

Minutes

Meeting name	GC0048: Joint GCRP/DCRP Workgroup on National Application of RfG
Meeting number	13
Date of meeting	25 September 2015
Time	10.00 – 15:00
Location	National Grid House, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

Attendees

AC	Alan Creighton	Northern Powergrid	
AD	Amir Dahresobh,	Nordex	
AF	Alastair Frew	Scottish Power	
AJ	Antony Johnson	NGET	
CM	Campbell McDonald	SSE	
CMa	Chris Marsland	ENER-G	
DS	David Spillett	ENA	
GP	Guy Phillips	EON	
HH	Honor Hynes	NGET Tech Secretary	
JAT	Jawad Al Tayie	AMPS	
JD	Joe Duddy	RES	
JN	John Norbury	RWE	
MB	Mick Barlow	S&C	
MK	Mike Kay	ENA	
SC	Sarah Carter	Ricardo AEA	
SD	Steve Davies	DECC	By tcon
SM	Steve Mockford	UKPN	
SP	Stephen Perry	Ofgem	
RJW	Richard Woodward	NGET	
RW	Rob Wilson	NGET – Chair	

1 Introductions

IP

RW welcomed attendees to the workgroup and outlined the main objective for the meeting to move banding thresholds forward.

2 Stakeholder Representation

IP

RW raised the standing agenda item on effective representation, particularly from manufacturers and smaller parties. Absence of Solar PV industry members was noted. RJW confirmed that Carmen Garralaga of SMA UK, a solar developer, will be joining from next month. RJW will also be attending a solar event taking place at the NEC on 13 – 15 October 2015.

The event details can be found via the following link. <http://uk.solarenergyevents.com/>.

3 Review of Actions & Approval of Minutes

HH

There were two remaining items in the previous minutes to be confirmed by the workgroup.

MK had put an action on RW to align the ToR for various workgroups. This was confirmed since RW had not been in attendance at the August meeting.

MK reminded the group that GG had brought the Compliance issue up saying that excessive charges on customers for compliance would lead to disputes from licensees. It was agreed that this was an issue for DECC and Ofgem to clarify and close off at a National level. MK also pointed out that which activities were chargeable would not have changed – and would in any case be subject to NRA oversight as is the case now.

The second query related to RfG Article 15 - 2s delay time. AJ confirmed that this issue is addressed through line 2 of Table 5 of Article 15 and applies only for power generating modules with inertia.

Action HH to update and publish the minutes accordingly.

Actions

13. AJ confirmed that an update on the European Network Codes (ENC) would be given at the NGET customer seminars in early October highlighting how GB stakeholders can get involved. A letter will be circulated to connection customers following the seminars to set out the future expectations of ENC compliance. On the suggestion of JN, AJ will also discuss with the Customer team some standard wording to be included in the informal offer.

25. Ongoing. SD confirmed that an informal brainstorming session has been arranged for 30 September by DECC. A broader session may follow. SD to report back at the next meeting.

69i-v. Banding covered later in agenda

80. RW confirmed that the justified bandings can go as low as you like as long as they do not exceed the 800W minimum for Type A which is fixed. There is no need for bands to overlap. Action closed.

81. Ongoing; information on the number of LEEMPS stations, what their obligations are for providing frequency response, or where there are derogations from this continues. RJW is still collating data from multiple sources, and hopes to complete this for the October meeting.

82. BM action closed. Feedback welcome.

83. EU code has been silent but needs to be consistent with existing licence conditions. SP has asked the Ofgem legal team about this.

84. MK confirmed that price control submissions from DNOs included some prediction of costs. These costings should be revisited to try to get some consensus. **Action** MK to follow up. GG had been concerned that this was a possible loophole that could be exploited by a third party making money from this activity. It was advised that NG and DNOs cannot make an unregulated income from compliance testing and in any case any unfair, excessive or unlicensed charges could be referred to Ofgem.

CM queried that where a generator (eg type A in the north of Scotland) changed its technical specification, what would the modification application process be and would they need to pay the mod app fee?

Action RJW to include this query included in the compliance work stream.

85. The mapping spreadsheet has been reissued to include DCode mods 8&9 and DECC/Ofgem responsibilities.

SD confirmed that with regard to the Operational codes (which have been rewritten now as a single guideline with the exception of Emergency and Restoration); a stakeholder workshop has been pencilled in for 3 November to page turn this and understand what needs to happen.

CM pointed out the interaction between RfG and Operational Guideline given the need to understand frequency response requirements.

JD added that the three main elements to consider are inertia, RoCoF and largest loss of infeed/export.

86. RJW's action to extract code mapping exercise into mod-specific reports covered under project plan.

87. SP to report back on member state progress setting banding. ENTSO-E stakeholder workshop on code implementation to be covered under Ofgem progress update.

88. NG to ensure that all relevant WG ToRs were summarised for GC0048 to confirm that all necessary development work is underway. Needs to be picked up under each workgroup.

89. RJW to update names assigned to Ofgem actions on the Risk Register. Closed

4 Progress Update

DECC/Ofgem

SP reported on the ENTSO-E workshop in Brussels. There were more than 100 people in attendance representing 20 countries and 4 member states (France, GB, Germany and Norway) presented their objective approach to implementing RfG. All approaches are similar but with varying degrees of NRA and government involvement since the framework varies in each country. GB seems to be ahead of most and the GB presentation was positively received. With regard to banding, only GB had got as far as specifically addressing this in terms of actual values although several other states commented that they were looking at reducing their levels and were anticipating that this would be difficult. SP concluded that it had been a very positive meeting.

SP confirmed that Entry into Force for RfG was still likely to be early 2016. There have been some issues with translating the code into other languages.

SP also informed the group that the first DCC working group is planned for 12 October. MK commented that he did not expect that the text would change significantly from the existing draft. RW stated that we would see in the next draft but that it did not appear to have reached a stable position yet. SD confirmed that the Commission was due to vote at the October Cross Border Committee if draft text is available.

CM asked for a presentation by NGET some time ago identifying how many EU codes will impact the GC to be recirculated and if necessary updated.

Action RJW to locate and re-circulate the presentation from a previous workgroup.

5 Project Plan Update

CR

RJW presented slides from the last GCRP discussing how the GC0048 work is going to be split and coordinated, including the link into any on-going Grid Code modifications.

For on-going work, RJW confirmed that:

GC0062 - Fault Ride Through would not consider RfG after concluding its Terms of Reference. AJ confirmed the workgroup report is now in draft and will be circulated ahead of the next meeting which is pencilled in for late October. It will make recommendations on how to cover the RfG requirement for directly connected synchronous generators, but nothing more. CM commented on the link between banding and the RfG requirement on FRT (at Type B upwards).

GC0087 Frequency Response has sought to cover the entire RfG requirements on Frequency. Their Terms of Reference were approved by the GCRP in September, and invites to a revised workgroup will be circulated. RJW confirmed that this would also be circulated to GC0048 for their consideration.

GC0079 Revised ToR has been accepted by the GCRP subject to some clarification. MK commented that RoCoF withstand is separate to RoCoF protection. CM added that he thought that RoCoF cannot be resolved until the operational codes on frequency have been agreed. CM also commented that GC0079 is only addressing one aspect of a wider issue in isolation.

The remainder of the agreed RfG sub-workstreams would need to be formed by GC0048. RJW suggested this was considered before year-end.

RW agreed with the need to address overlaps between the Operational Codes and Connection Codes but pointed out the difficulty given that the timing of codes is staggered in addition to the draw on what is likely to be the same resources.

There was general agreement that GC0086 Open Governance was no longer a relevant consideration here. It was included given the option for multiple solutions but this is not precluded in the existing Grid Code and licence conditions although custom and practice has been to try to agree a solution.

RJW discussed the likelihood that the GC0048 workgroup in its current form won't need to meet as frequently once the subgroups are up and running. The role of GC0048 is likely to change into an overseeing/project management/approval role and could therefore meet bi-monthly or quarterly. RJW also suggested the formation of a single 'connection codes' workgroup which could look at the progress of all three connection codes as a means of being more efficient and co-ordinated.

Coordination with work relating to the Operational Guideline will also need to be considered following DECC/Ofgem workshop on 3 November.

MK commented that RfG fits in with the Grid Code Connection Conditions so these are the focus for what should be re-written. In summary, it was suggested that the new Connection Conditions would include all the Type D requirements acknowledging the cumulative nature of the code (ie that all Type D requirements include applicable A, B and C requirements). AC agreed that generally the Connection Conditions would reflect RfG and Grid Code Operational Codes would reflect the EU Operational Guideline.

RW suggested that a possible way forward could be to draft a central framework for connection code, then each work stream/group could fill in the relevant section.

Action NGET to think about how to go about this (not least the resources to achieve it).

The group noted that although implementation must be completed within 2 years of entry into force, it would be beneficial to complete the work in advance of this deadline, leaving a contingency for unforeseen delays, but also allowing manufacturers and stakeholders as much lead-time as possible to adapt specifications and products to suit.

Action RJW agreed to work with Celine Reddin to revisit plans for one year delivery rather than two (where achievable).

CM queried why the compliance work stream was split into 2 parts. AJ confirmed that part 1 addressed basic structure (ie the Compliance Process such as EON, ION and FON) and part 2 would be a consistency check against the agreed technical requirements eg testing / simulation. It was noted that it may not be necessary to complete the compliance work stream too early. This would be considered during the timescales review action above.

It was also noted that, with several work streams taking place concurrently, meetings should be scheduled efficiently to minimise travel/time commitment of workgroup members.

G98

SC

The latest G98 documents have been published on the website. SC commented that items to be resolved by this group were highlighted in red.

Action All - to review documents and provide feedback to SC.

SC confirmed that G99 would follow looking at type A and B under 10MW. The draft would be available in about a month.

Action CR to add lines into the project plan to cover this work.

6 RfG Banding Thresholds

RJW

Time window survey outcome

RJW thanked the group for completing the survey on the window of data to consider in setting the banding thresholds (e.g. FES, SOF). The majority view of the responses was to set this to five years. This was generally accepted by the workgroup. SP sought to confirm that justification had been provided by the respondents, which it had been. The report compiled all of this information and RJW invited the workgroup to review.

RW clarified that the five year period would apply from RfG entry into force date (estimated Q1 2016) and is the period of data that will be utilised; the banding thresholds can be reconsidered at an interval of no less than 3 years.

Banding discussion

RJW introduced his banding presentation. The objective of this was to propose a revised approach to finalising workgroup banding discussions by inviting the workgroup to consider viable options for the thresholds, and to give their justification (i.e. pros and cons for each). The intention would be to reach some consensus at the next meeting on the preferred option(s) and how to structure the data analysis and CBA work to construct a workgroup report. This would then next be taken to industry consultation.

RW and RJW stressed the necessity to progress banding in a more timely manner, given the code's imminent entry into force and the dependency from other RfG implementation activities on knowing the banding levels.

JN commented that under the GB Grid Code, bands A, B, C and D don't yet exist whilst currently we have definitions for Small, Medium and Large. JN queried whether the industry would consider changing these and could the existing bands be mapped to A, B, C and D. RJW noted that the existing definitions would be needed for pre-RfG generation; he also believed there were licence implications too. In an ideal world it would be good to map between them, but the regional differences make this tricky.

In response to the implication in the banding presentation that only NGET had made any banding proposals, AF referred to his presentation given in January, where he proposed a B/C boundary of 50MW given the existing levels of Frequency Response and in his view NGET not yet having provided a robust case for obtaining more support from smaller generators.

RJW explained that RfG considers technical capability of generators, rather than the dispatch method. Ensuring that sufficient frequency response is available against the developing generation background is the role of the system operator day-to-day. CM confirmed that longer term analysis of this was a product of the FES and SOF, which RW agreed.

SP commented that the discussion was valid but the CBA would bring out the consequences and issues posed by each option.

JD added that the group need to propose the challenge(s) that each option is intended to address and the method(s) of analysis from which the results in achieving those objectives can be measured.

RJW presented the following options for consideration for the GB thresholds.

Option 1 – Bandings as per Central Europe (the highest permitted in the code for GB).

Option 2 – Bandings as low as possible (as per Ben Marshall's presentation at the last meeting).

Option 3 – Moderate banding levels (an intermediate level between Options 1 and 3, which maintain some consistency with the Scottish Power region for Type C at 30MW+).

RJW invited the workgroup to consider other options, presenting Option '1' – MW levels consistent with Ireland as another neighbouring synchronous area. This option was opened for discussion but it was agreed that, although worth mentioning, it should not be considered as an option as the GB and Irish markets are fundamentally different. However, RW noted that exactly this argument could also be applied to use of the Continental Europe bandings which again tie GB to a very different market and scale of system.

GP asked whether analysis from the Frequency Response working group could be revisited to try to find an optimum requirement which could be used to provide a banding option. However, AJ cautioned that, if a defined level of Frequency Response requirement was used, then this would only need to change with changing plant type in the generation background. There was also the on-going debate on generator commercial availability and load when response was actually needed.

It was agreed that RJW would circulate a document inviting workgroup member preferences on the options and their justifications (pros and cons). As per JD comments, the workgroup could also consider

how these options could be analysed and what data would be needed. In addition, workgroup members would be welcome to suggest further options for consideration. RJW would compile the submissions and this would be circulated before the October meeting, at which the preferred banding option(s) for a workgroup report/CBA would be agreed, and owners for the next stage of work would be identified.

SP commented that the consultation should be backed up with as much background information as is available.

Action RJW to circulate document for review of options to Workgroup members by 2 October. Members to provide feedback by 16 October. RJW to compile results and circulate in a report before the next meeting.

RW added that although banding thresholds are set per synchronous area, individual member states can opt to reduce their own threshold levels. For example, in Continental Europe, France and Belgium are looking at reducing banding thresholds, as others might. RW also confirmed that the agreed thresholds would be set for a minimum duration of three years. Depending on which option is preferred, a proposal to change by the TSO could be necessary against a changing background as early as this three year minimum.

7 Risk Register

RJW

RJW gave a brief update on the risk register, confirming that SP had taken ownership of Ofgem risks. He also pointed out that the risk on agreeing banding could go red if the agreed approach does not work out sufficiently in the next few months.

MK queried whether the existing risks on implementation timing were still accurate, given the discussion earlier on aiming for one year. RJW agreed that this should be updated and took an action to do so.

Action RJW to update timings risk.

Action RJW to ensure cross-code risks explicitly refer to HVDC and DCC, and the System Operation guideline.

8 DECC/Ofgem Steering Group Reporting

RJW

SP commented that he will summarise the banding discussion and the next steps at the Steering Group.

Action RW to draft wording for SP to feedback.

Action SP will emphasise to the Steering Group the importance of coordination between code activities.

9 Agree Actions

HH

10 AOB / Next Meeting

All

AOB

AF commented that DNOs need to indicate how much embedded generation is connected down to 1MW to their network in Week 24 submissions.

Next Meeting:

The next RfG Workgroup meeting will take place on **Wednesday 28 October** at **National Grid House, Warwick**. Please also find attached below all future dates arranged for this workgroup for 2015:

(Calendar invites have been sent out for these dates, please contact Grid.Code@nationalgrid.com if you haven't received them)

- Thursday 19 November
- Thursday 17 December