Public

Workgroup Consultation

GC0182: Standardisation of Power Flow Metering Polarity

Overview: This modification aims to provide a unified standard for Power Flow Metering Polarity when data is sent to the National Energy System Operator (NESO). The standard will be in the format of a diagram and explanatory description.

Modification process & timetable

1. **Proposal Form**
   07 July 2025
2. **Workgroup Consultation**
   14 April 2026 – 12 May 2026
3. **Workgroup Report**
   24 September 2026
4. **Code Administrator Consultation**
   06 October 2026 – 06 November 2026
5. **Draft Final Modification Report**
   18 November 2026
6. **Final Modification Report**
   01 December 2026
7. **Implementation**
   TBC

Have 2 minutes? Read our Executive summary
Have 60 minutes? Read the full Workgroup Consultation
Have 120 minutes? Read the full Workgroup Consultation and Annexes.

Status summary: The Workgroup are seeking your views on the work completed to date to form the final solution to the issue raised.

This modification is expected to have a:
Medium impact on: Generators, Network operators, Interconnectors, Non-embedded customers, Licence Exemptible Embedded Medium Power Station (LEEMPS).
Low impact on: NESO and Transmission Licensees

Modification drivers: This modification is driven by the need for cross-code consistency, improved efficiency, GB regulatory compliance, harmonisation of standards, and enhancements to system operability, planning, and security.

Governance route	Standard Governance modification with assessment by a Workgroup	
Who can I talk to about the change?	**Proposer:** Thomas Goss, NESO Thomas.Goss2@neso.energy	**Code Administrator Chair**: Prisca Evans prisca.evans@neso.energy
How do I respond?	Send your response proforma to grid.code@neso.energy by **5pm** on **12 May 2026**	

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Executive Summary

Inconsistent power flow polarity undermines situational awareness, system security, and operational efficiency for NESO Control Room engineers, increasing the risk of Security and Quality of Supply Standards (SQSS) breaches, higher balancing costs, and delays to metering setup. These issues are driven by the absence of a single, mandated metering polarity convention, no code or licence obligation to comply or correct non-compliance, and the use of differing conventions across parties.

What is the issue?

NESO relies on its Supervisory Control and Data Acquisition (SCADA) system to securely operate the GB electricity network in real time by receiving power flow data from external parties (such as Generators, Transmission Owners (Tos), Offshore Transmission Owners (OFTOs) and Network Operators NOs). However, over 800 meters have been identified as providing data with inconsistent polarity, resulting in misleading information within the SCADA system and its downstream applications. These data errors result in suboptimal system operation, increasing operating costs and ultimately costs to consumers.

What is the solution and when will it come into effect?

Proposer's solution: The Proposer solution is to introduce and publish a new Electrical Standard **(Annex 05)** to define a clear polarity convention for operational metering data submitted to NESO, with the Electrical Standard referenced in the Grid Code. The Electrical Standard will apply to operational metering that is newly installed or upgraded from 540 days after the implementation of GC0182. This approach is intended to ensure consistent metering polarity going forward, with an equivalent modification also proposed for the System Operator Transmission Owner Code Procedure (STCP).

Implementation date: 10 Working days after Authority decision. However, the Electrical Standard is proposed to become applicable to code Users 540 days after the Implementation date.

What is the impact if this change is made?

The change requires all GB and EU Code Users to adopt the new metering polarity convention for new or upgraded operational metering, including those with pre-GC0182 Bilateral Agreements, with only limited wiring or software changes expected. While the impact on NESO is expected to be low, some additional compliance checks may be needed. Overall, the convention will improve system operability, security, and data quality, enabling more accurate forecasting and lower operating costs that ultimately benefit consumers.

Interactions

The Grid Code Modification interacts with GC0103, which restructures the Annex to the General Conditions of the Grid Code to introduce Relevant and Applicable Electrical Standards. As GC0103 is expected to be approved before GC0182, the legal drafting of GC0182 will align with the GC0103 framework by adding references to the new metering polarity Electrical Standard in both parts of the Annex. This ensures the proposed Electrical Standard is fully applicable across all Transmission Areas and remains consistent with the changes introduced under GC0103.

What is the issue?

What is the defect the Proposer believes this modification will address?

NESO must operate the GB electricity network securely and safely in real time using the SCADA tool. The NESO SCADA system continuously receives power flow data from external parties (including Generators, TOs and in some cases NOs, for example at Bolney 132KV site) to provide Control Room engineers with up-to-date network status and support operational decisions. However, sometimes power flow metering data that has polarity inconsistent with NESO conventions (e.g. negative instead of positive flow) is fed into the system, due to the lack of a unified metering polarity convention. As of February 2025, more than 800 meters have been identified with incorrect polarity (compared with NESO's convention). NESO liaises with the appropriate stakeholders to request the polarity of these meters be corrected where possible. However, without a compulsory convention, the polarity is often not amended, and the number of offending points continues to increase. NESO currently applies temporary workarounds such as creating a calculated point equal to −1 × the provided metering value or configuring the network model to reverse the input. These workarounds become difficult to manage and are not sustainable if the number of metering points with incorrect polarity increases. Since NESO SCADA data feeds multiple internal downstream systems, errors in operational metering can lead to suboptimal transmission system operation, increasing operating costs and ultimately raising costs for consumers.

Why change?

Receiving power flow metering data with inconsistent polarity compared to NESO's convention can undermine situational awareness for NESO Control Room engineers, reduce system security, and lead to suboptimal performance, potential SQSS breaches, and higher balancing costs. NESO currently apply temporary workarounds, but this is not a favourable or long-term solution.

Polarity validation is not part of the pre-energisation process, as it would require significant time and resource from NESO and data providing parties. Incorrect polarity often persists on the system until it is noticed by Control Room engineers, logged as faulty with the operational metering team, and corrected by the modelling team. This creates periods where incorrect polarity impacts

network analysis and balancing actions. These issues become increasingly unsustainable if the number of incorrect metering points grows.

During constraint management, incorrect polarity can distort group demand, causing unnecessary reduction of generation. NESO must then procure additional generation to maintain system balance. The associated cost can be approximated as:

Extra Cost = Price of megawatt hour (MWh) to increase Generation in Area B * Amount of Incorrect MW * duration- Price of MWh to reduce Generation in Area A* Amount of Incorrect MW * duration

A typical example occurred on 1 July 2024, resulting in a £64,000 cost to NESO. A constraint was reportedly broken by 500 MW, leading to a 500 MW reduction in Area A. However, due to group demand error, this was a 200 MW oversell. NESO subsequently had to increase generation in Area B by 200 MW to compensate:

Extra Cost=£120/MWh* 200MW * 4h-£40/MWh* 200 MW *4h=£96,000-£32,000=£64,000

For other stakeholders, it can delay operational metering setup for new connections, increase workload due to the need for corrections, and add potential errors in the data and decisions made as a result. Industry stakeholders may also face delays in NESO's approval of outage plans. NESO has worked with industry parties to address these issues, but challenges remain.
This proposal aims to prevent the issue of inconsistent polarity increasing further by establishing a unified convention for power flow data sent to NESO. This ensures that Control Room engineers receive accurate data without needing to proactively check polarity or apply manual corrections. NESO will gradually implement this, ensuring new connections and replacement meters adhere to the correct convention. Existing active meters will not be required to conform.

The Original Proposal form can be found in **Annex 01**.

What is the solution?

Proposer's solution

The Proposer suggests publishing a diagram and accompanying explanatory notes as an Electrical Standard **(Annex 05)**, to define a power flow metering polarity convention to be adhered to when sending operational metering data to NESO. This Electrical Standard will be referenced in

the Grid Code (applicable to GB and EU Code Users) within the Annex to the General Conditions (for all Transmission Areas) and published on the Company's website.

The Electrical Standard will apply where:

- User's Plant and Apparatus have a Completion Date on or after 540 days following the implementation of GC0182 (10 Working Days after the Authority's decision); and
- User's operational metering is installed or upgraded on or after 540 days following the implementation of GC0182.

Referencing the Electrical Standard in the Grid Code aims to ensure all Connection and Use of System Code (CUSC)parties, as well as LEEMPS, are captured by the requirements. CUSC parties include those with the following connection agreements: Bilateral Connection Agreement (BCA), Bilateral Embedded Generation Agreement (BEGA) and Bilateral Embedded License Exemptible Large Power Station Agreement (BELLA). These connection agreements are governed by the CUSC and, consequently, bound by the Grid Code. LEEMPS are obligated to meet specific requirements of the Grid Code, as detailed in the BCA (Appendix E) between NESO and the Network Operator. Generators in respect of Small Embedded Power Stations are only subject to the Grid Code if they become a CUSC party and have a BEGA. In the event that a Generator in respect of a Small Embedded Power Station voluntarily chooses to enter into a BEGA, then they would be required to adhere to the Grid Code and, hence, captured by the requirements of the Electrical Standard.

This Proposal has been refined over many months following discussions at the Grid Code Development Forum (GCDF (October 2024 and July 2025), in addition to discussion and consultation through the GC0182 Governance Process.

Workgroup considerations

The Workgroup convened 6 times to; discuss the issue as identified by the Proposer within the scope of the defect, develop potential solutions, and evaluate the proposal in relation to the Applicable Code Objectives.

Workgroup Discussions ahead of the Workgroup Consultation

The NESO representative proposed the high-level plan where a unified power flow polarity convention, in the form of a diagram with an explanatory description, would be published as an Electrical Standard **(Annex 05)** which would be referred in the relevant Grid Code clauses. It was noted that the proposed Electrical Standard would not apply retroactively. Workgroup members were generally supportive, however, they requested NESO to clarify when the implementation date

would be. A Workgroup Member also sought clarity on whether the modification applies to TOs, OFTOs, and large demand users, and the need for potential changes to the STC.

The NESO Representative took the Workgroup through the proposed changes to the Legal Text. The changes consisted of adding the reference of a new Electrical Standard to the General Conditions. The Code User would be directed to the Electrical Standard via the proposed new clauses CC 6.5.6 (f) and ECC 6.5.6.4 (f).

The Workgroup discussed whether the Electrical Standard should be implemented solely via the BCA referencing the General Conditions, or if changes to Connection Conditions (CCs)/European Connection Conditions (ECCs) were necessary. Some members advocated for a streamlined approach using only the BCA and General Conditions, to avoid confusion and conflicting obligations. However, another member suggested that implementing solely via the BCA may miss connections already signed and queued to connect in the future. The Workgroup member suggested adding clauses to CCs/ECCs, with compliance for new connections determined by the Completion Date. It was agreed by all parties the date of 01 November 2026 was not achievable and would need to be amended in the next draft of legal text.

Based on the Workgroup feedback, the NESO Representative outlined a plan for incorporating the metering polarity requirements into the BCA Appendix F5 (Appendix E for LEEMPS) template so that all new offers would need to comply. Should Ofgem approve the proposal, the new metering polarity convention would be formalised as an Electrical Standard **(Annex 05)** and referenced in the Grid Code, creating new clauses CC 6.5.6 (f) and ECC 6.5.6.4 (f).

Once implemented into the Grid Code, the connection agreements would be updated to refer to the Grid Code.

Several Workgroup Members raised concerns over modifying agreements and questioned the appropriateness of introducing a new Electrical Standard into connection agreements before Grid Code approval. They highlighted the need for proper governance and the risk of creating confusion or inconsistency with this approach.

The NESO Representative provided context for the interim use of BCAs, providing examples such as the first storage and wind farm connections to the system. The NESO Representative explained that such measures were sometimes necessary due to lengthy Grid Code modification processes, while acknowledging the associated risks and the need for consensus. One Workgroup member highlighted that if Ofgem were to reject GC0182, any interim requirements added to BCAs would need to be removed from all affected contracts. The Workgroup member added that time, resource, and money may have been spent to comply, which would now be considered unnecessary and wasteful. The Workgroup agreed the preferred approach was not implementing the Electrical Standard into the BCA before Ofgem's decision. It was also noted that any interim arrangements required more consideration and possibly further consultation with the Panel and industry stakeholders.

One Workgroup Member highlighted the missing scenario of EU Code Users upgrading operational metering. The Proposer agreed an additional ECC clause could be required.

Some Workgroup Members voiced concerns around the unknown applicable compliance date. The Proposer said this was to be determined by Ofgem approval and would likely be chosen to align with the implementation of 10 working days after the authority decision. The NESO Representative gave the reasoning for choosing Completion Date, explaining there can be long delays between application submission and connection. The use of Completion Date ensures connections in the queue will be captured, preventing the issue of inconsistent polarity increasing further.

The NESO Representative revised the implementation plan and presented the intention to publish a Guidance Note **(Annex 04)** on the NESO website, adding the link to the Guidance Note **(Annex 04)** in new Connection Agreements, before GC0182 is approved. The Workgroup members voiced their preference for not including the link in the Connection Agreements, due to there being no governance process for changing a guidance note. The Workgroup raised that adding the link in the Connection Agreements might give the stakeholders a false impression that the unified metering polarity convention had already been approved and implemented.

The updated implementation plan proposed 2 clause additions to the Grid Code this can be found in **Annex 03**

Some Workgroup members questioned the clarity of the clauses, specifically the details of ECC 6.5.6.4. The Workgroup discussed the previously proposed Completion Date and how this was absent from the clauses. Workgroup members also felt the wording was not strong enough to correctly convey who is required to comply and under which scenarios. The NESO representative agreed to reconsider the inclusion of Completion Date and to refine the clauses to clearly state the different scenarios of new connections, and existing connection upgrades.

A Workgroup member also raised concern regarding the amount of time (post Ofgem decision) for connections to comply with the Electrical Standard, requesting that there be a longer period between decision and compliance.

A Workgroup member queried whether the implementation of the metering polarity convention is as simple as choosing which way to connect two wires and asked about the difficulty of making such changes during a project. The NESO Representative responded that it is generally straightforward to implement when installing or replacing the meter, however, making changes after commissioning is much more challenging and costly. Workgroup members discussed offshore sites, as changing connections after commissioning could cost tens or hundreds of thousands of pounds, highlighting the significant impact of late changes. Costs arise because once a site is commissioned and operational, modifying the outflow contract and physical setup becomes expensive. The NESO Representative also explained the option of complying with the Electrical Standard via software updates, rather than physical re-wiring. The NESO Representative confirmed that correcting polarity via a software fix is acceptable, provided the power flow data

submitted to NESO complies with the agreed polarity convention, and the Workgroup raised no objections.

The NESO Representative considered the comments from Workgroup members on how the metering polarity convention can be effectively implemented and refined the proposed approach.

The refined draft of the implementation plan (detailed below) was presented to the Workgroup members:

- Step 1: **Before approval of GC0182**, publish a Guidance Note **(Annex 04)** covering the Metering Polarity Convention on the NESO Website to notify and educate as many industry stakeholders as possible, as early as possible, on the best practice when setting up operational metering points and make them aware of the ongoing Grid Code change GC0182 and also an equivalent modification which will be raised for the STCP changes . The Guidance Note **(Annex 04)** will also state that the principles outlined are not mandatory and corresponding Grid Code and STCP Modifications may not be approved.

- Step 2: **Before approval of GC0182**, add the following statement into the Bilateral Agreement templates to notify as many industry stakeholders as possible, as early as possible, on the best practice when setting up operational metering points:

  "Grid Code Modification GC0182 is currently underway to create a unified metering polarity standard for power flow data submitted to NESO. The operational metering of the EU Code User will need to follow the standard, if GC0182 is approved. A guidance note has been published on the NESO website highlighting the key principles of the proposed metering polarity standard. Please note that the key principles are not mandatory unless the GC0182 is approved and implemented.

- Step 3(A): **If GC0182 is approved by Ofgem**, on the Implementation Date:
  - Publish the Metering Polarity Standard for Power Flow Data as a new Electrical Standard **(Annex 05)** and add reference in Part II (b) of Annex to Grid Code General Conditions.
  - Add new clauses to Grid Code CC.6.5.6 and ECC.6.5.6.4 to specify that GB Code Users and EU Code Users will need to follow the Metering Polarity Standard for Power Flow Data 540 days after the Implementation Date of GC0182.
  - Remove the Guidance Note **(Annex 04)** from NESO website.
  - Update the Bilateral Agreement templates by adding the link to the newly published Electrical Standard and changing statement added in Step 2 to request all meters shall conform to the Metering Polarity Standard for Power Flow Data in accordance with ECC.6.5.6.

NESO Compliance team will also send out a letter and memo to inform the industry of the new requirement for the Metering Polarity Standard for Power Flow Data and update the ONCC checklist (used during Compliance process) to capture this new requirement.

- Step 3(B): **If GC0182 is rejected by Ofgem**:
  - Keep the Guidance Note **(Annex 04)** on NESO website and remove the statement related to ongoing GC0182.
  - Update the Bilateral Agreement templates by changing the statement added in Step 2 to "*In order to help the power flow measurement data received by NESO be consistent with the convention used by the NESO SCADA system, a guidance note has been published on NESO website for use when setting up operational metering polarity. The convention used in this guidance is not mandatory, however, it indicates the best practice approach and will be beneficial for all to ensure correct and efficient operation of the network.*"

The NESO representative clarified that only the Bilateral Agreement templates (BCA, BEGA and BELLA) for future connections will be updated if GC0182 is approved. However, any Users who have already signed a Bilateral Agreement before the implementation of GC0182 and meet the conditions specified in the legal text, will still be required to comply with the Electrical Standard. It was also suggested, by a Workgroup member, that the statement to be put into the Bilateral Agreement templates before approval of GC0182 should be changed to cover GB Code User and the wording should indicate that the Code User shall follow the process as set out in the GC0182 rather than "follow the standard". The statement to be added into the Bilateral Agreement templates after the approval of GC0182 should also be clearly specified.

Due to previous comments and questions from Workgroup Members, the NESO representative also clarified that the Connections Reform process is expected to conclude before the Ofgem decision is reached on this GC0182 modification. Therefore, all offers should be re-issued before the Electrical Standard is published and referenced in the Grid Code, meaning the re-issued offers would not contain any requirement to follow the proposed Electrical Standard. However, any changes to the Connections Reform timescales will not be impacted by GC0182, since Code Users who meet the conditions specified in the GC0182 legal text will be required to comply with the Electrical Standard, regardless of whether they have already signed a Bilateral Agreement or not.

A Workgroup member stated that, as there is no governance process around guidance notes, it needs to be extremely clear that this guidance is not enforceable and is optional for Users to follow, as a best practice approach. The Workgroup member also suggested some updates to be made

to the foreword, in the guidance note, to clarify this position. Additionally, another Workgroup member stated that the term 'standard' should not be used, since an Electrical Standard will not be established at the time of publication of the proposed Guidance Note.

When reviewing the proposed legal text, some Workgroup members noted discrepancies in the terminology used, specifically between 'metering points' and 'operational metering signals.' The Workgroup concurred that 'operational metering signals' is more consistent with the language found in the existing Grid Code and Bilateral Agreements. Additionally, the Workgroup discussed the potential confusion caused by describing connections as 'new' or 'existing', as these terms are relative to a particular point in time. Since Completion Date is already mentioned in the legal text and has been established as the method to determine the application of the Electrical Standard, it was agreed that these terms could be removed.

The Workgroup debated the structure of the new legal text clauses, questioning whether separate clauses for new and existing connections were necessary in ECC.6.5.6.4, and suggested a simplified approach based on the installation or upgrade date of operational metering equipment. It was also suggested by a NESO subject matter expert (SME), that the Electrical Standard should be referenced in both Part I (b) and Part II (b) of the Annex to Grid Code General Conditions, to which the Workgroup members agreed.

Upon review of the Workgroup Consultation document, the Workgroup members highlighted the importance of quantifying the impact of incorrect polarity. The Workgroup emphasised the need to determine the number of meters affected and assess the potential implications for forecasting and overall system operation. It was agreed that relevant data and figures should be included in the documentation, with the possibility of referencing more detailed analysis in an annex for further clarity.

Bilateral Agreement Discussion

The NESO representative updated the statements to be added to the Bilateral Agreement templates before and after the approval of GC0182, based on suggestion from Workgroup 5.

- **Before approval of GC0182**
  "Grid Code Modification GC0182 is currently underway to formalise the requirements for GB Code Users and EU Code Users to follow a unified metering polarity convention when submitting power flow data to NESO. If GC0182 is approved by the Authority, the operational metering signals of GB Code Users and EU Code Users being installed or

upgraded after a specific date, will need to adhere to the polarity convention as requested.
A guidance note has been published on the NESO website highlighting the key principles of the proposed metering polarity convention. Please note that the key principles of the metering polarity convention are not mandatory. In the event that the Authority approve Grid Code Modification GC0182, it is proposed that the metering polarity convention will be developed into an Electrical Standard which would be applicable to those parties caught by the obligations of GC0182."

- **After approval of GC0182**
  "All operational metering signals being installed or upgraded after DD/MM/YYYY shall conform to the Electrical Standard for Metering Polarity Convention for Power Flow Data in accordance with CC.6.5.6 and ECC.6.5.6."

The NESO representative presented the updated legal text based on the feedback from the previous Workgroups. The revised legal text addresses the concerns around consistency between documents, replacing the term “metering point” with “operational metering/operational metering signals” and removing reference to “new” and “existing connections”. The NESO Representative also considered removing the word “standard” from document titles; consequently, the Electrical Standard has been renamed “Metering Polarity Convention for Power Flow Data”, and this updated terminology is reflected throughout the proposed legal text and the guidance note.

The Workgroup agreed updates to ensure alignment between the legal text and the consultation document, including confirming that mandatory compliance applies 540 days after implementation, not at the point of implementation itself. Drafting was refined to improve consistency of terminology, including replacing references to “metering points” with “operational metering signals”, and simplifying clause structures using an agreed format.

The Workgroup also discussed the treatment of installation, upgrade, and modification of operational metering, agreeing to explore use of existing Grid Code–defined terms (such as “modification”) where appropriate. Overall, the Workgroup confirmed the revised legal text was acceptable, subject only to minor drafting updates after agreeing to minor wording updates including changing “upgrades” with “modification” as a defined Grid Code term, providing clarity.

Draft legal text

The draft legal text for this change can be found in **Annex 03**.

What is the impact of this change?

The proposed change will impact NESO, GB Code Users and EU Code Users. GB Code Users and EU Code Users will need to adopt the convention for new connections during commissioning and when operational metering is installed or upgraded at existing sites, requiring some process updates. The convention has been developed to align with existing unofficial conventions to minimise disruption; however, there may be instances where work is required to conform to the proposed Electrical Standard such as wiring changes for equipment or software reconfiguration. It should be noted that any Code Users who have already signed a Bilateral Agreement before the implementation of GC0182 and meet the conditions specified in the legal text, will still be required to comply with the Electrical Standard. This is because the Grid Code is binding upon each User from the time, they become a CUSC Party and, subject to its terms, a change to the Grid Code will be binding upon each User from the time at which that change becomes effective.

This modification is expected to have low impact on NESO as the provided metering will be correctly interpreted by NESO's systems without the need for manipulation. NESO may, however, require additional checks and tests to ensure compliance.

For NESO, it will improve situational awareness and decision-making by ensuring consistent polarity in power flow data, reducing errors and enhancing system security.

Positive impacts include improved operability, forecasting accuracy, cost efficiency, and alignment with existing conventions. Meanwhile, negative impacts involve implementation effort, transitional challenges, and limited initial scope as the change applies only to new connections and new operational metering at existing sites but not legacy operational metering.

Forecasting inaccuracies are being addressed by focusing on the accuracy of the SCADA operational metering. Specifically, if the metering has incorrect polarity, it directly impacts the National Demand calculation, leading to inaccuracies in forecasting models. By preventing incorrect polarity in operational metering, the modification aims to enhance the accuracy of National Demand calculations, thereby improving demand forecasting going forward.

Proposer's assessment against Code Objectives

Original Proposer's assessment against Grid Code Objectives	
Relevant Applicable Objective	**Identified impact**
(i) To permit the development, maintenance and operation of an efficient, coordinated and economical	Positive The change will improve situational awareness and system security in general, as well as allowing for better forecasting and reducing balancing costs.

system for the transmission of electricity;	Reduce and/or mitigate iterations and delay for setting up new connections and approval for outage and commissioning. Improved coordination, efficiency and transparency between NESO and other parties following unified polarity convention and standardised process. Eliminate situations where some stakeholders (i.e. batteries) are unable to use the current system.
(ii) Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);	Neutral This Modification will not directly impact on the generation and supply of electricity, however it will instead allow for better overall system management that will be more cost-effective and ensure that no stakeholders are left outside of the system.
(iii) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;	Positive Improved situational awareness, system security, better forecast and reduced balancing cost. Reduce and/or mitigate iterations and delay for setting up new connections and approval for outage and commissioning. Improved coordination, efficiency and transparency between NESO and other parties following unified polarity convention and standardised process.
(iv) To efficiently discharge the obligations imposed upon the licensee by this license* and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	Neutral. This Modification is in line with our license and regulatory obligations, which is facilitating a change to a new Frequency Regulation system as mandated by Ofgem.
(v) To promote efficiency in the implementation and administration of the Grid Code arrangements	Positive: The data from the meters is used more and more widely by NESO in multiple aspects, and the current methodology is increasingly unviable as the temporary fixes for the metering polarity issues decline in effectiveness. The changes we are proposing will ensure that the Gris Code is much more clear regarding the obligations or all

	parties, and make significant improvements to the administration resulting in time and cost savings.

When will this change take place?

Implementation date

10 Working days after Authority decision.

Date decision required by

31 December 2026

Interactions

☐CUSC	☐BSC	☒STC -P	☐SQSS
☐European Network Codes	☐ EBR Article 18 T&Cs[1]	☒Other modifications	☐Other
☐NCER Article 4			

How to respond

Standard Workgroup Consultation questions

1. Do you believe that the Proposal better facilitate the Applicable Objectives versus the current baseline?
2. Do you support the proposed implementation approach?
3. Do you have any other comments?
4. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?
5. Does the draft legal text satisfy the intent of the modification?

Specific Workgroup Consultation questions

6. Do you believe it is appropriate to include the metering polarity requirements as an Electrical Standard? If not, please state your rationale.
7. Do you have any specific comments on the draft Metering Polarity Electrical Standard (Annex 05)?
8. Do you believe the compliance timescales of 540 days (18 months) after implementation is appropriate for this modification?
9. There is a concern on signing the BCA this Standard may not actually exist and creates the potential for there to be a minor conflict between the BCA and the Grid Code

concerning Generators. Do stakeholders agree that this is a reasonable low risk approach?

10. If OFGEM reject the GC0182 but NESO still have the Guidance Note published on the website, will that be a conflict to OFGEM's decision and give the industry a false impression that there is still a meter polarity standard to follow?

The Workgroup is seeking the views of Grid Code Users and other interested parties in relation to the issues noted in this document and specifically in response to the questions above.

Please send your response to grid.code@neso.energy using the response pro-forma which can be found on the GC0182 modification page.

In accordance with Governance Rules if you wish to raise a Workgroup Consultation Alternative Request, please fill in the form which you can find at the above link.

If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel, Workgroup or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
BCA	Bilateral Connection Agreement
BEGA	Bilateral Embedded Generation Agreement
BELLA	Bilateral Exemptible Large License-exempt Generator Agreement
CCs	Connection Conditions
CUSC	Connection and Use of System Code
ECCs	European Connection Conditions
EBR	Electricity Balancing Guideline

GCDF	Grid Code Development Forum
LEEMPS	License Exemptible Embedded Medium Power Station
MWh	Megawatt hour
NO	Network Operator
OFTO	Offshore Transmission Owner
SCADA	Supervisory Control and Data Acquisition
SME	Subject Matter Expert
STC	System Operator Transmission Owner Code
STCP	System Operator Transmission Owner Code Procedure
SQSS	Security and Quality of Supply Standards
T&Cs	Terms and Conditions
TO	Transmission Owner

Annexes

Annex	Information
Annex 01	GC0182 Proposal Form
Annex 02	GC0182 Terms of Reference
Annex 03	GC0182 Draft Legal Text
Annex 04	GC0182 Guidance Note
Annex 05	GC0182 New Electrical Standard