

Meeting Minutes

Grid Code Development Forum: Whole System Grid Code introduction

Date: 02/06/2021 Location: Webex

Start: 09:00AM End: 10:05AM

Participants

| Attendee | Attend/Regrets | Attendee | Attend/Regrets |
|----------------------|----------------|---------------------|----------------|
| Anubhav Jain | Attend | Melanie Hoffmann | Attend |
| Matthias Dernbach | Attend | Kyran Hanks | Attend |
| Jayachandra Sakamuri | Attend | Moorthy Subramanian | Attend |
| Julian Werrett | Attend | Isaac Gutierrez | Attend |
| Natalia Lythgoe | Attend | Liying Wang | Attend |
| Cory Wang | Attend | Allen Wang | Attend |
| Russell Smalley | Attend | Joel Matthews | Attend |
| Michael Chowns | Attend | Mithun Suresh | Attend |
| Sridhar Sahukari | Attend | Bala Santhanam | Attend |
| Garth Graham | Attend | Jeremy Caplin | Attend |
| Joe Duddy | Attend | Paul Crolla | Attend |
| Graeme Vincent | Attend | Mike Kay | Attend |
| Derryl Miranda | Attend | Andrew Hemus | Attend |
| Xiaoyao Zhou | Attend | Kanan Ganakesavan | Attend |
| Kavita Patel | Attend | Natheer Al-Ashwal | Attend |
| Mark Herring | Attend | Laetitia Wamala | Attend |

Minutes Recipients

| All above attendees | Grid Code Administrator | Rob Wilson | Kirsten Shilling |
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Agenda

1. Introduction of the Whole System Grid Code Mark Herring (MH)

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| 2. | Journey to Date | Mark Herring (MH) |
|----|----------------------|----------------------|
| 3. | Stakeholder Feedback | Mark Herring (MH) |
| 4. | Identified Benefits | Laetitia Wamala (LW) |
| 5. | Discussion | Laetitia Wamala (LW) |
| 6. | Next Steps | Laetitia Wamala (LW) |

Discussion and details

1. Introduction of the Whole System Grid Code (WSGC), Journey to Date & Stakeholder Feedback
These topics were presented by MH. See presentation attached.

2. Identified Benefits

This was presented by LW. See presentation attached and discussions as recorded below:

- There was a query on whether it will be a consolidation or changing of the codes.
 This is not currently clear, as initial stakeholder engagement is aimed to define the scope of work (which includes questions such as this one).
- How does the development of the WSGC fit with GC0103? GC0103 is a modification that was
 proposed to consolidate the 3 sets of electrical standards which if progressed will benefit from the
 digitalisation.

Noted

- There is a risk that legal liability is unknown in the scenario that the digital version of the code does
 not accurately reflect the legal text, and Users who act on the digital version then breach the
 requirements of the legal text..
 - LW advised that the information extracted from the digitalisation is for guidance and should not be legally binding. Stakeholders feedback is that should this be the case (digitalisation for guidance only), then there is no value in the digitalisation of the codes if users still need to refer to the hard copy of the codes.

Post Meeting Note: This matter has been passed on to the NGESO digitalisation lead to investigate further.

- There was support of the transmission and distribution whole system approach. However, it is worth
 considering that technical requirements for a 50 MW connection at distribution could be different if
 connected at transmission level.
- Support for the project, as the boundary between Distribution and Transmission is increasingly arbitrary. A common framework for all technical codes would be very valuable, but not all customers have the same requirements from the system or the same resource to engage with the codes (e.g. domestic vs transmission-connected customers), so requirements and codes accessibility should be different for different parties.
- What would the implications be for users by introducing the whole system approach? Stakeholders feedback is that the introduction of the WSGC:
 - Should not result in additional technical requirements being applied retrospectively to existing customers
 - Should not introduce additional technical requirements for customers in a given category
- Noting that it is just the Distribution Code (& associated Engineering Recommendations), Grid Code and SQSS in scope, stakeholders requested for the STC to be included as the TOs are part of the whole electricity system.

3. Discussion

This was presented by LW. See presentation attached and discussions as recorded below:

- How do we develop the content of WSGC?
 - Identify areas of commonality that can be quickly consolidated in a single document.

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- Categorize requirements based on the size/type of plant connected to the electricity system
- A joint workgroup could work; an approach that was applied to the Requirements for Generators (RfG) development. The workgroup comprised representatives of the Grid Code and Distribution Code and thus the codes' legal text was identical to a large extent.

How do we keep industry informed?

- Existing forums should be used to keep industry informed, such as, GCDF.
- Open Networks is not a good model to use, as industry stakeholders were not involved in decision making.

How do we make decisions?

- Suggestion that changes to the existing codes should be made through the existing open governance process
- Given that the work affects changes to the codes, there is need to have Ofgem closely involved throughout the process to ensure that they provide their input upfront
- A steering group would be valuable and should include Ofgem.
- It was discussed that the project should be clear not to pre-empt the outcome of the Energy Codes Review, and that relevant recommendations could be made to the review.

• Would you like to be involved in the development of the Whole System Grid Code? Which category of stakeholders best describes you?

- GG confirmed that he would like to be involved in the WSGC development; existing Code Party.
- In order to get the best out of this project, it is best that industry gets directly involved as opposed to utilizing an independent consultant or legal firm. This is because the obligations developed would have to be applied industry players. Seeking modifications straight after implementation would likely be frowned upon by Ofgem.

What are the risks and/or opportunities you envisage from this project? Opportunities:

- Less material to be read during the connection journey
- > Alignment of requirements e.g. 1 set of electrical standards to be considered
- ➤ The Grid Code covers different types of generators and it is difficult to identify the requirements that apply to a particular category. This is an opportunity to write the WSGC in such a way that the Users can easily identify what applies to their connection. To this end, having an index at the front of the WSGC that lists the sections that apply to the different categories could be one potential approach.
- The digitalisation should split the information by category (wind onshore, wind offshore, interconnectors, etc.) and type of generator (Types A, B, C & D).
- > There should be an easy way to identify requirements for hybrid connections
- Grid Code Guidance Notes are really useful and should be included within the scope of the digitalisation

Risks:

- Given that electricity licences define the content of the codes, the project team should get an understanding of the nature of licence changes required prior to progressing.
- > Primary legislation may be required which would put the timeline for the project at risk
- By digitalising the codes, we need to consider the legal liabilities that may arise from the information
- ➤ This is a resource intensive activity and will require time commitment from participants across industry. There will be phases which will not be able to be progressed through a normal workgroup process a reference was made to the week-long "bunker session" approach used when first writing the Grid Code.

4. Next Steps

This was presented by LW. See presentation attached.