

# Code Administrator Meeting Summary

## Meeting name: GC0155 Clarification of Fault Ride Through Technical Requirements - Workgroup Meeting 17

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Date: 12/07/2024

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### Contact Details

Chair: Teri Puddefoot, National Grid ESO ([terri.puddefoot@nationalgrideso.com](mailto:terri.puddefoot@nationalgrideso.com))

Proposer: Bieshoy Awad, National Grid ESO ([bieshoy.awad@nationalgrideso.com](mailto:bieshoy.awad@nationalgrideso.com))

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## Key areas of discussion

TP introduced herself as the new Chair and SA as the new Technical Secretary. The Chair welcomed attendees to the Workgroup and outlined the objectives for the meeting:

- To review the Action Log for any updates
- To review the draft Workgroup Consultation document and Legal Text.
- To review the timeline.

### Review of the Action Log

- Actions 39, 56 and 62 - Work is ongoing, further updates will be provided at the next Workgroup.
- Actions 45 and 47 - The Chair agreed to provide further clarity on exactly what these actions were.
- Actions 49, 61, 65 and 66 – Workgroup members to make sure their views are documented within the draft Workgroup Consultation document, ahead of the next Workgroup.
- Actions 51, 58 and 60 - The Workgroup agreed to close these actions.
- Action 63 – This amendment has now been reviewed by the Workgroup; it is therefore proposed that this action is closed in the next Workgroup.
- Action 64 - No update was provided.

### Review of the draft Workgroup Consultation document and Legal Text

- The Proposer went through any amendments, clarifications and deletions that had been made to the Proposers solution within the draft Workgroup Consultation document and Legal Text.
- The Proposer highlighted that the Workgroup still needed to agree the temporary overvoltage levels upon which a Generator would be relieved from their obligation to

ride through a fault and would be allowed to trip. As well as agreeing where this should sit within the Legal Text.

- The Workgroup raised several concerns in regard to the ability to comply, the cost implications and retrospectivity of the new requirement to progressively absorb reactive current in proportion to the voltage excursion without exceeding the transient rating limit under section CC.6.3.15.1 (a) (ii). The Proposer explained that parties adversely affected would need to discuss this with the ESO, to see if any mitigating measures can be put in place. Such as an exclusion clause in their bilateral agreement stating that during high voltage conditions, they will not be required to absorb reactive current.
- The Workgroup disagreed with the Proposers view of the Earth Fault Factor and felt that it was a defined term within the Grid Code which only related to phase to earth voltage and made no reference to phase to phase voltage. The Workgroup argued that this meant it had no relevance to fault ride through considerations of phase to phase voltage. The Proposer felt that this did not mean it could not be interpreted in this way and not everything was documented within the Grid Code.
- The Workgroup disagreed with the Proposers view that the European Connection Conditions ECC.6.3.16.1.6 and ECC.6.3.16.1.8 were technical requirements which related to fault ride through. The Workgroup felt that these conditions only stated that Users will not contribute to an overvoltage.

Review of the Timeline

- The Proposer felt that a further 4/5 Workgroups may be needed before the Workgroup Consultation and that the current timeline would need to be extended.

**Next Steps**

- *All Workgroup members to review and update the Draft Workgroup Consultation report to ensure their views are captured.*
- *BA to ensure that the legal text is removed from the Consultation Document, tidied up and placed on the baseline.*
- *All Workgroup members to prepare any draft Workgroup Consultation questions that they would like to add to the report.*
- *Timeline to be adjusted and shared with the Workgroup.*
- *The next Workgroup meeting will be held on the 20 September 2024.*

**Actions**

Action number	Workgroup Raised	Owner	Action	Comment	Due by	Status
39	WG8	BA	Discuss CC.6.1.11 with TOs and manufactures and feedback to WG with strawman	A number of meetings have been held, but there is nothing to report back to the WG as yet.	WG9	Ongoing

45	WG10	Ofgem	Check with Legal if CRM should be put in place if applying retrospectively	TP to provide further clarity on exactly what this action was.	WG11	Open
47	WG11	SS	Come back with feedback on action 43	TP to provide further clarity on exactly what this action was.	Early August 2023	Open
49	WG12	All	Consider TOV graph, what palatable limits might be	There are 2 sets of limits one proposed by the Proposer and the other as an alternative by the WG. WG members to provide justification on why they cannot operate on the limits proposed by the Proposer and why their alternative is better.	WG13	Open
51	WG12	BA	Share the results of the effects with a lower voltage	BA confirmed that this action was more about clarifying the requirements for connections that connect at voltages below transmission level. The WG agreed to close the action.	WG13	Closed
56	WG14	BA	Proposer to trace discussions on issues with fault ride through requirements from GC0111 and GC0137	BA has not found anything yet within GC0111 & GC0137 that explains the narrative for GC0155 but will continue to check them.	WG 15	Open
58	WG14	BA	Review section for performing during overvoltages, checking for any missing baseline legal text in these sections, conferring with Workgroup members and reviewing the clause reference at the base of page 11.	BA confirmed that this has been completed and incorporated into the WG consultation document. The WG agreed to close the action.	WG 15	Closed
60	WG15	BA	Create the BCA exception clause to put into text	BA confirmed that this has been completed and incorporated into the WG consultation document.	WG 16	Closed
61	WG15	All	Workgroup members to provide feedback on why BCA doesn't work and how they feel they can better comply	To be provided during WG discussions & documented within the WG consultation document.	WG 16	Open
62	WG16	AP	Draft legal text wording for Max Reactive Current and share with the WG	Should be ready by WG 18.	WG 17	Open
63	WG16	BA	Review formatting of text	This has been amended and was reviewed by the WG when they looked at the draft consultation document in WG 17.	WG 17	Open – Propose to close in next WG.

64	WG16	BA	Review text for ECC.6.3.15.8 and consider non-compliance issues	No update given.	WG 17 Open
65	WG16	All	Provide challenge and provide feedback on risks re Operation During Temporary Overvoltages section	To be provided during WG discussions & documented within the WG consultation document.	WG 17 Open
66	WG16	All	Provide feedback on the Issues with the current requirements and validate that these points are correct.	To be provided during WG discussions & documented within the WG consultation document.	WG 17 Open

### Attendees

Name	Initial	Company	Role
Teri Puddefoot	TP	Code Administrator, ESO	Chair
Shazia Akhtar	SA	Code Administrator, ESO	Tech Sec
Bieshoy Awad	BA	ESO	Proposer
David Halford	DH	ESO	Workgroup Member
Afshin Pashaei	AP	NGET	Workgroup Member
Alastair Frew	AF	Drax Power Station	Workgroup Member
Isaac Gutierrez	IG	Scottish Power	Workgroup Member
Julie Richmond	JR	Scottish Power	Workgroup Member Alternate
Martin Aten	MA	Uniper	Workgroup Member Alternate
Nicola Barberis Negra	NN	Orsted	Workgroup Member
Owen Curran	OC	Siemens	Workgroup Member
Tim Ellingham	TE	RWE	Workgroup Member
Andrew Larkins	AL	Sygensys	Observer
Fiona Williams	FW	ESO	Observer
Harry Burns	HB	EDF	Observer
Mike Kay	MK	Independent	Observer
Mzamoyabo Sibanda	MS	SSE Renewables	Observer
Nathanael Sims	NS	ESO	Observer
Vincenc Casadevall	VS	GE Renewable Energy	Observer
Shilen Shah	SS	Ofgem	Ofgem Representative