Codes Summary - August 2013 (as at 21 August 2013)

This document provides a summary as to latest developments concerning the various other Industry Codes. Further detailed information can be found at http://www.nationalgrid.com/uk/Electricity/Codes/

CUSC

CMP201 (Removal of BSUoS Charges from Generators) - CMP201 seeks to align GB market arrangements with those prevalent within other EU member states. This will deliver more effective competition and trade across the EU and so deliver benefits to all end consumers. It is proposed that Balancing Services Use of System (BSUoS) charges, which are currently charged to all liable CUSC parties on a non locational MWh basis, are removed from GB generators. This will effectively align the GB 'generation stack' with those in other EU markets, thus facilitate equitable competition with generation in other EU markets which are not subject to such charges. CMP201 was presented to CUSC Modifications Panel on 16th December 2011 who agreed that it should follow the Standard CUSC Modifications process via a Workgroup and the Workgroup report to be presented back to the Panel in April 2012. At the CUSC Panel meeting on 24 February 2012, a one month's extension was granted to the original timetable to allow for the Workgroup to carry out further work on the Workgroup consultation and also to allow for a longer consultation period. A further month's extension was agreed at the CUSC Panel meeting on 27 April 2012 to allow for further analysis to be carried out. Upon identifying an error in one of the calculations contained with the final Workgroup Report, National Grid requested that the Panel reject the Report at their June 2012 Panel meeting in order to rectify the error and liaise with the Workgroup and Ofgem. The error was been corrected and the changes discussed and agreed by the Workgroup and the final Workgroup Report was presented to the CUSC Panel at their meeting in July 2012. At September 2012's CUSC Panel meeting, the Panel voted that CMP201 Original and the two Workgroup Alternative CUSC Modifications all better facilitate the Applicable CUSC Objectives, with a preference for the Original to be implemented. On the 25 October 2012, the Authority issued a "Send Back" direction, asking for further work to be carried out by the Workgroup after which a further Code Administrator Consultation will be published. A further Code Administrator Consultation was issued and the Final Modification Report was sent to the Authority for decision on the 9 May 2013.

CMP213 – (Project TransmiT TNUoS Developments). CMP213 was raised by National Grid as a result of the direction to NGET by the Authority following their Significant Code Review on electricity transmission charging arrangements. CMP213 is made up of three main elements: Network Capacity Sharing, Inclusion of HVDC in the charging calculation, and Inclusion of islands links into the charging methodology. The Panel agreed for CMP213 to progress to a Workgroup through the standard route and to report back to the December 2012 CUSC Panel as it was felt that a minimum of 6 months would be required for the Workgroup phase. At the CUSC Panel meeting on the 25 January it was agreed for the CMP213 to receive a one month extension for the Workgroup Report to be presented to a Special CUSC Panel meeting in April 2013. CMP213 was submitted to the Authority for decision on 14 June 2013.

CMP218 – (Changes required for use of new banking product to hold Users' cash securities). CMP218 seeks to amend the CUSC to facilitate the use of a new banking product by NGET to hold security provided by Users. The new banking product uses "virtual client accounts" to hold the security and interest which will have a number of administrative benefits: it would remove the need to create a new account for each User that provides security; it would allow refunds of security and interest to be provided more quickly than under the current arrangements. CMP218 was presented to the CUSC Modifications Panel on 22 March and the CUSC Modifications Panel agreed that it should progress through the Self Governance route. However, the Panel raised some queries and it was agreed that the queries would be clarified prior to proceeding to Code Administrator consultation. The queries were discussed at the CUSC

Panel meeting on 26 April 2013. The Code Administrator Consultation was published on 6 June 2013 and closed on 4 July 2013. The Panel voted unanimously that CMP218 better facilitates the Applicable CUSC Objectives and so should be implemented. Inline with the Self-Governance process, the Appeal Window for CMP218 opened on 26th July and closes on 16th August 2013. CMP218 will be implemented after 2 months on 16 October 2013 if no appeals are raised.

CMP219 – (CMP192 Post Implementation Clarifications). CMP219 seeks to make the necessary changes to the CUSC to refine the legal text related to CMP192 to further clarify the User Commitment Methodology. CMP219 was presented to the CUSC Modifications Panel on 31 May 2013 and the CUSC Modifications Panel agreed that it should progress as Self Governance and for it to proceed to a Workgroup. The Workgroup Report will be presented at the September 2013 CUSC Panel meeting.

Grid Code

The most recent meeting of the **Grid Code Review Panel** was held on 17 July 2013. The next GCRP will take place on 18 September 2013.

Consultations & Reports to the Authority

2012

A/12 (Information Required to Evaluate Sub-Synchronous Resonance)

Proposes changes to facilitate the exchange of information required to evaluate and, if necessary, mitigate the risk of Sub-Synchronous phenomena such as Sub-Synchronous Resonance on the Transmission System. The Industry Consultation closed on 26th March 2012 and 5 responses were received. National Grid is considering some possible issues identified in the consultation responses. Once these are resolved, National Grid will submit a Report to the Authority. On the 2 May 2013, National Grid hosted an industry workshop for parties with an interest in Sub Synchronous Resonance. The Report to the Authority was sent to the Authority for determination on 27 June 2013. Following discussions between National Grid and the Authority some changes were made to the drafting and a revised Report to the Authority was submitted on the 15 July 2013. The Authority approved the modification on 30 July 2013. A/12 was implemented into the Grid Code on 19 August 2013.

F/12 (Formalising Two Shifting Limit and other parameters)

This consultation has been published by the Electricity Balancing System Group and is seeking views on modifications to the Grid Code to make Two Shifting Limit and certain items of Other Relevant Data (Grid Code BC1.4.2(f)) formal parameters. The consultation opened on 16th March 2012 and responses are requested by 24 April 2012. Consultation closed with 9 responses received. The EBSG have submitted a workgroup report on TSL to the GCRP panel who met on the 18th July. As Eggborough originally raised the issues surrounding TSL, National Grid hosted a meeting with Eggborough on 26 July 2012 to discuss their issues and try to develop a pragmatic way forward. A consultation 'Treatment of Two Shifting Limit' closed on 16 November, with 8 responses received. The Report to the Authority was sent to the Authority for determination on the 6 December 2012. On 14 May 2013, National Grid resubmitted the Report to the Authority. This resubmitted Report to the Authority (v2.0) includes a guidance document that was requested by the Authority following submission of the Report to the Authority (v1.0). The Authority approved F/12 on the 19 June 2013. The modification was implemented into the Grid Code on August 19 2013.

2013

GC0033 (Offshore Wind Farms not connected to an Offshore Transmission System)

This proposal seeks to modify the Grid Code to ensure that the benefits afforded to 'Power Park Modules' in the Grid Code are restored to relevant Generators located Offshore and to improve

the clarity of the code. The industry Consultation was published on 15th February 2013 and closed on 15th March 2013, with 3 responses received. National Grid are considering the responses and drafting the Report to the Authority.

GC0044 (Grid Code changes resulting from BSC Modification P276)

This proposal seeks to modify the Grid Code to reflect the changes, approved by Ofgem, resulting from BSC modification P276 'Introduce an additional trigger/threshold for suspending the market in the event of a Partial Shutdown'. The industry consultation was published on the 7 May 2013. The consultation closed on Wednesday 5 June 2013, with two responses received. The Report to the Authority was sent to the Authority for determination on 19 June 2013 and a decision is expected on 24 July 2013. The Authority approved GC0044 on 19 July 2013, with an implementation date of 31 March 2014.

Workgroups

BMU Configurations Offshore

This purpose of this group is to look at development of standard BMU Configuration diagrams for offshore Power Park Modules. The Working Group will assess the current industry code requirements for the relevant reporting of such data, determine what the System Operator requires and consequently develop code modifications for the provision of such information. The last meeting took place on 14th February 2012 where it was agreed that the Workgroup Report would be drafted. No further meetings are anticipated. National Grid is currently drafting the Industry Consultation.

Electricity Balancing System Group (EBSG)

The scope of this group is limited to that of the Electricity Balancing System, and the Balancing Mechanism and Ancillary Services data and instructions that it will support. The group will consider the changes requested by the industry in response to National Grid's consultations and also any changes that are offered as part of the standard vendor system. The group has established two subgroups EBSIT (focusing on IT issues) and EBSMSM (focussing on Multi Shaft modelling). The last EBSG meeting took place in on 13th July 2012. The EBSG was given an update to the EBS Multi Shaft Modelling Subgroup. The main action of this subgroup is to work up a "straw man" configuration modelling proposal and bring this back to EBSG and GCRP in due course. There is no forecast on when this might be presented at this time. A regularly updated EBS Project Plan is now presented at each EBSG meeting, giving an overview of events and milestones. This supported discussion around release dates for EBS and how these would consider release dates for Elexon. The last meeting was held on Thursday 13th December 2012 in Warwick. The EBSG have presented two Grid Code issue papers to the Janaury GCRP. Reactive and Frequency Report Fax Form Information and New and Revised Balancing Code Parameters and Instructions will both be developed further by the EBSG before proceeding to Industry Consultation. The last meeting was held on Thursday 1 August 2013 and the next meeting is expected to be early October 2013.

Power Available

Following discussions within the CBSG, in March 2012, the group initiated proposals to develop the concept of Power Available for wind farms. This concept proposes to use data, such as wind speed, to calculate the potential power that would have been produced by a wind farm if they did not have their output curtailed. This value could then be used to assist with the integration of intermittent generation into current balancing arrangements for example as a reference point for settlement of bid/offer acceptances rather than the current method of using the generator's Final Physical Notification (FPN). There is overlap between this and the High Wind Speed Shutdown Workgroup. The first meeting was held on the 11 September 2012. The Workgroup are progressing through the Terms of Reference.

High Wind Speed Shutdown

Wind turbines are designed to operate within a specific range of wind speeds. Generally, where the speed exceeds such operating ranges, it can lead to the turbines disconnecting in order to protect against damage due to excessive mechanical loading. The impact this has on the transmission system is that there will be a loss of power leading to a drop in frequency. The secondary effect is the potential uncontrolled reconnection of the turbines once the wind speed returns to a safe operating range. This could lead to a high frequency event due to the additional power from the turbines combined with replacement plant which may have been despatched to mitigate the initial low frequency. A workshop was held on 11 April 2012 to further discuss these issues with relevant industry stakeholders. This workshop concluded that a Workgroup should be established under the governance of the GCRP, this was approved at the July 2012 GCRP. The first workgroup meeting was held on the 11 September 2012. The Workgroup presented their recommendations to the GCRP in July 2013. The Workgroup concluded that High Wind Speed Shutdown (HWSS) events are currently too infrequent, and of insufficient consequence, to justify modification to the Grid Code. The Workgroup agreed that there was benefit to the industry in National Grid being able to improve its forecasting ability in respect of HWSS Events. The Workgroup suggested that National Grid should obtain HWSS information from Power Park Module owners in the post operational phase through Grid Code OC7 (Operational Liaison) and OC10 (Event Information Supply). The GCRP agreed with this recommendation and the issue will be reviewed in two years time, or earlier should further evidence become available. The Workgroup has now concluded.

Information on Embedded Small Power Stations for the Purposes of Developing, Planning and Operating the Transmission System.

This workgroup was established at the May 2012 GCRP meeting. The workgroup will; review information currently provided by Network Operators to NGET concerning embedded small power stations, review how this information is used, identify any inconsistencies between how Small Power Stations connected to User's networks can be accounted for and identify any information which is necessary and not provided or information that is provided but is not necessary. The Workgroup met on Wednesday 19 June. The Workgroup are progressing through their Terms of Reference and expect to present their findings to the GCRP in September 2013.

Frequency Changes during Large Disturbances and their impact on the Total System

The Frequency Changes during Large Disturbances and their impact on the Total System Workgroup was established by Grid Code Review Panel (GCRP) at the May 2012 GCRP meeting. The workgroup will review the expected behaviour of the Total System when subject to frequency changes during large disturbances with particular focus on the rate of change of frequency. The workgroup will also review the findings of the frequency response technical sub-group and assess their implications, take account of relevant international practice and the approach taken in European code development and evaluate the costs, benefits and risks of any actions necessary to maintain or improve current levels of resilience to frequency changes under future system conditions. The first Workgroup was held on 26 October 2012 and have met a further 7 times. The Workgroup have published an open letter to the Industry informing interested parties of the likely setting changes and inviting them to an Industry Workshop. The workgroup hosted two industry seminars, one in Scotland on 25 April 2013 and one in London on 8 May 2013. The Workgroup presented their workgroup report to the July GCRP and the Industry Consultation was published on 15 August 2013 and closes on 27 September. The Workgroups proposals recommend changing all Rate of Change of Frequency Protection Relays on Generators between 5 and 50MW to 1Hzs⁻¹ measured over 500ms. In conjunction with the Industry Consultation, the Workgroup are hosting two industry seminars to engage with affected parties. The seminars are scheduled for Monday 9 September in London and Monday 16 September in Glasgow. The Workgroup are now investigating sub 5MW generators and inverter type technologies.

Demand Control

The Demand Control Workgroup will; review the need for, and requirements of, Demand Control Instructions, review the existing capabilities of the DNO's to implement Demand Control Instructions, take account of relevant international practice and the approach taken in European Code development and evaluate the costs, benefits and risks of any actions necessary to ensure that DNOs can implement the required Demand Control Instructions in the required timescales under future system conditions. The Workgroup met for the first time on the 5 December 2012. The Workgroup met again on 30 May 2013. The Workgroup are planning to present their findings in November. They will be conducting some demand reduction tests during September.

AMALGAMATED ELECTRICITY CODES MODIFICATION REPORT

As at 21 August 2013

This document contains the Modification Registers for the CUSC, STC, Charging & Grid Code and is correct as of the above date.

The most up to date versions may be found at the following websites:

STC: www.nationalgrid.com/uk/Electricity/Codes/sotocode/

CUSC: http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/

TCMF: http://www.nationalgrid.com/uk/Electricity/Charges/modifications/

Grid Code: www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/

BSC Amendments can be found on the following website:

www.elexon.co.uk/changeimplementation/ModificationProcess/ModificationReports/default.aspx