# nationalgrid

# Minutes

Meeting name Grid Code Review Panel

Meeting number 79

Date of meeting 18 May 2016

**Time** 10:00am – 3:00pm

**Location** National Grid House, Warwick.

Attendees			
Name Role		Initials	Company
Rob Wilson Chair		RW	National Grid
Ryan Place Code Administrator		RP GS	National Grid
Gurpal Singh	Gurpal Singh Authority Representative		Ofgem
Andy Vaudin	Large Generator (>3GW) Member	AV	EDF Energy
Campbell McDonald	Large Generator (>3GW) Member	CMD	SSE
Guy Phillips	Large Generator (>3GW) Member	GP	Uniper
Philip Jenner	Large Generator (<3GW) Member	PJ	Horizon Nuclear Power
Guy Nicholson	Generators with Novel Units Member GN		Element Power
Tom McCartan	Externally Interconnected System Operators Member	TM	SONI
Alan Creighton	Network Operator (E&W) Member	AC	Northern Powergrid
Jim Barber	Network Operator (Scotland) Member	JB	SSE
Graeme Vincent	Transmission Licensee (SP Transmission) Member	GV	Scottish Power
Roddy Wilson	Transmission Licensee (SHE Transmission) Alternate	RoW	SHE Transmission
Robert Longden	Suppliers	RLo	Cornwall Energy
Nick Rubin	BSC Panel Member	NR	ELEXON
Graham Stein	NGET Member	GS	National Grid
Tim Truscott	NGET Member	TKT	National Grid
Le Fu	NGET Member	LF	National Grid
Richard Woodward	NGET Member	RJW	National Grid
Xiaoyao Zhou	NGET Member	National Grid	
Presenters			
Antonio Del Castillo	NGET Presenter	ADC	National Grid
John Martin	Guest Presenter	JM	National Grid
Franklin Roderick	Guest Presenter	FR	National Grid
Anthony Johnson	Guest Presenter	AJ PC	National Grid
Patrick Cassels	Patrick Cassels Guest Presenter		National Grid
Abid Sheikh	Abid Sheikh Guest Presenter		Ofgem
Lewis Heather Guest Presenter		LH	Ofgem
Alternates			
Alastair Frew	Large Generator (>3GW) Alternate	AF	Scottish Power
John Norbury Large Generator (>3GW) Alternate		JN	RWE
Gordon Kelly Network Operator (Scotland) Alternate		GK	Scottish Power

Apologies			
Name	Role	Initials	Company
Martin McQueen	Authority Alternate	MMc	Ofgem
Richard Lowe	Transmission Licensee (SHE	RL	SHE Transmission
Richard Lowe	Transmission) Member	KL	
Craig McTaggart	Transmission Licensee (SP	CMt	Scottish Power
Craig McTaggart	Transmission) Alternate	Civit	
Dave Draper	Large Generator (<3GW) Alternate DD Horizon Nuclear Power		

Sigrid Bolik	Generators with Novel Units Alternate	SB	Senvion
Steve Cox	Network Operator (E&W) Member	SC	ENW
Lisa Water	Generator (Small and/or Medium) Alternate	LW	Waters Wye

# 1 Introductions & Apologies

4376. Apologies were received from: RL and JB.

#### 2 Approval of Minutes

# a) March 2016 GCRP Minutes

4377. Comments were received from JN, AF, CMD, AMC and TKT. The minutes were approved by the Panel.

ACTION – RP to update the website with approved minutes.

# 3 Review of Actions

#### a) Summary of Actions

- 4378. **Minute 4181: Grid Code Process Review**. RP noted that the current Grid Code process review has been placed on hold until the Authority decision on GC0086.
- 4379. **Minute 4182: Grid Code Process Review.** RP noted that the current Grid Code process review has been placed on hold until the Authority decision on GC0086.
- 4380. **Minute 4142: Grid Code Process Review.** RW noted that the new template has been developed and used for the UKPN issue due to be presented later in the meeting and invited any comments. RP confirmed that there is still an issue with the template being uploaded to the website.
- 4381. Minute 4196 4326: RES Review. Discussed in the below agenda item.
- 4382. Minutes 4196 3-4 RES documents still draft. FR provided an update on the remaining outstanding E&W RES documents still published as draft on the National Grid website. It was confirmed that following a consultation process changes have been made to Voltage Divider and Voltage Transformer documents. These documents will be re-circulated among Panel members for final approval before publication. The remaining two documents on Substations and Substations Interlocking Schemes have been finalised by NGET TO and will be circulated to the Panel members for final approval. Grid Code list of relevant document needs to be matched up with the Appendix. Ask Franklin for further information to complete the minute.
- 4383. **Minute 4340: TSOG Progress.** On the agenda for the meeting.
- 4384. Minute 4318: Update on Power Available (PA). On the agenda for the meeting.
- 4385. **EBS Update.** On the agenda for the meeting.

ACTION – amended RES documents to be circulated amongst the Panel with a 20WD query period.

ACTION – website review on the reference Relevant Electrical Standards as captured in the Grid Code.

ACTION – National Grid to chase remaining RES documents still outstanding as draft for a Consultation date.

## 4 New Grid Code Development Issues

#### a) Storage

- 4386. PC provided an overview presentation on the Storage issue paper (Provisions of Energy Storage Devices). The increased number of Storage applications for connection to the Transmission system has triggered the need to fully understand the technical requirements that should be placed on applicable Storage devices. Currently the EU codes specifically exclude Storage devices from the applicability of the requirements captured under the codes. As a result in GB we have a lack of bespoke requirements in the Grid Code which clearly define the requirements on Storage devices to connect to the Transmission System. Issues that have been identified are: a lack of codified clarity, connection conditions, frequency variations, governor behaviour, voltage variations, reactive capability and fault ride through behaviour. The proposed solution was to establish a Workgroup to assess the issues and develop a set of requirements that can be adopted across all GB codes. It was suggested that a joint DCRP/GCRP Workgroup was set up to consider the equitable treatment with Users, more detailed data submissions that are required under the Planning Code / DRC and applicable technical requirements.
- 4387. JN questioned what the issue currently is, is it problems applying Grid Code obligations on new technologies, or difficulties applying obligations on synchronous or none synchronous Generation associated with storage technology? GS stated that the reason is a lack of codified clarity on how they should be treated and there is currently no defined term in the Grid Code relating to Storage technologies other than pumped storage.
- 4388. AV then asked AJ and PC how it is possible to progress with any technical requirements without the licencing clarity being provided. TKT stated that the licencing issue it is not a National Grid issue so AV asked if National Grid can amend the Grid Code without knowing how Storage devices will be licenced.
- 4389. RW confirmed the aim of the Workgroup is to discuss the technical requirements and this issue paper seeks to clarify what requirements are suitable with the help of industry. GS commented that we have to provide anyone who applies to connect to the system with a connection offer and so these requirements need to be thought through.
- 4390. CMD questioned why a Storage entity would have to comply with the Grid Code as it is the licence that would define whether they are Demand, Generator or another participant. TKT confirmed that they are bound by the Grid Code as anyone who connects to the system is a user. The Grid Code applies to a licenced or an unlicensed Generator. GS added that he believed that licensing is not an issue, as Users connecting to the system are bound by the requirements of the CUSC and as a result the Grid Code.
- 4391. NR added that surely the party should be treated as demand as it will take more energy off the system than it spills. The important thing is how the BSC deals with storage applications etc. so it would be useful to have cross code discussions on the impacts any changes might have and how storage can be considered under the BSC.
- 4392. AJ reiterated that something needs to be done as soon as possible because applications have been received and need to be dealt with within the 3 month offer period. The main aim of the issue paper is to be transparent and consistent so that all users are treated in the same way. AV's assumptions were that Generation obligations will apply to storage (ccs). Under RfG these are being amended but because Storage does not need to comply with EU law then it would be existing Connection Conditions that applied. CMD questioned whether GB can legally put conditions on energy Storage devices when the rest of Europe does not. RW reiterated that no obligations are captured under the European Codes (ie RfG, DCC and HVDC) on storage. The main of this paper is to flag that information on connection requirements needs to be placed in the BCA in order to provide a connection offer to the applicant in the timeframes required.

- 4393. PJ noted that he was struggling to understand what the codified issues are. AJ confirmed the main issue is to seek clarity on which clauses in the Grid Code apply to applicants rather than making assumptions. Currently if you have pumped storage you have 1 set of requirements and if you are a battery then it is likely to be another set of requirements. He advised that if the technical requirements are not agreed then information put into the BCA becomes bespoke which is non transparent. In addition he also advised that the data relating to storage devices needed to be defined so National Grid could accurately model the behaviour of the plant was built
- 4394. AV recapped that the aim of the Workgroup would be to go through the Grid Code and flag which connection conditions apply to Storage applicants. AJ felt that the GCRP needed to understand further information such as discharge rates and plant behaviour etc. GS suggested setting up a Workshop to scope out the Terms of Reference for the Workgroup to ensure an efficient and useful process.
- 4395. GP flagged that tender results on EFR will be announced in the summer for autumn 2017, so wanted to understand if the successful applicants will be captured because there is a risk that some users will already have gone to tender for plant in order to participate in the EFR auction. AJ stated that any proposed legal text can be written to say that the requirements apply from a specific Completion Date rather than retrospectively.
- 4396. GN wanted to caution the danger of going into too much detail. Any work needs to be kept simple and applicable only to what is connecting to the Grid and no more. If a user is exporting onto the Grid then it should have the same Grid Code compliance requirements as any other User connecting at the same capacity. In support of simplicity CMD did not understand why it is being suggested to extend this to the DCRP when they are already dealing with battery connection applicants. It should be restricted to the Grid Code and let the Distribution Code sort out any of their own issues, the scope of the Workshop should solely be focused on the Grid Code requirements in order to expedite the process.

#### b) NISM

- 4397. RJW presented the amended NISM paper to the Panel.
- 4398. The Panel did not support the proposed name change. Their view was that we are dealing with two separate groups; 1) being industry and 2) the general public/media. Industry are familiar with the existing process of system warnings and names and the process works NISMs drive actions from market participants that almost always remove the risk of any further steps being required. Any change would risk reducing the impact of a NISM as it might not be recognised to the same extent by industry and therefore might not drive the same reaction from the market. For the general public and media, no matter what we call a NISM it may still be subject to misinterpretation. In addition, just changing the name could be seen as spin.
- 4399. Other pertinent points raised were:
  - The Panel acknowledged NISMs are more newsworthy than in the past relating to all of the other high agenda stories about power margins, including the closing of coal plant and delays to new nuclear.
  - The Panel also acknowledged that reaction to the last two NISMs has been fairly muted and that this may be due to National Grid efforts in managing the message.
  - It is likely that some User's systems will have to be amended to collect a revised label, which is not without cost.
  - Discounting changes to the Grid Code to reflect the Capacity Market Warning as currently
    drafted may not be appropriate, which, although for different purposes, also references
    Inadequate System Margin (ref. Capacity Market Rules 8.4.6 and 8.4.7). This links to a
    System Stress Event as described in 8.4 of the Capacity Market Rules.
  - Time and effort has to go into raising a Grid Code change, consulting, producing responses to this etc. Companies have considerable internal governance around official responses made to consultations. Can we make sure that this is really what we want to do before going any further?

 Given that the consultation responses will presumably not be positive, what would be the next step? National Grid could submit the proposed change to Ofgem regardless but in agreeing a change to the Grid Code Ofgem need to weigh all of the evidence which includes stakeholder responses.

#### c) Relevant Electrical Standards

- 4400. FR introduced and discussed the background to the Relevant Electrical Standards issue paper. Recapping on GCDF discussion some users felt more consistency is needed across Transmission Owners to improve the connection process. Furthermore it was also flagged that connections offers differ between Scotland and England & Wales because 132kV is a Transmission voltage in Scotland. The conclusion following GCDF was that an independent body may be required to administer the Relevant Electrical Standards in order to keep impartiality when onshore competition comes into force. 3 potential solutions were provided to the issue: 1) Scottish TO's adopt the E&W relevant electrical standards; it was confirmed that SHET are already progressing this avenue but cannot sign off the document until the E&W standards are finalised. It was also confirmed SPT also do not want to adopt this approach. 2) Creating a core set of standards for the Transmission system potentially lead to inconsistent application at 132kV. 3) Finally the third suggestion was that a wider review is undertaken with the ENA owning a core set of standards which the individual TO's would have to comply with whilst also being able to own their own set of regional variations.
- 4401. FR stated that the issue will also be presented at the next DCRP on the 4<sup>th</sup> June to discuss the potential of a joint Workgroup set up across the 2 codes to look at the implementation of 1 set of standards.
- 4402. AC asked for clarity on the concern with the distribution system connections as Generators connecting to the 132kV in E&W don't have to comply with the RES. The Generators are provided with a metering circuit breaker which is their point of connection to the distribution system. FR stated that the issue was raised by SPT on why there are different standards for 132kV network in Scotland and England & Wales.
- 4403. JN questioned the principle defect that was being presented. It was identified in the last GCRP and GCDF that the principle defect was a lack of definition of the Relevant Electrical Standards in the General Conditions of the Grid Code. It was reiterated that terms of reference needs to be developed for a workgroup to consider the purpose, application and format of the Relevant Electrical Standards before looking at setting up a core set of standards. FR noted Grid Code General Condition's changes would not require a Workgroup. GV felt that it is not clearly understood how Scottish standard started to become common practice as previously it was solely E&W. CMD stated that in 2005 the Scottish standards were shoehorned in to allow BETA to happen.
- 4404. AV then asked what the aim of the Workgroup would be. Would it be to decide a way forward, or is it, to discuss the implementation of one set of standards. CMD added that RfG has now entered into force and that Type D is connecting at 110kV, RfG does not differential between Transmission and Distribution because the aim is to have harmonisation across Europe. The currently framework is counter intuitive to this as parties connecting at Gretna and Carlisle have different standards to currently apply with.
- 4405. AC stated that if one of the proposals is for the ENA to look after the RES going forward further discussion would be required about how the relationship would work. FR added that it needs to be understood how the ENA would be funded going forward by industry participants if it was to adopt the ownership of the RES documents. FR confirmed that he had spoken to David Spillett and his thinking is that if everyone is in agreement at the Workgroup then the ENA would not have any problem taking on the responsibility.
- 4406. CMD asked FR when referring to 'Transmission' is the reference to the TO or SO standards (MODIS Interface Specification etc.)? And is a type D Generator under RfG included? CMD felt that the review needs to purely be the interface requirements and nothing else and also, the RfG requirements need to be taken into account when looking at a wider review of the RES documents because European law precedes National law. TKT added that going

forward the SO standards will also be applicable to embedded Generation if they wish to participate in the BM.

4407. The Panel were asked to decide whether they wished to progress with the issue paper and set up a Workgroup with the goal of looking at the applicability of 1 set of RES standards. In order to develop the terms of reference it was concluded a Workshop should be convened with the results reported back to the July GCRP meeting.

ACTION - Amend the Issue Paper to bring out the content and applicability (SO and TO etc).

ACTION – Engage in discussion with the ENA prior to the Workshop to discuss the viability of the plans.

ACTION - BSC to be included in any Storage Workshop/Workgroup discussions.

ACTION – Storage Workshop to be set up including BSC, DCRP and all applicants for storage connection.

**ACTION – define a lead and content owner for the Workshop.** 

ACTION - re-circulate NISM consultation to GCRP members before publication.

# 6 Existing Grid Code Development Issues

4408. None.

# 7 Workgroups in Progress

- a) GC0079: Frequency Changes during large disturbances and their effect on the total system (ROCOF).
- 4409. GS confirmed that the Workgroup convened on the 17<sup>th</sup> May and discussed the first draft of the Workgroup Report. The formulation of the report is likely to take a few months to complete with the group currently tying down the cost benefit analysis etc. It was presented to TCMF in May where discussion centred on how it is funded and who takes advantage of any funds generated. The Workgroup Report will be available for Panel members to review around August.
  - b) GC0087: Frequency Aspects of RfG.
- 4410. GS confirmed that the Workgroup on the 2<sup>nd</sup> June will be rescheduled because it clashes with DCRP. A date currently being suggested is the 15<sup>th</sup> June. The Workgroup has made a lot of progress and is now focused on ensuring LSFMU banding levels do not impact current frequency response arrangements. National Grid is doing some analysis to back up this theory and is aiming for a November set of policy conclusion to fit into broader RfG implementation work.
  - c) GC0090: HVDC
- 4411. RJW confirmed that the HVDC Workgroup met on the 3<sup>rd</sup> May to consider the Fault Ride through requirements. It is anticipated that the Workgroup will follow some of the recommendations made in the RfG Workgroups. It was felt that another meeting may be required for fast fault current injection on the 1<sup>st</sup> June.
- 4412. RJW confirmed that RfG came into force on May 16<sup>th</sup>, so on May 16<sup>th</sup> 2017 the obligations will capture all new entrants to the market.

#### 8 Workgroup Reports

4413. None.

#### 9 Industry Consultations

- a) GC0048: RfG Implementation.
- 4414. RJW confirmed that the deadline for responses to the Workgroup Consultation was extended by 2 weeks following feedback from industry groups (Energy UK etc.). The Consultation has now closed with 15 responses received and RJW thanked the organisations around the table who responded for putting in the time to provide responses.
- 4415. AV asked if most of the responses are providing data to back up the recommendations. RJW confirmed he has yet to open the Consultation responses.

# b) GC0077: Subsynchronous Resonance

- 4416. GS confirmed 5 responses have been received to the Consultation. 4 responses were fully supportive and 1 response raised some further concerns, but as a whole National Grid was happy with the detail of the responses. GS confirmed that more visibility of the responses can be provided if required.
- 4417. PJ expressed concern that the proposed change introduced obligations on new Users to resolve SSR issues which were inconsistent with other similar aspects of User connections. Concern arose from the fact that SSR issues identified when a new User applied for a connection were best addressed by works on the transmission system and that the proposed change meant the new User would have to fund these. After some discussion, the Panel concluded that the proposed change to the Grid Code and NETS SQSS would not have this effect as the arrangements for managing new and existing connections and funding any works were captured in the CUSC and not changed.
- 4418. GS noted the next steps are to progress the proposals as they stand, the Report to the Authority will be progressed in line with an SQSS Panel approval for GSR018 and send them as 1 submission.
- 4419. PJ asked for additional information to be included in the Report to the Authority highlighting how the proposed change affected the responsibilities of new and existing Users and licensees. The report will be circulated to GCRP members before submission at the start of July.
  - c) GC0092: Using National Grid Network Models for Long Term Planning
- 4420. RJW reminded the Panel that the Consultation has now closed with 2 key points: other references for data provisions for operational perspective need to be explored and some feedback from WPD stated that the data should be provided in an IEC common information model to provide consistency. The aim will be to address comments before sending a final Report to the Authority to the Panel for final comment before sending.

#### 10 Reports to the Authority

4421. None.

#### 11 Pending Authority Decisions

- a) GC0062: Fault Ride Through.
- 4422. XZ confirmed a second version of the report was submitted on the 2<sup>nd</sup> May after making minor amendments to satisfy some Ofgem queries
  - b) GC0075: Hybrid Static Compensators.
- 4423. XZ confirmed that Modification has been approved on the May 10<sup>th</sup> for implementation.
  - c) GC0086: Open Governance.

- 4424. JM informed the Panel that the Report has been sent back to the Code Administrator in order for them to include the legal drafting resulting from CGR3. AS confirmed the reasoning was rather than having to do further work via another modification or other processes it would be most efficient to capture all the changes in 1 document. JM confirmed that the next step would be to provide track changed legal text to the GCRP to see whether a further consultation will be required. The materiality of the changes will not be clear until the legal text changes resulting from CGR3 are confirmed.
- 4425. AS confirmed that a statutory Consultation on the changes is currently live on the Ofgem website.

ACTION – Update the Panel on the progress of GC0086 in particular in relation to Panel elections and the impact on current modifications.

# 12 Progress Tracker

4426. No update.

# 13 Standing Items

# a) European Network Codes

- 4427. CMD felt it was important to note that RfG has now gone live, and asked the National Grid Representative if a circulation email will be drafted. RJW stated he expected ENTSO-E to publish something, but since they have not National Grid will draft something.
- 4428. CMD also wanted to reiterate that some activities where new requirements are required that the minimum requirements need to be adopted to avoid the potential element of gold plating currently being carried out. RW confirmed that there may be adequate justification for more onerous parameters. CMD felt that it is important for new users to understand that it needs to be as suitable as possible.

#### b) Joint European Stakeholder Group

4429. No comments from the panel.

# c) Grid Code Development Forum

- 4430. JN wished to highlight the paper presented at the last Grid Code Development Forum regarding potential changes to the Grid Code arising from the XBID common model project. JN stated that he made comments in the meeting to the effect that the Grid Code is currently incorrect in that it places an obligation on Interconnector Users to submit PNs whilst in reality this function is carried out by the Interconnector Owner (or Externally Interconnected System Operator) on a net basis. He requested that the roles of the Interconnector User, Interconnector Owner / EISO and NEMO be first clarified in respect of PN submissions in BC3.1 before considering any required Grid code changes and an action was placed on National Grid to provide a flow chart on how the process currently works between data submissions. The GCDF headline report proposed that no immediate action be taken but the concern is that some changes may need progressed sooner as the project is likely to go live in the summer of 2017.
- 4431. The next Meeting is on 09/05/2016

ACTION – NG to circulate email to the Grid Code distribution list to confirm RfG has come into force.

# 14 Impact of other Code Modifications or Developments

#### 15 Any Other Business

#### a) CGR3/CMA Update

4433. AS and LH presented content on the Code Governance Review Part 3 and the Authorities views on the CMA's Code Governance Proposals. The Panel requested for the link to the Statutory Consultation on CGR3 remedies to be circulated for reference.

# b) EBS

- 4434. ADC provided an EBS update to the Panel. It was confirmed that the regular EBS IT meeting was on 17<sup>th</sup> May and the following update was discussed: Work has been carried out on user acceptance testing as well as the IT software for EDL and EDT and 5 errors were found in the system which requires fixes. The hope is to certify the software supplier by July 2016 but with the recent errors it will result in access validation being postponed until mid-August to have assurance that the supplier has been certified.
- 4435. ADC confirmed that the plan has been amended slightly to mean that the new go live date in for 'National Grid' which means an enduring 24/7 support in the control room will be 8<sup>th</sup> November. The important date for market participants is 30<sup>th</sup> November which is the point of no return. The BMRA service will be transferred from BM reports to EBS and then EDT services will be transferred one by one to EBS.
- 4436. ADC confirmed the reason for the new date is to ensure that the autumn clock change and market participants IT change freeze around the Christmas period is avoided so that everything that can be tested comprehensively.
- 4437. JN asked if there are any alternative arrangements being considered to mitigate users' risks such as telephone despatch. ADC confirmed that these scenarios are being thought about and it would be dealt with specifically on a case by case basis.
- 4438. CMD flagged that the implementation is scheduled for a winter period which may be difficult with high demand on the system. CMD felt that it is frustrating that the project is continuing to slip when may cause even further disruption. ADC confirmed that pre trials will be carried out in September 2016 with market participants on a Saturday morning to verify that the EBS is able to control and balance the system whilst also getting ready for despatch trials in October. It was noted that EBS will be beneficial to the user as it can send multiple BOA's at the same time. GP asked if it included SBR plant. ADC confirmed they will be included.
- 4439. CMD asked how many BOAs are likely to be sent to market participants. It was confirmed by ADC that 3 BOAs per minute per BMU could be sent every 5 minutes (National Grid have now confirmed that no changes will occur to the BOA request and submissions). Both JN and CMD were not happy with the amount of resource that may be placed on market participants in the control room to action the BOAs.
- 4440. Panel members were unhappy that they had only received sight of these changes at such a late stage of the EBS implementation. ADC confirmed that the new system will allow the market to be more flexible in response to actions from National Grid. JN added that currently it seems that IT specialists are satisfied with the system functionality; however, the problem will be with operational aspects associated with such action. It is important to give market participants opportunities to respond to any changes to the EBS implementation plan. Further engagement is required with industry participants in order for them to fully understand the impact. RW confirmed that it feels like another forum may be required to discuss any process impacts and the implementation of EBS. ADC reiterated that the current forum where EBS issues and impact are discussed is the EBS IT, which is not just an IT only meeting as explained to the GCRP 6 months ago. The invitation is sent to IT, business and operational staff from the Market Participants. EBS impacts are also presented at the Industry Operational Forum, attended by 200+ members from the industry.

- 4441. TKT asked how often we expect EBS to send out BOAs in relation to the current BM system. ADC confirmed that currently we can simulate the information that we hold until now but it is not possible to see what will happen in future when market participant start submitting new parameters into the new system. TKT asked if it is possible to compare data from last year with what EBS would do in the same scenario and will we see a comparison during the trial period. ADC confirmed that they are currently going through that simulation in order to get the right parameters and that the system will not issue BOAs well into the future, EBS will only issue BOAs that you do not need to unwind.
- 4442. CMD added that he obtained feedback from the EBS IT meeting on 17<sup>th</sup> May. The feedback stated that you can get 3 BOAs in a 5 min period which means you can get 36 BOAs in 1 hour. As a result a significant risk is that plant becomes inflexible in order to avoid the risk of having to deal with a large amount of BOAs which could be detrimental to NG. RW stated that the EBS IT group is not for solely IT, it also covers Operational issues and communications. RW reiterated that dates need to clearly be in the diary well in advance.

#### c) TSOG Update

4443. RJW confirmed that the TSOG Code was approved by member states on W/C 9<sup>th</sup> May. It was confirmed that the Code is likely to come into force in February 2017 and due to no curie period quite a lot of the requirements will need to be implemented immediately. Resultantly the implementation will need to be progressed urgently, so, an Eventbrite email will be sent shortly to the Grid Code circulation list. The proposal is that a Workgroup should be set up to look at TSOG implementation due to impact across codes. It will still come back to the coordination group to keep the overall approach to the European Code implementations in line. RJW asked the Panel if an issue paper can be circulated rather than at the next Panel for comment. The Panel confirmed that will be the best course of action.

#### d) Power Available Update

- 4444. RJW provided an update on the Power Available project. It was confirmed that Power Available resulted as a consequence of GC0063; the requirement for a Power Available signal was enabled in the Grid Code for new wind schemes with complementation dates from 1<sup>st</sup> April 2016 onwards. RJW confirmed the National Grid control room is ready to accept the signals and that Andrew Form will write a letter to industry explaining the requirements for Power Available signals also detailing how it will be used for Frequency Response from the summer of 2016 onwards. Industry parties will be liaised with directly to activate their Power Available signal and set up communications to provide it direct to the control room. EBS will also be configured to use Power Available to automate dispatch activities with wind. RJW added that Power Available has been introduced because wind FPN accuracy post gate closure has proved to be inconsistent. A trial on London Array was concluded in March 2016 and it has confirmed the signal accuracy for control room instructions to deload as well as during high wind cut out when London array reduced output. It was flagged that issues potentially remain with settlement inaccuracy as instructions are made from the FPN.
- 4445. RL asked if there are any incentives to ensure that an accurate signal is achieved. RJW confirmed that there is no fall back but, if there are any issues National Grid will work closely with the parties involved. JN added that the issue is not that PN's are inaccurate, as implied, but rather that the outturn may be different to the PN. TKT confirmed it is very difficult to carry this out as wind is a real time commodity and the Power Available should be suitable to achieve better accuracy.

ACTION - Ryan to circulate the statutory consultation link to Panel members

ACTION – provide an update on the number of frequency response instructions carried out on a quarterly basis to GCRP.

**ACTION – circulate PA slides.** 

**ACTION** – further information on the PA project.

ACTION - assess another forum which EBS can be discussed in.

#### 16 Next Meeting

4446.	The next meeting is planned for 20 <sup>th</sup>	July 2016 at National Grid House, Warwick.