Change Proposal – BSCP40/02	CP No: 1324 *Version No: v1.0* *(mandatory by BSCCo)*

Title *(mandatory by originator)*
Access Requirements for Offshore Metering Installations at 132kV or Above

Description of Problem/Issue

The Authority and the Department of Energy and Climate Change (DECC) have introduced a regulatory regime for offshore transmission, at or above 132kV, that will cover wind and tidal energy sources within the UK. The Offshore Transmission Operator (OFTO) arrangements will go live in June 2010. These arrangements will incorporate the Plant and Apparatus necessary for offshore installations (when completed) into the Total System. As a result the GB Total System will extend to the offshore installations in June 2010, and the offshore platform will therefore be where Settlement Metering Equipment is installed.

In recognition of the additional health and safety risks associated with accessing offshore Metering Equipment, ELEXON invited a number of industry experts to consider the existing Balancing and Settlement Code (BSC) requirements in this area and to evaluate any potential technical or procedural solutions that may reduce the need for offshore site visits.

The expert group meet twice on 7 September and 19 October 2009 to consider all of the requirements under the BSC for personnel to gain access to Settlement Metering Equipment. These included the Technical Assurance Agent (TAA), BSCCo, the Central Data Collection Agent (CDCA), Meter Operator Agents (MOAs), the BSC Auditor and Registrants of Metering Systems. The group also deliberated on the potential technical solutions that may reduce the need for personnel to visit offshore sites for BSC purposes.

The details of the group's recommendations are given in detail below, but in summary the group believes that there are significantly higher risks associated with accessing offshore Metering Systems when compared with land based Metering Systems. Weather conditions will also play a very significant part for Registrants of Metering Equipment, who carry the responsibility for ensuring that relevant BSC timescales are met. The group's recommendations include strengthening the redundancy in communications equipment within relevant Codes of Practice (CoPs) which will significantly reduce the need for some site visits to be made within existing time frames (i.e. the frequency of required visits can be reduced) whilst maintaining the integrity of Settlement.

Proposed Solution

Communication Redundancy.

The group considers that offshore Metering Equipment for the OFTO arrangements will need to meet the requirements of CoP2 (up to 100MVA) and CoP1 (above 100MVA) and believes that CoP2 should specify, as a minimum, dual redundancy in Outstations and communications equipment in line with the requirements of CoP1. It is therefore proposed that CoP2 be changed to require two Outstation Systems where each Outstation will be connected to two communication lines. The group recommends that CoP1 and CoP2 should also clarify the term 'communication line' such that a communication line is one which is uniquely identifiable by its number or address. This reduces the potential for providing communication systems that may be subject to a common mode failure. The redlining for CoP1 is contained in Attachment A and redlining for CoP2 is contained in Attachment B.

Technical Audits.

The TAA is required to select a sample of Metering Systems for audit per year. The process is contained in BSCP27 'Technical Assurance of Half Hourly Metering Systems for Settlement Purposes' where a sample is randomly based on Metering Equipment variables which results in around 2% of the total number of Central Volume Allocation (CVA) Metering Systems being selected for audit. The sample (from June 2010) has the potential to include offshore Metering Systems. The group considered alternative methods for such audits that may not require any offshore visits, but it was agreed that their significance to Settlement is not different from any other site and that no change should be made. However, once a site is selected for audit the TAA is required to give Registrants 20 working days (WD) notification. The group believes that this will not be sufficient time, particularly in winter months when access will be more dependent on sea conditions, to make the necessary arrangements for access. Further, provision should be made that allows for the audit to be conducted within a 20WD window of the scheduled date. This allows for unforeseen adverse weather conditions that may delay the audit.

The group therefore recommends that BSCP27 should be changed to provide 90WD notice in the event that an offshore Metering System is selected for technical audit. Provision is also recommended for the TAA to notify ELEXON if a scheduled visit cannot take place for health and safety reasons within 20WD of the proposed date. Such cases may be referred to the Performance Assurance Board for further consideration. BSCP27 has been red lined in accordance with the group's recommendations and is provided in Attachment C.

Metering Faults.

The minimum requirements for the repair of Metering Equipment faults are detailed in BSCP06 'CVA Meter Operations for Metering Systems Registered in CMRS', and are currently 95% within 5WD and 99% within 15WD. The group gave careful consideration to the practicalities of these timescales in relation to offshore metering and the need to maintain Settlement integrity. The group concluded that no change to these timescales should be made as these should remain the goal in all cases, but a process should be introduced whereby the MOA can notify ELEXON if these timescales cannot be met for health and safety reasons only, i.e. poor sea conditions are preventing access. The notification would be in the form of an assessment of the risk to Settlement and would detail the control measures in place. ELEXON would bring any uncontrolled risks to the attention of the Imbalance Settlement Group. The changes to BSCP06 are red lined in Attachment D.

Meter Advance Reconciliations.

The final area identified for change is the Meter Advance Reconciliation (MAR) process as detailed in BSCP05 'Meter Advance Reconciliation for Central Volume Allocation', in which there are obligations on the CDCA to visit site to obtain Meter readings.

The frequency for these Meter readings is determined by the type of Metering Equipment installed and ranges from every 3 months to every 12 months. The group believes that regular 3 monthly visits to offshore installations (for Metering Equipment consisting of Meters with external Outstations) represents an unnecessary health and safety risk and will be difficult to maintain long term, especially in winter months. The group recognises that there is value in the initial MAR to identify problems early. Therefore the group has concluded that, where a MAR would otherwise be required every 3 months, the first will be within 3 months then the frequency of the MAR Meter readings will be

extended to every 12 month, and this requirement will be added to BSCP06. Further changes to the CDCA User Requirement Specification (URS) and the CDCA Service Description (SD) have also been identified where the functional requirements reflect the change proposed to BSCP05. BSCP05 (Attachment E), the CDCA URS (Attachment F) and the CDCA Service Description (Attachment G) have been red lined to reflect these recommendations.

Justification for Change

The expert group believes that the changes proposed by this Change Proposal represent a carefully considered and balanced approach to ensuring the continued integrity of Settlement while taking into due consideration the risk to personnel safety and the practicalities of access to offshore installations.

To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code?

This CP facilitates Section E 1.3 'BSC Service Description' in relation to the TAA and the CDCA services and BSC Section L 2.1.1 (b) in respect to Registrants' responsibility to maintain Metering Equipment.

Estimated Implementation Costs *(mandatory by BSCCo)*
8 ELEXON Man Days effort, equating to £1920.

Configurable Items Affected by Proposed Solution(s)

Code of Practice 1 and Code of Practice 2
BSCP05
BSCP06
BSCP27
CDCA URS
CDCA Service Description

Impact on Core Industry Documents or System Operator-Transmission Owner Code

None

Related Changes and/or Projects

None

Requested Implementation Date

June 2010 Release

Reason:

This will coincide with the OFTO arrangements that are due to go-live in June 2010.

Version History ***(mandatory by BSCCo)***

This is version 1.0 for external impact assessment.

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Attachments: Y (If Yes, No. of Pages attached: see below)
(delete as appropriate)

Attachment A: Red line changes to CoP1 (33 pages)
Attachment B: Red line changes to CoP2 (33 pages)
Attachment C: Red line changes to BSCP27 (46 pages)
Attachment D: Red line changes to BSCP06 (35 pages)
Attachment E: Red line changes to BSCP05 extract (4 pages)
Attachment F: Red line changes to CDCA URS extract (2 pages)
Attachment G: Red line changes to CDCA Service Description extract (1 pages)