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BSC Update

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The BSC Panel considered the P329 Assessment Report and agreed that the Alternative Modification (which retains the use of MODIS for reporting) was better than the Proposed Modification (which proposes removing MODIS as a means for reporting). ELEXON published the P329 Modification Report for consultation on 12 February and will present the results to the BSC Panel at its March meeting.

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Review of BSC Credit Modifications: ELEXON presented the Panel with a summary of its review of three Credit Cover related BSC Modifications (P306, P307 and P310) implemented in the November 2014 and June 2015 releases. ELEXON noted that the modifications have had a positive impact, particularly P310 which resulted in a reduction in total credit lodged of £5.2m.

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CUSC

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onshore network. At the August 2015 NETS SQSS Review Panel it was unanimously agreed that this modification is ready to be submitted to the Authority for a decision. The modification report is currently being finalised and shall be submitted to the Authority as soon as possible.

GSR015: Normal Infeed Loss Risk: This proposes to reword the definitions of infeed loss risks and unacceptable frequency conditions to avoid increased costs being incurred to procure additional frequency response until additional risks arise. This modification was approved by the Authority in December 2014 and the Ofgem Decision Letter is now available on our website. However, for these changes to take effect Ofgem will need to modify the electricity transmission licenses so that they refer to the new version of the NETS SQSS. Since GSR015 is not considered to be time-critical this has not yet been done. Ofgem will do this at an appropriate stage in the future.

GSR016: Application of Scaling Factors and the Inclusion of Embedded Wind in NETS SQSS Chapter 4 Studies: This aims to determine more realistic dispatch levels for generation, including embedded generation, in local and wider system capability studies. The working-group presented its initial conclusions to the NETS SQSS Review Panel in June 2014. The working-group aims to bring their final report and an initial industry consultation document to the NETS SQSS Review Panel soon. The NETS SQSS Review Panel is coming under increased pressure to conclude this modification. As a consequence this may now be wrapped up with a new piece of work concerning the Security and Economy Planned Transfer Conditions as detailed below.

GSR017: Treatment of Switch Faults in Operational Timescales: This is reviewing the risk of switch faults and determining the extent to which switch faults should be secured against given the changing mix of generation and reductions in system strength. The working-group continues to liaise with National Grid's Market Operation function over the appropriate NETS SQSS text revision.

GSR018: Sub-Synchronous Oscillations (SSO): The NETS SQSS Review Panel agreed to progress work to develop and clarify the transmission licensees' responsibilities with respect to sub-synchronous oscillation issues. A working-group report was approved at the December 2015 NETS SQSS Review Panel. This has now been approved by the Grid Code Review Panel also and shall be released for industry consultation soon.

GSR019: Review of Chapter 7 Double Busbar Requirements: It has been suggested that current interpretation of the NETS SQSS mandates the use of a double busbar (or equivalent) arrangement for the first onshore substation for offshore transmission system connections. However, a Cost Benefit Analysis (CBA) performed by DONG Energy aims to demonstrate that this requirement is not the most economic and efficient solution for all offshore wind farm connections. It has therefore been proposed that this interpretation within the NETS SQSS for the need to have double busbar substation arrangements is addressed and subject to NETS SQSS Review Panel assessment, this deterministic requirement be removed if no net benefit can be demonstrated for this configuration of switchgear when considering the specific characteristics of offshore generation connections. A working-group has been established that aims to present their initial conclusions to the NETS SQSS Review Panel soon.

GSR021: NETS SQSS Criteria for 220kV Transmission Assets: Traditionally, 220kV has not been a standard operating voltage on the GB onshore transmission system. However, the Kintyre-Hunterston subsea link currently under construction and due to be commissioned in 2015 will be the first 220kV installation on the GB network. Further 220kV installations are expected to follow, with a number of OFTOs preferring AC connections. The NETS SQSS currently does not specify planning or operational criteria for onshore transmission system assets operated at 220kV. This modification proposal therefore intends to review the current version of the NETS SQSS and proposes to include 220kV in the planning and operational

criteria of the onshore transmission system. This modification proposal was initially raised at the February 2015 NETS SQSS Review Panel with the intention of going straight out to industry consultation. To facilitate this, the NETS SQSS Review Panel requested a detailed impact assessment be conducted. This was presented to the April 2015 NETS SQSS Review Panel. This was subsequently released for industry consultation for a period of 20 working days closing in October 2015. One response that was fully supportive of the proposals was received. The modification report has subsequently received NETS SQSS Review Panel approval at the December 2015 meeting. This was submitted to the Authority for a decision on 23 December 2015. We are awaiting their response.

Other:

Lack of Reactive Compensation Redundancy in Offshore Transmission Networks: This is a potentially forthcoming modification proposal with respect to the lack of reactive compensation redundancy in offshore transmission networks. Due to modern offshore power park modules moving further away from the shore and having longer AC connections, there is a greater risk that having only a single bank of shunt reactive compensation might cause operational limitations, especially if this shunt compensation is out of service.
This issue continues to be further investigated by the Generation Connections Team within Network Capability - Electricity, as part of a connection request, and a modification proposal may be raised in the near future.

Design of Main Interconnected Transmission System (MITS): It is proposed to review the assumptions used to set power system transfer conditions for design of the MITS. These conditions are covered in Chapter 4 of the NETS SQSS and are referred to as the "Security Planned Transfer Condition" and the "Economy Planned Transfer Condition". For the 2015 Future Energy Scenarios (FES), lower levels of thermal generation capacity in later years cause the "Security Planned Transfer Condition" to break down. Additionally, it is agreed that the scaling of different types of generation and external system connections in the application of the "Economy Planned Transfer Condition" should be reviewed. Reviewing the two conditions will ensure that their use continues to identify accurately the future need for transmission infrastructure reinforcement. TO representatives will further scope out this work before a wider working-group is established.

Concluded:

GSR010: Review of Onshore Entry Criteria: This aims to revise the requirements for new onshore generation with different levels of connection security based upon the generation capacity and load factor. Following an inconclusive industry consultation, a guidance note with suggested approaches has been produced. This guidance note was approved at the April 2015 NETS SQSS Review Panel and formally replaces any official submission to the Authority to request a change to the NETS SQSS. GSR010 is therefore now considered as concluded and closed.

GSR020: Modification of Clause 7.8.1.1 to Allow Single Transformer Offshore Substations of Capacity Greater Than 90MW: This modification proposal was submitted by Siemens to the December 2014 NETS SQSS Review Panel. A working-group was subsequently established that has recently concluded that no change to the NETS SQSS is required; rather a simple clarification of the relevant clauses and definitions is needed. This has been addressed via an open letter to the industry that was published in November 2015. GSR020 is therefore now considered as concluded and closed.

Operational Forum

National Grid's latest Operational Forum was held on the 19th October 2015 and topics consisted of the Winter Outlook for 2015/2016, a Summer Review and a BSUoS forecasting

update among other things. The next meeting will be held on 02 March 2016. Information and slides are published on our website at the link below:

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