

Minutes

Meeting name	GC0048: Joint GCRP/DCRP Workgroup on National Application of RfG
Meeting number	11
Date of meeting	20 July 2015
Time	10.00 – 12:00
Location	National Grid House, Warwick Technology Park, Gallows Hill, 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
Alastair Frew	AF	Scottish Power
Andy Vaudin	AV	EDF Energy
Antony Johnson	AJ	National Grid
Campbell McDonald	CMd	SSE Generation
Chris Whitworth	CW	AMPS
David Spillett	DS	ENA
Honor Hynes	HHy	National Grid
John Norbury	JN	RWE
Julian Rudd	JR	DECC
Mike Kay	MKa	Independent Consultant (ENA)
Richard Woodward	RJW	National Grid
Sarah Carter	SC	Ricardo-AEA
Steven Mockford	SM	UK Power Networks
Steve Cox	SCo	Electricity North West
Garth Graham	GG	SSE
Mick Barlow	MB	S&C Electric Europe

1 Introductions

RW

1. The Chair welcomed attendees and set out the schedule for the next two days. The GC0048 workgroup would take place in the morning on Day 1 (Monday 20 July) followed by an RfG Code Mapping Workshop in the afternoon which would continue all day on Day 2 (Tuesday 21 July).
2. RW also introduced Honor Hynes 'HHy' (National Grid) who will be taking over the GC0048 Technical Secretary role from September 2015.

Stakeholder Representation

RW

3. The Chair noted the Stakeholder Representation as a standing agenda item for this workgroup, in particular to ensure effective representation from manufacturers and smaller parties. The workgroup is open to all but for reasons of room capacity may need to be limited to one representative from each organisation.
4. Ofgem sent their apologies for this meeting noting the current staff movements and recruitment in progress. Matthew Berry (Ofgem) would dial into the afternoon RfG Code Mapping Workshop and attend in person on the following day.

2 Review of Actions & Approval of Minutes

SLK

5. SLK ran through the Action Log and progress made to date.

6. The following actions were closed at this meeting: Action 73 'HVDC & DCC Implementation Approach/Workshops', Action 74 'Implementation Paper Comments', Action 75 'RfG Mapping Template Draft – Workgroup Comments', Action 76 'Project Plan Scope Circulation to Workgroup'.
7. In relation to the open Action 13 'RfG timescales within connection offer documentation'; GG added the importance for National Grid Electricity Transmission (NGET) to write out to customers in advance providing guidance on the RfG timescales that will impact that customer and the necessary actions required as a result of this. AJ and RW noted this point and advised it has been included within the internal discussions to date and brought informally to customers' attention. It will be progressed going forwards when the code enters into force and will be pertinent to those customers holding connection offers/agreements who are not anticipated to have let contracts for main plant items by 2 years after Entry into Force (EIF). The issue will also be raised as part of the next series of customer stakeholder workshops which generally take place in October.
8. GG also mentioned the need to consider for the Connection Codes what is classed as 'boiler plate' and therefore included identically within each code as standard. There needs to be a joined up approach and consistency for the implementation of the Connection Codes along with the associated implementation workgroups. RJW added the code mapping workshops should assist with this with that for RfG starting this afternoon. RW mentioned there are two areas to look at; the need for European Network Code (ENC) Coordination overall and then the coordination across GB Codes and 'boiler plate' changes (Note: under section 5 of these minutes both these will be added as risks on the RfG Risk Register). This is something the GC0048 workgroup will begin looking at as part of the RfG mapping exercise.
9. The Action Log was approved by the workgroup and will be updated and circulated with the minutes of the meeting.
10. SLK highlighted that the previous meeting minutes had been updated with the changes received from John Norbury, Joe Duddy and Julian Wayne.
11. The minutes of the previous meeting were approved by the workgroup and will be published in the 'workgroup' section of the Grid Code website¹.

3 Progress Update

JR

12. JR provided an update and recap of the RfG progress to date. After 2 days of discussions at the Electricity Cross Border Committee, RfG was approved ('adopted') by Member States on 26 June 2015. The adopted text has been issued to Member States (and with that the GC0048 workgroup) and a copy can also be found on the Joint European Stakeholder Group (JESG) website². JR added the main changes of relevance to the GC0048 workgroup are that allowance for small (<20kW) wind turbines to be excluded from LFSM-O requirements has been removed from the adopted RfG text following scrutiny from Member States, however all other changes made were welcomed by Member States.
13. The next steps are for the adopted text to be translated followed by final approval from the European Parliament and Council and publishing in the Official Journal of the European Union (OJEU). Subject to this approval, it is then expected RfG will enter into force (become law) at the end of 2015.
14. JR also mentioned that there will be a meeting of the Electricity Cross Border Committee in Brussels this Thursday (23 July) which will include discussion of the HVDC and DCC ENCs. It is currently anticipated that HVDC voting will now move to September 2015 (previously expected to take place in July) followed by DCC voting in October (at the earliest).
15. CW asked if there is any way to find out more details on the issues discussed, in particular to help aid AMPS' members' understanding. JR advised that there isn't a formal process for this but would be happy to assist bilaterally with any queries stakeholders may have.

¹ <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0048/#>

² <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/European-network-code/Joint-European-Stakeholder-Group/>

16. RJW presented data extracts from the recent publication of the 2015 Future Energy Scenarios (FES)³, as a context for defining the RfG banding thresholds for GB. The FES was published on Wednesday 15 July by National Grid and is the conclusion of a further year of research which has been consulted on with a large number of stakeholders from across the industry. The FES uses four social-economic scenarios (see below) to provide a possible out-turn for energy landscape. The four scenarios for 2015 explore what the future of energy might look like through to 2050. The scenarios – Consumer Power, Gone Green, Slow Progression and No Progression – are based on the energy trilemma and describe different but credible pathways for the future. RJW stressed the data provided in the FES is not a forecast. RJW invited the workgroup's feedback on whether this should be used as the primary data source for defining the banding thresholds, and if so, what further information is required. Further discussions on this will take place at the next GC0048 workgroup meeting in August.

17. RJW introduced the new FES scenarios and defined the terms referenced as outlined below;

FES Scenarios 2015/16:

- **Gone Green** is a world where green ambition is not restrained by financial limitations. New technologies are introduced and embraced by society, enabling all carbon and renewable targets to be met on time
- **Slow Progression** is a world where slower economic growth restricts market conditions. Money that is available is spent focusing on low cost long-term solutions to achieve de-carbonisation, albeit it later than the target dates
- **No Progression** is a world focused on achieving security of supply at the lowest possible cost. With low economic growth, traditional sources of gas and electricity dominate, with little innovation affecting how we use energy
- **Consumer Power** is a world of relative wealth, fast paced research and development and spending. Innovation is focused on meeting the needs of consumers, who focus on improving their quality of life

Definition of Terms Used:

- **Distributed Generation** - generation directly-connected to the Distribution network (also known as 'embedded generation')
- **Merit Order** – the commercial viability of Response providers

18. RJW presented the data within the FES on system demand (particularly summer minimum), expected levels of distributed generation, and commercial availability of response in the coming two decades. This allows conclusions to be drawn on how system management may change. RJW mentioned that Ben Marshall (NGET) will present more on this in August as his team prepare the System Operability Framework. RJW and the workgroup noted in particular the rapid growth of Distributed Generation and large proportion at sub 1MW scale which over time will have a significant impact on Transmission System Demand.

19. The workgroup went on to discuss the time frame for FES and how this links with the banding setting. JN queried whether the workgroup should consider a time horizon to call upon FES data and for which the bandings could reasonably apply. GG suggested that as the banding thresholds can be amended after 3 years, should we not just look at this 3 year window? GG also added the need to consider the costs imposed on a plant and dependant on a plants lifespan and the cost of achieving greater level of capability retrospectively. If the requirement is required in say 20 years time, only ask for it when required. RJW suggested the workgroup agrees (via circulation) before the August workgroup, their respective views on the preferred timings to agree the banding.

³ <http://fes.nationalgrid.com/>

20. The workgroup discussed the FES findings in relation to Frequency Response. AJ noted that Small Power Stations (Generation less than 50MW in England and Wales) are not currently *mandated* to provide Frequency Response, and outlined in the Grid Code. Of most significance, the FES 'Consumer Power' scenario suggests only 4GW of commercially available Frequency Response at summer minimum (6am/2pm on an average summer's day). [These slides in the pack (21-22) have been retitled following feedback from the workgroup clarifying the data being presented.]
21. The workgroup raised queries in relation to the FES data and its sources: AF queried how this compares with the last FES Scenarios and also how accurate the forecast for 2015 ended up being? GG queried the definition of 'Distributed Generation' in relation to Scottish connections? JN queried the impact of subsidy changes on the FES scenarios, for example the recent government changes for Onshore Renewable Obligations. There was a general acceptance that a fundamental political change could undermine all the scenarios. JN also added that the 'installed capacity' needs qualifying with load factors, applying some probabilities. AF and AV requested that overall national demand needs to be plotted against installed capacity, and how setting the banding thresholds may affect this.. CMD queried what assumptions have been made for Interconnectors in particular for the Merit Order? RJW took an action to respond on these queries and return to the August GC0048 workgroup with a further update.

5 Project Plan and Risk Register

RJW

22. RJW provided an update on the RfG GC0048 Workgroup Risk Register. RJW advised one risk had been removed which was in relation to concerns around changes to the RfG network code. This was removed on the basis that RfG has now been adopted by Member States and therefore it isn't anticipated there will be further substantial changes to the code.
23. RJW will include the risks mentioned today in relation to coordination across the ENC's and Coordination across the Connection Codes and the implementation workgroups.
24. SLK provided an update on behalf of Celine Reddin (National Grid) on the RfG Implementation Project Plan. The RfG code mapping workshop will be used to in effect produce a task register that can then aid taking the project plan to the next level of detail; the plan will also be updated based on the adopted RfG network code version. CR will return to the August GC0048 to discuss the progress and updates made.

6 DECC/Ofgem Steering Group Reporting

All

25. The workgroup suggested a steer be provided by the DECC/Ofgem Steering Group in relation to today's discussions on the 'boiler plate' for the connection codes and an update on Ofgem's intentions on this.

7 Agree Actions

SLK

26. Following queries raised by the workgroup on FES Scenarios data, **RJW to return to the August workgroup with updates on;** National Demand vs Connected Generation (banding insight), the time horizon for banding setting and the specifics behind the FES data as queried by the workgroup.
27. **SLK/RJW** to circulate banding presentation and FES link to the workgroup.
28. **SLK/RW** to circulate ENTSO-E information on the RfG Implementation Workshop.
29. **RJW** will include the Risks mentioned today in relation to coordination across the ENC's and Coordination across the Connection Codes and the implementation workgroups.

8 AOB / Next Meeting

All

AOB:

30. **ENTSO-E RfG Workshop:** RW mentioned that ENTSO-E is planning to hold a workshop on RfG implementation covering a range of different national approaches. The workshop is due to take place on 23 September in Brussels. Further details including who this will be open to will be shared when known – although it is expected that it will be aimed firstly at those member states/TSOs that have not participated actively in the code drafting process

31. **Distribution Code Changes Update:** SC and MK presented an update on the drafting progress for the GB documents for the Distribution code as a result of RfG. SC advised that a large amount of information is already present in existing EU and GB standards. In particular the BSEN 50438 (which has a specific annex for GB) and TS 50549 1&2. In relation to drafting considerations, SC advised this provides the opportunity to align more closely with Europe but considerations are required for making this user friendly. SC also added that the work to date has focussed on the smaller generators and considerations are still ongoing for the larger generators and associated changes to both the Distribution and Grid Codes once the RfG Banding Thresholds have been agreed. SC also mentioned the discussions with Marta Krajewska (Energy UK) and GG on a platform to house user friendly guidance documents for the GB code changes.

Next Meeting:

The next RfG Workgroup meeting will take place on **Tuesday 18 August** 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 [Sara-Lee](#) if you have not received them)

- Friday 25 September
- Wednesday 28 October
- Thursday 19 November
- Thursday 17 December