

# Joint European Stakeholder Group



Tuesday 14 May 2019  
Meeting 41

# Agenda

ID	Title	Lead	Time
1.	<b>Welcome &amp; Introductions</b>	Chair	11:00 - 11:05
2.	<b>Electricity System Operator Update:</b> Emergency and Restoration	Susan Mwape	11:05 – 11:25
3	<b>BREXIT</b> An opportunity for stakeholder to ask questions around a No Deal	BEIS	11:25 – 12:00
3	<b>Ofgem Update</b> Implementing EBGL into GB	Leonardo Costa	12:00 – 12:20
3.	<b>Review of Actions log</b>	Matthew Bent (JESG Technical Secretary)	12:20 - 12:30
4.	<b>Future Meeting Dates &amp; Agenda Items</b>	Matthew Bent (JESG Technical Secretary)	12:30 - 12:35
5.	<b>Stakeholder Representation</b>	Chair	12:35 - 12:45
6.	<b>Any Other Business</b>	All	12:45 - 13:00

# 1. Welcome & Introductions

Barbara Vest

Independent Chair

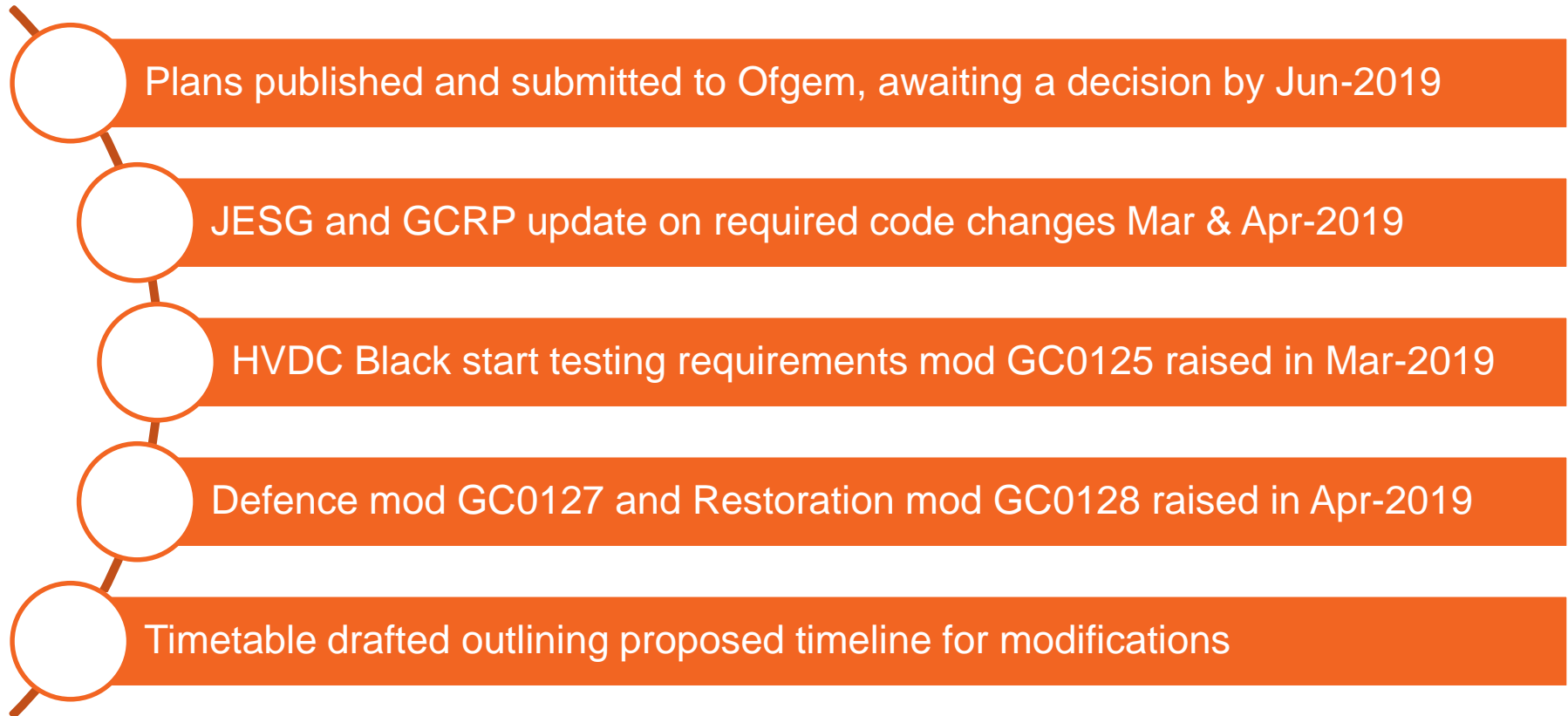
## **2. National Grid Update**

# Emergency and Restoration GB implementation

Susan Mwape



# E&R implementation- what's happened?



# EU Code SGU Criteria

Existing and new Type B, C or D power generating modules	<ul style="list-style-type: none"><li>• In accordance with Article 5 of RfG</li><li>• Only SGUs with mandatory GB code obligations</li></ul>
Transmission connected demand facilities	<ul style="list-style-type: none"><li>• Existing and new facilities providing services to the TSO</li></ul>
All transmission connected closed distribution systems	<ul style="list-style-type: none"><li>• Existing and new facilities providing services to the TSO</li></ul>
Aggregators	<ul style="list-style-type: none"><li>• Demand facilities by means of aggregation and providers of active power reserve in accordance with Title 8 of Part IV of SOGL</li></ul>
Existing and new HVDC	<ul style="list-style-type: none"><li>• In accordance with NC HVDC where existing HVDC only comply with articles 26, 31, 33 and 50 unless they undergo substantial modification</li></ul>

## SGUs responsible for implementing Defence measures

Defence measure	Responsible SGUs
<b>Reduction in active power at frequencies above 50.5Hz</b>	Only for power stations with a frequency response contract
<b>Limited Frequency Sensitive Mode</b>	1) Existing synchronised Gensets and HVDC converters caught by BC3.5.2 and CC.6.3.3. 2) New synchronised Gensets and HVDC converters caught by BC3.5.2 and ECC.6.3.3.
<b>Requirement not to exacerbate frequency excursion when system frequency is &lt; 49.7Hz or &gt; 50.3 Hz</b>	Only for BM participants that are required to satisfy Grid Code BC2.5.4
<b>Reactive Power Instructions to generating units</b>	Only for power stations with a mandatory services agreement
<b>Emergency Instructions</b>	Only for BM participants required to satisfy Grid Code BC2.9

# Defence plan changes for Dec 2019 implementation

## 1. Automatic under frequency control for storage providers (art.15.3)

- Requirement on storage providers to switch from import to export at low frequencies before demand trips on LF (This requires further discussion)
  - Only applies to storage units that have contracts or mandatory code requirements
- Under GC0096 this requirement has not been included in the drafting. There is also the unintended consequence on the sudden change from import to export and different technologies will have different cycle times.

## 2. Compliance testing of demand facilities (art.45)

- DSR providers required to execute a demand modification test, after two consecutive unsuccessful responses in real operation or at least every year
  - Only applies to transmission connected demand facilities or if you have a contract with NGESO

## 3. Assistance for active power procedure (art.21.1b)

- Any SGU (not a balancing service provider) to make available all active power
  - No Grid Code changes but work needed with DNOs if D Code change is required.

# SGUs responsible for implementing Restoration measures

**Restoration Service Providers have contractual and codified obligations that they shall meet**

**Transmission connected SGUS that are required to comply with Grid Code BC2.9 on emergency Circumstances**

**Distribution connected SGUs that are required to comply with Distribution Code DOC9.4 on Black Start**

# Restoration plan changes

- **Activation of the re-energisation procedure (art.27(4))**
  - TSO to consult with DSOs on establishment and notification of the amount of netted demand to be reconnected on distribution networks.
- **Testing of communication systems (art.48)**
  - Annual test of communication system defined in Article 41 (required by 2022)
  - Test backup power supply of communication systems at least every 5 years

## Phase 2 code changes

NCER Requirements	Implementation date
Automatic under frequency control scheme (art.5 to 8)	18/12/2022
Communication systems (art.41)	18/12/2022
Resilience tools and facilities (art.42.1, 2 and 5)	18/12/2022
Compliance testing of low frequency demand disconnection relays (art.47)	18/12/2022
Testing and Communication Systems (art.48)	18/12/2022
Inter-TSO test plan for testing of communication systems (art.48)	18/12/2024

## E&R mod timeline

Black start mod GC0125	
Proposal to Grid Code Review Panel	20 Mar 2019
Initial consideration by workgroup	9 May 2019
WG Consultation	W/C 20 May 2019
Workgroup report presented to panel	19 Jul 2019
Code Admin Consultation report to industry	Late Jul 2019
Grid Code Review Panel Decision	Aug 2019
Submit Final Modification Report to Ofgem	Sep 2019
Ofgem decision	Oct\Nov 2019
Date of Implementation	Dec 2019

Restoration plan (GC0218) and Defence plan (GC0127)	
Proposal to GCRP	25 Apr 2019
Webinar	16 May 2019
Workgroup Meeting 1	29 May 2019
Workgroup Meeting 2	12/13 May 2019
Workgroup Consultation	W/C 24 Jun 2019
Workgroup report presented to panel	Aug 2019
Code Admin Consultation report to industry	Aug 2019
Grid Code Review Panel Decision	Sep 2019
Submit Final Modification Report to Ofgem	Oct 2019
Ofgem decision	November 2019
Date of Implementation	December 2019

# Links to documents

NCER plans and documents submitted to Ofgem on 18 Dec 2018:

<https://www.nationalgrideso.com/codes/european-network-codes?code-documents>

HVDC Black start testing GC0125, Defence plan GC0127 and Restoration plan GC0128 mods:

<https://www.nationalgrideso.com/codes/grid-code?mods>

Emergency and Restoration code:

[https://www.entsoe.eu/network\\_codes/er/](https://www.entsoe.eu/network_codes/er/)

# 3. BREXIT Update

BEIS

# **4. Implementing EBGL in GB**

Leonardo Costa – Ofgem

## 6. **Actions log**

Matthew Bent

JESG Technical Secretary

# JESG Standing items

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ID	Topic	Lead Party
S1	Continue to review the membership of the JESG and engage additional industry parties where appropriate.	JESG Chair
S2	Prepare a commentary / comparison document between the Network Code and the existing GB arrangements at appropriate stages in the Code development for each Network Code.	NGET / Ofgem / BEIS
S3	Share any intelligence about how other member states are approaching demonstrating compliance through information gained from other government departments, regulators or parent companies	BEIS / Ofgem / Industry parties with European parent companies

# JESG Open Actions

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ID	Topic	Lead Party	Status	Update
	No Current Open Actions			

# 7. Future Meeting Dates & Agenda Items

Matthew Bent

JESG Technical Secretary

# Future JESG Meetings

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- As always registration is required and will be opened through the JESG Weekly updates.
- Stakeholders are invited to put forward agenda items for the forthcoming JESG meetings:

Date	Proposed Agenda Items
Tuesday 11 June	
Tuesday 9 July	

# 8. Stakeholder Representation

All

## 9. AOB