

GC0155 Clarification of Fault Ride Through Technical Requirements

20 September 2024

Online Meeting via Teams

WELCOME



Expectations of a Workgroup Member

Contribute to the discussion

Be respectful of each other's opinions

Language and Conduct to be consistent with the values of equality and diversity

Do not share commercially sensitive information

Be prepared - Review Papers and Reports ahead of meetings

Complete actions in a timely manner

Keep to agreed scope

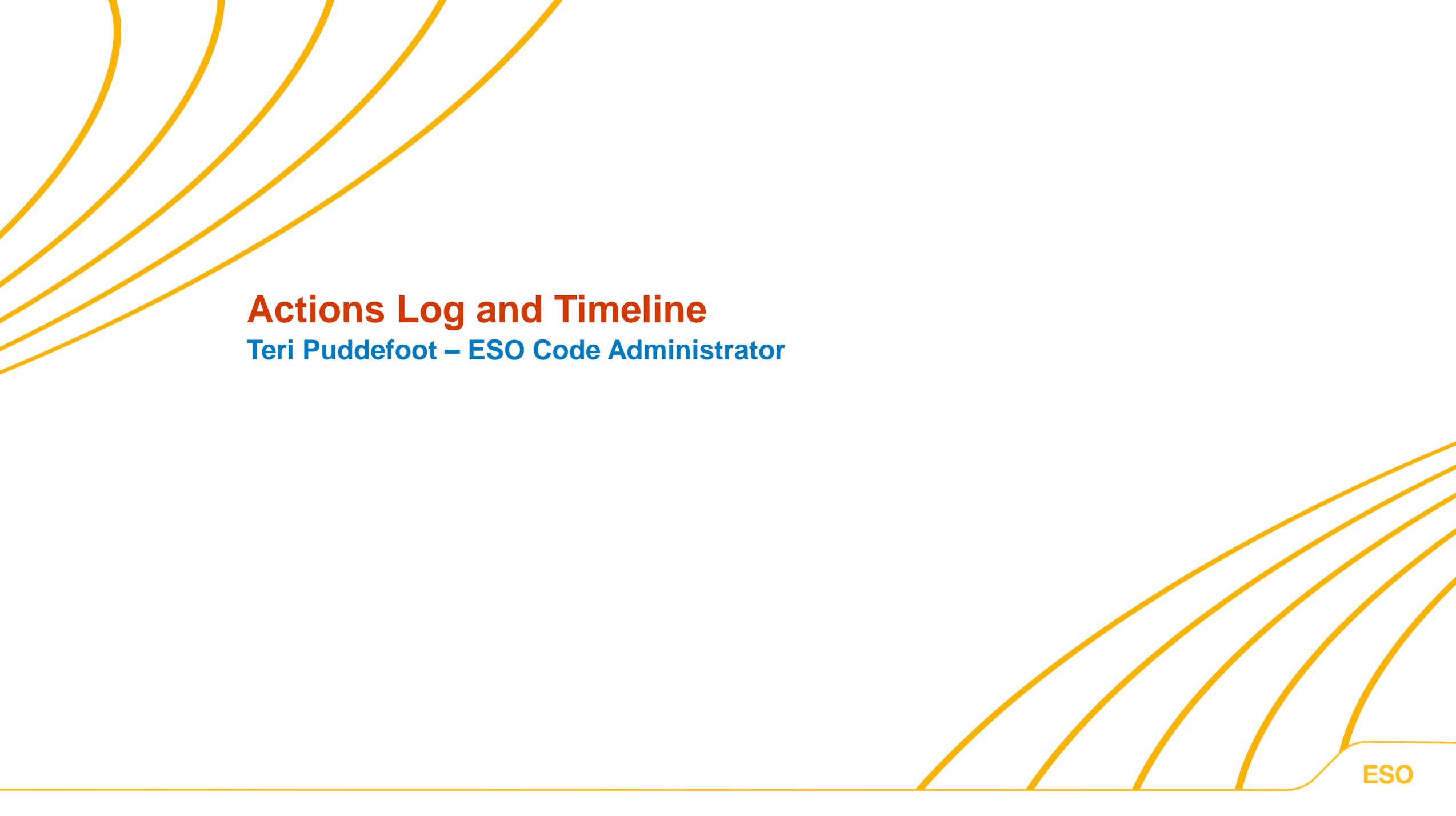
Your Roles

Help refine/develop the solution(s)

Bring forward alternatives as early as possible

Vote on whether or not to proceed with requests for Alternatives

Vote on whether the solution(s) better facilitate the Code Objectives

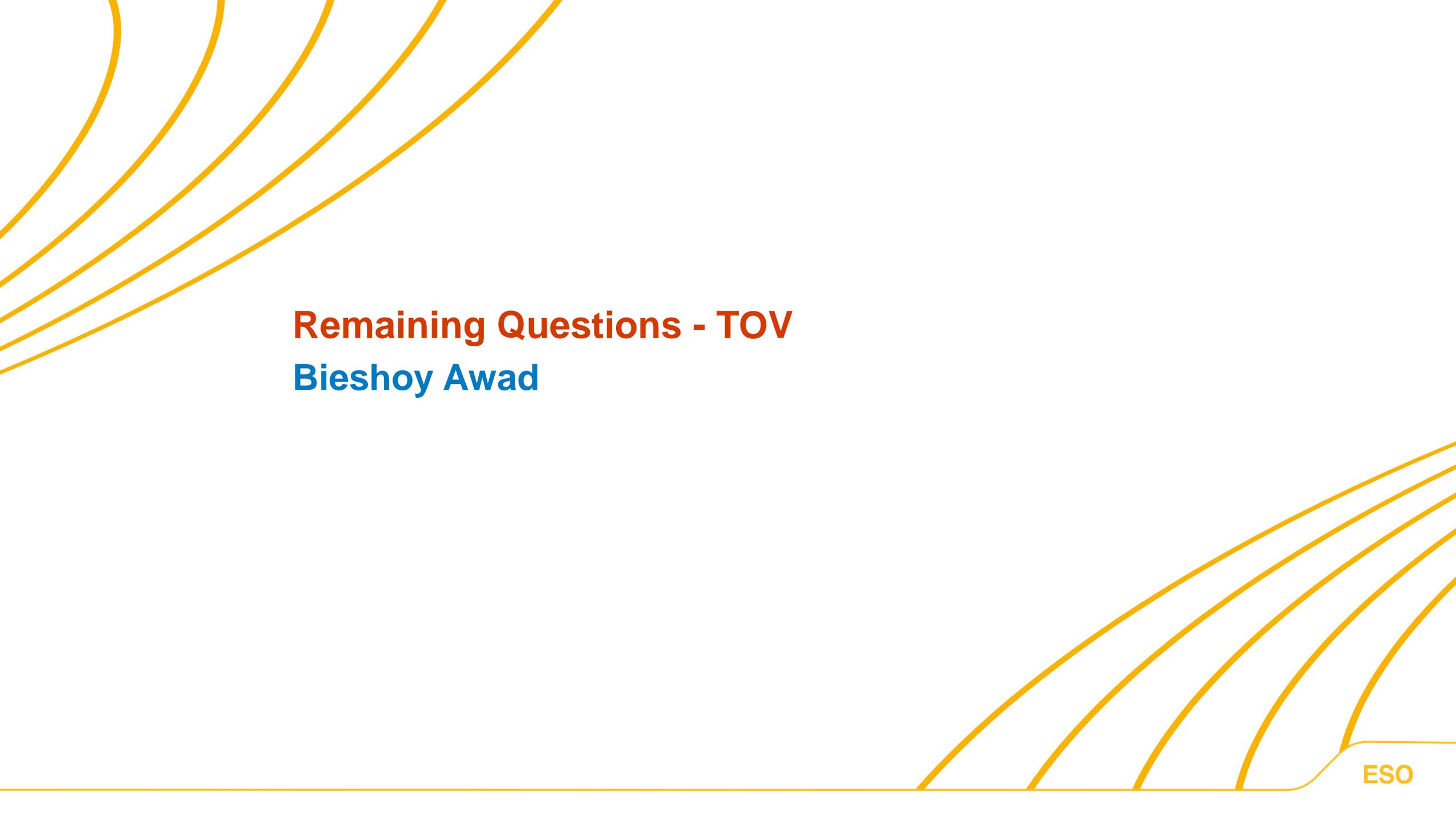


Actions Log and Timeline

Teri Puddefoot – ESO Code Administrator

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	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 (ML Contact Ofgem Rep to gain Legal view)	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	<p>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 can not operate on the limits proposed by the Proposer and why their alternative is better.</p> <p>Nicola confrimed that this was completed on 30/10/23, when they provided text for WAGCM1 to be added to the WG report along with the legal text and possible WG consultation questions.</p> <p>Does this need updaing to align with the current proposal?</p>	WG13	Open
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	Ongoing
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 (ECC 6.3.15.9.2.1 (a) (iii) onwards) to make easier to read	This has been amended and can be reviewed by the WG when they look at the draft consultation document.	WG 17	Open
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



Remaining Questions - TOV
Bieshoy Awad



GC0155 – TOV Management

WG 18 - 20.09.2024

GC155 – Overview of Original Proposal and current Alternatives

1. Original Proposal:

Addresses clarifications: Mostly agreed

Includes a proposal to address TOV: Need further development – still subject to significant challenge

Minor clarification on compliance studies for line-to-line fault: Discussed previously but not included yet

2. Generators' Alternative (WAGCM1):

Addresses clarifications: Not aligned with original proposal

Includes a proposal to address TOV: Not fully discussed – still subject to significant challenge

3. NGENSO's Alternative (WAGCM2):

Addresses clarifications: Mostly agreed

Includes a proposal to remove TOV requirements which would be resolved via a separate modification.

GC155 – TOV Requirements

Where should the TOV requirements sit?

Option 1:

Under CC.6.1/ECC.6.1 – proposal refers to CC.6.1.7/ECC.6.1.7 with a reference in the fault ride through section.

Option 2:

Under the fault ride through section – Generators alternative covers this.

Issues to consider

- Risks for TOs
- Risks for the ESO
- Risks for Generators
- Risks for Consumers

GC155 – TOV Requirements

What is the magnitude and duration allowed for TOV?

Option 1: TGN288 figures.

Option 2: RfG-2 figures.

Option 3: Other levels to be considered.

Issues to consider

- Investment costs
- Equipment capability
- Costs of potential retrofitting of existing plant

GC155 – TOV Requirements

Which plants are captured by the requirements

Option 1:

All plant required to ride through the maximum TOV permitted under the Grid Code and to demonstrate compliance at that level.

Option 2 – Covered by Generators' alternative:

All plant connected after an agreed date required to ride through the maximum TOV permitted under the Grid Code and to demonstrate compliance at that level. Plant connected ahead of that date not required to remain connected.

Option 3 – Covered by the original proposal – in development:

All plant connected after an agreed date required to ride through the maximum TOV permitted under the Grid Code and to demonstrate compliance at that level. Plant connected ahead of that date required to ride through the maximum TOV they could encounter up to the maximum TOV permitted.

GC155 – TOV Requirements

Which plant is captured by the requirements

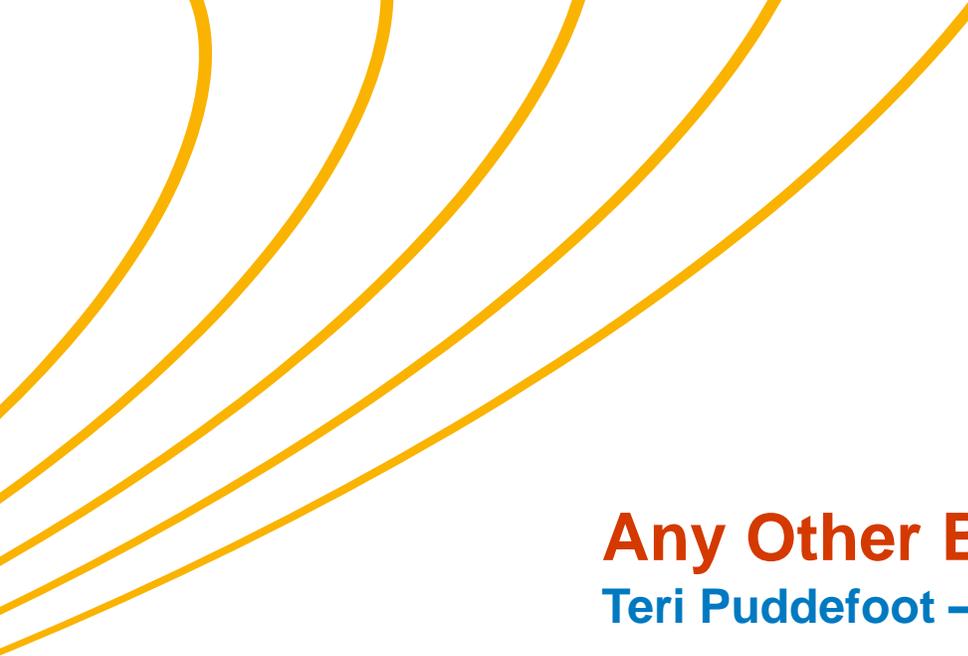
Issues to consider:

- Potential need for a cost recovery mechanism – if Ofgem is happy with this principle
- Clarity (option 1) vs potential deferral of investment (option 3)
- Risks to ESO/Consumers (option 2)
- Process for identifying the need for retrofitting
 - What could be done with minimal expenditure
 - Proactive vs reactive approaches
 - Need for TO input throughout the process





Workgroup Consultation
Teri Puddefoot



Any Other Business

Teri Puddefoot – ESO Code Administrator



Next Steps

Teri Puddefoot – ESO Code Administrator