliance with it?

Summary of responses:

We received 5 responses to this question. All of the respondents were supportive of our proposal. However, the ESO believes that obligations to implement and demonstrate compliance should include the ESO but not necessarily be limited to the ESO.

SPT considered that the terminology used (“ESR Assurance Framework”) is ambiguous and unclear when compared to the current term “Black Start Strategy”, which they considered to be clearer about what the document is and its function.

SSE reiterated the need to avoid placing some companies at a commercial disadvantage and suggested edits to SpC 2.2 (specifically 2.2.4 and 2.2.15). Another respondent added the SpC 2.2 should also require the ESO to ensure that any relevant party with a role in assuring the Restoration Model (e.g. Ofgem Chief Engineer, E3C) has access to ESO training on the model.

Ofgem’s response to stakeholders:

As the party responsible for procuring services, organising, and coordinating an ESR, we believe that the obligation to demonstrate compliance should sit with the ESO. We expect other parties to fulfil any obligations that are subsequently developed through modifications to industry codes.

We appreciate stakeholders feedback on the apparent ambiguity of the “ESR Assurance Framework”, however we would like to clarify that the purpose of this document will be to provide assurance to ourselves and industry that the ESO has appropriate plans in place to ensure that it will have the capability to comply with the ESRS.

⁸ The window for MSIP submissions is in January each year. Further information on the MSIP reopens can be found in SpC 3.14 of the NGET, SHET and SPT’s Electricity Transmission Licences.

With regards to stakeholders' feedback on training on the ESO's Restoration Model, we do not believe that it will be necessary for the licence to require training for Ofgem and wider stakeholders on the Restoration Model. Given the frequency in which the Restoration Model is required to be reviewed, we believe that it is sufficient to allow an independent auditor with relevant expertise to work with the ESO to develop an in-depth understanding of the Restoration Model on our behalf. We believe that the requirement for the ESO to provide sufficient details of the methodology, assumptions and data used by the ESO to reflect the capabilities of the NETS will sufficiently allow stakeholders to assess and provide comment on how well the ESO is representing the capabilities of the NETS within the Restoration Model.

Question 3: Do you agree with integrating the approach to regulating restoration services procurement into the StC C16 obligations?

Summary of responses:

We received 5 responses to this question. All of the respondents were generally supportive of our proposal. The ESO agreed with the proposal in principle but stated that this could lead to unintended consequences in fulfilling other C16 obligations, arguing that it would have to dedicate significant extra resource to turnaround these reports, and the corresponding audit, in the required timescale. The ESO expressed concerns over whether this would be feasible.

SSEN said that it would welcome further detail on how this will be implemented in practice. SSE again reiterated the need to avoid placing some companies at a commercial disadvantage and provided some suggested amendments to condition C1 and C16 to reflect that.

SPT cautioned against restoration services costs being considered as part of the overall balancing costs metric, explaining that there is a risk that that the ESO is incentivised to cut restoration costs to reduce costs in the overall balancing costs metric, when it is fundamental that meeting the ESRS is led by the system security requirements of the GB electricity network.

Ofgem's response to stakeholders:

We have taken on board the ESO's concerns around resourcing constraints, and have amended the licence condition to extend the deadline for the ESO to produce an end of year report from 1 month to 2 months. We believe that this extension should alleviate the ESO's resourcing concerns, whilst also allowing us to align the ESO's reporting requirements with the timing of the Regulatory Year and our incentives framework.

We believe that the ESRS will provide a clear obligation for the ESO to procure sufficient restoration services. We believe that this, in itself, should mitigate the majority of the risk that the ESO would choose to reduce system security in favour of lower balancing costs, and do not believe it to be in consumers' interests for the ESO to have no interest in delivering the ESRS cost-effectively. In addition, the balancing cost metric is one element within a much larger framework for measuring the ESO's performance. Alongside the quantitative metrics, the ESO may provide a supporting narrative that we will also consider when evaluating the ESO's performance. This further limits the risk of the ESO reducing system security to deliver lower balancing costs.⁹ Although we believe that the risk of the ESO undermining system security is very low, we will continue to closely monitor balancing costs, restoration costs, and the ESO's restoration timeframes to ensure that there are no unintended consequences of consolidating balancing and restoration costs within one metric.

To provide further details on how this will be implemented in practice, we anticipate that in the first year, the reporting requirements will be a consolidation of the ESO's current balancing and restoration reports. Our intention is to ensure that balancing costs, which include restoration costs, are reported in one location and the time publication aligns with the timing of the ESO's RII02 reporting and incentives framework. In subsequent years, we intend to work with the ESO to streamline the reported content, ensure that it is accessible and ensure that it continues to provide value to both ourselves and market participants.

We have taken on board SSE's proposed amendments to condition C1 and C16 to ensure the link with the definition of 'restoration services' is captured.

Question 4: Do you agree that the proposed assurance framework (including the independent assessment) is proportionate and will provide sufficient confidence that the ESO will be able to meet the ESRS?

Summary of responses:

We received 6 responses to question 4. All of the respondents were generally supportive of our proposal. One respondent raised a concern that the proposed framework introduces a single point of failure by placing reliance on a single independent auditor to assess the framework. They believe a suitably vetted group of industry experts could assess the model regularly to prevent this. They also stated that the report from the independent expert

⁹ Further information about how we determine ESO performance can be found within the "ESO Reporting and Incentives Arrangements: Guidance Document" at the following address: [ESORI Guidance Document 2021-2023 \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/esri-guidance-document-2021-2023)

should be made available to the industry and that the framework should explicitly require the ESO to test the sites it procures restoration services from.

The ESO noted that no assurance measures or modelling can ever provide any absolute guarantee of future outcomes and so the key objective must be to provide sufficient evidence that industry preparation is sufficient based on credible data and measurement processes.

SSE stated that the relevant party appointed by the ESO under this framework should be made in consultation with the Authority to ensure independence of that party.

Ofgem's response to stakeholders:

We expect the ESO's annual consultation on the ESR Assurance Framework to provide stakeholders with the opportunity to assess and influence the methodology behind ESO's Restoration Model and its development. With this level of engagement in place, we do not believe that using a panel of industry experts to assess the Restoration Model is necessary. We believe that the use of an independent expert with full access to and training on the ESO's Restoration Model will mitigate the potential for any inherent bias, and will provide us with an appropriate level of assurance that the input data, technical assumptions, and calculations represent the capabilities and characteristics of the Electricity System.

We have taken on board the stakeholder's suggestion that the report from the independent auditor should be made available to the industry and published alongside the ESR Assurance Framework. Due to the sensitive nature of the report's content, we propose to allow the ESO to seek Ofgem's approval to publish a redacted version of the report by the independent auditor. With regards to the testing of sites offering restoration services, we note that Article 44 of the NCER Regulation places an obligation on restoration service providers to be tested at least every three years.

In response to a stakeholder suggestion that the independent auditor should be appointed in consultation with the Authority to ensure independence of that party, we believe that the requirement of an independent auditor of internationally recognised standing will mitigate the risk of the auditor having any inherent bias. This approach is consistent with similar obligations where licensees are required to appoint auditors, and has operated successfully under the current framework for assessing "black start" costs.

Finally, we understand that no assurance measures or modelling can ever provide any absolute guarantee of future outcomes. However, we expect the Restoration Model and its outputs to be robust enough to provide us, industry, and most importantly the ESO, with

enough certainty that if a NETS failure were to occur, the ESO would be able to comply with its licence obligation to meet an ESRS.

Question 5: Does replacing the term “black start” with “Electricity System Restoration” in the licence conditions have any implications for industry codes or other GB governance documentation? Please explain.

Summary of responses:

We received 7 responses to question 5. Respondents were generally supportive of our proposal. All of the respondents were in agreement that replacing the term “black start” with “Electricity System Restoration” is a large change, with respondents noting that the term “black start” is used widely in documentation both in GB and globally. The ESO also noted that the change may require some translation. One respondent noted that there were other instances where the term “black start” is used in licences not covered by our initial consultation.

ELEXON suggest that a formal review would be prudent in order to assess the changes required to the codes and the impact this may have. The ESO stressed that the changes associated with this may be complex and the costs associated with this are as yet unknown. Another respondent noted that code administrators would be well placed to assess the impact of the change in terminology and consult on findings.

One respondent stated that a change of terminology to “Electricity System Restoration” is a more generic description of the service capabilities required. They added that it has the potential to lower barriers for providers who may associate “black start” with responsibilities for restoring a large network area, and that the adoption of “Electricity System Restoration” could promote wider participation.

Additionally, SSE want to ensure that the two-stage process¹⁰ for restoring electricity supplies is recognised. SSE believe that it is important that the two-stage process is captured in the legal and regulatory framework to ensure that providers of these two services are aware of what their code and contractual obligations are going forward.

Ofgem’s response to stakeholders:

We believe that the development of code modifications needed to facilitate the introduction of an ESRS, will provide a natural opportunity to consider whether the GB codes and

¹⁰ SSE considers that there is a ‘black start’ phase where a small number of plant or apparatus both energizes (and stabilizes) the local system; followed by a second phase where non-black start capable plant in that locality, to commence their re-start processes and procedures (the ‘restoration’ phase) in order to, collectively, restore the electricity system in GB.

standards need to be further modified to align terminology between BEIS's restoration policy, our licence conditions and the GB codes and standards. If the GB codes and standards need to be modified to account for the new terminology, then we believe that it would be prudent for the relevant code administrators to perform a thorough review of the changes required in order to replace the term "black start" with "Electricity System Restoration". However, the term "Electricity System Restoration" will be given exactly the same meaning as "black start", so we do not expect any immediate impacts on industry codes. Furthermore, the definitions in our license conditions relate solely to each respective licence, and we have not seen any evidence to suggest that a change in terminology in our licenses will lead to any short-term impacts elsewhere.

Following our initial consultation we have performed a review of all licence conditions and are now proposing to replace all references to "black start" with "Electricity System Restoration" in SpC 1.1 and 3.14 of NGET Plc, SPT and SHET Plc's Transmission Licence and StC 1 and 31E of the Electricity Distribution Licence.

Whilst we recognise that there is currently a two-step approach to a restoration, we believe that referring to restoration services in the licence rather than binary black start and non-black start providers should offer the ESO more scope to develop restoration services that may not fit into the categories of black start or non-black start. As a result, we believe that the license should refer to restoration services, allowing the ESO to define a range of coherent services that fall within that category of service.

Question 6: Do you have any comments or suggestions on the proposed licence text modifications?

Summary of responses:

SPT noted that SpC 2.2.7 refers to an "appropriate restoration approach". It is not stated what is considered to be an "appropriate restoration approach" and this should be clearly set out. Furthermore, on the penultimate line, it refers to identification of new technologies and approaches. The respondent suggested that these technologies and approaches do not have to be "new" to ensure the Electricity System Restoration Standard is met.

Another respondent said the assurance framework must facilitate engagement and appropriate transparency with TOs, DNOs and restoration service providers. They noted that there should be an obligation on the ESO to produce a detailed roadmap of actions and milestones in advance of the ESRS implementation.

Ofgem’s response to stakeholders:

Having taken account of the feedback received, we have removed reference to an “appropriate” Restoration Approach. A Restoration Approach that ensures that the ESRS is capable of being complied with at all times during a Regulatory Year, is by default appropriate. We therefore consider that our previous use of the word “appropriate” was unnecessary. We also agree with the stakeholder’s suggestion to remove the word “new” and their rationale.

We believe that the ESR assurance framework will facilitate a good degree of engagement and appropriate transparency with TOs, DNOs and restoration service providers. We believe that this obligation coupled with our proposed obligation for the ESO to produce a strategy for the provision of ESR in the short, medium and long term will provide stakeholders with clarity of the upcoming changes.

We have also addressed the suggested changes put forward by stakeholders in response to our other consultation questions and made amendments as set out in the above sections. However, due to the large number of minor amendments suggested by respondents, we are unable to respond to all points. For a full account of our revisions to the proposal licence conditions, please see the annexes attached to this statutory consultation.