

# Grid Code Review Panel



Grid Code Review Panel – 15 August 2018

# Welcome

# Introductions & apologies

---

## Code Governance changes:

- **Emma Hart** – new Grid Code Panel Secretary/Framework Officer for Grid Code modifications (Panel secretary today)
- **Matt Bent** – new Workgroup day Chair/Framework Officer for Grid Code modifications (Observer)
- **Rashpal GataAura** – new to team – Election process (Observer)
- **Chrissie Brown** – moving away from GC specific work (CA rep seat today)

## Apologies:

Alan Creighton

## Observers:

- Greg Heavens
- Susan Mwape (NGET 106 Proposer)
- Sigrid Bolik (Panel alternate)

# Approval of Panel Minutes

- 16 May 2018
- 28 June 2018
- 18 July 2018

# Actions Log

# Workgroup Reports

# GC0112

---

## GC0112 - National Grid Legal Separation Grid Code Changes to incorporate NGESO

- Modification raised at April 2018 GCRP
- Three workgroup meetings held to finalise the legal text for legal separation
- Workgroup Report highlights areas that were looked at in more detail
- Workgroup agreed their Terms of Reference met
- Implementation highlighted as a potential issue – action CA
- Workgroup unanimously agreed that the modification should be made as it better facilitates the Grid Code objectives

# GC0112

---

## GC0112 - National Grid Legal Separation Grid Code Changes to incorporate NGESO

### The Grid Code Panel is asked to:

- Agree that the Terms of Reference have been met and that the modification should proceed to being issued to Code Administrator Consultation
  - Code Administrator to place proposed GC0112 legal text amendments on top of new baseline to be implemented on Thursday 16 August (GC0115 and GC0116) ahead of issuing the CAC



# Authority Reports – Gurpal Singh, Ofgem

# Modifications Progress Update



# GC0106 update

---

Code Admin

---

15<sup>th</sup> August 2018

## Background

---

- Data exchange modification driven by Title II of SOGL Article 40 – 53
- In June GCRP instructed WG to workup assessment and impact of WACM2 for submission to panel in September and to Authority in October 2018 on proposer's assumption that legal text already exists.
  - WACM2 legal text assumed to exist, with only threshold to be determined
  - No legal text for WACM1 as it is a legal question but must allow time in the timeline in case Authority send it back requesting full legal text ahead of compliance deadline
  - Action to submit WG report and letter to Authority outlining panels decision as per GR21.5

# GC0106 Proposals

---

1. Original Proposal
  - Minimum necessary change and cost
  - Maintain existing GB frameworks
2. WACM1
  - Interpretation of SOGL Article 40.5
3. WACM2
  - Parity of data treatment for all Generators in GB
4. WACM3
  - Combination of WACM1 and WACM2

## WACM2 development options

---

- Draft full GC0106 WACM2 legal text
  - Maintain CUSC data requirements
  - Non CUSC parties provide data directly to DNOs
- Align GB data provision thresholds
  - E&W vs SPT vs SHET
  - Propose new thresholds for GB
- Submit WACM2 to CA and RTA without GC legal text
- Change Grid Code concept of large, medium and small through GC0117 (subject to agreement from proposer)

## Progress on WACM2

---

- Part G Code legal text developed, D Code implications yet to be considered
  - Real time data ECC.6.4.4 text circulated but data transfer mechanism need to be discussed and agreed
  - Structural data PC3.3 text circulated – but detailed consideration of DDRC v DRC not yet started
  - Scheduled data OC2 and BC1/2 changes are more complex and require consideration
- Challenges determining GB harmonised threshold
  - 10MW, 30MW, 100MW or new?
  - E&W approach results in lower implementation costs compared to Scotland
  - Impact on system operation
- Commonalities with GC0117

## Impact of original and WACM2 proposals

	Original Proposal	WACM2 (a)	WACM2 (b)
DNO/TSO ICCP links	No	No	Yes- approx. £250k per DNO
Generator data links	No	No	Yes – approx £30k per site
Database updates	No	Yes	Yes
Process updates	Yes- DNO	Yes (TSO, DNO, generators)	(TSO, DNO, generators)

- **Costs very preliminary estimates**
- **Assumes WACM2(a) – threshold set at 100MW; WACM2(b) –threshold set at 10MW**
- **Approx 500 sites impacted hence looking at**



## Revised timeline

Proposal to Grid Code Panel Review Meeting	17 October 2017
Workgroup Consultation	April 2018
Workgroup Report to Grid Code Review Panel (May require second WG consultation due to material changes)	-Oct 2018 (Nov/Dec 2018)*
Publish Code Admin Consultation	Oct 2018 (Dec/Jan 2018)*
Draft Modification Report to Grid Code Review /DFMR to Industry	Nov 2018 (Jan/Feb 2018)*
Grid Code Review Panel Recommendation Vote	Nov 2018 (Jan/Feb 2018)*
Publish/Submit Final Modification Report	Nov 2018 (Jan/Feb 2018)*
Decision	Jan 2019 (Mar/Apr 2019)*
Date of Implementation	<b>14 March 2019</b>

**\*Dates in brackets  
assume full**

## WG views

---

- Unable to develop legal text before CA consultation and the RTA because:
  - It will take too long and will mean that the other parts of GC0106 won't be delivered in time for March
  - Data exchange thresholds can't be changed without consideration for regional differences, cost and security
  - there is a significant cost associated with WACM2 if a Scottish option is selected - and given the physical work on site there would be a very real risk of multiple party non compliance
  - The concept of the WACM is acceptable but it would be better and efficiently addressed properly in a more considered way as part of GC0117 - or another new proposal just to consider the concept of WACM2

## Summary

---

- Original proposal expects future GC changes in line with wider access, open networks projects etc.
- If SHETL approach is adopted WACM2 is probably more expensive but aligns with future market developments and delivers benefits for both TSO and DNOs by providing access to more data but impossible to implement by March 2019 (leading to non-compliance) - effects
  - Increases data available to SO with more efficient system operation
  - The workgroup assumes that this may lead to a reduction in E&W constraint costs

# Summary

---

- If E&W approach is adopted WACM2 will have lower costs and can be implemented by March 2019, but does not align with future market developments - effects
  - Reduces data available to SO with less efficient system operation
  - WG assumes this will lead to an increase in Scottish constraint costs
    - May lead to system security issues
- No legal text developed for WACM2 in the CA and RTA
  - Consequential issues could fall into scope of GC0117

## A view on these issues is sought from panel

---

- It is recognised that WACM2 identifies a difference in the data requirements across the whole of GB
- National Grid fully recognise the differences in requirements across GB and wishes to work with industry to address these issues in a coordinated and timely manner
- It is however believed that WACM2 only addresses these issues with respect to data and does not address the more wider concerns over the connection process or industry code structure

## A view on these issues is sought from panel

---

- National Grid do not believe it is economic or efficient to address WACM2 and GC0117 in isolation and would recommend that this issue is addressed through GC0117 to give industry the best opportunity to discuss and understand the implications of these changes
- The Workgroup acknowledge that it will be difficult to implement the GC0106 work in the timescales required. If this timescale is not met there is the risk of a fine from the European Commission

# GC0111

---

## GC0111 – Fast Fault Current Injection Specification Text

- First Workgroup held on Workgroup day on 4 July 2018
- Second meeting to be held mid September
- Workgroup members requested that updated draft legal text be circulated in advance of next meeting being held
- Stakeholders currently feeding into NG on drafting ahead of next meeting
- **Extension requested to December 2018 Panel meeting (3 month extension)**

## GC0114 SOGL Prequalification Processes

---

- Last workgroup meeting was held yesterday in order to agree the Workgroup Consultation being issued
- Workgroup Consultation to be issued on the **16 August 2018**
- Workgroup request for consultation to be 20 working days
- Extension request to **November 2018 (2 month extension)** Panel meeting. Consultation would close 13 September, WACM to be voted on and developed and October Panel meeting early October



## GC0109

---

- **GC0109 The open, transparent, nondiscriminatory and timely publication of the various GB electricity Warnings or Notices or Alerts or Declarations or Instructions or Directions etc., issued by or to the Network Operator(s).**
- Request for this modification to be treated as Urgent sent to the Authority
- Decision received on 13 August 2018 and modification to be treated as **NOT urgent**
- Workgroup **on track** for Workgroup Report being issued to November 2018 meeting

# GC0096

---

## GC0096 – Energy Storage

- First workgroup following the implementation of GC0100-102 was held on the **26 July 2018**
- Workgroup have requested a two day legal text review ahead of the Workgroup Consultation being issued to Industry
- Workgroup have highlighted the cross code and cross industry impacts of the modification and the need to ensure its done correctly
- Two day page turn to be held in **October 2018**
- Call to be held in early September to discuss actions ahead of the legal text exercise

## GC0118

---

- Modification raised at the last GC Panel
- Workgroup nominations have opened and close on **21 August 2018**
- First meeting to be held on Workgroup day on **5 September 2018**
- **Proposed that the Workgroup Report is submitted to the October 2018 Panel meeting** based on the assessment made at the GCDF meeting where the modification was presented where the stakeholder view was that the legal text would require review

# GC0103

---

## GC0103: Introduction of Harmonised Applicable Electrical Standards

- No further meeting held since March 2018
- Workgroup 3 convened on 27 March to review actions and potential alternatives
- Scale of documentation to review is large and prioritisation discussion occurring in the Workgroup
- Terms of Reference circulated to Panel for comment by 7 September 2018
- Next meeting to be scheduled for late September 2018
- ***Interim Workgroup report*** on where the workgroup have got to will be submitted to the December Panel meeting

## GC0107 (+GC0113)

---

**GC0107: The open, transparent, non discriminatory and timely publication of the generic and/ or PGM specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the RfG.**

- Panel agreed that this modification is to be amalgamated with GC0113
- Modifications not required for compliance as agreed by Workgroup consensus.
- Date for Workgroup to be held in September 2018
- Website updated with proposal and can be accessed online via:  
<https://www.nationalgrid.com/sites/default/files/documents/PP3.%20GC0107%20Modification%20Proposal.pdf> (GC0107)
- <https://www.nationalgrid.com/uk/electricity/codes/grid-code/modifications/open-transparent-non-discriminatory-and-timely-1> (GC0113)

# GC0117

---

- Request at the last Panel for modification to be discussed with CMP291
- Request highlighted at the CUSC Panel, CUSC Panel agreed that they could be progressed on the same day
- Code Administrator discussing the best way forward with the three modifications – CMP295 also being administered on the same day currently
- Code Administrator recommendation for initial six month duration **(Workgroup Report to be submitted to February 2019)** to be agreed with a view to review this when the initial assessment presented to Grid Code Panel as per the Terms of Reference agreed
- Initial meeting to be held late September/early October

# GC0105

---

## GC0105: System Incidents Reporting

- Two Workgroup meetings held on 22 Feb and 16 March
- Proposer currently developing solution for Workgroup Consultation based on Workgroup discussions
- CA received request to place modification on hold until later in the year recently

## Prioritisation principles

---

<b>Complexity</b>	<b>The defect has implications for many different areas of the energy system which need to be taken into consideration throughout the process. The technical complexity and cross code impact of the modification will most likely require significant use of industry time and a higher than average number of workgroups to conclude the process.</b>
<b>Importance</b>	<b>The perceived value &amp; risk associated with the proposed modification. The value / risk could be considered from a number of different perspectives i.e. financial / regulatory / licence obligations both directly for customer and end consumers more generally.</b>
<b>Urgency</b>	<b>A modification which requires speedy consideration within the code governance process, as well as the timescales for implementation within the respective code.</b>

---



# Prioritisation stack

GC0106: Data exchange requirements in accordance with Regulation (EU) 2017/1485 (SOGL)
GC0110: Limited Frequency Sensitive Mode-Overfrequency (LFSM-O) compliance requirements for Type B Power Generating Modules (PGMs)
GC0111: Fast Fault Current Injection (FFCI) specification text
GC0112: National Grid Legal Separation Grid Code changes to incorporate National Grid Electricity System Operator (NGESO)
GC0114: System Operation Guideline: Prequalification Processes
GC0109: The open, transparent, non discriminatory and timely publication of the various GB electricity Warnings or Notices or Alerts or Declarations or Instructions or Directions etc., issued by or to the Network Operator(s).
GC0118 Modification to the Grid Code to accommodate the recent Distribution Code modification to Engineering Recommendation P28 –Voltage fluctuations and the connection of disturbing equipment to transmission systems and distribution networks in the UK
GC0096: Storage, Definition and Assignment of Technical Requirements for Storage Technologies
GC0103: Introduction of Harmonised Applicable Electrical Standards
GC0113/107: The open, transparent, non discriminatory and timely publication of the generic and/ user specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the Demand Connection Code (DCC).
GC0117 - Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of PGM requirements.
GC0105: System Incidents Reporting

---

**CODE JOURNEY**  
JOURNEY UPDATE

---

## INTRODUCTION

### CODE CHANGE DESIGN PROJECT

---

National Grid is undertaking a Customer Transformation programme to truly understand the environment that our customers operate in, the expectations our customers have, and the services that we currently provide.

We are doing this to help us **make a step change in the service we provide** to make sure that **we deliver what our customers need**.

As part of this programme we have kicked off a **Code Change design project** to help us achieve this **in our role as the Code Change Administrator**.

How do we make sure we have the **most efficient process for constructive and diverse participation** in code changes that produce the **best possible outcomes for the energy industry**

## CUSTOMER RESEARCH KEY INSIGHTS

---

### NO TARGET TO AIM AT



**Decisions are not guided by a vision of what the energy system should be in the future, so changes can often be tactical.**

### OPAQUE ON WHAT AND HOW



**Awareness to engage among customers who are new entrants is low and happens by accident. For those who are aware, learning the process is by trial and error.**

### INDEPENDENCE QUESTION



**Current representation as well as a lack of newer entrants and the voting rights of subsidiaries makes it hard for the process to be, or be seen to be, independent.**

### HIDDEN MOTIVES



**A lack of work upfront means that proposals can be made that go through the process without participants being clear on the underlying motives and drivers behind them.**

## CUSTOMER RESEARCH KEY INSIGHTS

---

### THE MISSING CONSUMER



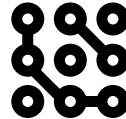
**The consumers' voice isn't heard or gets lost through the process. Many layers of impact to work out without the motivations there to encourage doing the work.**

### TRANSLATION-AS-A-SERVICE



**It takes a lot of research to translate what a change will mean for all parties. Businesses can fund the work to do this, but 'findings' aren't always trusted.**

### EXPERTISE OBSTACLES



**Technical depth of knowledge and language used in Forums presents an obstacle of understanding for some. Content is there but users need to hunt for it.**

### HOW TO FIND THE TIME



**All struggle with workload vs capacity. Small companies due to small team, big companies due to multiple stakeholders. Macro trends suggest this will only get worse.**

## CUSTOMER RESEARCH KEY INSIGHTS

---

### PICK AND CHOOSE



**Everyone picks and chooses what Mods to invest in, which is hard to get right. There is no space for 'good ideas' to make the system better to be made over and above the Mods that are raised.**

### WITH NOT TOO



**There is a need and a want to form ideas together, and have a 'critical friend' through the process. When this does happen it is fortuitous and not by design.**

### NUCLEAR OPTION ONLY

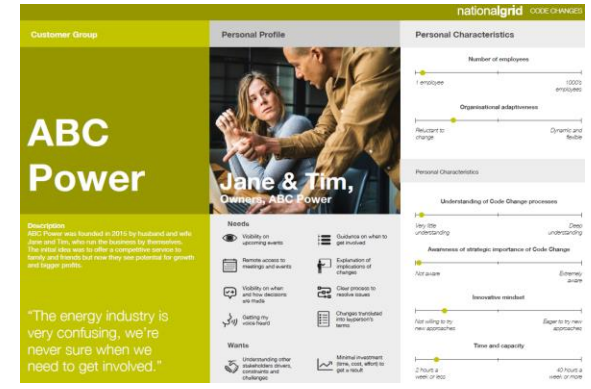
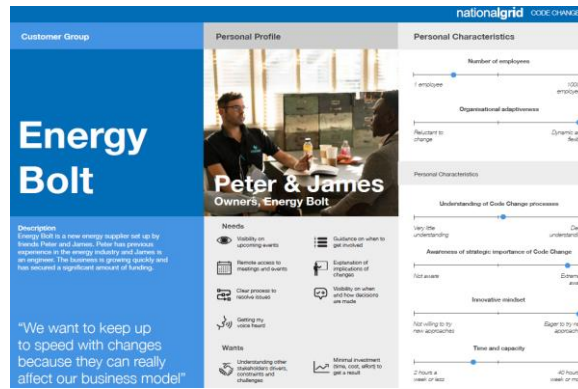
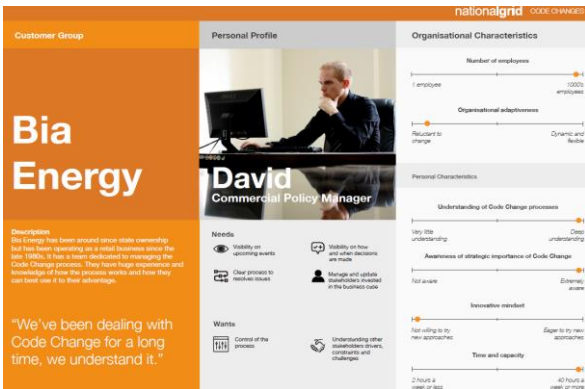


**When things get less than 'collegiate' there aren't many routes to go to resolve conflicts. It can feel adversarial or entrenched given how those involved think.**

### PACE AND DYNAMISM



**There is a clear tension between the dynamism of the market and newer entrants with the appetite and ability of NG, Ofgem and established players to keep up with the pace.**



### Bia Energy

Bia Energy has been around since state ownership but has been operating as a retail business since the late 1980s. It has a team dedicated to managing the Code Change process. They have huge experience and knowledge of how the process works and how they can best use it to their advantage.

### Energy Bolt

Energy Bolt is a new energy supplier set up by friends Peter and James. Peter has previous experience in the energy industry and James is an engineer. The business is growing quickly and has secured a significant amount of funding.

### ABC Power

ABC Power was founded in 2015 by husband and wife Jane and Tim, who run the business by themselves. The initial idea was to offer a competitive service to family and friends but now they see potential for growth and bigger profits.



**THE DESIGN PROCESS**

**NEXT PHASE WITH KEY DELIVERABLES TO BE CREATED**

<p><b>Kick Off Meeting</b></p> 	<p><b>'Colleague Immersion' Phase</b></p> 	<p><b>Opportunity Spotting Workshop</b></p> 	<p><b>Journey Design Working Session</b></p> 	<p><b>Requirements Workshop</b></p> 
<p><b>What it is</b> Align all on what we are doing and why. Map out the as-is journey. Identify pain points. Validate the Colleague landscape. Determine approach to persona and Colleague immersion.</p> <p><b>Who</b> Mix of stakeholders from NG and Engine.</p>	<p><b>What it is</b> To be agreed. Likely to be a series of interviews with different colleagues who have experienced the service. Is to validate what the experience is really like for them today.</p> <p><b>Who</b> NG journey managers and Engine Customers with experience of the process</p>	<p><b>What it is</b> To generate a spread of ideas that meet the buying needs of different colleague personas. To provide the project team with initial ideas to further design the target journey.</p> <p><b>Who</b> Mix of select stakeholders from NG team</p>	<p><b>What it is</b> Design the service and the experience colleagues will have of it, enabled by different concepts.</p> <p><b>Who</b> Mix of select stakeholders from NG team</p>	<p><b>What it is</b> Imagine how the target journey will work, and drive out experience requirements needed. Build the case for what needs changing, and the benefits that will be realized.</p> <p><b>Who</b> Mix of select stakeholders from NG team</p>

# Draft Final Modification Report – GC0108

## GC0108 EU Code: Emergency & Restoration: Black start testing requirement

---

- Discussion at last GC Panel meeting around re-consultation under GR22.4
- Code Administrator confirms that another CA Consultation can be administered and proposes issuing this to Industry ahead of the September Panel meeting
  - Panel asked to confirm that they have requested to re-consult due to the material amendments required to the legal text under GR22.4
- **Draft Final Modification: 19 September 2018**
- **Panel Recommendation Vote: 27 September 2018**
- **Vote circulated to Panel: 1 October 2018**
- **Final Modification Report submitted to Authority: 9 October 2018**

# Draft Self-Governance Report – GC0110

## GC0110

---

- **GC0110 Limited Frequency Sensitive Mode Over frequency Compliance Requirements for Type A and Type B PGMs**
- GC0110 was raised by **Centrica** and was submitted to the Grid Code Modification Panel for their consideration on **26 April 2018**
- The purpose of GC0110 is to update the Grid Code and G99 with revised text for limited frequency sensitive mode- overfrequency compliance so that manufacturers have clear pass/fail criteria for limited frequency sensitive mode-overfrequency compliance.
- The GC0110 Joint Grid and Distribution Code Workgroup met on two occasions, one to discuss the legal text and change and the second time to carry out the Workgroup vote via webex
- All Workgroup members voted that the proposed change better facilitates the Grid Code objectives and should be implemented
- The Workgroup did not consider that a Workgroup Consultation be required

## GC0110

---

- **GC0110 Limited Frequency Sensitive Mode Over frequency Compliance Requirements for Type A and Type B PGMs**
- Three responses were received to the Code Administrator Consultation that closed on 6 August 2018
- All respondents stated that the modification better facilitates the Grid Code objectives
- One request for legal text improvement to be made – respondent spoken to around process as outlined in the Draft Self-Governance Report and will be addressed as a future modification
- **Panel Self-Governance Vote to take place**
- Timetable post Panel vote:
  - Final Self-Governance Report circulated to Panel members – 5 working days (16 August 2018)
  - Appeal window opens 23 August closing 14 September
  - Implementation in GC 1 October 2018

# Electrical Standards

# Governance



# Reports to Authority

## Reports to Authority

---

- GC0108**
- GC0112**
- GC0106**

# Standing Items

# Distribution Code Panel update 8 August

---

## Discussion points:

- **Open Governance in the Distribution Code**
- **GC0110 and submission of G99 to the Authority**
- **EREC G5/5 – Update**
  - **Consultation to be issued to Industry early September 2018**
  - **Request for workshop to be arranged for Industry on proposed amendments**

**AOB**

## Next Meeting

---

**27 September 2018 at NG House**  
**Papers Day – 19 September 2018**