

## Minutes

<b>Meeting name</b>	GC0048: Joint GCRP/DCRP Workgroup on National Application of RfG
<b>Meeting number</b>	16
<b>Date of meeting</b>	17 December 2015
<b>Time</b>	10.00 – 15:00
<b>Location</b>	<b>National Grid House, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA</b>

## Attendees

<b>AC</b>	Alan Creighton	Northern Powergrid
<b>AD</b>	Amir Dahresobh	Nordex
<b>AF</b>	Alastair Frew	Scottish Power
<b>AV</b>	Andy Vaudin	EDF
<b>CW</b>	Chris Whitworth	AMPS
<b>CM</b>	Campbell McDonald	SSE
<b>CMa</b>	Chris Marsland	ENER-G
<b>GM</b>	Greg Middleton	Deep Sea Electronics plc
<b>JA</b>	Jawad Al-Tayie	Cummins Generator Technologies
<b>JD</b>	Joe Duddy	RES
<b>JN</b>	John Norbury	RWE
<b>MB</b>	Mick Barlow	S&C
<b>PG</b>	Paul Graham	UK Power Reserve
<b>SC</b>	Sarah Carter	Ricardo
<b>SP</b>	Stephen Perry	Ofgem
<b>SS</b>	Sridhar Sahukari	DONG
<b>RJW</b>	Richard Woodward	NGET
<b>RW</b>	Rob Wilson	NGET – Chair
<b>AJ</b>	Antony Johnson	NGET
<b>HH</b>	Honor Hynes	NGET Tech Secretary

### 1 Introductions

RW

RW welcomed attendees to the workgroup and outlined the main objective for the meeting to progress the work group report on RfG Banding options and the proposed new approach to meetings/workstreams in 2016.

Several stakeholders expressed concern at the shortening of the meeting at short notice and consequential impact on travel arrangements. RW confirmed that every effort would be made in future planning of meetings to make best use of a full working day.

SC and AC were representing DNOs stakeholders in the absence of MK and DS.

### 2 Stakeholder Representation

RW

RW raised the standing agenda item on effective representation, particularly from manufacturers and smaller parties.

RJW told the group he was meeting a new contact at RenewableUK (who had previously been represented in the workgroup by Zoltan Zavody), who will hopefully participate in the workgroup from early 2016.

Scottish TO representation – see Action 105.

**Action** HH to publish the Meeting 15 minutes – as no further comments received.

### Actions

13. RfG timescales within connection offer documentation; AJ has circulated internally for review. Covered further under AOB – open letter to industry item.

25. Future Compliance Regime Update. SP has sought legal advice and plans to provide an update at January's meeting.

69i-v. Banding actions to be reviewed following workgroup report.

CM expressed concern over SOGL data exchange requirements not being taken into account when considering RfG banding levels. RJW agreed that SOGL could impact future generation, but suggested that as the code text had not arrived at a settled form and concerns have been fed back the requirements may change. He therefore felt that whilst the banding report should acknowledge a potential impact on SOGL, it shouldn't go far as pre-empting detailed requirements. SP added that there had been substantial feedback on the issue from several Member States. RJW encouraged workgroup members with any concerns on SOGL to raise them to DECC/Ofgem so that they could be addressed. RW has also raised concerns through ENTSO-E.

JN explained that SOGL provides a route to market for services which generators should be capable of providing under RfG and raised the concern as to whether generators can be confident that the necessary TSO systems will be in place to enable this route to market.

Picking up the banding discussions more broadly, AF queried whether the B/C threshold would be academic since most generation above say 30MW would connect at 132kV. The future generation volumes table in the report suggest a negligible difference in volume between the High and Mid levels for Type C generation – is it therefore worth debating much more on this? JD commented that he has had a 49MW wind farm connected at 33kV in Scotland and RW confirmed that there are cases in Scotland in particular where larger capacity generation connects at 33kV.

81. Information on the number of LEEMPS stations, what their obligations are for providing frequency response, or where there are derogations from this: to be reviewed following workgroup report by RJW, who elaborated that this data isn't immediately accessible to NGET, otherwise it would have been delivered by now.

83. DECC/Ofgem to provide guidance on Relevant System Operator compliance testing to give assurance to generators that costs would be managed. This will be considered in more detail in the Compliance work stream.

84. Responsibility between TSO and DNOs to conduct compliance testing. DNOs agreed costing model via MK; AC confirmed that DNO data already provided by MK was the best available. RJW to finalise this data with MK for inclusion in the banding report.

86. RJW has amended the code mapping spreadsheet into different tabs for each mod which can be included in ToRs. This will be circulated once the revised approach to the plan has been agreed.

88. NG to ensure that all relevant WG ToRs were summarised for GC0048 to confirm that all necessary development work is underway. This will be the role of the proposed Coordination Group.

90. Compliance Workstream. Ongoing.

92. Central framework for the connection code - AJ working on this and developing example of legal text to test approach.

100. SP had circulated draft guidance for those wishing to be considered as an Emerging Technology requesting comments. LR had queried whether this should be manufacturer or technology based. AJ queried the 0.1% statement in the guidance note when compared to the RfG text. RW asked for some clarification as to whether a slight change to a technology or production by a different manufacturer would be considered as a separate application. SP pointed out that Ofgem still had to consider what happens if oversubscribed – AJ thought the cap may address this. AJ to send email with comments to SP. Ongoing.

101. Ofgem to seek legal advice on timescales for modifications approval and implementation. SP fed back that the Authority would not issue any decisions ahead of EIF due to the risk of the Commission changing the code. RW agreed that it would be worth doing all the work including sending a draft report to Ofgem but then leave the final submission until EIF. Close

102. HH had circulated dates for two day meetings for 2016. See Item 5 project plan. Ongoing.

105. Scottish TOs have been asked to comment on banding report. Ongoing.

106. SP to follow up new/existing RfG issues/references in SO GL. Feedback to follow. Ongoing.

107. Week 24 data is confidential but can be used in trends/totals – has been used in report. Close.

108. Draft Banding Workgroup report covered under Item 7. Ongoing.

109. SOGL interaction. Covered under Risk Register. Closed

110. Reminder to comment to Ofgem on Multiple TSOs responsibilities initial draft by 2 January. Close.

#### 4 Progress Update

DECC/Ofgem

SP summarised that current areas of work for Ofgem/DECC were as follows.

- Multiple TSO comments by 2/4<sup>th</sup> January
- Licence changes
- Emerging Technologies
- Project Planning
- Bandings

All of the above will be discussed at the Steering Group in January since December's meeting was cancelled.

CM highlighted concerns for existing Users under SOGL – eg OC2 data.

#### 5 Project Plan Update

RJW presented slides explaining the he was conscious of the need for coordination between work for the three EU Grid Connection Codes. The intention was to setup meetings in an efficient manner for all, and leading to a more structured output of code modification work at the end (i.e. fewer instances of legal text changes/reports to the authority). There are some common areas which can be considered together but some others which should remain separate.

The proposed approach divides the workstreams as follows:

**Non-Technical Groups (spanning RfG, DCC and HVDC):**

1. GCC co-ordination and oversight
2. Compliance Processes

**Technical Groups:**

3. Generator Technical Group
4. HVDC System Technical Group [GC0090]
5. DCC Technical Group [GC0091]
6. System Management

This approach had already been presented to the HVDC and DCC workgroups which generally endorsed the approach though provided some suggestions. This included scheduling a third 'placeholder' day each month perhaps two weeks after each 2-day slot. This would allow further work to occur if needed or space to avoid meeting clashes in the circulated x2 day dates in 2016 where required.

JN commented that the same people won't necessarily be needed for both days. RJW agreed, and encouraged workgroup members to consider where in the proposed structure they would be able to contribute best. He did however acknowledge that some individuals would have to attend multiple meetings due to resource constraints. NGET would strive to facilitate this structure in the most efficient way possible and would try to avoid meeting clashes for affected parties.

SS pointed out that the agenda has to be set in enough detail in advance to allow the correct people to attend. RJW agreed, but suggested that the groups would need to set this out early on and then clear information would be circulated to allow specific users to attend where appropriate. CM welcomed the approach commenting that people attending groups should be contributing. RJW added that those attending for information would be better placed on the overviewing coordination group. JN noted the importance of getting the correct technical specialists round the table and keeping them engaged.

The coordination group would get oversight of cross codes groups. SP suggested they should provide steering to common issues arising across codes and consideration of other changes required. RJW confirmed that the Coordination group would advise on consequential code (e.g. STC/CUSC) changes when identified in the implementation work, but that it wasn't in the terms of reference of any groups to do this by default. He explained that NGET would liaise with respective code panels on how to manage this. Regarding workgroup reporting, SS suggested that it would be easier to produce smaller specific technical mod reports as and when possible rather than leaving a large report until the end. RJW agreed, but said it was up to the workgroups to consider how to discharge their ToRs most efficiently. The Coordination Group would also have oversight of all the work being undertaken and be able to make suggestions.

SP felt the approach would be more efficient for Ofgem to consider items grouped together where possible.

AV added that groups won't be querying the content of RfG [which will be of course European law] but rather looking to implement the requirements into the existing GB codes.

RJW will present the report to GCRP in January for their consideration. CM suggested presenting a recommendation.

CM queried D-Code changes; RJW confirmed that any legal drafting would take place outside the x2 days (as with Grid Code) as to draft by committee is to be avoided; but that the workgroups would be expected to steer and review this. SC re-iterated the issue with D-Code definitions so would be keen to sit on the Coordination Group. There was a further query raised as to whether there is a need for DNO technical expertise in the Generator Technical group.

It was confirmed that GC0087 and GC0079 meetings will continue to run separately and will include elements of work from RfG implementation. SP suggested it is worth checking where dates of these meetings fall compared with the two day slots planned.

RJW introduced the proposed January agenda with the Coordination Group and banding on day 1 and HVDC and DCC on day 2. JN asked whether in effect the current GC0048 group should meet on day 1. RJW confirmed the expectation that GC0048 would form the basis of the Coordination Group as it was the most established, but as it spanned all three EU Connection Codes HVDC and DCC participation would also be encouraged.

GM asked that agendas be sent out well in advance to allow for travel arrangements.

**Action RJW** to send January agenda and ToR for Coordination Group by 23 December.

## 7 RfG Banding Workgroup Report

RJW

RJW had drafted and circulated the workgroup report on RfG banding looking at the options below.

	High Option (Existing RfG CE max levels)	Mid Option	Low Option Similar to Irish levels
A	800W – 1MW	800W -1MW	800W – 1MW
B	1-50MW	1-30MW	1 – 5 MW
C	50-75MW	30-50MW	5 – 10MW
D	75MW	50MW+	10MW+

RW confirmed that the banding workgroup report should be close to completion by now in order to achieve review at January GCRP and industry consultation in February. The focus today was to avoid

technical debate and look instead at the approach and assigning responsibilities for filling any gaps in the report.

RJW thanked those who had contributed/commented on the draft report.

RJW asked whether the group considered the sections on generator views sufficient.

RJW suggested two options for moving forward:

1. The workgroup fill in gaps and produce workgroup report.
2. Use industry consultation to fill gaps.

SP commented on the gaps stressing that quantitative analysis was needed.

RW asked SP how addressing the gaps could be taken forward. SP suggested that a consultant could be employed to do CBA. There was general consensus around the table that if, after a year of discussion and for many valid reasons the data required for a meaningful CBA could not be obtained, that it was then unlikely that a consultant would be able to do any better. There was also concern over who would pay for any studies, and the time it would take for a consultant to arrive at a result.

GM supported this view adding that the missing figures are commercially sensitive/confidential so being able to obtain useful information to complete a CBA may well be impossible.

JN commented that he considered a consultant would not necessarily achieve the desired result, which would be more a judgement call.

RW reiterated AF's comment at the start of the meeting, asking whether it was worthwhile arguing over 30 and 50MW when most generation at this level is connected at >110kV. He also reminded the group that in Germany's consideration of their banding level, they believed that they would have little-to-no Type C generation

AF's preference on the banding level was to stick to the ceiling CE levels drafted in the code and review this in 3 years when all the other codes were also in force.

JD agreed with RJW that more stakeholder group comments would be needed to go in the report and encouraged representatives to provide material for the gap sections.

SP was still concerned about pushback from Ofgem which may occur if the arguments are not quantified. He suggested that Ofgem may not be in a position to support the workgroup report/consultation findings, even if consensus on the GB levels had been achieved, if there was not supporting data (costs etc.).

RJW sought agreement on approach to complete the gaps in the workgroup report, present to GCRP and then industry consultation.

CW stated that AMPS represents generators up to 5MW. Members have asked that Europe have a common requirement but other member states in the CE block are also changing their thresholds so this will not work. Trying to calculate a cost is complex due to the many considerations which need to be taken into account.

JD commented that NG costs had not been included – an attempt had been made early on to quantify running out of merit plant. RJW confirmed that the SO sections are a work in progress, as with the rest of the report, and that SO costs are being worked on based on the recent SOF publication and the generation background as detailed in the FES.

JN suggested that taking the current position then establishing the case for change could be an alternative approach.

It was noted that the report currently omitted a methodology for establishing a process for changing banding thresholds in the future based on changing/evolving generation background. RJW would add this. RW expressed the concern that it would be better to get this right now; if seeking to change thresholds in the future an argument against this would be the further complication and the lack of a level playing field.

It was concluded that more contributions to cover all of these issues raised were required. RJW encouraged all stakeholders to continue to review the report and provide more material if possible. Specific actions were agreed to address report gaps and are summarised in the table below.

<b>Section of Report</b>	<b>Contributor</b>
Interconnectors	RJW draft CM comment
LEEMPS	RJW/AJ
Voltage Control	TOs/JD
Controllability <ul style="list-style-type: none"> <li>- Back office</li> <li>- Systems</li> <li>- OC2</li> <li>- Levels of service required – SOF NGET</li> <li>- From other Users?</li> </ul>	If BSC - RJW CM to provide costs
Process for setting banding <ul style="list-style-type: none"> <li>- 5 years for time horizon</li> <li>- 3 years for change</li> </ul>	RJW
SOGL interaction concern on existing (banding reference)	RJW (CM to check?)
Consistency to existing arrangements	AF
Commercial inclination vs obligation for frequency response	JD
Costs of compliance – DNOs	RJW/MK
Other compliance requirements (BCA) + Generator assessment	All
Existing generation <ul style="list-style-type: none"> <li>- Wk 24.</li> </ul>	RJW/(AF)
Fault Ride Through – Differing requirements For B/C/D + synch/asynch	AJ
Summary table showing ticks against each requirement for each band	RJW
Data horizon Q4 2021 – Adjust data to fit	RJW
Manufacturer Assessment	RJW
GC Objectives/banding options	All
Incorporate comments already provided by CW and AF	RJW

RJW to circulate next draft of report by 8<sup>th</sup> January and liaise with contributors before then. Finally, it was noted that papers day for the January GCRP is on 13 Jan.

## 8 Risk Register

### **New or expanded risks:**

Expand on SOGL interaction risk, plus adjust mitigation status to amber until the text develops further.

SP –Risk of Ofgem rejecting banding if a full CBA or quantitative analysis has not been carried out leading to further work and delays in implementation.

CM - Add risk of GCRP rejecting planned workgroup approach?

## 9 DECC/Ofgem Steering Group Reporting

JR/SP

- Banding update.
- How to establish compliance for type A generators.

See action log.

### AOB

#### **Open letter to generators**

RW - As requested previously a draft of this has been circulated to the group and some comments have been received. Currently this is going through internal governance with a key question to answer being around the timing – does it have to be done now?

RW to resend current version once comments incorporated.

JN – the purpose of the letter being to alert people that RfG is coming and who it will apply to should be noted at the start.

AV - reference to ‘main generating plant’ needs to be consistent in the new/existing criteria.

**Action** All to provide any comments.

CM generators need be warned that their existing connection agreement may need to be changed.

SS the perception need to be clear to all. SS also requested for additional clarification on dates regarding the procurement of major equipment and also how this is applicable in the case of OTSDUW equipment.

#### **Next Meeting:**

Details will be circulated before Christmas on the first Coordination Group and RfG banding meetings, which will take place during the two day slot on **12/13 January, at National Grid House, Warwick and starting at 10am.**