

Code Administrator Meeting Summary

GC0148: Implementation of EU Emergency and Restoration Code Phase II

Date: 5 July 2021 (Workgroup 2)

Contact Details

Chair: Ian Ascroft, National Grid ESO Ian.Ascroft@nationalgrideso.com / 07929 654061

Proposer: Antony Johnson, National Grid ESO Antony.Johnson@nationalgrideso.com / 07966 734856

Key areas of discussion

The Workgroup discussions are summarised according to the agenda items:

Introductions and meeting objectives

- Ian Ascroft explained that he is now Chairing the Workgroup and Shazia Akhtar will be acting as the Technical Secretary.
- Ian Ascroft carried out introductions and noted that Chris Statham will be the Ofgem representative and Julie Richmond will be the new Scottish Power Renewables representative on the Workgroup going forwards.

Actions from the Previous Meeting

- The Workgroup were content with the responses to actions 2, 3, 5, 9, 10, 12 and 13 that had been circulated within the papers for this workgroup. They noted that action 6 had been covered off within the introductions and agreed that all these actions could now be closed. Actions 1, 4, 7, 8 and 11 remain open.

Thresholds of Small, Medium and Large Power Stations against Type A, B, C and D Power Generating Modules

- It was highlighted that the concept of Small, Medium and Large Power Stations used within GB still exists and defines the Connection Process and Charging arrangements. Changes to these arrangements are currently being addressed through Grid Code Modification GC0117.
- The Workgroup reviewed the thresholds and it was noted that technical requirements are based on whether the Power Generating Modules forming part of that Power Station will be a Type A, B, C or D and not if they are part of a Small, Medium or Large Power Station. A Power Station can be made up of any combination of a Type A, B, C or D Power Generating Modules.

Articles falling into Phase II of E&R Code:

Articles 15(5) - 15(9) – Low Frequency Demand Disconnection (LFDD)

- There was discussion on how the LFDD scheme worked and how it was quicker to get the system back up and running from this position, then a total black out state where they would need to evoke Black Start.
- It was noted that the LFDD Scheme did not currently differentiate between generation and demand and that there was a lot of embedded generation sitting behind an LFD disconnection relay. In a low frequency event if they were to trip demand off, they could end up taking embedded generation off as well, which would only compound the problem.

- There were discussions on whether they could move the position of the LFDD relays, have time delays for tripping generation off or look at how LFDD relays are mandated at the point of connection. But these changes would have a significant cost and time delay associated with it, which would make it a challenge to meet the December 2022 implementation date under E&R timeframes. This may require a long-term scheme change instead.
- It was highlighted that the E3C and the Energy Task Force are also currently looking at long term solutions to this problem.
- The Workgroup concluded that Articles 15.5 and 15.6 appeared to be linked to Article 15.7, so they require a constraint in the Grid Code to state try not to disconnect any demand groups known to have large generators; to “minimise disconnection of power generating modules, especially those providing inertia”, as far as reasonably practical with the equipment already available for disconnection. If the DSO cannot fulfil the requirements of “minimise”, then under the last paragraph of 15.7 they will then notify the TSO, who can then in conjunction with the DSO establish the applicable requirements based on a joint cost benefit analysis approach. This will allow them to meet the December 2022 implementation deadline and allow for a more long-term scheme change to come out of the E3C work.
- There were concerns on whether National Grid had to agree to any changes to LFDD’s submitted in WK 24 data or if they were agreed by default if National Grid do not respond within a particular timeframe.
- There was discussion around whether the LFDD schemes should be defined against the total load at national level rather than the 3 transmission license areas, and they should get rid of the different thresholds for different transmission areas. It was noted that if they normalized the approach this would mean a substantial change for Scottish TO’s /DNO’s and the demand in Scotland was 10% of what it is in England and Wales. They may also struggle to meet the percentage demand without tripping off a lot of the renewable generation in Scotland. The current system reflects 50% demand loss in each transmission license areas.

Articles 41:

- It was highlighted that there was already a good standard of communication facilities, and resilience in place for parties who used Control Telephony, but not for those parties who used System Telephony, which would need to be addressed.

Articles 42 (1), (2) and (5):

- It was noted that these articles referred to making critical tools and facilities available, with reference to Article 24 of the System Operation Guidelines (SOGL).
- It was highlighted there may be some confidentiality issues with sharing of certain types of data.
- There was discussion around what back up facilities DNO substations currently had, and what obligations were currently imposed on them via the Grid Code and Electrical Standards to have this resilience. It was highlighted there may be an issue with Electrical Standards not being retrospective and the only standards that would apply would be the ones at the point of connection. The Workgroup questioned whether the ESO needed to re-visit existing bilateral agreements to make sure they are changed to reflect the current version of the Electrical Standards.
- There was discussion around Article 24 (2) SOGL allowing them to be selective on the level of resilience required depending on which service is being provided.
- Updates would be required to the Tele-Communication and Telephony Standards, System Defense Plan and the System Restoration Plan. Mapping tables would also be needed to illustrate how each EU obligation had been discharged.

Related Articles Art 50, 48(3) and 15(9):

- It was noted that these articles related to Articles 15(5) – 15(8), 41, 42(1), (2) and (5) and will require some attention as part of this modification.
- There was already a draft test plan for testing Inter TSO communication facilities, which needed to be updated.

Questions for the Workgroup:

- Slides will be presented at the next Workgroup to explain the Proposer’s thoughts on storage to transition from import to export during low system frequency. Taking into consideration the work already done in the D-Code, consistency with GC0096 and the EU Storage Expert Group.
- There were discussions around the issues surrounding smaller (non CUSC parties) parties and how they could fall under the E&R framework. This could be done under:
 - a) GC0117, but it only relates to generation, or

- b) If anyone has got a contract with a restoration service provider that is not a CUSC party, then as part of the terms and conditions of that contract they would have to meet the applicable requirements of the Grid Code which would bind them into E&R, or
- c) The Distribution Code pulls in the appropriate requirements, but this would be a lot of work.

Next Steps:

- It was agreed that the next Workgroup would be held on Wednesday 18th August 2021.

AOB:

- There were concerns raised around the distribution list for the GC0117 questionnaire and retrospective E&R costs of becoming large.

The following new actions were noted:

Actions Log

Number	Action	Owner	Status
1	Terms of Reference - Make sure Distribution Objectives are covered in section two and re-circulated to the Workgroup for a final review.	Ian Ascroft/Shazia Akhtar	Open
14	Update text for GC0127 WAGCM2 (Storage) - to reflect the latest thinking and ensure consistency with the Distribution Code. This will then be discussed and reviewed by the Workgroup.	Antony Johnson	Open
15	Provide a presentation on Distribution Re-start, what it is, how it works, the proposed solution and their thinking behind this including the legal text. Make sure workgroup members have adequate time to debate and comment on this.	Antony Johnson	Open
16	Circulate Energy Task Force power point presentation on LFDD.	Mark Dunk	Open
17	Contact legal to check a) Linkage between Articles 15.5, 15.6 and 15.7; b) Proposed one line of legal text; and c) If legal are comfortable with the Workgroups approach on this and the long-term work that is being done under E3C.	Antony Johnson	Open
18	Contact Sean Sullivan to see if he can attend the next Workgroup, to give them an update on the E3C work and if they are explicitly picking up the requirements from the E&R Code. What are their plans for the future and the timelines involved.	Antony Johnson	Open
19	Check if National Grid (NG) have a requirement to look at/respond to LFDD modification requests sent via WK 24 submissions. Do these need to be agreed or are they agreed by default if NG do not respond within a particular timeframe.	Alan Creighton	Open
20	Review clauses in Article 41 and confirm if they have been covered off, or if more work needs to be done on them.	Antony Johnson	Open
21	Update the Telecommunication Standard and the Control Telephony Standard.	Antony Johnson	Open
22	Check resilience times in between versions of the communication standards with Mark Bingham & Confirm if the ESO needs to re-visit old bilateral agreements to make sure they reflect the current version of the electrical standards.	Antony Johnson	Open

23	Review and update System Defense Plan & System Restoration Plan (including requirements under SOGL)	Antony Johnson	Open
24	Develop a mapping table to show how the relevant clauses are mapped into GB Code.	Antony Johnson	Open
25	Make sure the draft test plan is up to date.	Antony Johnson	Open
26	Prepare slides on storage, taking into consideration work done in the D-Code and ensure consistency with GC0096 and the EU Storage Expert Group.	Antony Johnson	Open
27	GC0117 Questionnaire - Highlight concerns raised by GC0148 Workgroup to Code Admin Chair Nisar Ahmed	Ian Ascroft/Shazia Akhtar	Open

Participants

Attendees	Company	Position
Ian Ascroft	Code Administrator National Grid ESO	Chair
Shazia Akhtar	Code Administrator National Grid ESO	Technical Secretary
Antony Johnson	National Grid ESO	Proposer & Workgroup Member
Mark Dunk	Energy Networks Association	Workgroup Member
Graeme Vincent	SP Energy Networks	Workgroup Member
Paul Crolla	Muirhall Energy Limited	Workgroup Member
Alan Creighton	Northern Powergrid	Workgroup Member
Stephanie Hay	TNEI Services Ltd	Workgroup Member
Andrew Colley	SSE Generation	Workgroup Alternate
Julie Richmond	Scottish Power Renewables (UK) Limited	Workgroup Member
Alastair Frew	Drax	Workgroup Member
Mike Kay	P2 Analysis	Observer
Apologies	Company	Position
Matthew Cullen	E.ON UK	Workgroup Member
Richard Wilson	UK Power Networks	Workgroup Member
Ruth McKelvie	Scottish Power Renewables (UK) Limited	Workgroup Member
Garth Graham	SSE Generation	Workgroup Member
Camille Gilsenan	National Grid ESO	Observer
Laetitia Wamala	National Grid ESO	Observer
Banke John-Okwesa	National Grid ESO	Observer
Chris Statham	Ofgem	Observer

For further information, please contact the Code Administrator.