Public

# Compliance Seminar February 2025 FAQs

*The follow questions were asked at our Birmingham Compliance Seminar on 25 February 2025. Answers are provided in this document.*

1. **Have NESO ever faced the ultimate escalation, a legal challenge to their interpretation of the Grid Code?**

- Our codes team spends a significant amount of time consulting with the industry and working through changes to the codes to ensure clarity and compliance. This collaborative approach helps us address any potential issues proactively and maintain a robust and transparent framework. Due to the engagement, we do, NESO has never faced a legal challenge to their interpretation of the Grid Code.

2. **Do we have more plans for further pathfinder projects and what could be the emerging problems NESO is investigating and services to be procured?**

- We regularly review our long-term system needs and assess the need for network services (previously pathfinders) procurement. Our Operability Strategy report and Clean Power advice (CP30) provides an overview of emerging challenges and mechanisms required to meet them. We encourage any parties interested in NESO services to sign up to our newsletters to receive updates by visiting our Network Services page .

3. **Can we look at considering the simulation time step requirements in EMT analysis for the longer duration simulations like LFSM and FSM as 10uS becomes difficult. Agree that 10uS is fine for FRT?**

- To ensure consistency across various users, NESO advises conducting the Limited Frequency Sensitive Mode (LFSM) and Frequency Sensitive Mode (FSM) tests in accordance with the actual time step utilised for the EMT model. NESO acknowledges that performing the LFSM over extended durations can present challenges. NESO will undertake internal discussions and may propose a potential solution.

4. **Theres been many Qs relating to the Grid Code (GC) vs guidance. The guidance is very helpful and needs to be kept, however some additional clarifications is required to try reducing compliance iterations with models.**

- We always welcome feedback and suggestions on how we can improve our guidance. In general, NESO is required to write guidance notes to explain the rationale of key GC clauses and how these clauses should be interpreted, as well as to provide options for Users on how they might want to demonstrate the requirements have been met. We accept that additional work might be needed on the Guidance to obtain the quality models NESO requires while at the same time reduce the amount of effort. Please provide feedback with specific examples in the areas where the guidance notes could be improved to Arnaldo Rossier at Arnaldo.Rossier@nationalenergyso.com.

5. **Where can we get a copy of the presentation slides for all breakout sessions?**

- A copy of the slides can be found on our website please visit the following Link.

6. **Model validation report submission deadline was mentioned to be 3 Months after testing, just to clarify is this Deadline based on the test date or when the tests were approved and deemed as a pass?**

- Users are required to submit models 3 months ahead of the ION date and 1 month ahead of LON date as a minimum so that NESO can check the user system models are of the minimum level of quality required by the Grid Code before authorising the release of the ION/FON. However, NESO recommends Users to submit them as earlier as possible to minimise the risk of NESO having to withhold operational notifications.
- 3 months after the compliance tests results have been accepted by NESO as sufficient to demonstrate compliance Users are expected to submit final models with all relevant associated documentation appropriately updated.
- The final models must come with all the settings and parameters as fitted on site and validated against the corresponding compliance tests results.

7. **Is NESO compliance expecting any impact following the implementation of Gate 2 process/CP30? What measures are being taken prepare for the change?**

- If your project passes through the Reform process and gets a Gate 2 offer, then there should not be any impact to the Compliance process. Connections reform focuses on the front end of the process so therefore the Compliance process should remain unaffected and follow the current process. The only differences may be that reinforcement schemes listed in Appendix H of your CONSAG are potentially reviewed, therefore. If you would like to know more about the changes, please look at https://www.neso.energy/industry-information/connections/connections-reform

8. **Could you explain how NESO can speed up the compliance process. NESO are imposing a lot more requirements for EMT and Sub Synchronous Oscillations (SSO) and are asking for increased times to review, slowing down projects?**

- We are actively reviewing the compliance process to ensure it is as efficient as possible and are exploring potential automation options for example the Data Registration Code (DRC) Portal. It is essential to balance the desire to speed up the process with the need to ensure that generators connect to the National Transmission System (NTS) safely, thereby maintaining the security of supply.

9. **Why has there been no mention of the extended response times SLA being proposed for User Data Submissions Feedback Period (STCP19-3)?**

- The extended response times SLA being proposed for User Data Submissions Feedback Period (STCP19-3) is being managed through the Grid Code Development Forum (GCDF). The extension is necessary due to the increased complexity of connections rather than a consequence of not meeting existing timescales. Once this process has concluded we will look to share more information with industry.

10. **Developers are at the mercy of the application of the codes by one compliance engineer. How do we make sure there is consistency across different projects?**

- While we have a significant number of projects undergoing the compliance process, we always aim to maintain a consistent approach. We are regularly reviewing and sharing lessons learned to ensure that learning from projects is shared across the engineering and compliance teams. This helps us maintain a consistent application of the codes and improve our processes continuously

11. **Do NESO have a vision of what they want to receive in a modelling report?**

- NESO has shared its vision on what is the minimum information needed for a model user guide, associated model documentation and model validation report in the "Guidance Notes on Modelling Requirements - GC0141 Grid Code Modification". The model verification/validation methodology recommended in this Guidance Notes relies on overlaying the models' responses on benchmark data (either coming from an already verified model or plant tests data), which is the standard worldwide practice. As explained during the seminar, the guidance notes include accuracy requirements to assess the level of alignment between the models' responses and the benchmark data, which NESO is happy to review and modify provided there is valid reasons and evidence to suggest is needed.

12. **Who reviews the models and is each model submitted shared with all the relevant teams? Also, can NESO implement a basic model submission check so poor-quality models can be sent back to the user ASAP?**

- The model review process is co-ordinated by the Engineering Compliance Team, however, once preliminary checks have been completed, and while detailed compliance assessment is undertaken, the models are passed to the Model Development Team (for RMS models) or Operability Innovation Team (for EMT models) to ensure they can be integrated into NESO's system models for the wider network.
- If quality or version issues are identified during the preliminary checks, the User will be notified immediately (for resubmission).

13. **Can model requirements be refined so that it can be addressed in 2 revisions rather than 10?**

- It's important that Users familiarise themselves with the requirements for modelling at an early stage in the project lifecycle. We are always happy to discuss the requirements during the inaugural meeting or subsequent project meetings, to ensure they are clear, prior to model development and submission. We also welcome feedback and suggestions on how we can improve our guidance documents, where there's a view that further clarity would be beneficial. Please provide further details to Arnaldo Rossier at Arnaldo.Rossier@nationalenergyso.com

14. **Do NESO plan to mandate Grid Forming capability on Type D & HVDC by end of 2028**.

- As NESO consider the long supply chain timeline for WTGs procurement as this date is not realistic for developer & WTG OEM? There is a Grid Forming expert group exploring the

further GFM develop including possible mandate for GFM requirements. It is open to wider industry; we would encourage you to participate the group and provide your feedback so that the issue can be properly discussed and addressed in the right forum.

15. **It would be highly beneficial to share insights from the modeling journey, including specific challenges, Q&A, recording and best practices i.e. continue discussions beyond this forum, more regularly?**

- This is a great suggestion. We will discuss internally and come back with proposals in the near future.

16. **Is there an SLA on the TO's to respond to submissions? Compliance is a tripartite activity, they need to be more involved. Are they in the room today?**

- Yes, the TOs have a 15 working days SLA to respond to UDFS submissions. Further details of the process are available under the STC 19.3 code.
- Yes, the invite was extended to the TOs for attendance.

17. **Can NESO implement more specific guidelines for model 'quality/validation'. This would seem to be most relevant for WECC/IEC equivalent models?**

- NESO will be working with industry participants to provide further clarity on WECC/IEC equivalent models in the upcoming revised modelling guidelines.

18. **Why is there no room for flexibility if the 3 week cut off is missed for SORT?**

- The cutoff and SORT upload dates are scheduled and published several months ahead (currently available up to November 2025) to ensure they are visible to project planners well in advance. There is a predictable cadence which can be used for planning in the longer term.
- The three week lead time between cutoff and upload dates is used to prepare the data from all qualifying units to be included in the SORT upload. This process includes quality checking and testing the unit data to ensure it is correct and complete in time for us to test the upload, identify and fix any potential issues or interactions ahead of the SORT Upload date.
- Allowing a unit to miss the cutoff and still enter SORT would reduce the time available for quality checking and testing which increases the risk of incorrect data entering the NESO Balancing Mechanism systems.

19. **Are there agreed timeframes for NESO and TOs to review submitted documents and provide responses? Who's responsible for providing submitted docs to the TOs?**

- Yes, the TOs have a 15 working days SLA to respond to UDFS submissions. Further details of the process are available under the STC 19.3 code. NESO are responsible for sharing UDFS submission with the TO.

20. **GC1056 – critical tools. During a restoration event, how would NESO control room plan to communicate with our control room if all the means of communication is unavailable?**

- Control Telephony is designed to be mains resilient. However, where all comms are lost then they will have to wait until it is restored. We also have several clauses in BC2 relating to the absence of instructions / comms from the ENCC which are covered in BC2.5.4, BC.2.6.1, BC2.6.5, BC.2.9.7, BC2.9.8. In addition, we also have STCP 06-1 (section 2.6) and STCP 06-4 (section 5).

**21. Do you have the power to enforce SSO if it's not in the Grid Code?**

- It is important to ensure user connect to the system safely and securely. Users have to carry out a set of assessments to demonstrate they meet the requirements specified in the Grid Code and Bilateral Connection Agreement. SSO is one of the requirements.

**22. Is there a simple guide to bmu registration, egamma, STOR to learn about the process?**

- We have published guidance here. We recognise our guidance may require some knowledge of technical terminology so we also provide monthly "Onboarding and Registration Webinars and Drop In sessions". If you would like to join the sessions, request a call/meeting or ask any questions about the Registration process please email the team at: bmu.registration@nationalenergyso.com

**23. Some code mods effecting generators are being referenced from STC changes (e.g. 19-3 CP SLA extension, ESRS offshore requirements ref CC7.10.8 - how are these being referenced back to GC.**

- There should be no ESRS obligations in the STC that apply to Generators. However there are obligations on Transmission Licensees through the STC that bind them to specific requirements in the Grid Code - eg STC Section D Part I section 2.2.6 requiring compliance with CC/ECC6.1, 6,2, 6.3 and 6.4, Section C Part 3, 2.1.3 relating to requirements to comply with OC5.7 (which includes things like Critical Tools and Facilities by Ref to the relevant parts of the CC/ECCs which are referred to in OC5.7) and submission of data under DRC Schedule 16, Section K applies to OFTOs which also refers back to Critical Tools and Facilities in particular CC/ECC.7.10.8 which relates to Offshore Generators.

**24. Can you please provide contact details to discuss queries?**

- Contact details are available on our website at Compliance Process | National Energy System Operator
- Registrations queries please contact: bmu.registration@nationalenergyso.com

**25. What, if any, is the feedback from NESO compliance and the relevant TOs when plant commissions, are they updated with 'as built' details?**

- NESO continues to work with both Users and TOs post-commissioning. Users are required to resubmit DRC schedules every year as part of their Week 24 submissions.

**26. Is NESO aware that the cost of modelling for legacy plant is driving a halt to plant refurbishment, ultimately leading to lower availability and closure of older generation?**

- As part of Grid Code Modification GC0168, which is looking at introducing a requirement to obtain EMT models for legacy plant, we are aware of the high costs involved and the risk

this could have on the viability / investment of these older plants. As part of this modification, we have specifically asked a consultation question regarding views on a cost recovery mechanism. As part of our response to the Consultation, NESO believes it is appropriate to have a cost recovery mechanism in place in order to avoid premature or early plant closure.

27. **NESO is in a much better position to keep an eye on compliance efficiency across the portfolio than individual users. Is any monitoring taking place?**

- Compliance is monitored by the Compliance Manager and Engineer for each project. The number of UDFS submissions a User makes during a project varies widely from User to User and project to project but is not usually a reflection of the efficiency of the compliance process.
- It's important that Users familiarise themselves with the requirements for modelling at an early stage in the project lifecycle. We are always happy to discuss the requirements during the inaugural meeting or subsequent project meetings, to ensure they are clear, prior to model development and submission. We also welcome feedback and suggestions on how we can improve our guidance documents, where there's a view that further clarity would be beneficial.

28. **GC0156 -72 hour Restoration. How effective are Battery assets during a restoration scenario?**

- We also have several clauses in BC2 relating to the absence of instructions / comms from the ENCC which are covered in BC2.5.4, BC.2.6.1, BC2.6.5, BC.2.9.7, BC2.9.8. In addition, we also have STCP 06-1 (section 2.6) and STCP 06-4 (section 5). This is a complex question because the above clauses cater for both non restoration and restoration scenarios. In general, where comms is lost, User's should not do anything that could put the system at risk (BC2.5.4 refers).

29. **Is the model parameter check against current Grid Code (GC) version since most connection offers and procurements by Developers were signed few years back and based on a previous GC revision?**

- In general, most modifications are non- retrospective and therefore Grid Code requirements would be against those obligations when the Generator originally connected. There are however some Grid Code Mods which are retrospective which apply to existing plants. OFGEM approve grid code modifications, the decision includes a statement on whether it needs to be applied retrospectively or not.

30. **Compliance Process: Op Not slides mention issuing a time limited ION for OPs Metering proving. Understand the need for this, but feels like admin with no benefit?**

- This process was reviewed in 2022 with feedback from our operational metering teams who were struggling to manage a minority of generators who remain restricted to 20% for extended periods. We have found that a 30 day Interim Operational Notification (ION) is a better incentive for timely testing of Operational Metering.