

Minutes

Meeting name	GC0048: Joint GCRP/DCRP Workgroup on National Application of RfG
Meeting number	4
Date of meeting	20 October 2014
Time	10.00 – 15.00
Location	National Grid House, Warwick, CV34 6DA

Attendees

Name	Initials	Company
Rob Wilson	RW	National Grid (Chair)
Sara-Lee Kenney	SLK	National Grid (Technical Secretary)
Alan Creighton	AC	Northern Powergrid
Amir Dahresobh	AD	Nordex
Alastair Frew	AF	Scottish Power
Antony Johnson	AJ	National Grid
Celine Green	CG	National Grid
Chris Whitworth	CW	AMPS
John Norbury	JN	RWE
Julian Rudd	JR	DECC
Julian Wayne	JW	Ofgem
Mick Barlow	MB	S&C Electric Europe
Mick Chowns	MC	RWE
Peter Bolitho	PB	Waters Wye Associates
Rupika Madhura	RM	Ofgem
Steven Mockford	SM	UK Power Networks

Apologies

Alan Mason	AM	Senvion
Andy Vaudin	AV	EDF Energy
Chris Allanson	CA	Northern Powergrid
Chris Marsland	CM	(on behalf of) CHPA & AMPS
Campbell McDonald	CMD	SSE
David Spillett	DS	ENA
Guy Phillips	GP	EON
Gareth Parker	GP	DONG
Joe Duddy	JD	RES
John Morris	JM	EDF
Mike Kay	MKA	Electricity North West
Mustafa Kayikci	MKY	TNEI
Philip Jenner	PJ	RWE
Peter Thomas	PT	Nordex
Sarah Carter	SC	PPA Energy

1 Introductions/Apologies for Absence

RW

1. The Chair welcomed the Workgroup and apologies were noted.

2 Review of actions & approval of minutes

SLK

2. SLK ran through the Action Log and progress made to date.
3. *Action 5 Compliance against the code*: MB asked for clarity around the 'compliance' referred to in this action. RM advised that there are two parts to the compliance that this action refers to, the first being that GB parties (Generators, Network Operators etc) are compliant with the European Network Codes once they enter into force; monitoring of this would be done by DECC and Ofgem. The second part is European wide Member State level implementation monitoring which would be assessed by ACER and ENTSO-E as per the obligation on them stated in the third package. As part of that GB will be asked to demonstrate compliance with the codes as well. The action will now be split into two parts, 5a & 5b, to capture this and will be left in the actions register. CW added that manufacturers will need to be able to demonstrate compliance with RfG to customers. AD pointed out that compliance would be at the point of connection.
4. *Action 6 Comparison table*: covered by AJ presentation under agenda item 5.
5. *Action 8 Future Changes to the European Network Codes (ENCs)*: RM advised ACER has published a document for how amendments can be made once an ENC becomes law. RM and RW suggested sending the link to this document to the workgroup allowing the workgroup time to review the document and this can then be covered at the next workgroup meeting¹. CW added that as manufacturers sell across Europe they need clear harmonisation.
6. *Action 9 Enforcement of G83 and G59*: RM advised that DECC and Ofgem are liaising on this and RM will report back to the workgroup on the outcome of these discussions when ready.
7. *Action 10 & 11 Fault Ride Through Requirements and Treatment of User's under the GB Code framework*: AJ ran through presentation linked to these actions;
8. *FRT workgroup update (action 10)*: Grid Code Fault Ride Through Workgroup (GC0062)² is currently in place (started with a series of workshops in 2012) looking at FRT requirements for Large and Medium Synchronous Generation. AJ advised that the workgroup have carried out extensive study work for Directly Connected Synchronous Generation and narrowed down to three options for the voltage against time curve which are fully consistent with the RfG. AJ advised that Smaller Embedded plant has not yet been considered but one option was for Embedded Generation to satisfy the same requirements as Directly Connected plant – i.e. it should remain stable and connected for any Transmission system fault but noted that further analysis would be required in this area. CW requested if the invitation could be opened to Smaller Generators when the Embedded requirements were addressed. AJ advised additional representation on the FRT workgroup would be welcomed. MC noted that the current GB fault ride through requirements as detailed in CC.6.3.15 of the Grid Code only applies to Transmission faults which are at 200kV or above. JW and AJ advised that the January 2014 version of RfG did not make the FRT requirements clear advising there was reference to Transmission Network and Distribution Network, neither of which are defined terms. AJ advised that the RfG requires FRT conditions at the point of connection. This condition applies for both Embedded Generation and Directly Connected Generation albeit with a different voltage against time curve. AJ advised that the definitions do not provide clarity on this, and RM added that this needs to be checked across all ENCs as ACER advised they will not repeat or redefine definitions once they have been made in another ENC. RM stated that if a modification to the Grid Code were to be submitted to Ofgem on FRT while RfG is still in draft form this could be difficult to approve and that it would be useful to look at the timelines for the FRT Grid Code modification and RfG implementation. AC asked if

¹http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Directors%20decision/ACER%20Guidance%20on%20Evaluation%20Procedure%20for%20NC%20Amendment%20Proposals%20under%20Article%207%20of%20Elec%20and%20Gas%20Regulations.pdf

²<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0062/>

the workgroup was currently just looking at larger generators and AJ confirmed that it had set out to assess large synchronous requirements first and then potentially extend. CW recognised that there was obviously considerable interest in this. AJ summed up stating that for Directly (Transmission) Connected Generators, an update would be given to GCRP in January, while Embedded Generation would take longer to complete.

9. Treatment of users under the GB framework (action 11): AJ ran through the GB framework for GB codes, legislation and licences including how this links in with European Legislation, and the GB arrangements for licenced and unlicenced generators. AJ advised that Licencing is administered by DECC, and there are mandatory requirements for any generator in excess of 100MW to have a Generation Licence and to comply with the Grid Code, if this is not in place or achieved breach of Licence penalties can apply. RM questioned if in breach in GB, how do Ofgem seek compliance of a generator if it is not licenced? This is being considered internally and with DECC. JN asked if there is an expectation of a reduction in the thresholds for licence exempt generators. JN asked if there is an expectation to change the thresholds for the licence exempt generators. AJ advised this is something to be investigated and there are complexities. AJ added in an ideal world it would be useful to have one set of thresholds (i.e. A, B, C and D) rather than A, B, C, D and Small/Medium and Large. PB stated that this could be counter to existing GB thinking in avoiding over-regulation. RM replied that it is an ongoing concern adding that Ofgem and DECC are exploring this further. RW referenced the compliance with G83 and G59 under the Distribution Code and the action to explore this as well. JN added that differences with Scotland have grown up due to characteristics of the Transmission system. RfG will tend to push into a lowest common denominator approach. AJ also ran through in this presentation the 'Applicable Requirements' table [please note that for slide 8, the description of requirements for a 50MW+ embedded generator, both BELLAs and BEGAs need to meet requirements of the Grid Code. AJ will update the table accordingly].
10. Action 12 *Examples of definitions conflicts between ENC and GB codes*: AF forwarded examples to RM and NG (19 which match). AF highlighted the one exception was Non-synchronous directly connected PPMs where there is a risk of having one definition which means two different things. AF doesn't believe any of the other definitions affect generators. JW asked for clarity on the problem from AF, AF asked which definition should be used (i.e. Grid Code or RfG) as this needs clarity to avoid confusion. JW advised that this would feed into the general discussions of how the codes are aligned. AJ expanded that you have one term but it means two different things and there is the potential if amending to suit an RfG definition, that this could have unintended consequences upon existing parties. AF added that the issue isn't as bad as originally anticipated. AF also added that other ENCs are retrospectively applied whereas RfG isn't. JW clarified that definitions across all of the ENCs should be linked, so any definition across ENCs will only be made once and then not redefined or over written in another ENC. RM advised that she will take action to discuss with ACER the definitions across ENCs and flag particularly for codes which do apply retrospectively.
11. Action 13 *RfG timescales within connection offer documentation*: AJ provided an update from the NGET legal team. There are a number of ways the RfG timescales could be covered, whether this is on National Grids website, within the connection offer letter or within the connection offer itself. AJ advised this needs further consideration and will discuss further internally and update the workgroup.
12. Action 14 and 15 *Draft task list/project plan and National Parameters Table*: covered by RW presentation, under agenda items 6 and 7.
13. The Action Log was approved, noting the addition of the comments mentioned above, and will be updated and circulated with the minutes of the meeting.
14. SLK highlighted the previous meeting minutes have been updated with the changes received from Julian Wayne, Rupika Madhura, Alistair Frew and Antony Johnson.
15. AC asked for the minutes to have a final proof read following the track changes, in particular for paragraph 4.

16. The minutes of the previous meeting were approved noting the above comments and will be published in the workgroup section of the Grid Code website³.

3 Progress Update RM

17. RM ran through the Commission's progress on RfG. The Commission has issued its priorities for the ENC's in 2015. RfG and DCC are top of the list with the goal for adoption (Entry into Force) in Q1 2015. This is based on the view that CACM will have been adopted by the end of 2014. The latest draft of RfG is currently commencing inter-service consultation internally in the Commission and is being reviewed by their lawyers; therefore it has not been released for wider viewing at the moment.
18. RM added that based on the above it would be too optimistic to discuss DCC at the November ECCAF meeting.
19. RM advised DECC will issue an email to all stakeholders when the next RfG text is available. RM added there will be stakeholder engagement on this; although RM highlighted that there may be tight timescales on this of potentially 3-4 weeks.

4 High Level GB Implementation Approach (DECC) JR

20. JR provided a précis of the presentation made to JESG (October) by DECC on the high level approach to ENC implementation in GB. JR discussed the origins of the ENC's, the Third Energy Package and overall high level implementation process.
21. JR advised that DECC is responsible for the overall implementation of the national elements of the Energy Third Package within GB and Ofgem will monitor compliance against the ENC's. JR added that the overall approach is for minimum change and disruption to the existing GB framework.
22. RW noted that slide 8 is written from a CACM perspective in that there isn't a 'home' as such for areas of CACM within the existing GB framework however for RfG there is. PB sought confirmation that the approach is for minimum possible change and asked how it fits with the general approach to seek to minimise volume of new legislation. JR replied that there was no desire to add legislation.
23. JR asked the workgroup to flag to him any issues in terms of lack of engagement or interaction from DECC. In particular, it is important that as many stakeholders as possible, who could be affected by the proposals are aware of them. JR advised that DECC will be present at future RfG workgroup meetings which was welcomed by the workgroup.

5 High Level Comparison Table AJ

24. AJ advised that from the first version of RfG in June 2012, 3 comparison tables had been prepared; (Table 1 comparing RfG to the current Grid Code, Table 2 comparing the GB Grid Code with RfG in detail and Table 3 – a comparison of the RfG Offshore Requirements with the GB Code). AJ ran through an update of Table 1 (comparing RfG to the current Grid Code) which had been amended to reflect the changes made up to RfG January 2014 version. The table details the differences between the RfG requirements and the current Grid Code. AJ advised that any changes which are in track change marked format are differences from the June 2012 version of RfG and any items in yellow are issues with the existing text. AJ ran through the table to highlight the issues.
25. AF queried the requirement under Article 10.2(e) requiring plant including pumped storage plant to disconnect during low frequency events. AJ advised this was an error as this specific requirement was covered under OC6.6 and he would correct the table. These tables were produced to help highlight the differences with GB codes and likely main work areas.
26. JN suggested in terms of alignment of RfG to the Grid Code, that as discussed previously if a new Grid Code Connection Conditions section were started this would then allow much easier

³ <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0048/#>

transposition would it be a lift of RfG into the Grid Code. AJ confirmed that this is something NGET are looking at internally. AJ added that there was an intention to maintain the same numbering and nomenclature of the GB code as the RfG clauses were far from ideal. After some discussion, the workgroup came to the consideration that actually, whether a new Grid Code Connection Condition, or a stand-alone 'RfG' Connection Condition to then be referenced from both of the Grid Code and Distribution Code (or any other related option) makes little difference to the actual work that needs to be carried out and is really more presentational in nature.

27. AC added some of the uncertainties in the comparison tables should be clarified in the next version of RfG. RW added the work done is to get us to the point of being able to identify the key tasks and issues however it was noted that RfG remains in draft form and subject to change however there needs to be a balance between keeping the comparison tables up to date and avoiding unnecessary work. RM added that this work has given us the opportunity to highlight early on issues where there may be a need for legal involvement.
28. CW said that the original objectives were harmonisation and simplification and asked what was driving all the additional changes. AJ ran through the development process and the delays and changes including the Comitology updates. JW said maybe this was underestimated but added the process which includes the views of 28 countries and their technical requirements takes time. MB added that more onerous conditions make this more difficult for 'new' generators.
29. RM and JW queried Page 9 of the comparison table with regards to the modification mentioned under the operational notification procedure and advised the modification had been approved. AJ confirmed this was an error and he will update the table to reflect this.
30. RW advised NGET won't update the other 2 comparison tables until a new RfG text is in place rather than have to repeat this work unnecessarily.
31. JN suggested the next step is to see exactly how the RfG requirements would fit into the Grid Code. It was suggested it would be worth coding up some text based on a blank version of the Connection Conditions. AJ reiterated the previous view of starting from a blank page for a new connection conditions section and take it from there.

6 National Parameter Setting

AJ/RW

32. RW ran through the ECCAF CMWG output table (January 2014 RfG version). The aim of this table was to identify what tasks need to be undertaken not necessarily where the requirements will sit in the Grid Code. RW updated the workgroup on what had been added to the 'notes' column of this table by RW/AJ to identify areas in which GB parameters needed to be set or key tasks had to be undertaken. For the parameters, these were then brought out into a table which was presented to the workgroup.
33. JN asked about the mapping and how this is best approached. RM added that there are two routes for this, the first is how you align the codes and the second are the key tasks that need to be completed. RW added this table is to define the tasks and when they can start. It was noted that CG would be involved in developing a project plan for the work.
34. AJ advised that he had identified some of the inconsistencies in RfG via Table 1 (above). He also noted that it would be useful to identify the sections of RfG which placed a requirement on the TSO to work with the Relevant Network Operator, especially for Type A and B Generators for which the TSO had little previous experience.
35. JN asked what about where requirements in RfG are more onerous. AJ asked if this was something to do with the total volume of legislation and potential gold-plating. This certainly isn't the intention. We all want this to be as straight forward and easy to implement as possible but recognise that there are many areas of the Grid Code that are not affected at all by the ENCs.

36. RW ran through the task list, priorities the 'GB parameters to set' document. The GB Parameters list covers those elements of the RfG where there is a requirement for a national parameter within a defined range.
37. RW asked for the High Level GB Task List to be the main piece of work for the group to initiate. This comprises of three main parts; Retrospectivity process (3.a.3), Process for consideration of plant as new/existing (3.a.4), TSO setting of banding thresholds (3.b.2-4)
38. RW suggested these be the three items to work through for the next workgroup meeting.
39. The workgroup agreed that the banding would be the first item to progress as it is impossible to come to any other conclusions without knowing which generators requirements are applicable to. RW asked, as stated in RfG at present, what would happen if the TSO did not submit a substantive case to keep the thresholds at their base levels. JW replied that as the RFG requires the thresholds to be justified, even if they are set at the levels in the code. AC added that need to get everyone comfortable with the banding and other first considerations.
40. JN suggested it may be appropriate for the Grid Code to cover Band D Generators and the Distribution Code to cover Bands A, B or C. An alternative solution was also suggested in which the Generator requirements are located in a document which sits outside both the Grid Code and Distribution Code. RW replied that we need to work out the requirements and then decide where these live within the GB Codes.
41. JN thought that a single document being an annex to the Grid Code and Distribution Code and referred to in each could work which would be agreed jointly with joint governance. Makes it clear to users what they have to do. RW asked, with a single external additional document, what do you do to resolve possible conflicts with existing GB codes.
42. CW added that to get the banding right we need to make it readable. Do DNOs know exactly what is connected and what will be. SM replied that DNO Long Term Development Statements (LTDS) do give most of this information, or best view in any case; but obligation is on customers to tell DNOs for DG and they don't always. So is this accurate. How can it be improved.
43. PB stated that in terms of how we take this forward in presenting modifications, we could chunk things up but then finally submit in one go. At what point do we start working up the specific mods. Perhaps halfway through however long we have. RM replied that the CMP Gas Code looked exactly at this and we should try to understand pros and cons of how successful this approach was. RW agreed to see if this could be presented at the next workgroup meeting.
44. AJ suggested that to provide clarity to Generators, it would be useful to include flow charts within the text clearly indicating the obligations applicable to them. The aim is to reduce the administrative burden for generators, particularly those which fall into Band A or Band B.
45. CW advised such process flows need to be user friendly and clear.
46. RM suggested doing the banding first but also wanted to add into the priorities the 'relevant TSO'/Multiple TSO responsibilities similar to the approach applied for CACM. This could be represented in a tick list format.
47. RW asked what forum would this fit into, RP advised CACM is one such meeting with all TSOs could do that or include in RfG workgroup but would need an awareness session ahead of this.
48. RW stated that we need a project plan and prioritised task list. We will progress this; it would be possible to chunk up as a framework mod and then split the technical requirements up into logical groups. The task list is to become a project plan in terms of where we expect RfG to be. CG to assist on this. A critical question is how long each task will take. We need to start putting dates in. AJ asked if DECC/Ofgem need a certain minimum time at the end of the process. RM replied it is difficult to assess this without considering a plan.. We do need to put

all of the activities against a timeline. A timetable can also be used to negotiate with the Commission at Comitology via DECC on how long the implementation of the code will take (at present the indication is that the Commission would like implementation to take place within two years) but also we need to stick to it. And it helps us to see how on track we are.

49. RM mentioned there will be a DECC/Ofgem Steering Group which oversee all of the ENC's and associated groups. It was noted the progress of the RfG workgroup would need to report into this steering group. In terms of Ofgem approval, they would look at the modifications received against the articles of the RfG ENC and use this with ACER and the Commission to demonstrate compliance and correct implementation.
50. SM clarified, that the workgroup would look at the tasks and check with Ofgem that the implementation process had been executed in the correct way.
51. CG added the need to create an assumption log to capture any assumptions made in putting the project plan together.
52. RM advised that there is a DECC/Ofgem Steering Group meeting at the beginning of November. RM added there will be a need to summarise and present the project plan to the DECC/Ofgem Steering Group and update its members at future meetings on progress.
53. AJ asked RM is there any information of how other member states are managing their approach to implementation. RM mentioned that there are plans being developed – Germany is taking quite a legalistic approach - but their regulators have not shared this in any detail.

8 Agree Actions

SLK

54. SLK to split Action 5 into two sections – 5a and 5b
55. RW and CG to produce task list which will be used to develop an RfG project plan.
56. Project plan lead by CG based on Entry into Force Q1 next year with an implementation of 2 years. This is to be included on the agenda for the next meeting.
57. CG to create an Assumptions Log to capture assumptions made.
58. RW to see if a Commercial Frameworks-Gas rep from NGET can provide an insight to the approach adopted on the Gas ENC's.
59. RM to look into the Ofgem/DECC Steering Group terms of reference and reporting lines. RM will report back to the workgroup for the next meeting.
60. AJ - 'Applicable Requirements' table (slide 8), AJ to update error in table relating to BELLA's and BEGA's. And SLK to arrange for corrected version to be published on the GC0048 website.
61. RM to discuss with ACER the definitions across ENCS and flag the codes which do not apply retrospectively. RM will report back to the workgroup for the next meeting.
62. AJ to check the OC6 requirements and update the comparison table accordingly as queried by AF. And SLK to arrange for corrected version to be published on the GC0048 website.
63. AJ to correct the error in the comparison table with regards to the Compliance / operational notification process showing this has been approved. And SLK to arrange for corrected version to be published on the GC0048 website.
64. RW to prepare material for the three priority items to work through for the next workgroup meeting;
 - Retrospectivity process (3.a.3)
 - Process for consideration of plant as new/existing (3.a.4)
 - TSO setting of banding thresholds (3.b.2-4)

65. SLK to look at website documentation and publishing format – can the documents run in chronological order or be split by meeting date.
66. SLK to add 'Stakeholder Representation' as a standing agenda item for this workgroup.

9 AOB / Next Meeting

SLK

AOB

67. Stakeholder representation: RM mentioned the October JESG, a discussion of stakeholder attendees for the RfG workgroup. RW advised we need to make sure that the membership of the group is properly representative and that within any limitations of capacity the group has an open membership. RM supported this and encouraged any attendees to please contact Sara-Lee Kenney⁴ if there are additional people who wish to attend. RM added she had discussed the appropriate representation with Mike Kay. RW reiterated that the worst case without representation is that we get pushback at consultation or later. The workgroup agreed to make 'stakeholder representation' a standing item.
68. RW discussed he has a slot at the next JESG to provide a more detailed update on the RfG workgroup and will also mention stakeholder representation at the same time. It was suggested to also present at the next DG Forum on 17 Nov. David Spillett is the Tech Sec of this and Martin Lee is the Chair. We could potentially arrange a special session at one of these.
69. CW asked could his AMPS rep who is attending the next ENA meeting, mention the RfG workgroup for their opinions. The workgroup agreed this is a good idea for engagement.
70. CW asked if it would be possible to drip-feed info for the next meetings. SM asked if it would be possible to not embed documents in the agenda. RW agreed to try both suggestions but said some prefer embedded documents but we put could them on the web as well.

Next Meeting Dates

The next RfG Workgroup meeting will take place on **20 November at National Grid House**. Please also find attached below all future dates as arranged for this workgroup until June 2015:

(calendar invites will be sent out for these)

- 17 December
- 20 January 2015
- 17 February
- 17 March
- 21 April
- 19 May
- 16 June

⁴ sarahlee.kenney@nationalgrid.com