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STCP Modification Proposal Form

PM0154:

STCP16: System Access

Reform. Investment Planning Process – Data on Constraint Costs.

Overview: The proposal to amend STCP 16-1 Paragraphs 4.2.7 and 4.2.8 aims to enhance investment planning for UK electricity transmission projects. Key improvements include clearer data requirements, incorporation of constraint costs, defined response times, and a streamlined Project Listing Document (PLD) in Appendix C. These changes promote efficiency, transparency, and regulatory compliance, supporting cost-effective, timely delivery and system reliability, while aligning with national decarbonisation goals and benefitting both industry stakeholders and consumers.

Modification process & timetable

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| 1 | Initial STCP Proposal Form 10 February 2026 |
| 2 | Approved STCP Proposal Form 25 February 2026 |
| 3 | Implementation 10 Business days after decision |

Status summary: The Proposer has raised a modification and is seeking a decision from the Panel on the governance route to be taken.

This modification is expected to have a: Low impact on Transmission Owners, Transmission Licensees, Generators, System Operators.

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| Proposer's assessment of materiality | Not a material change – STC Panel approval | |
| Who can I talk to about the change? | Proposer: Maria Lopez Maria.Lopez@neso.energy 07925432287 | Code Administrator Contact: stcteam@neso.energy |

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What is the issue?

The transmission system is becoming increasingly complex. Therefore, long-term planning now requires greater levels of investment together with more robust and appropriate records management to ensure that planning decisions are informed, transparent and capable of supporting the scale and pace of future system development. Moreover, the current process does not consistently provide NESO with early visibility of outage requirements or the constraint-cost implications of different build options, meaning that options which appear economically attractive on project cost alone may in fact be more expensive once system constraints are considered.

Consequently, there is a clear need for outages and constraint costs to be identified with sufficient detail at the outset, particularly through the STCP16 Project Listing Document in Appendix C; however, this level of detail is not being reliably provided under the existing arrangements. As a result, long-term investment planning remains vulnerable to incomplete data, suboptimal optioneering, and delays, reinforcing the necessity of amending STCP16-1 to formalise and strengthen the information TOs must submit when outlining project options and associated system impacts.

Decisions on investment options that look cheaper on project cost alone may actually be more expensive when constraint costs are included. At the same time, NESO often does not have visibility of the outage requirements for different build options during early project development. This means NESO cannot provide system-wide insight into the security implications or whole-system cost impacts of the TOs' preferred investment options planning. This modification will support prioritisation of such decisions on project costs to better determine them by enhancing interactions between the system operator and Tos during the project listing process in STCP16 4.2.7 and 4.28, ensuring that outages, constraint costs and other essential information are identified with sufficient detail during TO-SO data exchanges.

Why change?

The current long term investment planning process in STCP 16-1 requires best estimates which otherwise may lead to unsuitable project delivery options, while

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the more competitive projects could be at risk of suffering delays at any of its stages. Due to this, NESO expects to manage more granular datasets from the TO's during the long-term outage planning process. In order to do this, the STCP 16-1 procedure needs to be modified to allow for improvements during the investment phase to happen. Such an improvement could consist of enhancing a means to estimate investment costs through project planning within the Section 4 (Production of Investment Planning Process), STCP-16-1.

Accelerating transmission build requires timely and transparent data exchange between NESO and TOs. The Transmission Acceleration Action Plan identifies the need for improved responsiveness and holistic cost assessment, including constraint costs, to support optimal project delivery and consumer benefit. By specifying a practical timeframe for responses agreeing on what falls within the reasonability criteria, the modification will enable more efficient planning and decision-making, reduce delays and support the Clean Power 2030 objectives.

What is the Proposer's solution?

The Proposer's solution is to modify the STCP 16-1 investment planning process to allow constraints costs for different build options to be incorporated on an ad-hoc basis as requested by TO's. Such updates in the current process will be achieved by replacing the existing paragraphs of articles 4.2.7, and article 4.2.8. The proposed modification to STC Procedure (STCP) 16-1 are intended to introduce a more flexible and holistic approach to project cost assessment, particularly regarding constraint costs for different build options. Previously, the process only allowed for a limited scope in considering constraint costs, often leading to a less comprehensive understanding of the true financial impact of various project delivery methods.

The draft Legal Text seeks to address this limitation by enabling Transmission Owners (TOs) to request the incorporation of constraint costs on an ad-hoc basis, specifically when multiple build options exist for a project.¹ Under the revised process, when a TO identifies a project with several feasible build options, they can submit this project to NESO for assessment. Importantly, the projects selected for this route are typically those where the TO is aware of the potential

¹ Transmission Acceleration Action Plan, pages 46-47.

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for both offline and online build strategies, each with its own set of operational impacts and associated constraint costs. NESO's role is to evaluate the boundaries affected by each option, estimate the reduction in power transfers during construction, and calculate the costs arising from the need to manage these boundaries. This analysis is then communicated back to the TO, who integrates this constraint costs with the overall project build costs.²

The aim of this modification is to formalise the information required for such requests. The new wording in Paragraph 4.2.7 expands the scope of permissible data requests and specifies a minimum set of information the TO must provide. This includes the identity of the requesting and receiving parties, the request date, a clear description and rationale for the planning request, details of required outages, and assessments of operational, health and safety, and third-party impacts. By doing so, the process ensures that NESO receives all relevant details upfront, streamlining the assessment and promoting transparency. Furthermore, the amendment to Paragraph 4.2.8 clarifies NESO's obligation to respond to data requests within a reasonably practical timeframe, supporting more predictable and efficient project investment planning.³

Overall, these changes are designed to foster joint evaluation between TOs and NESO at the Production Investment Planning phase within STCP-16 Section 4. The logic behind the modifications is to ensure that all significant cost factors, especially those related to system constraints, are considered during the data collection phase throughout a normalised document which is referred in Appendix C of this protocol to ensure better investment decision-making. This approach not only enhances the accuracy of economic comparisons but also aligns project delivery with broader network and regulatory objectives.

The anticipated outcome is a more robust, transparent, and accountable framework for managing complex infrastructure projects within the national electricity transmission system.⁴ In the solution proposed, the modification of the Legal Text includes changes in the wording of articles 4.2.7 and 4.2.8, enclosed with this request (see **Annex 01**). The change in the articles 4.2.7 and 4.2.8 will

² Transmission Acceleration Action Plan, 2025, pages 46-47

³ Transmission Acceleration Action Plan, pages 46-47.

⁴ Transmission Acceleration Action Plan, pages 46-47

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help enhance the project listing process, and the PLD (Project Listing Document pro forma) within Section 4.2 of the protocol 16-1 STCP and maintaining Appendix C of STCP 16-1, except for the changes proposed in the following section. The footnote corresponding to the field Outage requested below the table in the Appendix C, STCP 16-1 will maintain the same effects as the current version⁵, and the PLD pro forma in Appendix C is therefore to be interpreted as per the new wording jointly given to Clause 4.2.7 and 4.2.8 according to Annex 01.

Legal Text

Please see proposed Legal Text in **Annex 1**.

What is the impact of this change?

The proposed modification affects all parties in complementary ways: Transmission Owners are impacted most directly, as they will be required to provide a more detailed and standardised dataset when requesting NESO analysis, including information on outages, operational impacts, health and safety considerations, and third-party effects, thereby ensuring more rigorous and transparent assessment of multiple build options. In turn, Transmission Licensees experience benefits through improved compliance with their statutory and licence obligations, since the clarified process supports efficient, coordinated and economical planning while reducing the risk of investment decisions that disregard whole-system costs.

Meanwhile, Generators are indirectly but meaningfully affected because the formal inclusion of constraint-cost assessments helps avoid planning choices that would unnecessarily increase curtailment or restrict generation, and because clearer outage information supports more predictable and equitable system access during the transition to net zero. Finally, the System Operator gains a clearer legal mandate and a more structured flow of information, enabling NESO to undertake earlier and more holistic whole-system assessments, respond within a reasonably practical timeframe, and better fulfil its duties relating to system security, quality of supply and cost-efficient operation.

⁵ If not included in PLD outages shall be notified via STCP 11.1 process and annotated with PLD reference number.

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| Proposer's assessment against STC Objectives | |
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| Relevant Objective | Identified impact |
| (a) efficient discharge of the obligations imposed upon Transmission Licensees by Transmission Licences and the Electricity Act 1989; | Positive By requiring TOs to provide detailed information, the modification ensures obligations under the Electricity Act are met transparently and efficiently. |
| (b) efficient discharge of the obligations imposed upon the licensee by the Electricity System Operator licence, the Energy Act 2023 and Electricity Act 1989; | Positive The change enables NESO to better fulfil its obligations by facilitating holistic cost assessments. As a result, the process aligns with the latest legislative requirements and supports the delivery of system access in line with statutory duties (e.g., Electricity Act 1989 (s.9(2)), " <i>Efficient, coordinated, economical transmission system</i> ") |
| (c) development, maintenance, and operation of an efficient, economical, and coordinated system of electricity transmission; | Positive Including constraint costs by design into the outage planning process enables more coordinated and economical assessment. Therefore, the system can be developed and maintained with a clearer understanding of total costs, leading to more efficient network operation and optimising investment decisions. |
| (d) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) | Positive By ensuring that all build options are assessed on a whole-system cost basis, including constraints, the modification levels the playing field for all parties. This, in turn, supports fairer |

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| facilitating such competition in the distribution of electricity; | competition and more transparent investment choices. |
| (e) protection of the security and quality of supply and safe operation of the National Electricity Transmission System insofar as it relates to interactions between Transmission Licensees and the licensee*; | Positive The structured provision of operational impact and health and safety information ensures that security and quality of supply are considered early. Thus, risks are identified and mitigated, supporting safe and reliable system operation. |
| (f) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC; | Positive The modification formalizes the exchange of relevant data and rationale, promoting transparency and consistency. As a result, it drives good industry practice and enhances administrative efficiency across all parties. |
| (g) facilitation of access to the National Electricity Transmission System for generation not yet connected to the National Electricity Transmission System or Distribution System; and | Positive By enabling more accurate and holistic planning, including for constraint costs, the change supports timely and efficient system access for new generation. This, in turn, helps accelerate the connection of new projects and supports decarbonization goals in line with the CP2030 and the Transmission Acceleration Action Plan. |
| (h) compliance with the Electricity Regulation and any Relevant Legally Binding Decisions of the European | Neutral The modification aligns with regulatory expectations for transparent, non-discriminatory access and planning. |

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| Commission and/or the Agency. | Therefore, the amendment aligns with European Network Codes, and aids timely planning data exchange without breaching confidentiality safeguards. Eventually, NESO could be able to conduct more rapid comparative analysis and data exchange facilitates decisions that respect broader adequacy and security methodologies. |
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* See Electricity System Operator Licence

| Proposer's assessment against the STCP change requirements | Proposer's assessment |
|--|--|
| (a) the amendment or addition falls within the terms and arrangements set out in condition E4 of the ESO Licence Standard Condition B12 of the Transmission Licence; | <p>Requirement met</p> <p>The amendment respects and does not alter the prescribed modification procedures, ensuring procedural integrity is maintained. The proposed amendment has been carefully reviewed in light of the relevant licence conditions, specifically condition E4 of the ESO Licence and Standard Condition B12 of the Transmission Licence. It is evident that the amendment aligns with the established terms and arrangements, as it does not deviate from the prescribed regulatory framework. Consequently, the change remains firmly within the scope authorised by these licence provisions, ensuring regulatory compliance throughout.</p> |
| (b) the amendment or addition does not impair, frustrate or invalidate the | <p>Requirement met</p> <p>The modification aligns with the established terms and arrangements for system planning and operation, without deviating from the prescribed</p> |

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| provisions of the Code; | regulatory framework. It ensures seamless integration with existing arrangements. Rather, it operates in harmony with the existing Code requirements, supporting their continued validity. The amendment has been structured to ensure seamless integration, thereby safeguarding the integrity and enforceability of the Code's provisions without introducing any form of impairment or frustration. |
| (c) the amendment or addition does not impose new obligations or liabilities or restrictions of a material nature on Relevant Parties which are not subsidiary to the rights and obligations of the Relevant Parties under the Code; | Requirement met Careful analysis indicates that the amendment does not place any new material obligations, liabilities, or restrictions upon Relevant Parties beyond those already subsumed under their rights and duties as defined by the Code. Any requirements introduced are strictly subsidiary and do not alter the fundamental balance of responsibilities. As a result, the amendment avoids imposing undue burdens and maintains the equitable framework established by the Code. |
| (d) the amendment or addition is not inconsistent or in conflict with the Code, ESO Licence or Transmission Licence Conditions or other relevant statutory requirements; and | Requirement met Following a detailed assessment, it is confirmed that the amendment is neither inconsistent with nor in conflict with any aspect of the Code, the ESO Licence, or Transmission Licence Conditions. The change has been evaluated against statutory requirements and found to be compatible, ensuring that no discrepancies or contradictions arise. This consistency supports the overall coherence of the regulatory regime and upholds legal certainty. |

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| <p>(e) the Relevant Party Representatives deem that the amendment or addition is appropriate to support compliance with the Code.</p> | <p>Requirement met</p> <p>Based on consultation with Relevant Party Representatives, it has been determined that the amendment is appropriate and effective in supporting ongoing compliance with the Code. Their collective judgement affirms that the change will facilitate adherence to Code obligations and promote operational alignment. The amendment is thus viewed as beneficial, reinforcing the commitment to regulatory compliance and best practice within the industry.</p> |
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When will this change take place?

Implementation date:

10 Business Days after Panel Decision

Implementation approach:

There is an immediate and compelling need to formalise the proposed changes to STCP 16-1 Sections 4.2.7 and 4.2.8, including consequential updates to Appendix C, through this modification process. Without this formalised Legal Text, NESO cannot consistently obtain the minimal dataset required for comprehensive whole-system assessment, leading to ongoing delays, inefficiencies, and increased risk of non-compliance with the Transmission Acceleration Action Plan.

As Transmission Owners develop new build options under significant commercial, safety, and legal pressures, the absence of clear governance heightens the risk of process failures and statutory breaches. Straight forward approval and further implementation of this modification are essential to ensure

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timely and robust assessment of network reinforcement options, maintain regulatory compliance, and support accelerated delivery of transmission infrastructure. Deferral would expose the system and stakeholders to material harm, making immediate formalisation both proportionate and necessary.

Interactions

☐ Grid Code ☐ BSC ☐ CUSC ☐ SQSS
☐ European ☐ Other ☐ Other
 Network Codes modifications

PM0154 does not have any cross code or modification interactions.

Panel Determination

| Party | Determination |
|--|---|
| National Energy System Operator (NESO) | To be updated following Panel determination |
| National Grid (TO) | To be updated following Panel determination |
| Offshore Transmission Owners (OFTOs) | To be updated following Panel determination |
| Scottish Hydro Electric Transmission plc (SHET) | To be updated following Panel determination |
| SP Transmission Limited (SPT) | To be updated following Panel determination |

Acronyms, key terms and reference material

| Acronym / key term | Meaning |
|--------------------|-----------------------------------|
| BSC | Balancing and Settlement Code |
| CM | Code Modification |
| CUSC | Connection and Use of System Code |
| DC | Direct Current |
| E4 | ESO Licence Condition E4 |
| GW | Gigawatt |

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| HV | High Voltage |
| LV | Low Voltage |
| MW | Megawatt |
| NAP | Network Access Planning |
| NESO | National Energy System Operator |
| NETS | National Electricity Transmission System |
| OPI | Operational Planning Workstream 1 |
| SQSS | Security and Quality of Supply Standards |
| STCP | System Operator Transmission Owner Code Procedure |
| STC | System Operator Transmission Owner Code |
| TO | Transmission Owner |
| UK | United Kingdom |

| Annex | Information |
|----------|-------------------|
| Annex 01 | PM0154 Legal Text |

Reference material

- [Clean Power 2030 Action Plan, 2024](#)
- [Electricity Networks Commissioner, Companion Report Findings and Recommendations](#)
- [NESO Transmission constraint management](#)
- [NESO System Access Reform](#)
- [Transmission Acceleration Action Plan, 2025](#)
- [Transmission Acceleration Action Plan. Government Responses to the Electricity Networks Commissioner, 2023](#)