Change Proposal	CP No: 1381
	Version No: v1.0 *(mandatory by BSCCo)*

Title *(mandatory by originator)*

Negative Wind Generation Forecast on BMRS

Description of Problem/Issue *(mandatory by originator)*

Each day, National Grid submits a file to the Balancing Mechanism Reporting Agent (BMRA) containing data for the UK Forecasted Net Wind Generation. These values (which are known by the record type as 'WINDFOR') are provided for each hour, from 21:00 on the current day D to 21:00 on D+2.

Occasionally, during periods of very calm weather, the net generation forecast for any given hour may be negative. Even where there is no wind, wind farms still require an amount of base load power to operate, and it is at that point that they can become demand rather than generation sites.

As it currently stands, the Balancing Mechanism Reporting Service (BMRS) does not support negative values for the Wind Generation Forecast, and so it rejects any WINDFOR files containing generation values less than zero. In these circumstances, a workaround has to be applied in which any negative values are replaced with zeroes and reloaded into BMRS for storage and publication.

The specific issues with BMRS are as follows:

- The BMRS data item associated with WINDFOR generation volumes, and defined in the NETA IDD Part 1 spread sheet, is 'SPN Generation'. The Valid Set defined for this data item is '0 to +99999', and so it does not support negative values.

- The TIBCO field type used to report WINDFOR generation volumes is 'Generation Value (VG)', and also has a valid set of 0 to +99999. Therefore, any negative WINDFOR generation volumes received and stored within BMRS cannot be successfully reported in the corresponding WINDFOR TIBCO message.

Proposed Solution *(mandatory by originator)*

The following changes are required to BMRS:

- WINDFOR generation values should be associated with the 'FT Generation' data item defined in the IDD Part 2 spreadsheet rather than 'SPN Generation'; and

- The WINDFOR TIBCO message should use the 'Fuel Type Generation (FG)' field type defined in the IDD Part 1 document to report the data rather than 'Generation Value (VG)'.

Both the 'FT Generation' IDD data item and 'Fuel Type Generation (FG)' TIBCO field type have valid sets of -99999 to +99999 and so can handle negative values.

Justification for Change *(mandatory by originator)*

This change is necessary in order to ensure BMRS is able to receive, process and publish WINDFOR data correctly. While the workaround allows the majority of data to be loaded, it is a manual process and does not fully resolve the problem of not being able to report legitimate negative values in the forecast data.

We reviewed the available data formats and concluded that it would not be appropriate to change the valid sets of 'SPN Generation' and 'Generation Value (VG)' as these are related to Indicated Generation (INDGEN), which by definition is always positive (it represents the sum of the Physical Notifications submitted for exporting BM Units). The more consistent approach is to make use of 'Fuel Type Generation' items as these already accommodate negative values.

To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code? *(mandatory by originator)*

This CP facilitates the current provisions of BSC Section V.

Estimated Implementation Costs *(mandatory by BSCCo)*

The total central implementation costs for this CP would be approximately £14k. This comprises:

- Approx. £13k in BSC Agent costs; and

- Approx. £1k (4.5 man days) in ELEXON effort.

Configurable Items Affected by Proposed Solution(s) *(mandatory by originator)*
NETA Interface Design and Definition (IDD) Part 1 Document (redlined changes attached).
NETA Interface Design and Definition (IDD) Part 2 Spreadsheet (changes will be made by the BSC Agent service provider following approval).

Impact on Core Industry Documents or System Operator-Transmission Owner Code *(mandatory by originator)*

None Identified

Related Changes and/or Projects *(mandatory by BSCCo)*

None Identified

Requested Implementation Date *(mandatory by originator)*

27 June 2013 as part of the June 2013 BSC Systems Release

Reason:
This is the next available Release.

Version History *(mandatory by BSCCo)*

We raised v1.0 of this CP on 26 October 2012

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Attachments: Y/~~N~~

Draft redlined changes to NETA IDD PART 1