

## DRAFT Minutes

<b>Meeting Name</b>	NETS SQSS Review Panel
<b>Meeting Number</b>	18
<b>Date of Meeting</b>	01 April 2015
<b>Time</b>	10:00 – 14:00
<b>Location</b>	Ofgem, 9 Millbank, London, SW1P 3GE & Teleconference

## Attendees

<b>Name</b>	<b>Role</b>	<b>Initials</b>	<b>Representing</b>
John West	Chair	JW	Chair
Nick Martin	Secretary	NM	Secretary
Graham Stein	Member	GS	National Grid SO
Cornel Brozio	Member	CB	SPT
Diyar Kadar	Member	DK	SPT
Bless Kuri	Member	BK	SHET
David Lyon	Member	DL	OFTO
Simon Lord	Member	SL	Generators
Alan Creighton	Member	AC	Distributors
Aled Moses	Authority	AM	Ofgem

## Invitees

<b>Name</b>	<b>Role</b>	<b>Initials</b>	<b>Representing</b>
Bieshoy Awad	Invitee	BA	GSR010 Update
Mike Lee	Invitee	ML	GSR014 Update
Biljana Stojkovska	Invitee	BS	GSR014 Update

## Apologies

<b>Name</b>	<b>Role</b>	<b>Initials</b>	<b>Representing</b>
Mark Perry	Member	MP	National Grid TO
Brian Punton	Member	BP	SHET
Sean Kelly	Member	SK	OFTO
Stewart Whyte	Invitee	SW	GSR012 Update
Ben Marshall	Invitee	BM	GSR016/017 Update
David Phillips	Invitee	DP	Observer / OFTO Alternative

## 1 Introductions & Apologies

John West opened the meeting by thanking all of those in attendance. Special consideration was given to those that had travelled from afar. The apologies were also noted.

## 2 Approval of Minutes

The February 2015 NETS SQSS Review Panel Meeting Minutes were approved and will subsequently be published on the National Grid NETS SQSS Website. John West reminded the Panel Members of the System Operability Framework (SOF) presentation from the previous meeting and invited all Panel Members to the SOF Workshop scheduled for 09 April 2015.

## 3 Review of Actions

a) New:

Action	Description	Action Owner	Due Date
18.1 (April 2015)	<b>GSR021:</b> BK and GS to raise the issue concerning the Introduction of Planning and Operational Criteria for 220kV Transmission Assets within the NETS SQSS at the Grid Code Review Panel (GCRP).	BK / GS	Next Meeting
18.2 (April 2015)	<b>GSR021:</b> BK to check these proposals for alignment against the European Codes and GSR008: Regional Variations and Wider Issues as requested.	BK	Next Meeting
18.3 (April 2015)	<b>GSR021:</b> BK and NM to draft the Industry Consultation Document so that it is ready for approval at the June 2015 NETS SQSS Review Panel.	BK / NM	Next Meeting
18.4 (April 2015)	<b>GSR010:</b> SL to circulate the GSR010: Review of Onshore Entry Criteria Guidance Note around Energy UK for their comments. All comments to be received by BA by 01 May 2015.	SL	01/05/2015
18.5 (April 2015)	<b>GSR010:</b> BA to update the Guidance Note as a result of any additional comments received and present this to the June 2015 NETS SQSS Review Panel before publishing on the National Grid Website.	BA	Next Meeting
18.6 (April 2015)	<b>GSR016:</b> BM to arrange a Working-Group Meeting in April 2015 to conclude all outstanding actions and in an attempt to bring a finalised Working-Group Report to the June 2015 NETS SQSS Review Panel.	BM	April 2015
18.7 (April 2015)	<b>GSR016:</b> BM to check the consistency of GSR016 against the Distribution Network Planning Standard ER P2/6.	BM	April 2015
18.8 (April 2015)	<b>GSR014:</b> NM to check the NETS SQSS Governance Framework to establish what level of support is needed among NETS SQSS Review Panel Members to recommend change.	NM	Next Meeting

b) Carried Over:

Action	Description	Action Owner	Due Date
11.11 (Feb 2014)	<b>GSR016:</b> BM to present the GSR016: Application of Scaling Factors Working-Group Report at the next NETS SQSS Review Panel Meeting. <i>Update: The reports are not yet completed or ready to present to the NETS SQSS Review Panel.</i>	BM	Next Meeting
11.12 (Feb 2014)	<b>GSR017:</b> BM to present the GSR017: Treatment of Switch Faults in Operational Timescales Working-Group Report at the next NETS SQSS Review Panel Meeting and to provide some clear proposals on how the Industry Consultation may proceed. <i>Update: This was discussed at the October 2014 NETS SQSS Review Panel and it was agreed that the Working-Group Report shall be delayed until Mid-2015 at the earliest.</i>	BM	2015

12.1 (April 2014)	<b>Discussion Item:</b> JW to investigate the potential Modification Proposal: "Lack of Reactive Compensation Redundancy in Offshore Transmission Networks" further and bring a paper to the NETS SQSS Review Panel to determine the best course of action. <i>Update: The current position has been reviewed for a number of connections. NGET is also waiting for the opportunity to assess this as part of a generation connection application before progressing. The action therefore remains ongoing. However, this could now potentially be wrapped up with any significant review of all NETS SQSS Offshore Criteria that may occur as a result of further discussions.</i>	JW	Next Meeting
13.3 (June 2014)	<b>AOB:</b> AM to advise NM how best to submit the italicised text housekeeping change to the Authority for it to be actioned. NM to do as advised thereafter. <i>Update: This shall ideally be incorporated into the next Modification Report submitted to the Authority. This is now likely to be sometime in 2015.</i>	AM / NM	2015
15.3 (Oct 2014)	<b>GSR012:</b> SW to draft progress note, circulate to Working-Group Members for comment and agreement and circulate to NETS SQSS Review Panel Members thereafter. <i>Update: This action has not been completed as yet. NM shall chase SW again. However, broader discussions have been held at a recent Joint Planning Committee (JPC) Meeting.</i>	SW	Next Meeting
16.2 (Dec 2014)	<b>GSR014:</b> Circulate a revised version of the GSR014: Offshore Transformer Requirements Modification Report to the NETS SQSS Review Panel in early January 2015 for any final comments. Subsequently bring a finalised version of the Modification Report to the February 2015 NETS SQSS Review Panel for their approval and, subject to this, submit the Modification Report to the Authority thereafter. <i>Update: The Modification Report has been updated and circulated and consultee views on the revised report have been sought. A decision on how best to proceed now needs to be made.</i>	ML / NM	Next Meeting

c) Completed:

Action	Description	Action Owner	Due Date
9.4 (Oct 2013)	<b>GSR010:</b> JW and BM to finalise the GSR010: Review of Onshore Entry Criteria case studies.	JW / BM	Closed
11.4 (Feb 2014)	<b>GSR010:</b> Each TO to identify the number of generation connections that GSR010: Review of Onshore Entry Criteria would impact upon.	JW / CB / BP	Closed
11.5 (Feb 2014)	<b>GSR010:</b> JW and NM to prepare the GSR010: Review of Onshore Entry Criteria Modification Report for consideration at the next NETS SQSS Review Panel Meeting.	JW / NM	Closed
12.5 (April 2014)	<b>GSR010:</b> JW to further consider the consequential commercial and charging issues with National Grid's Charging and Capacity Development Team and to propose a way forward on these.	JW	Closed
15.2 (Oct 2014)	<b>GSR010:</b> GS to progress discussions with SPT and SHET on how to progress GSR010: Review of Onshore Entry Criteria and to invite SL. To be reviewed at February 2015 NETS SQSS Review Panel. <i>Update: All actions with respect to GSR010: Review of Onshore Entry Criteria have been superseded by the Guidance Note presented. This has subsequently been approved for publication by the NETS SQSS Review Panel and officially replaces any submission to the Authority to request a change to the NETS SQSS. GSR010: Review of Onshore Entry Criteria is therefore considered as concluded and shall be removed from the Modification Register accordingly.</i>	GS	Closed

16.1 (Dec 2014)	<b>GSR020:</b> BS and NM to establish the GSR020 Working-Group, write the Terms of Reference and circulate an invite to industry for Working-Group Participants. <i>Update: The Working-Group Terms of Reference have been approved and an email invitation for Working-Group Members has been circulated to the industry. The first Working-Group Meeting is to be scheduled for late May or early June 2015.</i>	BS / NM	Closed
17.1 (Feb 2015)	<b>220kV Modification Proposal:</b> Draft an impact assessment and circulate to the NETS SQSS Review Panel. <i>Update: BK presented this to the NETS SQSS Review Panel. This action is therefore considered closed.</i>	BK	Closed
17.2 (Feb 2015)	<b>Discussion Item:</b> Provide further information and stakeholder views on the need for a Review of Offshore Criteria at the next NETS SQSS Review Panel. <i>Update: A workshop has been convened for 21 April 2015 to gather the views of the industry as to how best to proceed with the NETS SQSS Offshore Criteria, the results of which shall be fed back to the NETS SQSS Review Panel at the earliest opportunity.</i>	JW	Closed
17.3 (Feb 2015)	<b>AOB:</b> NM to update membership pages on National Grid NETS SQSS Website. <i>Update: This has been completed and the action is therefore considered closed.</i>	NM	Closed

#### 4 Discussion Items

##### a) Significant Review of Offshore Criteria:

Following the discussions at the February 2015 NETS SQSS Review Panel with respect to offshore criteria, an action to provide further information and stakeholder views on whether a more fundamental update of the offshore chapters of the NETS SQSS is required resulted. Subsequently, a NETS SQSS Offshore Criteria Workshop has been arranged for 21 April 2015.

John West presented the briefing note circulated to the NETS SQSS Review Panel. This included the discussion paper from the February 2015 NETS SQSS Review Panel and a copy of the NETS SQSS Offshore Criteria Workshop invitation and agenda. JW went through the agenda item by item and questioned whether this was sufficient. The general consensus was that it was. Alan Creighton insisted that we would need to ensure the views of all impacted and interested parties were gathered and invited to the workshop. Due to the extensive list the invitation was circulated to, it is believed that this issue has been addressed as far as is possible. Biljana Stojkovska insisted that it would be useful to have representatives from Ofgem present at the workshop also.

JW concluded that the agenda provides us with enough flexibility to determine where we take the offshore standards following the workshop. Graham Stein agreed and summarised that the outcome will be either to deal with issues as and when they arise or a more co-ordinated approach. However, GS stressed that if a more co-ordinated approach is the desired outcome, industry members will need to commit to undertake a proportion of the work.

#### 5 Modification Proposals

##### a) Introduction of Planning and Operational Criteria for 220kV Transmission Assets:

Bless Kuri presented a proposal and corresponding impact assessment to introduce planning and operational criteria for 220kV transmission assets within the NETS SQSS. One aspect of the proposal was to align the same voltage criteria for 220kV to 275kV since the planning and operational voltage criteria for 132kV and 275kV are already broadly aligned in Section 6 of the NETS SQSS. Another aspect of the proposal was to include 220kV in the definition of the NETS SQSS defined term 'supergrid' on the basis that 220kV is closer to 275kV than 132kV and that 220kV is likely to be used for a number of future OFTO circuits.

Following further discussions, the consensus was that it would be appropriate to adopt the 275kV planning and operational criteria limits. With respect to the defined term 'supergrid', the Grid Code already uses 220kV and above. Therefore it was felt that there should be no issues in introducing this to the NETS SQSS also. BK believed that this would have no impact on either the Grid Code or the Distribution Code.

BK also believed there would be no impact on either Engineering Recommendation P2/6, since this is aligned to the Grid Code, or G54, since this makes no specific reference to voltage limits or the defined term 'supergrid'. However, the draft version of G55 does appear to be adopting standardised voltage ranges. BK still believed this does not cause any issues but welcomed any opposing views. None were forthcoming. John West questioned if 220kV to 33kV connections would cause any issues. BK didn't think so considering we already have 275kV to 33kV connections. Discussions subsequently moved on to connection criteria and protection arrangements within the Grid Code. However, Graham Stein stressed that this wasn't applicable since no-one is connecting at 220kV. Regardless, BK and GS agreed that this would at least need raising at the Grid Code Review Panel (GCRP) for their information only.

***ACTION: BK and GS to raise the issue concerning the Introduction of Planning and Operational Criteria for 220kV Transmission Assets within the NETS SQSS at the Grid Code Review Panel.***

JW summarised that the paper prepared by BK was comprehensive, well written and well thought through. JW also concluded that some sort of change is required to the NETS SQSS to cater for 220kV transmission assets. On balance, BK's first option, as illustrated in Appendix 1 of his report, looked preferable. Whilst this is a more conservative approach addressing only 220kV, covering the full voltage range between 200kV and 400kV would require further assessment. Aled Moses requested that this is checked for alignment with the European Codes and GSR008: Regional Variations and Wider Issues also.

***ACTION: BK to check these proposals for alignment against the European Codes and GSR008: Regional Variations and Wider Issues as requested.***

It was proposed that at this stage this could be sent straight out for Industry Consultation, since it was felt that this did not warrant having a Working-Group. This modification will be numbered GSR021.

***ACTION: BK and NM to draft the Industry Consultation Document so that it is ready for approval at the June 2015 NETS SQSS Review Panel.***

## **6 Work-Groups**

### **a) GSR010: Review of Onshore Entry Criteria:**

John West explained that Bieshoy Awad has been working on producing a Guidance Note with respect to GSR010: Review of Onshore Entry Criteria. BA has discussed this with transmission colleagues both internally and externally to National Grid. BA explained that the purpose of this Guidance Note is to allow generation developers to make a more informed connection choice. Generators will be able to check the most economic and efficient connection criteria for them through observations of commercial signals, as well as connection dates and TNUoS charges...etc...

Simon Lord agreed that this was an appropriate course of action but stressed that we need to be abundantly clear with regards to what a Guidance Note is. It is not a NETS SQSS requirement. JW questioned how the Guidance Note should be used. Should it stand alone or be appended to the NETS SQSS? Graham Stein explained that the Guidance Note is primarily aimed at User(s), to provide them with more clarity on the options available to them, so would best be made available as part of a connection application pack.

Bless Kuri questioned whether this Guidance Note covered all operational standards, stressing that we need to be careful that this note isn't able to be used against the transmission licensees. Diyar Kadar added that we need to make it abundantly clear that this concerns Chapter 2 of the NETS SQSS only. JW and SL agreed that the Guidance Note achieves what was originally intended but added that further clarification of this was needed upfront. GS added that the range of examples included within the Guidance Note was useful but that we needed to make it explicitly clear that we don't endorse any of them over another though. BA agreed, adding that transmission capacity is on a first come, first served basis.

To conclude, JW asked BA to take these comments on board and update the Guidance Note accordingly. GS added that any further comments should be sent to BA prior to 17 April 2015. A revised Guidance Note shall then be presented to the NETS SQSS Review Panel at the June 2015 Meeting. SL added that he shall circulate the Guidance Note around Energy UK for their comments also.



The decision was taken that this Guidance Note shall formally replace any official submission to the Authority to request a change to the NETS SQSS and therefore GSR010: Review of Onshore Entry Criteria is considered as concluded and closed and shall be removed from the NETS SQSS Modification Register accordingly.

***ACTION: SL to circulate the GSR010: Review of Onshore Entry Criteria Guidance Note around Energy UK for their comments. All comments to be received by BA by 17 April 2015.***

***ACTION: BA to update the Guidance Note as a result of any additional comments received and present this to the June 2015 NETS SQSS Review Panel before publishing on the National Grid Website.***

b) GSR012: Interconnectors:

The NETS SQSS does not currently clarify how you treat interconnectors for transmission security assessments. The GSR012: Interconnectors Working-Group has therefore been tasked with reviewing local and wider connection criteria, whilst also considering what is happening in Europe and any other changes that might impact interconnectors. The Working-Group has largely addressed the local issues and is finalising the proposed changes to the NETS SQSS in this respect. Wider issues shall be addressed in subsequent Working-Group Meetings. The NETS SQSS Review Panel is still waiting for Stewart Whyte to circulate a short note on the Working-Group's discussions to date.

c) GSR016: Application of Scaling Factors and the Inclusion of Embedded Wind in GSR009 Chapter 4 Studies:

Ben Marshall previously provided a more significant update at the December 2014 NETS SQSS Review Panel. At present, the Working-Group deliberations are largely complete and the Working-Group Report and corresponding Industry Consultation Document are being updated, with legal input sought from within National Grid. It is also proposed to update each generation category within Appendix E.

***ACTION: BM to arrange a Working-Group Meeting in April 2015 to conclude all outstanding actions and in an attempt to bring a finalised Working-Group Report to the June 2015 NETS SQSS Review Panel.***

***POST MEETING ACTION: BM to check the consistency of GSR016 against the Distribution Network Planning Standard ER P2/6.***

d) GSR017: Treatment of Switch Faults in Operational Timescales:

The Working-Group continues to liaise with National Grid's Market Operation function over the appropriate NETS SQSS text revision. Ben Marshall shall continue to provide Working-Group updates. However, a finalised Working-Group Report is not anticipated until late 2015 at the very earliest.

e) GSR018: Sub-Synchronous Oscillations (SSO):

This was brought to the NETS SQSS Review Panel because SSO risks need to be managed in the deployment of series compensation and HVDC technology, both of which are within scope of the transmission companies' future plans. Graham Stein explained that a Working-Group Meeting had only been held very recently at which the decision was taken to start drafting the Working-Group Report. However, he did also warn that new issues had been raised with respect to wind farms. GS reiterated that this Working-Group has good levels of participation from both transmission licensees and User(s) and that the Working-Group was working to resolve Grid Code issues also. A Working-Group Report is expected by summer 2015.

f) GSR019: Review of Chapter 7 Double Busbar Requirements:

The main issues yet to be resolved by the Working-Group include the use of the mean time to repair (MTTR) data and an appropriate cost benefit assessment of an AIS substation sensitivity. Further work is also required to update the Working-Group Report to provide a clear comparison of the different options and to consider what changes to the NETS SQSS text may be required in Section 7.13.3.1 and in Appendix A. The next Working-Group Meeting is to be scheduled for early May 2015.

g) GSR020: Single Transformer Offshore Substations:

At the December 2014 NETS SQSS Review Panel, it was agreed that a Working-Group should be established to progress this Siemens Modification Proposal. At this meeting the Working-Group Terms of Reference were approved. Post this meeting these have been circulated alongside an invitation for Working-Group Members to the industry. This shall be advertised at the NETS SQSS Offshore Criteria Workshop also. It is anticipated that the first Working-Group Meeting will occur in late May or early June 2015. At present the Scottish TOs have not expressed an interest in being involved with this Working-Group.

## 7 Industry Consultations

None

## 8 Modification Reports

a) GSR014: Offshore Transformer Requirements:

The GSR014 Modification Report had been recirculated to the NETS SQSS Review Panel but had not been materially updated. However, further consultation discussions had been held between Mike Lee, Biljana Stojkovska, Nick Martin and all Industry Consultation respondents. It was unclear if the additional work done had resolved all of the initial concerns raised by the Industry Consultation. Further feedback is still being sought and shall be responded to on a one-to-one basis as appropriate.

John West questioned what the next course of action should be. ML explained that this shall depend on any further feedback that is received and whether this is positive or not. This shall also temper what the report to the NETS SQSS Review Panel shall look like. JW confirmed that Mark Perry, on behalf of NGET TO did not support the modification as it stands. Aled Moses requested that these new responses are shared amongst the NETS SQSS Review Panel. It was confirmed that these shall be appended to the GSR014 Modification Report. It was agreed that a decision on whether to recommend NETS SQSS change would be made at the next NETS SQSS Review Panel Meeting.

***ACTION: NM to check the NETS SQSS Governance Framework to establish what level of support is needed among NETS SQSS Review Panel Members to recommend change.***

Alan Creighton summarised that there appears to be a number of fundamental issues with respect to Chapter 7 as a whole and questioned if these could not all be addressed in one pass? It was agreed that these issues and the problems experienced with respect to GSR014 shall be raised and presented at the forthcoming NETS SQSS Offshore Criteria Workshop.

## 9 Authority Decisions

a) GSR008: Regional Variations and Wider Issues:

Aled Moses explained that Ofgem have some further questions with respect to GSR008: Regional Variations and Wider Issues. He warned that these are far more detailed than previous questions but hoped these were the final set of queries before Ofgem launch their own Industry Consultation. A decision will be made thereafter.

b) GSR011: Review of Offshore Networks:

GSR011: Review of Offshore Networks was formally submitted to the Authority for a decision on 18 August 2014. Ofgem have responded with a number of questions. National Grid is addressing these and shall respond in due course. This modification will not progress any further until this has been completed.

## 10 Standing Items

a) Review of Modification Register:

The updated (March 2015) Modification Register was noted. It was agreed that Modification GSR010 should be removed and Modification GSR021 should be added to the Modification Register.

It was explained how moving forward we intend to use this to track progress on all of our current and potentially existing modifications. It was discussed how all closed modifications such as GSR009 and GSR010 could be added to an appendix. It was agreed that GSR015 should remain on the Modification Register as is until implemented. It has also previously been suggested that further milestones or indicative dates could be added to the Modification Register to allow NETS SQSS Review Panel Members to better track progress. Any further comments are welcomed and should subsequently be sent to Nick Martin.

## **11 Any Other Business**

### **a) Distribution Network Planning Standard ER P2/6:**

A review of the distribution network planning standard ER P2/6 is being carried out under the auspices of the Distribution Code Review Panel. Alan Creighton explained that this is a two stage process with high level options for the P2 standard to be considered over the next few months. Among the issues to be considered is alignment with the NETS SQSS. Bless Kuri noted that the NETS SQSS still refers to P2/5. However, GSR008: Regional Variations and Wider Issues has aspects more closely aligned to P2/6. A dissemination event is scheduled for 01 May 2015 to raise awareness amongst stakeholders. Further updates on the ER P2/6 proposals shall be considered at future NETS SQSS Review Panel Meetings.

## **12 Next Meeting**

The next NETS SQSS Review Panel is scheduled for 03 June 2015 from 10:00 – 12:00 at National Grid House, Warwick and via teleconference.

John West on behalf of the NETS SQSS Review Panel thanked Aled Moses and Ofgem for kindly hosting this meeting in their Central London offices.