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SQSS Modification Proposal Form

GSR036: System Access Reform: Review of the voltage limits

Overview: This modification is to review the voltage limits applicable to operational timescales and the potential for provision of some flexibility around them.

Modification process & timetable

1	Proposal Form 06 November 2025
2	Code Administrator Consultation 15 December 2025 – 15 January 2026
3	Draft Final Modification Report 21 January 2026
4	Final Modification Report 09 February 2026
5	Implementation TBC

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: Medium impact

Transmission Owners (TOs), Transmission System Operator (NESO), Distribution Network Owners (DNOs), Directly Connected Customers (DCCs), Offshore Transmission Owners (OFTOs), Interconnectors and Generators.

Proposer's recommendation of governance route	Standard Governance modification to proceed to Code Administrator Consultation.	
Who can I talk to about the change?	Proposer: Dozie Nnabuife Dozie.Nnabuife@neso.energy 07970004786	Code Administrator Contact: Box.SQSS@neso.energy

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What is the issue?

National Electricity Transmission System (NETS) Security and Quality of Supply Standard (SQSS) Section 6 criteria set the upper voltage limit applicable to operational timescales for nominal voltage range from 200kV to 300kV too low. It also does not allow any short-term flexibility that could be permitted from time to time if it has no negative impact the NETS.

The modification aims to introduce more flexibility, so that decisions can be based on actual risk and expert judgement, allowing important work to go ahead safely and efficiently.

Why change?

The current system access process is insufficient to support the scale and pace of transmission network development required to meet the UK's 2030 clean power and 2050 net zero targets. To deliver infrastructure at four times the historical rate, a strategic overhaul is needed.

This proposal enables beneficial outages—those that facilitate critical upgrades—without compromising system security.

These changes aim to:

- Improve outage planning flexibility and efficiency
- Reduce consumer costs and constraint impacts
- Maintain system resilience through smarter risk management
- Current operational experience suggests that there are significant costs to be saved if we change that limit back to 10%
- Previous operational experience suggest that it is safe to change that limit to 10%
- The limits on the Grid Code are already at 10% so no impact on Users
- TOs reported that there is no risk in operating the 275kV assets to +10%¹

¹ Transmission Acceleration Plan, 2025, <https://www.neso.energy/industry-information/network-access-planning/transmission-acceleration-public-consultation>

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- In implementing the change, we would be able to correct the issue with the 220kV system²
- In such cases, TOs should have the capability to allow National Energy System Operator (NESO) to operate within the relaxed voltage limits for the appropriate duration and time in a manner similar to how they permit higher thermal ratings via an Operational Capability Limits Record (OCLR).
- In some cases, NESO may request that TOs grant such limits (e.g. to deal with a specific outage or a particular site).
- There is no impact on Users as interface sites need to comply with the Grid Code and, if a relaxation is deemed beneficial at a connection site, that would be addressed in accordance with the Grid Code.

The reform aligns with the Transmission Acceleration Action Plan and the wider System Access Reform programme,³ which has broad industry support and aims to modernise access planning, reduce emergency recalls, and support digital-first delivery.

What is the Proposer's solution?

The solution is to update the SQSS to allow more flexible, risk-based decision-making for network outages and constraints. The legal text is contained in Annex 1 with tracked changes once it was requested to the CAC. This will be achieved by:

- Updating Table 6.3 and Table 6.4 in the SQSS to reflect the revised upper voltage limit for the nominal range which 275kV lies within to +10%.
- The change according to the legal text reads as follows:
- Table 6.3 Pre-Fault Steady State Voltage Limits and Targets in Operational Timescales

(a) Voltage Limits on Transmission Networks			
Nominal Voltage	PU Value (1pu relates to the Nominal Voltage)	Minimum (percentage of Nominal Voltage)	Maximum (percentage of Nominal Voltage)
Greater than 300kV	0.95pu-1.05pu	-5% Note 6	+5%
200kV up to 300kV	0.95pu-1.09pu	-5% Note 6	±9% +10%

² Transmission Acceleration Plan, 2025, <https://www.neso.energy/industry-information/network-access-planning/transmission-acceleration-public-consultation>

³ Transmission Acceleration Plan, 2025, <https://www.neso.energy/industry-information/network-access-planning/transmission-acceleration-public-consultation>

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132kV up to and including 200kV	0.95pu-1.10pu	-5% Note 6	+10%
(b) Voltages to be Achievable at Interfaces to Distribution Networks and Non-Embedded Customers			
Any Nominal Voltage	Target voltages and voltage ranges as agreed with the relevant Distribution Network Operators or Non-Embedded Customers, within the limits of Table 6.4		

Table 6.4 Steady State Voltage Limits and Targets in Operational Timescales

(a) Voltage Limits on Transmission Networks			
Nominal Voltage	PU Value (1pu relates to the Nominal Voltage)	Minimum (percentage of Nominal Voltage)	Maximum (percentage of Nominal Voltage)
Greater than 300kV	0.90pu-1.05pu	-10%	+5% Note 7
200kV up to and including 300kV	0.90pu-1.09pu	-10%	±9% +10%
132kV up to and including 200kV	0.90pu-1.10pu	-10%	+10%
(b) Voltage Limits at Interfaces to Distribution Networks and Non-Embedded Customers			
Nominal Voltage			
132kV	0.90pu-1.10pu	-10%	+10%
At less than 132kV	0.94pu-1.06pu	-6%	+6%

- Adding a note to the relevant tables stating that, under certain circumstances, operating to a higher limit is permitted if agreed with an onshore licensee in relation to one or more nodes on the onshore licensee's transmission system. Such agreement should specify the affected nodes, the higher limit, the duration, and any restrictions on the conditions following which the higher limit is permitted.

Legal text

The legal text for this change can be found in **Annex 01**.

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What is the impact of this change?

A medium impact on Transmission Owners (TOs), NESO, DNOs, OFTOs, DCCs, Interconnectors and Generators. The solution proposed may increase flexibility for NESO and TOs. For DNOs and DCCs this allows more tailored coordination with the transmission system at key interfaces, supporting more projects and outages scheduling. OFTOs, interconnectors and generators may benefit from fewer outage rejections and accelerated grid connections, as the process prioritises economic and system value while upholding asset integrity.

Proposer's assessment against SQSS Objectives	
Relevant Objective	Identified impact
(a) facilitate the planning, development and maintenance of an efficient, coordinated and economical system of electricity transmission, and the operation of that system in an efficient, economic and coordinated manner;	Positive Faster and more cost-effective network upgrades and maintenance. Improved reliability and affordability for consumers. Better coordination across the industry. Joint standard assessments to manage operational risks.
(b) ensure an appropriate level of security and quality of supply and safe operation of the National Electricity Transmission System;	Neutral The proposal is expected to support improved coordination and risk assessment, which may contribute to maintaining appropriate levels of system security, quality of electricity supply, and safe operation of the National Electricity Transmission System. These outcomes are consistent with the objectives of the reform but are contingent on effective implementation and stakeholder collaboration.

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(c) facilitate effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity; and	Positive Facilitates a more open and flexible system, making it easier for new and existing companies to compete in generating and supplying electricity. Encourages more competition in electricity generation and supply, making it easier for new entrants to participate, driving innovation and potentially lowering costs for consumers.
(d) facilitate Licensees to comply with any relevant obligations under Assimilated law	Neutral

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories

Stakeholder / consumer benefit categories	Identified impact
Improved safety and reliability of the system	Positive The modification will improve safety and reliability by allowing essential works and upgrades to be planned and delivered more efficiently, while still maintaining strict assessments and agreed mitigations. This ensures the system remains secure and resilient, reduces unnecessary delays, and supports a reliable electricity supply for consumers. Any increase in operational risk is carefully managed through joint assessment processes.

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Lower bills than would otherwise be the case	<p>Positive</p> <p>The modification will help lower consumer bills by enabling essential upgrades and maintenance to be delivered more efficiently and with fewer delays. This reduces unnecessary constraint costs and project overruns, leading to a more cost-effective electricity system. Savings from improved planning and flexibility are ultimately passed on to consumers through lower network charges.</p>
Benefits for society as a whole	<p>Positive</p> <p>The modification will benefit society by supporting a faster transition to a cleaner, more reliable, and cost-effective electricity system. It enables timely delivery of essential upgrades and new connections, helping to meet climate goals, boost economic growth, and ensure a secure energy supply for everyone. Improved planning and flexibility also reduce disruption and costs, delivering broad social and environmental benefits.</p>
Reduced environmental damage	<p>Positive</p> <p>The modification will help reduce environmental damage by enabling faster and more efficient delivery of network upgrades that support renewable energy connections and reduce reliance on fossil fuels. Improved planning and flexibility also minimise unnecessary delays and</p>

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	resource use, lowering the overall environmental footprint of electricity transmission projects.
Improved quality of service	Positive The modification will improve quality of service by enabling faster and more reliable delivery of network upgrades and maintenance. This reduces the likelihood of unplanned outages, ensures a more stable electricity supply, and allows consumers to benefit from a higher standard of service. Enhanced planning and flexibility also mean issues can be addressed more proactively, further supporting consistent and dependable service.

When will this change take place?

Implementation date

Target date: Q2 2026

Date decision required by

June 2026 in order to achieve implementation in time for roll-out.

Implementation approach

Implementation will need to be co-ordinated and communicated with all affected parties. Implementation requires robust, coordinated communication channels and procedural updates between NESO, TOs, DNOs, DCCs, and generators, ensuring higher voltage limits are safely agreed and managed. Current processes in some parts of the STCP may be impacted.

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Proposer's justification for governance route

The preferred process is the Standard Governance Code Administrator Consultation (CAC).

The Proposer has suggested this route because the modification is considered straightforward and does not require detailed technical debate. The CAC process allows for a streamlined consultation managed by the Code Administrator, ensuring transparency and compliance with CACoP principles while avoiding the need for a full Workgroup assessment. This approach is appropriate as the risks and mitigations have already been clearly defined by the Proposer, and stakeholder feedback can be gathered efficiently through the consultation process.

Interactions

☒ Grid Code ☐ BSC ☒ STC ☐ CUSC
☐ European ☐ Other ☐ Other
 Network Codes modifications

This proposal is part of a broader programme of work under System Access Reform and is expected to interact with other code modifications. In particular, concurrent changes to the STC and Grid Code are being considered to ensure alignment across the industry's technical and governance frameworks. These interactions are being actively scoped and coordinated to support a consistent and efficient implementation pathway, with warm-up presentations and stakeholder engagement already underway across all relevant Panels.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CUSC	Connection and Use of System Code
DCC	Directly Connected Customers
DNO	Distribution Network Owners

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NESO	National Energy System Operator
OCLR	Operational Capability Limits Record
OFTO	Offshore Transmission Owners
STC	System Operator Transmission Owner Code
SQSS	Security and Quality of Supply Standards
TO	Transmission Owners
TSO	Transmission System Operator (NESO)

Annexes

Annex	Information
Annex 01	GSR036 Legal Text

Reference material

- [Transmission Acceleration Action Plan, 2025](#)
- [System Access Reform | National Energy System Operator Website](#)
- [Electricity Networks Commissioner Companion Report, 2025](#)
- [Clean Power 2030 Action Plan - GOV.UK](#)