

Code Administrator Meeting Summary

Meeting Name: GC0155 Workgroup 2

Date: 07 June 2022

Contact Details

Chair: Banke John-Okwesa, National Grid ESO Banke.John-Okwesa@nationalgrideso.com

Proposer: Terry Baldwin, National Grid ESO Terry.Baldwin@nationalgrideso.com

Key areas of discussion

Review of timeline & meeting objectives

- The chair presented the revised timeline to the workgroup advising of an additional workgroup added to enable time to review the workgroup consultation document, no queries or objections of the timeline were raised by the workgroup.

Review of Actions log

- The Workgroup talked through each action in the order it had been logged. The Workgroup agreed to close actions **3 – 8**. Current open actions can be found in the Actions log. Discussions had around 2 actions are noted below:
- Re action 2 - On how the ESO define over voltage compliance following a fault, the Proposer confirmed that the current expectation is that systems will be designed in accordance to the definition in [TGN288](#). The NGESO Rep acknowledged that there is no requirement for compliance for over voltage in the Grid Code but that there is provision for compliance to outages. The Chair noted that there is a requirement in the Workgroup Terms of Reference to consider clarifying and or defining requirements for over-voltage during a fault.
 - Concerns were raised that TGN288 is not applicable or specific to generators and that the definition of 'overvoltage' needs to be fully documented in the Grid Code and that reference to TGN288 is not sufficient. The Proposer and NGESO Rep took an action to investigate the possibility of developing this requirement in the Grid Code and they will provide updates at the next meeting.

- There were mixed views as to whether the overvoltage requirement if considered within this modification, should apply retrospectively. Some Workgroup members suggested that this will raise an element of cost and needs to be considered in detail and decided by the NGESO.
- A workgroup member suggested having a single standard definition applicable across GB and the NGESO can explore standards from other countries to minimise potential cost implications and delays. An example from the USA was provided, accessible via this [link](#).
- Re action 3 – to consider removing undervoltage requirement from the proposal: The Proposer confirmed that this will loop into the above to be considered further.
- The Proposer advised that they have no view of ENTSO–E document but, once published the NGESO will review it.

Recap of modification requirements

- The proposer gave a brief recap of modification requirements. A workgroup member suggested that further consideration is needed re active power requirement.
- Concerns were raised around lack of clarity in a multiple FRTs scenario and how many events are classed as non-compliant. It was noted that this had occurred in Australia. The Proposer advised that this is highly unlikely to occur in GB and was not within the scope of this modification. A workgroup member suggested that it should be documented within the workgroup report that this issue was raised and discussed within the Workgroup.

Updates on draft legal text amendments

AF presented his updates from actions 1, 5 and 6 and noted the following:

- Re action 1: to remove diagram within the legal text and replace this with text within CC.6.3.15.1(a), no objections to this amendment from the Workgroup.
- Re Action 5: replacing 'maximum' to 'proportionate' to mitigate misunderstanding that maximum is required rather than proportionate to the severity of the voltage dip.
- AF provided the current Grid Code on overvoltage requirements as per action 6 from the previous workgroup meeting, this was for information only.

Presentation of Strawman for High Voltage Ride Through (HVRT) Requirement

- FN who has now replaced DJ delivered a strawman presentation on HVRT requirement. It was suggested that this requires further consideration. The Proposer and NGESO Rep will review this internally and come back with some feedback. It was noted that Workgroup members may explore other options share any findings offline or at the next meeting.

Draft Workgroup consultation questions

- No specific questions were raised within this workgroup meeting.

Review and agree Terms of Reference

- A review of the update for the Terms of Reference was completed by the Chair with an agreement that the minor changes as per action 8 from previous workgroup meeting will be adopted.

ESO presentation

- Tony Johnson (TJ) from NGESO talked through the housekeeping modification required for FRT studies (part of GC0155). TJ asked that the Workgroup members review the legal text and provide feedback or comments.

Next steps

- The Chair confirmed that the next Workgroup will be held on 05 July 2022.
- It was suggested that the timeline for this modification will need to be extended due to the additional work required by the NGESO to investigate the possibility of clarifying and defining requirements for over-voltage during a fault.
- The Code admin will request a month extension from the Grid Code Panel and once approved will update the timeline and send out an additional meeting invite to give the Workgroup adequate time to assess additional requirements and review the legal text before the Workgroup consultation.

The following actions were noted:

Actions Log

Action Number	Workgroup raised	Owner	Action	Comment	Due by	Status
3	WG1	TB	Find out how ESO define Overvoltage compliance following a fault / consider undervoltage aspects	Remained open to gain further information	WG2	Open
9	WG2	BA/TB	To review the Grid Code currently states on multiple fault ride through and the compliance associated to this.		WG3	Open
10	WG2	AF	To confirm offline with BA the detail in active power requirements figure 8		WG3	Open
11	WG2	BA/TB	A follow-on action from the Strawman presentation for NGESO to now analyse the requirements and to refine solution		WG3	Open
12	WG2	BJO	For code admin to review and update the modification timeline and add in an additional workgroup meeting and take to panel for agreement		WG3	Open
13	WG2	All	To provide Tony Johnson with any comments on the housekeeping amendments being made to the Grid Code as part of GC0155		WG3	Open

Participants

Attendees	Initials	Company	Position
Banke John-Okwesa	BJO	Code Administrator National Grid ESO	Chair
Ruth Roberts	RR	Code Administrator National Grid ESO	Technical Secretary
Terry Baldwin	TB	National Grid ESO	Proposer & Workgroup Member
Alan Creighton	AC	Northern Powergrid	Workgroup Member
Alan Mason	AM	Oceanwinds	Workgroup Member
Alastair Frew	AF	Drax Power Station	Workgroup Member
Andrew Larkins	AL	Syngensys	Workgroup Member
Andy Vaudin	AV	EDF	Workgroup Member
Bieshoy Awad	BA	NGESO	NGESO rep
Frank Martin	FM	Siemens	Workgroup Member
Fraser Norris	FN	SSE	Workgroup Member
Garth Graham	GG	SSE	Workgroup Member
Isaac Gutierrez	IG	Scottish Power	Workgroup Member
Priyanka Mohapatra	PM	Scottish Power	Workgroup Member
Martin Aten	MA	Uniper	Workgroup Member
Nicola Barberis Negra	NBN	Orsted	Workgroup Member
Tim Ellingham	TE	RWE	Workgroup Member
Sridhar Sahukari	SS	Orsted	Workgroup Member
Fiona Williams	FW	NGESO	NGESO rep & Observer
Julie Richmond	JR	Scottish Power	Observer
Mike Kay	MK	Independent	Observer
Owen Curran	OC	Siemens	Observer
Xiaoyao Zhou	XZ	NGESO	Observer

For further information, please contact Banke John-Okwesa.