# nationalgrid

# Minutes

Meeting name	Grid Code Review Panel
Meeting number	61
Date of meeting	15 <sup>th</sup> May 2013
Time	10:00am - 4:00pm
Location	National Grid House, Warwick, CV34 6DA

# Attendees

Attendees			
Name	Role	Initials	Company
lan Pashley	Chair	IP	National Grid
Robyn Jenkins	Secretary	RJ	National Grid
Steve Brown	Authority Member	SB	Ofgem
John Lucas	BSC Panel Member	JL	Elexon
Guy Nicholson	Generators with Novel Units Member	GN	Senergy Econnect
Tom Davies	Large Generator (<3GW) Member	TDA	Magnox
Alastair Frew	Large Generator (>3GW) Member	AF	ScottishPower
John Morris	Large Generator (>3GW) Member	JM	EDF Energy
John Norbury	Large Generator (>3GW) Member	JN	RWE
Alan Creighton	Network Operator (E&W) Member	AC	Northern Powergrid
Gordon Kelly	Network Operator (Scot.) Member	GK	ScottishPower
Richard Lavender	NGET Advisor	RLa	National Grid
Thomas Derry	NGET Member	TD	National Grid
Rob Wilson	NGET Member	RW	National Grid
Graham Stein	NGET Member	GS	National Grid
Alan Barlow	Non Embedded Customers Member	AB	Magnox
Damien McCluskey	Presenter	DMC	National Grid
Shijun Yi	Presenter	SY	Centrica
Joseph Dunn	Transmission Licensee (SPT) Member	JD	SPT
Campbell McDonald	Large Generator (>3GW) Alternate	CM	SSE Generation
Guy Phillips	Large Generator (>3GW) Alternate	GP	E.ON UK
Alex Thomason	NGET Observer	AT	National Grid
Julian Wayne	Authority Alternate	JW	Ofgem
Pavel Miller	Small / Medium Generator Observer	PM	Energy UK
Apologies			

Name	Role	Initials	Company
Roger Harris	BSC Panel Alternate	RH	Elexon
Xavier Pinchaux	Externally Interconnected System Operators Alternate	XP	RTE
Sigrid Bolik	Generators with Novel Units Alternate	SBO	REpower
Jim Barrett	Large Generator (>3GW) Alternate	JB	Centrica
Neil Sandison	Network Operator (Scot.) Alternate	NS	SSE
Lisa Waters	Small / Medium Generator Alternate	LW	Waters Wye
Richard Lowe	Transmission Licensee (SHE Transmission) Alternate	RL	SHE Transmission
Alan Kelly	Transmission Licensee (SPT) Alternate	AK	SPT
Mike Kay	Network Operator (E&W) Member	MK	ENW
Barbara Vest	Small / Medium Generator Member	BV	Energy UK
Brian Punton	Transmission Licensee (SHE Transmission) Member	BP	SHE Transmission
Brendan Woods	Externally Interconnected System Operators Member	BW	SONI
Audrey Ramsay	NGET Member	AR	National Grid

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#### 1 Introductions & Apologies

3086. The Chair welcomed the group and the apologies were noted.

3087. IP explained the new National Grid Operating Model and noted that BT was taking over the European Code development role and RW would now be the Technical Codes Manager and GCRP Member. IP noted that the slides could be circulated if required.

#### 2 Approval of Minutes

#### a) March 2013 GCRP Minutes

3088. The Panel approved the minutes for publication

- 3089. GN noted that a couple of his suggested actions had not been included. RJ added that as he suggestions were for actions which are part of the normal process, e.g. publish the consultation it was not normal practice to capture these as specific panel actions.
- 3090. JN noted that the CTV actions may not be accurate. JN requested that the action also includes a review to establish whether the CTV requirements remain fit for purpose. RJ agreed to amend the wording to reflect the true intent of the action.
- 3091. ACTION: RJ Upload minutes on to the National Grid website.

#### **3** Review of Actions

# a) Summary of Actions

#### A/12: Information Required To Evaluate Sub-Synchronous Resonance

3092. Minute 2678 – RJ noted that this action will be covered on the agenda. The action is now complete and can be closed.

Grid Code Modification Process

3093. Minute 2622 –RJ informed the Panel that the document will be moved once the website is refreshed but noted that this will be happening in the next few months and Panel members should expect to see changes soon. This action remains ongoing.

#### Protection Fault Clearance Times and Back-up Protection

3094. Minute 2678 – RJ informed the Panel that there is no update available. This action remains ongoing.

#### G5/4 Harmonics

- 3095. Minute 2943 GS explained that will try to make more information available in November ETYS.
- 3096. Minute 3028 RJ read a statement which RL had provided on behalf of SHE Transmission, noting that SHET have a number of fixed Power Quality Recorder (PQR) devices and portable PQR devices are deployed as required for investigation of power quality issues, including harmonic monitoring. In general SHE Transmission do not have a history of harmonic issues but, there are project –plans to install fixed harmonic monitoring devices at key locations around their network. SHE Transmission are working with SPT and National Grid to better understand the harmonic overview and how best to provide a useful description of this for current and potential future network customers either within ETYS or by other means.
- 3097. GN thanked GS for taking this on board and moving forward but noted that further information would be helpful and useful. Harmonics needs to be included in ETYS. SY noted that in a particular project it was not possible to provide further harmonic data because of different outage plans. But they did provide a flow chart on how it works. GS noted that they are on schedule for providing recommendations on G5/4 in July and from that work there will be clearer ideas of who does what when. GN noted that he

thought there would be a consultation (from Jackie Mesnard). GS noted that there are a number of streams of work which need to be clarified.

Revision of Engineering Recommendation P28

3098. Minute 2866 – RJ noted that the DCRP are looking for a Workgroup chair, when a suitable person is found, the workgroup will progress. This action remains ongoing.

Consequential changes from CA049

3099. Minute 2872 – TD noted that further queries had been raised at recent STC Panel meetings which delayed submission of the Final Modification Report to the Authority. The STC report was resubmitted to the authority on 10<sup>th</sup> May. Once an Authority decision has been made, NGET will raise the consequential changes required to the Grid Code. This action remains ongoing.

Constant Terminal Voltage

- 3100. Minute 3034 –update on why GB requirements are different to European Requirements due for the July Panel meeting. This action remains ongoing.
- 3101. Minute 2887 TD noted that National Grid has developed an outline for a workshop, which has been circulated to BV for review. This action remains ongoing.

AOB

3102. Minute 2975 – RJ noted that some photos have been received and asked the Panel to send their own photos as soon as possible. This action remains ongoing

GC0062: Fault Ride Through

3103. Minute 301- RJ noted that this will be covered on the agenda. This action remains ongoing.

#### 4 New Grid Code Development Issues

#### a) GC0049 – Code Governance Review phase 2

- 3104. DM presented panel papers 13/25, 13/26 and 13/27 noting that National Grid are seeking to include new processes in the Grid Code to formally align with Ofgem's proposals under Code Governance Review phase 2, noting that Ofgem are expected to publish a direction at the end of May.
- 3105. JN noted that there may also be a need to make changes to the General Conditions as a result of the proposed changes and that a simple procedure in the GCs may suffice. DM confirmed that drafting changes could likely be needed to the General Conditions, Glossary & Definitions and Constitution & Rules.
- 3106. JL asked if National Grid provided comments on Ofgem's Licence drafting. TD noted that National Grid had responded outlining concerns regarding the use of the term 'modification' and the proposed 31<sup>st</sup> December 2013 implementation date. JL added that he is not sure the GC0049 proposals include everything Ofgem wanted regarding making the Grid Code more open.
- 3107. JL noted that the Licence drafting has requirements for National Grid to help Authorised Electricity Operators raise modifications. IP noted that this may be an issue with the terminology; the sentiment is that National Grid should be helping draft and bring issues to the panel. These proposals allow National Grid to deliver the intent, such that parties can bring issues for progression. IP noted the intention is to make clear that what happens in Grid Code is similar in principal but different in governance to the other codes.
- 3108. GN noted that the document was not clear, for example in pp13/27 it discusses taking ownership he added that this may be issue of semantics, but question whether there would be an issue with users raising modifications.
- 3109. JL added that the intent of the Ofgem proposal was to introduce more openness and transparency for the Grid Code and the consultation documents need to make clear that National Grid is intending to make the process more open.

- 3110. AT noted that the CACoP is a public document on Ofgem's website and for the Grid Code the principles need to be implemented where they are applicable.
- 3111. IP noted that the Grid Code Modification Process will be reviewed following the completion this work.
- 3112. The Panel noted concerns over the send back procedure, particularly when that will be used. AT provided examples of when send back has been used under the CUSC.
- 3113. DM asked the panel whether a workgroup was required or whether instead a draft consultation can be brought to the July 2013 GCRP. The Panel agreed these issues can proceed to consultation.

# b) GC0070 – Clarification of Interpretation of BC2.7.3

- 3114. CM presented paper pp13/28 noting it is not an issue or proposal; it is intended to raise awareness.
- 3115. CM noted that safety in BC2.7.3 relates to danger to plant/personnel. Different fuel sources have to be managed differently, for Hydro plant the fuel cannot always be contained. There is not a dynamic parameter which the plant can use to specify that it needs to run so only thing the station can do is reject the BOA on safety grounds. CM added that better communication is needed; it would be helpful if, at start of BOA, the control room provide an indication of how long will last so the station can see how long they can weather it. Also, under these circumstances, if an emergency instruction was issued, they would have to reject that. Hydro plant cannot move water from one place to another then discharge in an unplanned and uncontrolled manor as this is a risk on their environmental licence.
- 3116. AF noted that they have also had issues with BOAs for pumping and have had to take things up to maximum price to try to stop pumping BOAs when dam levels are approaching their maximum.
- 3117. IP noted that TCLC has conditions to capture these things, so it would be up to Ofgem to determine whether using prices was an issue to be addressed or whether they would leave it to National Grid to manage. SB replied that Ofgem would have to consider it on its merit and address what precedent that would set. JW asked whether the turbine can be run with a de-energised generator. CM noted that this wouldn't pass the volume of water necessary. AF noted this can also cause overspeed which will result in a reduction of flow.
- 3118. IP questioned how effective the generators feel the current operational liaison is? CM noted that they have had successful discussions with the control room but there is nothing which forces System Operator to do anything and engage with the generators. IP noted that it appears that there is a lot of real time liaison and education needed across the shift teams to make everyone aware of the risks.
- 3119. IP enquired whether this could be submitted under Other Relevant Data in addition to general liaison in operational timescales, noting that with an issue of this sort using existing routes is preferable. IP added that it would be useful to establish who is affected, and there needs to be some dialogue to establish how often this is likely to be a risk. There is a need to ensure there are effective bilateral discussions taking place early on and if anyone else has an issue we need to capture that early.
- 3120. JN asked for clarity on whether this issue is because of a local transmission constraint and if not local it should be possible to use bid /offer prices to achieve the required result. GS noted that this is currently a local Transmission issue, but this may have to be done on a system wide basis. CMD noted that there should be obligations on the System Operator and the Generator and, if asked, plant should be able to say how long they can run for.
- 3121. IP noted that National Grid will report on the outcomes of any bilateral discussions at an appropriate time.

# b) GC0071 – Request to add a formal member representing renewable generators to the GCRP.

3122. SY presented paper pp13/29 highlighting the current Panel constitution and members.

- 3123. RJ asked the panel whether they feel that renewable generators, particularly wind, and under-represented on the Panel?
- 3124. JN and GP noted reluctance to support anything technology specific, they would support another more general generation member.
- 3125. JN noted that the panel is quite inclusive and does generally allow other generators to attend where necessary.
- 3126. RJ noted that the generator members should be representative of all in that category. SY suggested that if there are some commercially sensitive issues a generator may not want to talk to competitors. RJ noted the in those circumstances then National Grid can be approached.
- 3127. GN noted that he primarily represents renewables and does not feel that wind are underrepresented.
- 3128. The Panel were generally supportive of having more generator members, and noted that in the future there may be a requirement for more representatives for photovoltaics.
- 3129. JN noted that there are seats on the Panel for suppliers and externally interconnected system operators, suggesting that as they do not attend meetings or have not filled the position for several years, then their seats could be given over to more generator representatives, as the majority of Panel business is generator focussed. JL suggested not severing ties with these parties at this stage given all of the European developments which they will likely need to be involved in.
- 3130. SB asked whether there is potential for any improvement in confidentiality where discussions with members take place. JN noted that he has taken the view that the extent to which they are happy to discuss issues directly with him, they would be happy to share that with the panel where applicable unless indicated otherwise, adding that he has never been conscious that it has been an issue.
- 3131. RJ suggested that during the election process in December the membership is addressed, if there is sufficient interest from new generators then the membership categories may be revisited. At present, membership categories are uncontested and there have been no new members for several years. It was agreed that the election process would also be more widely advertised, and the roles of members highlighted.
- 3132. The Panel agreed that this was an appropriate way to progress.

#### 5 Existing Grid Code Development Issues

#### a) Issues Summary

- 3133. RJ informed the Panel that the issues for discussion at this meeting have been listed on the agenda.
- 3134. GN asked if the original date an issue was raised could be added onto the issues list.

#### b) GC0062: Fault Ride Through

- 3135. GS noted that following circulation to the Panel, comments have been received which could be addressed by circulation, but should probably be brought back to the July panel meeting. He acknowledged that Terms of Reference as drafted were clear for those who attended the workshops but not to anyone looking at it cold.
- 3136. IP noted that it seems sensible to look at seeking members for the workgroup in parallel to addressing the comments. CM noted that some of the points in the terms of reference are not logical and it does not feel right to do something which then may need to be done again. GS noted that was one of the unresolved issues and agreed to bring the terms of reference back in July and look to form the workgroup there after.

#### c) GC0040: Information required to evaluate sub-synchronous resonance

- 3137. GS noted that a workshop was held on the 2<sup>nd</sup> May.
- 3138. GS noted that there are some questions to resolve regarding HVDC technology. GN asked what the next step in the process would be. GS added that the work on roles

and obligations may translate into frameworks changes. GN observed that it is unlikely that an OFTO would want to take on liability for system changes, GP added that this is also an issue for interconnectors. AF noted the there is only an issue for the type of HVDC technology being proposed by wind farm connections if the wind farm is importing, not exporting.

# 6 Workgroups in Progress

#### a) Workgroup Table

- 3139. RJ noted that the Workgroup Table includes updates of the latest position of each Workgroup and an indicative timetable
- 3140. The Panel stated that it would be useful to expand this table to track all of the open Grid Code Issues. National Grid agreed to take this away and bring something to the next Panel meeting.
- 3141. ACTION: TD Look at developing a wider issue tracker for the GCRP.
- 3142. GP noted that there were a lot of workgroup reports due in July, RJ added that National Grid are doing everything possible to mitigate against bottlenecks in the workload and reduce the amount of issues on the agenda for July.
- 3143. The Panel also expressed concerns that many of the timescales for these workgroups have slipped. RJ noted that this is being monitored, and often it has been due to availability, internally and externally, for meetings.
- 3144. JL noted that the BSC issue 47 group met and there may be an impact on the Grid Code as DNOs may need to provide additional information. GS confirmed that this will be picked up by GC0042.

# b) GC0035: Frequency Changes during Large System Disturbances

- 3145. GS presented paper pp13/32 noting that the workgroup meets monthly. The workgroup are looking to conclude the work, by the University of Strathclyde, on changing the recommended rate of change of frequency. The workgroup have also done some industry workshops, to get access to those who would not normally get involved. The workgroup received good feedback on the workshops including information on what is already installed and the industries feelings about the changes. In general the feedback from generators suggests the changes may be a good thing. The revised Terms of Reference reflect the phased approach the workgroup are taking, the first phase focuses on 5MW and above. The workgroup will bring recommendations forward in July and any changes will be under distribution governance. Additionally the workgroup intend to outline the work program for how to deal with 5MW and above plant. GS noted that the current target of July is challenging and there is a risk that this may displace other work.
- 3146. AC noted that the workshops were a new approach and asked who attended. GS noted that the workshops were well attended with generators, DNOS, manufacturers and installers all attending.
- 3147. GN congratulated National Grid on launching the tender for inertia.

# 7 Workgroup Report

None

#### 8 Industry Consultations

3148. JL asked for an update on the offshore BMU configurations industry consultation. GS noted that he will try to bring this to the July panel.

# a) F/12: Formalising TSL

3149. TD noted that F/12 was sent to the authority for a decision on 14 May following creation of guidance document. It was noted that one comment was received from GCRP members which was addressed bilaterally and required no changes to the document. The Panel were supportive of the guidance document.

#### 10 Standing Items

#### a) European Network Codes

- 3150. IP noted that pp13/33 the ACER update on the European Network Codes was circulated to the panel
- 3151. RW gave a presentation on RfG Application Options. This was first presented at JESG from which one of the resultant actions was to take the same presentation to each of the GB code review panels.
- 3152. RW noted that many EU codes are now going into the comitology phase and highlighted the reasons why GB application is so complex. He added that there are no guarantees for how long the code takes to go through this phase and become European law; for RFG following this there will be a 3 year period for adoption. RW explained the implementation options considered noting that the favoured options to date are to either write a new code to cover ENC requirements but retain the existing code, or to rewrite the Grid Code completely, both these having distinct advantages and disadvantages. RW added that if the Panel can think of any other options or have any further feedback then nothing is closed off, these just show the most realistic options at present.
- 3153. JN asked if this means that all the obligations will be stacked, so that the most onerous obligations from the RfG and the Grid Code would apply to Generators, and hoped that this would not be the case. JN also queried whether, alternatively, some current GB code obligations could be relaxed where permitted by the RfG to balance those RfG requirements that may be more onerous than the current GB code. JN added that this is something which needs to be considered, and it will be very disappointed if there is an overall raising of the bar. RW noted that the national implementation stage will be the most important for determining this. It will not necessarily be simply a raising of the bar; while the ENCs, being European law, will take precedence over existing GB codes, if GB code provisions exceed the ENCs or fall outside them they will remain in place. CM questioned whose decision is it to determine how that will be formatted. IP noted that where there is something in the Grid Code which is more onerous than the EU code then there could be a change proposed to change the Grid Code.
- 3154. GN questioned whether an overall generator code to replace the Grid Code and Distribution code had been considered?
- 3155. RW noted that cost benefit analyses will be carried out to determine retrospectivity. AF suggested that in the Balancing Code it says you cannot take part in the balancing market unless you comply with the code. RW noted that many of these clauses are subject to NRA approval.
- 3156. CM noted that BETTA introduced some of the code conditions to smaller generators RW, point of the exercise is stakeholder engagement and talking to people. JN noted that where generators are concerned it can be difficult trying to deal with two regulated monopolies and it may almost be worth considering whether there should be a unified code and charging structure for everyone rather than separating out Distribution and Transmission connected. JN questioned why the discussion on application of RfG has only taken place between National Grid and the DNOs. AC added that ofgem were also involved. JN asked whether there is any plan to engage with the wider industry on this. RW stated that this was going to be a vital part of the national implementation process.
- 3157. RW posed questions to the panel including what governance arrangements should be considered noting that so far there is a strong preference for using existing processes to implement any changes. The Panel queried what would be done with making changes to the existing codes at the same time. IP suggested that there is a possibility for a cross codes panel to create coordination between the panels and resources.

- 3158. JN suggested that connection conditions in RfG would be simpler to progress separately to the current Connection Conditions in the GB Grid Code, which could remain in place for existing generating units. Drafting the new RfG compliant GB connection conditions, which could be developed to apply to new plant from a certain date, may also be a good opportunity to make the connection conditions tidier. He suggested that the two connection conditions codes, namely the legacy CCs and the new plant CCs, could then form part of the RfG Compliant GB Grid Code. This would ensure that the obligations relating to existing generating plant remained clear and unambiguous throughout their lifetime. JL added that there is not an indication of how much will be common across new and old generators.
- 3159. RW added that for the retrospectivity cost benefit analyses; in general requirements would be assessed on whether they are a benefit to GB, as is done now but with greater volume. RW noted that the ENTSO-E vision document is useful in setting out an introduction to the codes and interactions between then adding that there will be a link to it in the slides.
- 3160. JN stated that retrospectivity is a potential big issue for generators, as it creates a risk of requiring major capital investment.
- 3161. RW highlighted the next steps which will involve taking feedback from panels to JESG, then in conjunction with Ofgem and the group who did this work the next steps with the wider stakeholder community will be developed.
- 3162. GN noted that his understanding is that some of the RfG definitions are the same as the Grid Code and some mean slightly different things, noting that if they are adopted there could be future challenges.
- 3163. AB queried how easy it will be to change an EU code. RW added that there is no answer yet however ENTSO-E see the codes as documents that will need to change on a regular basis, but the only way at the moment is to take the code back through comitology which is very time-consuming

# b) Joint European Standing Group

3164. IP noted that as BV wasn't present, the paper pp13/34 provided an update on the JESG.

#### 11 Impact of Other Code Modification or Developments

3165. A codes summary, pp13/35, was circulated to the Panel.

# 12 Any Other Business

None

# 13 Next Meeting

3166. The next meeting is planned for 17 July 2013 at National Grid House, Warwick.