nationalgridESO

Emergency and Restoration

Summary of System Defence Plan, System Restoration Plan, Terms & Conditions and Test Plan consultation comments

20 December 2019

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Introduction

Thank you for your feedback

On the 21 October 2019, Ofgem made a second request for amendments to the documents the National Grid Electricity System Operators (ESO) had submitted to implement the Network Code for Electricity Emergency and Restoration (NCER). In response to this feedback the ESO published for consultation a revised System Defence Plan, System Restoration Plan and Terms and Conditions proposals for a consultation between the 18 November and 18 December 2019. In addition, the ESO also consulted on the Test plan as required for Emergency and Restoration code implementation within the same time period.

We would like to thank you for taking the time to respond to the third consultation. We appreciate your input and have given careful consideration to the feedback provided. Alongside the formal consultation, we've engaged with Stakeholders to better understand your feedback and to be able to respond to Ofgem by the 21 December. We've encouraged stakeholders to submit this verbal feedback through the formal process to ensure it is captured and transparent.

The amended System Restoration Plan, System Defence Plan and Terms and Conditions for providers will be published on our website and submitted to Ofgem on 21 December.

Included in the following document are ESO responses to your feedback, which aims to communicate our responses with reasoning to the points you have raised.

ESO are currently working to implement this into the GB industry through Grid Code modifications GC0125, GC0127 and GC0128. GC0125 modification report was submitted to Ofgem on 12 November while the GC0127 and GC0128 report was submitted on 3 December. Further code modifications will be raised in due course. We would appreciate further engagement through the GB Code forums and JESG.

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Feedback and Responses

ESO responses to your feedback

Document	Respondent	Comment	ESO Response
T&Cs, SGU list and High Priority SGU list	Northern Powergrid	1) The T&Cs mapping is a useful means of identifying the relevant sections of GB codes. The SGU & High Priority SGU list helps to clarify the types of sites which have obligations placed upon them by the relevant codes. It would also be useful to clarify whether it is the NGESO or the DNO who is responsible for informing those embedded generators that have been listed as an SGU and the duties that places upon them. 2) The Test plan takes the correct balance between physical and simulation tests with an appropriate period between tests. It is not clear whether IDNOs who may have responsibilities under the System Defence and Restoration plan should be specified. 3) The proposal ensures that any changes are captured within the relevant codes that the parties are already familiar with. Changes appear to minimise the impact on parties	1) Thank you for your feedback. The NGESO will notify those CUSC Parties (caught under Appendix A of the System Defence and System Restoration Plan) with whom we have a connection agreement and fall within the scope of NCER. 2) IDNOs will be notified if they are CUSC parties caught under Appendix A of the System Defence or Restoration Plans 3) We have implemented the EU codes under the guidance of minimum necessary changes. Careful analysis and review is needed in order to make major changes in order to deal with future system operation issues.
Test Plan	Northern Powergrid	1) For the Test Plan, is there a public consultation - which is targeted at the affected parties. Do the SGUs know who they are	1) The SGU's are listed in Appendix A of the System Defence Plan and System Restoration Plan. The ESO will be writing to all CUSC parties caught by the requirements of NCER as

	given that they haven't been written to yet?	soon as the Grid Code changes have been made. Unfortunately, we cannot write to them until the code changes have been approved otherwise it is not clear what obligations they have to meet.
	2) Test Plan- Does Art 43(1) require the TSO to do the testing - rather than delegate at least some of the testing. Is delegation OK?	2) Article 41 (5) of RfG states that the relevant system operator may totally or partially delegate the performance of its compliance monitoring to third parties.
	3) Test plan- I would have expected the affected parties to have the opportunity to help develop the plan rather than be involved in just the consultation process.	3) Article 43 (2) states we should consult, which we have done. The Test Plan links in with existing codes and the developing assurance framework, which have all been written through the industry working groups.
	4) Test plan section 4.1.7- might it be helpful to tease these out as per Table 1?	4) There is no proposed change as RfG, HVDC and DCC do not apply to existing plant and therefore the exisiting requirements of the Grid Code (ie CC/ECC's and CP/ECP's and OC5 would apply)
	5) Test Plan section 4.1.9- OC5.5.3.3 doesn't look like it has the same scope as Art 43(4). The first relates to safety of staff and plant, the second to the security of the transmission system.	5) Agree, however as noted in section 4.1.9 of the Test Plan, we did try to expand this requirement, but the Workgroup agreed that it was sufficient and hence the draft text prepared was removed. Amendments

		6) Test plan Section 5.1.5- I didn't quite follow this. Does 50(4) mean before any (substantial) operational configuration or permanent configuration? What is a substantial change – one that could have material impact on the SDP/SRP? 7) Test plan section 6.1.1 Are these computer simulation tests documented in the Test Plan – sounds like there needs to be a dedicated testing procedure relating to the simulation testing? 8) Test plan section 6.1.2- Agree that these paragraphs define the testing arrangements in GB, but Art 51(1) relates to simulation testing rather than physical on site testing. 9) Test plan- Is there a need to capture the testing of tools and facilities Art 49. SDP 6.3 refers to an annual compliance testing report. Does it need to be captured in a code somewhere.	however have been added to the Test Plan to cover this issue. 6) The term substantial change is a European term taken directly from Art 50(4) of E&R so it is not entirely clear, however it is assumed that it refers to any reinforcement or design changes which need to be factored into the System Defence Plan. The Test plan has been updated to reflect this. 7) Agree – this will be included within the Assurance Framework. Section 6.1.2 of the Test Plan has been updated to address this issue. 8) Agree – Section 6.1.2 of the Test Plan has been updated to reflect this comment. 9) Art 49 relates to obligations on the TSO and hence would not need to be in the Grid Code. This will however be picked up as part of the Assurance Framework and there may also be consequential changes required to the STC.
Terms and Conditions	Elexon	1) We agree with the mapping of 4(4)(b) terms for aggregation to the BSC as this aligns with the terms for aggregation from Electricity Balancing	1) Thank you, we believe these are the terms and conditions so thank you for the confirmation.

		Guideline Article 18(4)(b) and 18(5)(c). These are the terms and conditions that allow the aggregation of demand facilities, energy storage facilities and power generating facilities in a scheduling area to offer balancing services via the Balancing Mechanism or via TERRE. 2) The terms and conditions ('the T&Cs') for Defence Service Providers and for Restoration Service Providers now includes, for the first time, a reference to the BSC. This brings those parts of the BSC within the scope of the NC ER amendment process, in the same way that parts of the BSC were brought within the EB GL Article 18 amendment process. We would therefore suggest that we need to discuss with you, Ofgem and industry the most efficient way to change these BSC provisions in future while also meeting the requirements of the NC ER, EB GL and BSC change processes. 3) Also, we note that the System Restoration Plan, in particular, summarises parts of the BSC. Therefore, if and	2) There is no proposed change to the referenced parts of BSC. The BSC references are included to merely indicate that there is a provision for aggregation and the conditions of aggregation are as a result of EBGL and National law we are not proposing changes to aggregation as a result of NCER. In addition to GC0132, NGESO will be raising a Grid Code modification to implement the code process changes for consulting as required by NCER. We propose that a similar modification will be required for the BSC. 3) We agree that the System Restoration will need to be modified following any change to relevant BSC sections.
System Restoration Plan			

			when the relevant sections of the BSC are modified in future, this Plan may also need to change.	
System Defence Plan	ElecLink	1.	5.1 states that each GB Party which falls within the scope of the EU NCER as listed in Appendix A of this System Defence Plan must ensure their critical tools and facilities are designed to remain available for at least 24 hours in the case of a local loss of external power (EU NCER Articles 41.1 and 42.2). Furthermore, 5.1.1 states that critical tools and facilities are defined in SOGL Article 24, and include, but are not limited to, Supervisory, Control and Data Acquisition systems (SCADA), automatic logging devices and control telephony. The recently updated Communications Standards for Electronic Data Communication Facilities and Automatic Logging Devices Communications Standards - Communications Standards (Issue 6)1 includes a requirement for 24 hours main independence in line with the EU network code requirement.	1. As part of the work to implement the NCER, ESO undertook an initial review of the Communication Standards for Electronic Data Communication Facilities and Automatic Logging Devices and reissued in 2019. We are aware that we need to update the Electrical Standards for Control Telephony, which have been started. We will be progressing these updates through 2020, as part of Phase 2 implementation of NCER. In line with the current requirements, 24h mains independence resilience will still be required (Control Telephony Standard - Section 11, Communication Standard Electronic Data Communication Facilities and Automatic Logging Devices Section 7.4). Any change will follow Grid Code Governance process, with NCER timelines. Critical tools and facilities are captured under Grid Code (CC/ECC.6.5),

		However, the Control Telephony Electrical Standard Applicable In England And Wales (Issue 1) has not been updated and does not include the 24 hour main independence requirement. We ask that NGESO clarify whether or not this standard should be updated to account for the new EU requirement. ElecLink understands that NGESO intends for the 24-hour main independence requirement to be applied retrospectively. We believe an update to the electrical standards is not enough in this case. Any retrospective application should be clearly highlighted. We suggest that NGESO clearly define the "critical tools and facilities" in the trilateral (including connecting TSOs in other countries) and bilateral interconnector arrangements. Without this many bilateral contracts fail to capture an update to the electrical standards. 2. Section 6 describes compliance and assurance testing which places requirements on interconnector owners. In the case that these are required by ElecLink and other interconnector TSOs, we would request that these provisions are included in the trilateral	however a pragmatic approach is needed by the individual party and site. 2. In 2019 we developed these changes via GC0125/GC0127/GC0128. Once approved we will look to complete the work flow through to the Interconnector's Operational Protocols.

		(including connecting TSOs in other countries) and bilateral arrangements are reflected to include these. We would also request that these provisions are considered on a case by case basis and reflect the arrangements in place for each connecting onshore TSO.	
T&Cs, the SGU list and High Priority SGU list, Test Plan	SSE	1. The proposed terms and conditions for system defence providers and system restoration providers, including by aggregation, as set out in Annex 1 of the 18th November 2019 letter, still lack the commercial details that are needed by parties in order to enter into a contract with the TSO. 2. The obligation, on the TSO, in Article 4(2)(a) and (b) of ERNC is to submit a proposal to the NRA for: "the terms and conditions to act as defence service providers on a contractual basis in accordance with paragraph 4;" [emphasis added] "the terms and conditions to act as restoration service providers on a contractual basis in accordance with paragraph 4;" [emphasis added] As we have identified in our detailed comments to the previous consultations (see, for example, the 18th December 2018 TSO	1. As part of the System Defence Plan and System Restoration Plan (Appendix A) we have clearly stated that only CUSC parties are within scope of NCER for which we sought Legal advice. This approach was discussed as part of implementation of NCER in both GC0127/128 workgroups and via wider industry consultation. Commercial contracts are in place for non-CUSC parties but there is no obligation for them to satisfy wider requirements of the Grid Code including operation under Emergency Conditions. Generic commercial details are included in the CUSC and Grid Code. Site specific requirements are included in the Bilateral Connection Agreements. In the case of Black Start (CC/ECC6.3.5) the requirements and parameters are included in the black start contracts.

	submission to the NRA) the purported terms and conditions that the (GB) TSO has produced for system defence providers and system restoration providers including by aggregation is incompatible with the requirements of ERNC. This is because the TSO is proposing to apply a 'methodology' whereby the broad approach is outlined and agreed by the NRA, but the actual terms and conditions on a contractual basis are not approved by the NRA and thus the TSO plans to apply varied terms and conditions for different system defence service providers or system restoration service providers, including by aggregation (and those actual applicable contractual terms and conditions are not publicly consulted upon or subjected to NRA approval). As identified by the Commission, this leads to the less cost-efficient operation of the power system, and consequently to a 7% increase of its total cost (which are ultimately paid for by consumers) and is therefore incompatible with EU (and national) law. It is critical to understand that when it comes to this matter that the approvers	2. This issue was discussed as part of the GC0125 and GC0127/0128 Grid Code Workgroups for which several alternatives were raised. In the case of GC0125 an alternative was raised in respect of the definition of a Black Start contract which aimed to tie the contract to NCER. The Wider industry did not support this approach on the basis that it limited flexibility as reflected in the final modification report for GC0125. 3. Responses from the consultation on the System Defence Plan and System Restoration Plan in August 2019 provided comments that the GB industry prefer to stick with the GB terms. As a consequence, Appendix A of the System Defence and System Restoration Plan was prepared to provide a translation between EU Terms and GB Terms, the primary aim is to make it clear which GB parties will be within the scope of NCER. In addition, the ESO will be formally writing to individual CUSC parties to notify them that they will be within the scope of NCER when the relevant measures are approved. 4. ESO recognised that the implementation of EU code needs to be made as clear as possible within

	of ERNC did not establish that Article 4(2)(a)-(b) should be discharged, by the TSO, via a methodology. As shown by the use of 'methodologies' elsewhere in ERNC this was an option freely available to the approvers to choose – if they wished to do so. Nevertheless, the approvers of ERNC explicitly rejected the 'methodological' approach to Article 4(2)(a)-(b) and, instead, went with requiring the TSO to produce a proposal (for NRA approval) of the terms and conditions for system defence service providers and system restoration service providers, including by aggregation. 3. We also note that the parts of the Grid Code referenced in Annex 1 fail to refer to either the provision of system defence services or system restoration services, including by aggregation. Given this, and as we have noted in our previous consultation responses on this topic, we fail to see how the TSO has discharged its obligations in Article 4(2)(a)-(b). 4. The proposed approach in respect of the list of SGUs is flawed. It fails to list the SGUs in GB to whom	GB. This has been achieved through using Appendix A to align EU terms with GB terms. Considering the guidance to only make changes where needed, Appendix A utilises a criteria approach that applies GB parties to the NCER efficiently. 5. ESO have been asked by the National Regulatory Authority (Ofgem) to only make changes where needed. Throughout the process, the ESO developed original proposals on which we've engaged with stakeholders and sought legal advice to develop the final solution as proposed. As part of the transparent GB governance process, stakeholders have the opportunity to raise alternatives, which some have done. 6. All CUSC parties are required to satisfy the applicable requirements of the Grid Code (CUSC 6.3). Following November's JESG meeting, we've completed a thorough analysis and can confirm that the minimum requirements of the Grid Code apply. This does vary between type of user and plant.

		obligations, within ERNC, fall. The TSO's suggested approach; of applying a national definition of SGUs; is supported by network operators – but is not supported by SGUs – in the July/August 2019 TSO consultation. The proposed 'list' as shown in Appendix A of the System Defence Plan and System Restoration Plan is, at 18 pages, totally confusing for the SGUs. The TSO has managed, with its 18 pages, to make things far worse for stakeholders.	
		5. The suggestion of including the legal advice received by the TSO would only be of value to SGUs if the TSO accepted liability if that advice was incorrect and SGUs suffer any losses as a result of the TSO's failure to comply with EU law. Instead the TSO invites SGUs to accept the TSO's view when the consequences (for the TSO) if it is wrong are minimal but the consequences for SGUs are substantial. It also increases the risk (for SGUs) of them being non-compliant as they are caught between this confusing (national) definition of SGUs proposed by the TSO and that set out in the EU law (ERNC) which takes precedence over anything	7. The ESO has numerous contracts with parties to provide commercial services, including non-CUSC parties. These contracts are subject to licence condition C16 and the standard contract terms. These parties provide services based upon the obligations of the contract irrespective of the state of the system. Therefore, these parties cannot be bound by the specific obligations under only emergency conditions for which they could be exposed to higher costs and/or asked to provide services which they are not able to offer. 8. This issue was raised and discussed at the GC0127/0128 Grid Code working group. ESO have taken these points forward and the conclusion agreed with the National Regulatory Authority is that the current GB legislation is sufficiently robust, and no changes are required.

in the national regulatory framework.

6. In addition, this discriminates in its proposed approach of setting out that system defence service providers and system restoration service providers, including by aggregation, can only be CUSC parties (whilst noting that the discussions at November's JESG meeting identified that there is a major flaw in the TSO's proposal here as there are two types of CUSC party – those with and those without TEC. Those without TEC are growing in number as smaller parties connect to the whole system).

7. Evidence from the 9th August 2019 event, as set out in the TSO's Interim and Final Reports, clearly demonstrate that the TSO did utilised non-CUSC parties to provide system defence services, including by aggregation, to the TSO at that time. The failure to recognise that non CUSC parties can provide both system defence services and system restoration service providers means that the proposed approach, with the SGU list, is:
   (i) discriminatory;
   (ii) none compliant with the requirements,

9. The test plan is directly related to the System Defence and Restoration Plans. As part of these plans and as noted above (5.) Appendix A of the System Defence and Restoration Plans only apply to CUSC parties. As part of GC0127/GC128 Grid Code changes, an alternative (WAGM1) was raised to open the scope of non-CUSC parties.
10. The ESO were instructed by the National Regulatory Authority as follows in their letter dated 18 December 2014 "Ofgem's guiding principles in determining how to ensure compliance with European Regulations is that: • We will only make changes where needed; and • Where changes are needed to implement part of a European Regulation, we will make only those changes necessary to the relevant industry document to ensure compliance with the European codes and guidelines"

11. The reference made within the Terms and Condition letter to "Grid Code shall take precedence" relates to the Terms and Conditions document and the Grid Code.

    We agree that the EU Code takes legal precedent over the GB Code.

within the ERNC, on the TSO;

(iii) hinders competition in the provision of system defence services and system restoration service, including by aggregation, in GB; and

(iv) as identified by the Commission, this leads to less cost-efficient operation of the power system, and consequently to a 7% increase of its total cost (which are ultimately paid for by consumers).

8. We are concerned that the list of High Priority SGUs does not include demand sites listed, in accordance with ESEC, as being protected from rota disconnection measures. These sites are considered critical for the provision of national activities (such as air traffic control, key hospitals etc., etc.,) and in our view should be included on the list of High Priority SGUs. There non-inclusion does open up the TSO and DSOs to possible legal risks if they do, in fact, then prioritise those sites, in terms of disconnection or

reconnection, in the event of an incident.

9. The proposed Test Plan, according to paragraph 3, only applies to CUSC Parties. However, ERNC Article 2 sets out that the scope extends to non-CUSC parties; as we have explored in our answer to Question 1 above. Evidence from the 9th August 2019 system defence event; as set out in the TSO's Interim and Final Reports; clearly show that the TSO did utilised non-CUSC parties to provide system defence services to the TSO on that day.

10. Yet again the TSO has applied an arbitrary 'principle' which it then seeks to cajole (via, for example, the asking of this question) stakeholders into accepting.
To be clear, this 'principle' is a construct of the TSO alone.
The NRA (Ofgem) tasked the TSO, in the 18th December 2014 letter, with undertaking the 'necessary' changes – the word 'minimum' does not appear in that NRA letter, which the TSO harks back to.
In our view this November 2019 proposal is not consistent with ensuring the necessary changes;

		required in order to fully and correctly reflect the ER NC obligations within the national regulatory framework; are achieved. The TSO has, for example, failed: (a) to produce the terms and conditions to act as defence service providers or as restoration service providers, including by aggregation, in GB on a contractual basis, according to ERNC Article 4(2) (a)-(b); (b) to comply with the ERNC requirement, in Articles 12 (3)-(4) and 24 (3)-(4), for the TSO to notify SGUs by December 2018 (as of December 2019 GB SGUs still await this notification); and (c) to produce a list of SGUs, according to ERNC Articles 11(4) (c) and 23(4) (c). There is no 'principle of minimum necessary change' set out in the national regulatory framework or EU law.
	11.	The Terms and Conditions letter from the TSO dated 18th November 2019, states, at the top of page 2, that "Where there is any conflict between this document and the Grid Code, the Grid Code shall take precedence." This, in our view, is legally incorrect. The European law takes precedence over anything

	in the (national) Grid Code. The TSO are to set out what the terms and conditions for the provision of system defence services and system restoration services, including by aggregation, is in GB in its proposal – which the NRA will approve. Any inconsistence or conflict between those terms and conditions and anything in the Grid Code means that those terms and conditions (and not the Grid Code) takes precedence.	

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