

## Minutes

<b>Meeting name</b>	Grid Code Review Panel
<b>Meeting number</b>	76
<b>Date of meeting</b>	25 November 2015
<b>Time</b>	10:00am – 3:00pm
<b>Location</b>	National Grid House, Warwick.

## Attendees

<b>Name</b>	<b>Role</b>	<b>Initials</b>	<b>Company</b>
Ian Pashley	Chair	IP	National Grid
Alex Thomason	Code Administrator	AT	National Grid
Andy Vaudin	Large Generator (>3GW) Member	AV	EDF Energy
Alastair Frew	Large Generator (>3GW) Member	AF	Scottish Power
John Norbury	Large Generator (>3GW) Member	JN	RWE
Tom McCartan	Externally Interconnected System Operators Member	TM	SONI
Philip Jenner	Large Generator (<3GW) Member	PJ	Horizon Nuclear Power
Guy Nicholson	Generators with Novel Units Member	GN	Element Power
Marta Krajewska	Generator (Small and/or Medium) Alternate	MK	EnergyUK
Steve Cox	Network Operator (E&W) Member	SC	ENW
Alan Creighton	Network Operator (E&W) Member	AC	Northern Powergrid
Richard Lowe	Transmission Licensee (SHE Transmission) Member	RL	SHE Transmission
Alan Barlow	Non Embedded Customers Alternate	AB	Magnox
Robert Longden	Suppliers	RLo	Cornwall Energy
Nick Rubin	BSC Panel Member	NR	ELEXON
Graham Stein	NGET Member	GS	National Grid
Tim Truscott	NGET Member	IK	National Grid
Rob Wilson	NGET Member	RW	National Grid
Richard Woodward	NGET Member	RJW	National Grid
Richard Lavender	NGET Advisor	RLa	National Grid
Fiona Williams	NGET Presenter	FW	National Grid
Anthony Johnson	NGET Presenter	AJ	National Grid

## Guest Presenter

Gerry Cleary	Transmission Licensee (SHE Transmission)	GC	SHE Transmission
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## Alternates

Guy Phillips	Large Generator (>3GW) Alternate	GP	E.ON
Campbell McDonald	Large Generator (>3GW) Alternate	CMD	SSE Generation

## Apologies

<b>Name</b>	<b>Role</b>	<b>Initials</b>	<b>Company</b>
Tom Davies	Non Embedded Customers Member	TD	Magnox
Gordon Kelly	Network Operator (Scot.) Member	GK	Scottish Power
Sigrid Bolik	Generators with Novel Units Alternate	SB	Repower
Graeme Vincent	Transmission Licensee (SP Transmission) Member	GV	Scottish Power
Craig McTaggart	Transmission Licensee (SP Transmission) Alternate	CMt	Scottish Power

## 1 Introductions & Apologies

4179. Apologies were received from TD, CMt, SB and GV.

## 2 Approval of Minutes

### a) September 2015 GCRP Minutes

4180. Comments were received from JN and AV. The minutes were approved by the Panel.

**ACTION – RP to update the website with approved minutes.**

## 3 Review of Actions

### a) Summary of Actions

4181. **Minute 4087: Grid Code Process Review.** RP noted that the current Grid Code process review is ongoing and that any further updates will be presented to the panel in due course.

4182. **Minute 4142: Grid Code Process Review.** RP noted that unfortunately due to some of the embedded links in the issue papers and Workgroup Terms of Reference we have been unable to upload the new templates to the website. This is currently being investigated and an update will be provided to the panel once this has been resolved.

4183. **Minute 4089: DCC Workgroup.** RP noted that the request to have a joint DCC Workgroup with the DCRP was accepted by both GCRP and DCRP. The Workgroup met for the first time on 20<sup>th</sup> November and will meet again on 8<sup>th</sup> December when it will discuss the code mapping.

4184. **Minute 4093: EDT/EDL Housekeeping Change.** RP noted to the panel that Interface Standard Issue 5 has now been removed from the website and replaced with Issue number 4. Confirmed that the MODIS Standard has been incorporated and that a document control process has been put in place to ensure the procedures are followed.

4185. **Minute 4105: SPT Electrical Standards.** On the agenda for this meeting.

4186. **Minute 4139: Week 24 Generator Data addressees.** RP confirmed that it had been recognised within National Grid that this was a problem and that work had been done to try and rectify the problem. During the next cycle prior to the data being requested, National Grid will do an internal audit with the Customer Account Managers to ensure that the information is up to date. The Panel was asked if they were happy to close the action. The only comment was from JN who noted that he was happy for the action to be closed as it was now an internal matter for National Grid.

4187. **Minute 4151: GC0079 withstand limits.** On the agenda for this meeting.

4188. **Minute 4153: GC0087 Workgroup ToR.** On the agenda for this meeting.

4189. **Minute 4163: GC0086 Open Governance.** On the agenda for this meeting.

4190. **Minute 4169: Progress Tracker Updates.** RP informed the Panel that this had now been updated as requested to reinstate GC0076 Rapid Voltage Changes such that the follow-up actions on this remain visible.

## 4 New Grid Code Development Issues

4191. **SHE Transmission Electrical Standard Update.**

4192. GC provided a presentation to inform the panel of the differences between the SHET RES document and the current suite of RES documents for England and Wales and the amendments made to the document circulated two weeks prior to the meeting. SHET intend in the main to adopt the National Grid RES documents with only slight caveats (due mainly to geographic/network differences). He then opened the room up to questions.
4193. JN clarified that, in his view, the RES documents are not considered as National Grid's documents but industry standards under the governance of the Grid Code. He asked, since there appears to be only a few variations between the England and Wales RES suite and the SHET document, if the changes could be incorporated into the current RES documents? CMD agreed with JN that it would be beneficial to have one set of documents because it would make it clearer for the end user. RW then asked the question: would adapting the current RES to capture regional variation mean the governance of the RES has to change? GS then added that at the current moment it is not possible to merge the documents and rather this should be something to aim for. The priority is to get the SHET and SPT documents approved and then the merging of the documents can be revisited at a later stage. CMD acknowledged the good work done by GC and his team but that the priority was to comply with the law, and so questioned how regional variations can occur (for example at the interface points).
4194. AV asked what the expecting timeline for the implementation of the SHET RES document would be, and what standard a current generator should use when connecting to the system. IP confirmed that a generator should use the RES as quoted in their connection agreement.
4195. GC set out that it is proposed that SHET would produce an interface document that would allow them to use NGET RES documents while reconciling any minor changes required. He went on that once submitted, approval takes twenty working days.
4196. JN then requested clarification of what was being proposed, for example is the document to be incorporated into the Grid Code alongside the other RES documents? RL clarified that the document proposed should be a further addition to the NG baseline documents, and that SHET would like the document approved as a separate document in the short term as it is long overdue. CMD commented that it is a very positive step but should this be applied retrospectively? RL didn't believe anything should be applied retrospectively and IP confirmed this. CMD then asked if the connection offer of someone currently connecting would be honoured, and RL confirmed that it would. PJ then asked if the SPT RES documents are currently on hold as it would be good to go through the process with them at the same time. GS then suggested that RP chase up SPT to get an understanding on where they are with the RES documents. RL then asked if SPT are happy to put their current RES documents through the approval process with SHET or if they will do this separately. It was decided that both RES documents should ideally be processed at the same time with a considered target date of the 8<sup>th</sup> January. AC asked if there was any progress finalising the three or four of the current RES documents that are still in draft form. RP informed AC that the Asset Policy team will be in touch in the New Year, and that it is a priority to get this resolved.

**ACTION – RP to contact SPT to chase up RES document.**

**ACTION – RP to circulate SHET amended RES document.**

**ACTION – NG to liaise with three onshore Transmission companies to come back to the July panel with a proposal about how to co-ordinate a consolidate GB RES suite of documents.**

**ACTION – Ofgem to confirm which standards would be applicable to third parties connecting at the interface point.**

**ACTION – NG to finalise the remaining three or four RES documents**

## **6 Existing Grid Code Development Issues**

4197. No existing Grid Code Development Issues.

## 7 Workgroups in Progress

### a) **GC0079: Frequency Changes during large disturbances and their effect on the total system (ROCOF).**

4198. GS confirmed that GC0079 is getting to the stage where a proposal can be crystallised which the workgroup aims to complete in March 2016.

4199. GS noted that for the current GC0079 ROCOF action that is currently open, the October Workgroup came to the conclusion that a paper needs to be presented to the January panel flagging what is required to meet the withstand requirements. The Workgroup is making good progress on the scoping that is required for Loss of Mains Protection. It is noted by the workgroup that whatever resolution is provided it needs to be clear which parties may be affected by any decision and the timescales it may take to implement.

4200. PJ then stated that ROCOF withstand currently applies to both transmission and distribution connected users. CMD then commented that no withstand is currently applied to generators and so whilst it is a priority for new generators coming onto the system, that for existing generators it would require a big piece of work to understand what is required for them. An action plan is required.

**ACTION – GS to provide a Panel paper on ROCOF withstand at the January Panel.**

### b) **GC0087: Frequency Aspects of RfG.**

4201. GS noted the new ToR for GC0087 following a Workgroup review and asked for approval of the new ToR from the Panel highlighting the changes to the new ToR.

4202. AC then commented that we need to make sure that nothing falls through the cracks between the ToR for the various GC0048 subgroups. RJW then informed the group that he wants to use the code mapping spreadsheet to ensure all aspects of RfG are captured for the different work streams being created under GC0048. He noted that NGET are working on preparing a more detailed plan for the next GC0048 Workgroup and that this will be shared more widely subsequently. AV then commented that the ToR needs to be precise because at its simplest it is just setting parameters in line with the ENC. RJW then commented that the DCC is yet to do its code mapping and for HVDC this is not yet complete, but that these are an important feature in ensuring that all of the Workgroups maximise efficiency. RW then stated that he would place an action on himself to return to the January Panel with a report on the next steps and structure of the work to be done in implementing the European Connection Codes once all of the Workgroups had finished their code mapping. RJW picked up an action to circulate the ToR for GC0048.

4203. CMD then stated that point five on the ToR for GC0087 has a wide open scope and that it needs to make sure that it feeds back into the quality of frequency that you are trying to manage. IP then asked does something need to be added to set context for the reference. The group agreed unanimously yes so an action was placed on FR to get this amended.

**ACTION – RW to provide a report to the Panel in January on next steps and work planning following code mapping for implementation of the European Connection codes.**

**ACTION – RJW – Circulate the ToR for GC0048.**

**ACTION – FR to amend ToR for GC0087 to add context to point five.**

## 8 Workgroup Reports

4204. **GC0062: Fault Ride Through.**

4205. GS told the Panel that the Workgroup was concluding its proposals and was finalising its view on the applicability of the new requirements. The Workgroup Report is being revised to reflect

the feedback. It is currently with the Workgroup for comment. GS will return to the January Panel to request approval of the Workgroup Report and the Consultation document at the same time with the aim of then running the consultation in the spring. He stressed that the aim is to clear historic issues so that focus can be on RfG implementation etc.

## 9 Industry Consultations

### 4206. **GC0075: Hybrid Static Compensators.**

4207. AJ provided a presentation on the issue Hybrid Static Compensators have with complying with the Grid Code as it stands. AF then raised a question from the slide about how the 6hr and 24hrs periods fit together. AJ confirmed that 6hr is the period for cool down and 24hr is the consideration period. IP then asked if you needed to have both the 6hr and 24hr in the slide. Or does the issue need to be captured as a consultation question? RL then asked if it needs to clarify that the 24hr period is a rolling window.

4208. AJ invited the GCRP to approve GC0075's Workgroup Report for industry consultation. AF commented that it is a big improvement on the current legal text, but that some of the format of the Report needs to be amended as the numbering has gone awry. AJ to take an action to amend the formatting of the Workgroup Report. JN had no further comments on the technical content but noted that the legal text needed a little bit of tidying and agreed to provide written comments after the meeting. In addition, he asked how National Grid would be notified of a temporary restriction in reactive capability and what the form of this notification would be, e.g. BC2 Appendix 3 fax? AJ responded that it would require a consequential change to capture this, so could it be a consultation question to ask the industry for the preferred method (fax etc.). JN also noted that, whilst the obligation will be in the CC.A for the user to notify National Grid, corresponding provisions would probably be required in the Connection Agreement.

4209. RL then noted that the conclusion could be reworded to provide more clarity and that the bullets from the slide would be useful to incorporate to inform the reader. IP then asked whether the 6<sup>th</sup> January response deadline allowed enough time for respondents to provide comments on the Consultation document considering it is the Christmas period. The Panel's view was that a longer period was required and AJ was asked to amend the deadline to the 13<sup>th</sup> January. GN then asked a question about the performance of network licencing equipment. Are MSCDNs capable of the equivalent performance for example? IP suggested that this could be expressed as two questions: should they meet these requirements? And that any Workgroup discussions in that area should be captured in the consultation document.

## 10 Reports to the Authority

### a) **GC0023: Protection Fault Clearance Times and Back-up Protection.**

4210. FR updated the Panel that the GC0023 Industry Consultation closed in September with five responses. Four responses were in favour, one of which required clarity on the proposed legal text changes. The one rejection was a misinterpretation of the requirements laid out in the Consultation document and the belief that all requirements affected DNO connected sites and would be applied retrospectively as part of implementation. FR confirmed that the questions were being dealt with. IP asked about the timeline for submission to the authority. RW asked the GCRP to clarify that they are happy for National Grid to submit the report to the Authority once the last two questions have been ironed out. GCRP agreed unanimously.

### b) **GC0086: Open Governance.**

4211. AT confirmed that the Consultation window closed on the 6th November with seventeen responses received and split views on many of the issues. Eight respondents support the original GC0086 proposal, six supported the alternative, two didn't support either and one had specific issues to raise. It was confirmed that the final report had not yet been submitted to the Authority due to the publication of CGR3. National Grid confirmed that they needed to

have further conversations with Ofgem to make sure that the work presented avoided send back. AT then set out that Ofgem having now brought out CGR3 the interactions with this also need to be understood. Common areas proposed include the appointment of independent Panel and Workgroup Chairs, having independent Panel members not representing an employer or constituency and finally a change of emphasis for self-governance from the Panel having to determine where it was appropriate to be used to having to determine where it was not. It was confirmed that National Grid will have a meeting with Ofgem on Monday 30<sup>th</sup> November to discuss further.

4212. AT opened to the Panel the question of would they like to see the document before it is submitted? AC asked whether it needed to go back to the Workgroup. GP said that it does not need to go back to the Workgroup as all the building blocks are in the final report. The important part is the Panel seeing the document before it is submitted. IP then asked the Panel if they were happy to receive an email update on the document to be submitted to the Authority, rather than bringing it back to the January GCRP. This was approved unanimously. RW commented that there is then no need for the Workgroup to reconvene at this point as Panel members are part of the Workgroup.

4213. AV then asked what the next steps are and wanted to clarify that National Grid wanted comments from the Panel via email rather than at the January meeting. AT commented that it all depends on the volume and complexity of the responses. Dependant on this it may need to come back to the January Panel but that she does not want to prolong the submission of the document any longer than necessary. SC then asked what happens with the comments once they have been received. IP stated that the document will be sent to the Authority unless there is clear disagreement on how this sets out the work. AT confirmed that it will go to the Authority unless actual issues are received relating to the factual accuracy of the report to the authority it won't be another Consultation. RLo clarified that it is necessary for the final report to be a balance view of the discussions that have taken place; it is not necessarily the case that there should be agreement on all points.

**c) GC0028 Constant terminal voltage.**

4214. This report is ready to be submitted to the authority. GE asked if the Panel approved this or if anyone had any issues. The Panel agreed that the report could be submitted and that their approval was to be minuted.

## **11 Progress Tracker**

4215. GN asked where we currently are in the process for GC0036 Harmonics.

4216. GS stated that National Grid has no internal resource to support the workgroup and at this time he expects to set a Workgroup timetable in the New Year. There is a draft recommendation on the website currently; some feedback from DNO's suggests that it could benefit from simplification.

4217. GN asked to flag GC0036 as red on the progress tracker

4218. IP then asked to add an action to review the colour schemes to accurately depict the progress.

**ACTION – FR to review colour scheme of the progress tracker.**

## **12 Pending Authority Decisions**

**4219. GC0088: Voltage Unbalance.**

4220. RW noted that the final report had been submitted to the authority on the 20th October. GE had pointed out some minor and non-material corrections and the report was resubmitted on the 18th November hence Ofgem's decision is due in January after the Xmas moratorium. GE stated that Ofgem now had one issue to understand properly, which was the balance between

the obvious benefits in avoiding over-investment and any costs or risks that could be incurred by users. RW replied that the benefits are significant and that RWE's question on losses had been answered in detail and this had been included in the report. GE asked for any feedback from network users or generators. GN stated he had no issues with the report and AF stated that changes are only to be made in England and Wales and in fact the England and Wales level will still not be as high as allowed in the arrangements applied to Networks in Scotland. The Panel agreed that any downsides are inconsequential compared to the benefits identified and CMD noted also that the proposals provided benefits in easing the management of outages and constraints.

## **13 Standing Items**

### **a) European Network Codes**

4221. No comments from the panel.

### **b) Joint European Stakeholder Group**

4222. RP noted no update.

### **c) Grid Code Development Forum**

4223. RP provided an update on the previous GCDF and noted that the Headline Report has been published online. He also took the opportunity to highlight the fact that we have no agenda items for the December meeting and that it is crucial for industry to engage in proposing agenda items for the meeting. It was proposed on this basis that the December GCDF be cancelled due to no agenda items – Panel agreed. IP said that the reason it was created was due to customer feedback and CMD said that little engagement might be down to the raft of Workgroups for the ENC implementations. GN asked to be provided with the dates for the Forum in 2016.

**ACTION – RP to provide GCRP members with 2016 GCDF dates.**

## **14 Impact of other Code Modifications or Developments**

4224. NR wanted to flag to the group the November BSC release and the change to the imbalance price delivered relatively successfully with a few minor gremlins. National Grid and BSC worked well together to deliver a balanced set of changes and it was a good example of cross code co-ordination.

4225. CMD then noted that there are currently some Workgroups open on the SQSS that point at frequency quality in relation to the growth of interconnection. He asked is this something we want to tie in with the other work we are doing on frequency in Grid Code Workgroups as he would like to see a joined up policy. IP then noted that the new SO Guideline should point to a more coherent approach; GS stated that this made sense. CMD then noted that we can't wait until the SO Guideline is implemented as this could be 2-3 years down the line. AV then commented that it is important to operate to a certain standard rather than unconstrained. IP noted an action that further details will be provided at the January Panel with an opportunity to debate.

**ACTION – RW to provide an update at the January Panel on the SO Guideline and cross-code collaboration opportunities.**

**a) Update on EU Network Codes RfG, DCC and HVDC.**

4226. RJW shared with the group that two-day sessions on a monthly basis have been arranged to look at all European Connection Code implementation work in 2016, however with multiple work streams now developing from each code this may need to be revisited to understand how to make the most efficient use of stakeholders' time. RJW also confirmed that the GC0048 RFG workgroup is currently accessing a high, mid and low level for the generator banding thresholds for GB. The various stakeholder perspectives on these levels, along with supporting data were available, will be captured in a comprehensive workgroup report. This will be presented to the GCRP in January, with a view to taking to industry consultation.

4227. RW summarised the multiple TSOs clause in each of the codes and what this means for the particularly complex GB system in which there are many TSOs with very different roles. Each connection code places actions on a relevant TSO or relevant System Operator. The member state needs to decide who the relevant TO or SO – which has been delegated by DECC to OFGEM. A first draft of this has been completed by NGET on Ofgem's request and has been circulated along with the assumptions and ground rules used. Ofgem have requested responses and comments to this by a deadline of the 2<sup>nd</sup> January.

4228. NR asked if we can have a general overview of how responsibilities can be split between TSOs. JN asked for a timeframe on when invitations will be sent for the ENC sub groups requiring technical specialists. RJW confirmed that he would like to start issuing public invitations in January. RW stated that the basic assumptions circulated do include much of what JN wanted but that this work needed to be progressed further.

**b) Update on Technical Appendices progress.**

4229. FW introduced the update on Technical Appendices. A Generic Templates workshop was held on 16 Oct 2014 and there was a wide range of views from new entrants to well established stakeholders. Various points were picked up and an August workshop was arranged to review comments and progress the review. AF stated that there are currently thirty-four templates so wondered how many were envisaged to result from the review. FW stated around five.

4230. JN stated that, since the templates would form the Appendices to the legal binding connection agreement, he would prefer them not to include any guidance content and, as an alternative, would prefer any such guidance to be in the form of an appendix attached to the offer letter. FW confirmed that some members of the workshop didn't feel a guidance note in the form of what JN was suggesting was appropriate as it is not as formal as actual being in the contract itself. JN then stated that if there is a need for non-specific obligations namely guidance to be put into the connection agreements, it would suggest there being a deficiency in the industry document. AJ stated that there is a difference in views of new entrants and established stakeholders.

**d) System Disturbance Report.**

4231. GS provided an overview of the last System Disturbance Report and brief overview of the new one. GS committed to provide a formal document (full report) at the January Panel and an action was added to publish the slides. NR wondered how frequently low frequency demand disconnection is triggered and GS confirmed that there has only been 1 event where it has occurred and it will be in the full list in January. CMD asked if islanding and disconnection is part of the calculations. RW asked if it is possible to add the system demand onto the report as there is an obvious correlation. GS said he will look into it.

**e) KASM Issue UKPN**

4232. RW flagged to the Panel an issue raised by UKPN to do with data confidentiality and the use of OC2 data in investment planning rather than for operational purposes as allowed in the Grid Code. RW summarised the issue further and stated that it needed further consideration and

discussion with UKPN to confirm exactly what they wanted and the best course of action before coming back to GCRP with any proposal.

## **16 Next Meeting**

4233. The next meeting is planned for 20<sup>th</sup> January 2016 at National Grid House, Warwick.