

## **Codes Summary – November 2015**

This document provides a summary as to latest developments concerning the various other Industry Codes. Further detailed information can be found at:

<http://www2.nationalgrid.com/uk/Industry-information/Electricity-codes/>

### **BSC Update**

#### **Successful implementation of scheduled November 2015 BSC Release**

ELEXON successfully implemented the [November 2015 BSC Release](#) on 5 November. The November 2015 Release was a large release and included six Approved Modifications and eleven approved Change Proposals. In particular, the November Release introduced Approved Modifications P305 and P323, which made significant changes to the imbalance price calculations.

#### **P321 'Publication of Trading Unit Delivery Mode'**

[P321](#) proposed to publish information on the direction of delivery of Trading Units, particularly Grid Supply Point Groups. This information can currently be inferred, but the Modification will increase transparency. The BSC Panel approved P321 as Self-Governance on 8 October for implementation on 30 June 2016.

#### **P323 'Enabling inclusion and treatment of SBR in the Imbalance Price'**

[P323](#) proposes to enable Acceptances taken for Supplemental Balancing Reserve (SBR) purposes to be re-priced equal to the Value of Lost (VoLL) and included in the imbalance price without affecting Balancing Mechanism cash flows. On 15 October, the Authority approved P323 for implementation on 5 November 2015.

National Grid have since raised BSC Modification [P328](#) in order to add clarity to the P323 legal text. This will ensure that SBR volumes on units where SEL=MEL will also be considered 'SBR Actions' and hence priced at VoLL.

#### **Loss of Load Probability (LoLP) Calculation Statement**

Under approved Modification P305, the BSC Panel is required to maintain a [statement](#) detailing the methods that National Grid will use to calculate LoLP values. This was presented to the BSC Panel on 10 September, and approved by the Authority on 15 October for implementation on 5 November 2015.

### **CUSC**

#### **CMP242 'Charging arrangements for interlinked offshore transmission solutions connecting to a single onshore substation'.**

CMP242 aims to ensure that both circuits linking offshore platforms connecting to a common onshore substation and additional capacity that can be utilised on export cables to shore by offshore generation as a result are appropriately charged. JC presented the Workgroup progress of CMP242 noting that the Workgroup had developed two Workgroup Alternative CUSC Modifications (WACMs) and had voted on these as well as the Original option. JC advised that the Workgroup felt that all options better facilitated the Applicable CUSC Objectives than the baseline, however half the Workgroup preferred the Original as the best option and half considered WACM1 to be the best option.

#### **CMP243 'a fixed Response Energy Payment option for all generating technologies'**

CMP243 aims to allow all generators, regardless of technology type, the option of choosing whether their Response Energy Payment (REP) is based on the current methodology or a fixed value suggested at £0/MWh. JC advised that the Workgroup are currently agreeing the final version of the Workgroup Consultation as this will be sent out to Industry within the next

few days. The Workgroup will be meeting again once the Workgroup Consultation has closed. JC noted that with the Workgroup timetable as it is, the Workgroup will require a one month extension as the Workgroup Consultation took slightly longer to draft than originally expected. The Panel agreed to this extension. The CMP243 Workgroup will now report back to the December 2015 CUSC Panel meeting.

**CMP244 'Set final TNUoS tariffs at least 15 months ahead of each charging year'**

CMP244 seeks to increase the length of the notice period for TNUoS tariffs (currently 2 months) to a suggested minimum period of 15 months. JC advised that the Workgroup have issued their consultation which is currently open and will close on 19<sup>th</sup> November 2015. The next Workgroup meeting is currently being scheduled.

**CMP245/CMP246 'Introduction of a new 'Category 5 Intertripping Scheme' to include System to System intertrips in relation to One-off Charges'.**

CMP245 & CMP246 aim to clarify the position in relation to the treatment of a System to System intertrip by classing it as a new Category 5 Intertripping Scheme. JC advised the Proposer of CMP245/CMP246 has contacted her as Panel Secretary on 20<sup>th</sup> October 2015 to withdraw his support from the Modification. JC issued a note via e-mail to the CUSC Panel and to Industry parties to inform them of this and allowed 5 Working days for any relevant party to support the modification in the Proposer's place. JC advised the CUSC Panel that she had received no such request and therefore asked the Panel to official withdraw the Modification Proposal. The CUSC Panel agreed that CMP254 could be withdrawn.

**CMP248 'Enabling capital contributions for transmission connection assets during commercial operation'.**

CMP248 aims to enable users that have existing arrangements to pay annual charges for transmission connection assets the opportunity to make capital contributions again transmission connection assets. JC noted that the Workgroup met on 27<sup>th</sup> October 2015 and reviewed the responses to the Workgroup Consultation. The Workgroup developed no WACMs so voted on the Original Proposal (allowing full or partial contributions with a 10% of NAV minimum level). The Workgroup agreed that the Original proposal was better than the CUSC baseline. The Workgroup will report back to the CUSC Panel at the November 2015 meeting.

**CMP249 'Clarification of Other Charges (CUSC 14.4) – Charging arrangements for customer requested delay and backfeed'.**

CMP249 aims to include the principles underpinning the CEC before TEC policy within Section 14 of the CUSC, state the methodology for calculation and clarify in which situations this would be applied. JC advised that the Workgroup are meeting for the third time next Wednesday 4<sup>th</sup> November and at this point are not requesting an extension to the timetable.

**CMP250 'Stabilising BSUoS with at least a twelve month notice period'**

CMP250 aims to eliminate BSUoS volatility and unpredictability by proposing to fix the value of BSUoS over the course of a season, with a notice period for fixing this value being at least 12 months ahead of the charging season. NJ advised that the Workgroup have planned to meet every 2 weeks until the end of the middle of December 2015. The Workgroup are not currently requesting an extension to their timetable however NJ noted that there is a possibility that the Workgroup may request an extension at the November 2015 Panel meeting.

**CMP251 'Removing the error margin in the cap on total TNUoS recovered by generation and introducing a new charging element to TNUoS to ensure compliance with European Commission Regulation 838/2010'.**

CMP251 seeks to ensure that there is no risk of non-compliance with European Regulation 838/2010 by removing the error margin introduced by CMP244 and by introducing a new charging element to the calculation of TNUoS. JC advised that the Workgroup have had an initial meeting and will meet again once legal direction has been provided on some concerns

which have been raised. The Workgroup sought approval from the CUSC Panel to include an additional item to the Terms of Reference 'consider when €2.50 is to be calculated'. The Panel agreed for this to be included within the Workgroup Terms of Reference.

## **SQSS**

**GSR008: Regional Variations and Wider Issues:** This includes a number of proposed amendments such as: adjusted n-1-1 contingency requirements; the use of dynamic ratings; the assumed reactive power output of generation...etc... This modification was submitted to the Authority for a decision in October 2011. Due to the length of time this has been awaiting a decision from the Authority, they have advised that this may now need to be re-consulted upon. We are actively engaging with the Authority but are still awaiting their final conclusions.

**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.

**GSR011: Review of Offshore Networks:** This considers the offshore criteria for larger wind farms such as the Round 3 developments. At the August 2014 NETS SQSS Review Panel it was unanimously agreed that this modification is ready to be submitted to the Authority for a decision. GSR011 was formally submitted to the Authority in August 2014. We are actively engaging with the Authority but are still awaiting their final conclusions.

**GSR012: Interconnectors:** This considers a consistent treatment of interconnectors when planning their local connections and their impact on wider infrastructure requirements. This modification is on-going and the working-group presented their initial conclusions with respect to local connections at the October 2014 NETS SQSS Review Panel. Further information with respect to wider infrastructure requirements is expected to follow in due course.

**GSR014: Offshore Requirements at Onshore Substations:** This considers the onshore substation requirements (one or two switch-bays) where offshore cables connect to the 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.

**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 is well developed with good levels of support from working-group members. This is expected to be submitted to the December 2015 NETS SQSS Review Panel for approval.

**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.

**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 is to be addressed via an open letter to the industry, which shall be published in November 2015.

**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 shall now be drafted and submitted to the NETS SQSS Review Panel at the earliest opportunity.

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 Strategy, 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.

**Operational Forum**

National Grid's latest Operational Forum was held on the 19<sup>th</sup> 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 has yet to be planned for 2016. Information and slides are published on our website at the link below:

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-system-operations/Electricity-Operational-Forum/>