



CP Report – CP1381

Date	31 October 2013
Purpose of paper	For Information
Summary	This report provides details of the background, solution, impacts, industry views and the ISG's final views on its decision to Reject CP1381 'Negative Wind Generation Forecast on BMRS'.

1. Why Change

Background

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 21:00¹ on the current day ('D') to 21:00 on the day two days after the current day ('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 net importers rather than net exporters of electricity.

What is the issue?

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

The specific issues with the BMRS are as follows:

- The BMRS data item associated with WINDFOR generation volumes, as defined in the NETA Interface Definition and Design (IDD) Part 2 spreadsheet, 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. Even if negative WINDFOR generation volumes could be received by and stored within the BMRS, these values could not be successfully reported without making the necessary TIBCO changes.

¹ The WINDFOR data published on the BMRS is in GMT.



2. Solution

[CP1381](#) 'Negative Wind Generation Forecast on BMRS' was raised by ELEXON on 26 October 2012 and proposed a change to the BMRS to remove the need for the existing workaround described in Section 1. The solution also required changes to the NETA IDD Part 1 document and the NETA IDD Part 2 spreadsheet.

Changes required to the BMRS:

- WINDFOR generation values should be associated with the 'FT Generation' data item defined in the IDD Part 2 spreadsheet rather than 'SPN Generation'.
- 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 the 'Fuel Type Generation (FG)' TIBCO field type have valid sets of '-99999 to +99999' and so can handle negative values.

These changes are necessary in order to ensure that the 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.

Changes required to the NETA IDD Part 1:

- Section 4.7.4.43 'Fuel Type Generation': add WINDFOR to Message containing field.
- Section 4.7.4.48 'Generation Value': remove WINDFOR from Message containing field.
- Section 4.7.5.50 'WINDFOR – Forecast Peak Wind Generation' message definition: change the Generation Field Type from 'VG' to 'FG'.

We have reviewed the available data formats and have 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.

The proposed redlined changes to the IDD Part 1 document can be found in Attachment A. The changes to the IDD Part 2 spreadsheet can be found in Attachment B.



3. Impacts and Costs

Impacts and Costs

The following table summarises the ELEXON effort required to implement CP1381 and the impact on market participants.

Market participant	Cost/impact	Implementation time needed
ELEXON (implementation)	£1k (4.5 man days' effort)	31 December 2014 is appropriate
BSC Agents	£22k in total	31 December 2014 is appropriate
Suppliers	Minor costs and impacts associated with process and procedure changes	30 days lead time indicated
Generators	Minor costs and impacts associated with process, procedure and system (testing) changes	180 days lead time indicated

CP1381 was issued for Industry Impact Assessment on 26 October 2012 as part of CPC00719. When we issued this Impact Assessment, we provided the costs associated with ELEXON and the Application Management and Development (AMD) Service Provider. The final costs associated with the Business Process Operator (BPO) Service Provider were not known at that time, and so were not included in the CP form or the Impact Assessment. These costs have since been re-assessed based on a parallel implementation with P291 (see Section 5).

Two respondents to the Industry Impact Assessment (who both operate as Suppliers and various Party Agents) advised that they would require 30 days' lead time in order to implement this change and that their organisations would need to make minor process changes. We requested clarification of their required process changes and associated lead times; one of the respondents advised us that it was unable to provide any further details as the internally impacted area (generation) did not provide it to them, and the other respondent did not supply any further explanation. However, their proposed lead times are compatible with implementation on 31 December 2014.

Another respondent stated that it required 180 days lead time to implement this change. We requested clarification and the respondent advised that this was to test and ensure that its systems could accept negative values for the relevant data items.



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4. Industry Views

We received seven responses to the Industry Impact Assessment, of which six agreed with the change and one was neutral. The breakdown of responses is shown in the following table, and you can find the full collated participant responses to CP1381 in Attachment C and on the CP1381 page of the BSC Website, [here](#).

Respondent role	Supports CP?		
	Yes	No	Neutral
Supplier/Party Agent	3	0	0
Party Agent	2	0	1
Supplier/Generator	1	0	0
Total	6	0	1

Only one respondent provided reasons for its view, stating that the proposed change will remove a current workaround and help provide more accurate data.

Another respondent suggested changing the title of CP1381 from “Wind Generation Forecast” to “Wind Generator Forecast”, to reflect that negative values do not represent generation. Though we understand why the change to the title was suggested (as the suggested title would be more accurate), the title of the CP does not affect the actual solution, and so it was left unchanged.

Comments on the proposed redlining

No respondents commented on the proposed redlining.

6. Implementation Approach

We originally recommend an Implementation Date for CP1381 of 27 June 2013 as part of the June 2013 BSC Systems Release. At its December 2012 meeting the ISG decided to defer its decision and put the CP on hold until another BMRS software change is raised (which would allow for costs savings).

ELEXON has since reassessed CP1381 on the basis that it would be implemented alongside Approved Modification P291. Therefore, ELEXON recommended a revised implementation date of **31 December 2014**. This implementation date allowed for the 30-180 days’ lead time requested by respondents to the Industry Impact Assessment.



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5. ISG's Final Views

ELEXON presented CP1381 to the ISG at its meeting on 22 October 2013. ELEXON advised the ISG that if CP1381 was approved it would be implemented alongside P291 on 31 December 2014, to allow for cost savings. Implementing the CP in line with P291 would reduce the cost by one third, resulting in revised implementation costs of approximately £22k.

An ISG Member commented that there have not been any incidents of negative wind generation since February 2012 and that such incidents have been infrequent in the past. It was mentioned that ELEXON manually checks the data and that this CP would improve the efficiency of the process, as detailed in Section 1 of this document. An ISG Member noted that they were unsure about the benefit of being able to see negative wind generation as opposed to zero wind generation under the current process.

ELEXON advised the ISG that at its previous meeting it felt that it would be nice to display negative wind generation on BMRS and queried about the possibility to reduce the cost. ELEXON also noted that it is unlikely that the revised costs presented to the ISG will be further reduced. An ISG Member believed that, based on infrequent occurrence of negative wind generation, the benefit of the CP does not outweigh the cost. Other ISG Members agreed with this view. Therefore, the decision was made to reject CP1381, as the benefits of the change did not outweigh the costs.

Further information on the ISG's wider discussion on CP1381 can be found in Appendix 1 of this document.

Attachments:

Attachment A: NETA IDD Part 1 draft redlining
Attachment B: NETA IDD Part 2 spreadsheet draft redlining
Attachment C: CP00719 Consultation Responses

Appendices:

Appendix 1: ISG's Initial Views

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Appendix 1: ISG's Initial Views

ISG's original discussions

ELEXON presented CP1381 to the ISG at its December 2012 meeting ([ISG140/01](#)), providing details of the background, solution, impacts and industry views for CP1381. ELEXON invited the ISG to approve the CP for implementation.

An ISG Member asked for clarification on the proposed changes in the IDD Part 2 spreadsheet (Appendix 2), as these were not completely clear. ELEXON advised that because it is difficult to redline a spreadsheet, it had simply highlighted the cells requiring amendments in yellow.

Another ISG Member asked what the £33k BSC Agent costs included. ELEXON advised it includes software development and testing. It also noted that, as with any change to Central Systems, there are overheads in opening up the system and managing the change. An ISG Member queried whether ELEXON reviews, and where appropriate, challenges BSC Agent impact assessments. ELEXON responded confirming that it does review and challenge where appropriate. Another ISG member queried whether the full BSC Agent costs had been available at the time of the Industry Impact Assessment. ELEXON noted that the £13k associated with the AMD Service Provider had been available, but that the £20k BPO Service Provider cost had not been known at that time.

Deferral of decision

ISG Members agreed that, while they supported the CP in principle, the data was a 'nice to have' and was not essential. They considered that there was no urgency associated with it, and the benefits of the data did not seem to justify the cost of implementation as a standalone software change. An ISG Member asked whether there are other BMRS software changes that could be packaged with this CP to allow for cost savings. ELEXON advised that there were no changes being progressed that impacted the BMRS software. As such, the ISG asked ELEXON whether it could approve the CP to be implemented with an open date of 'whenever another BMRS software change is implemented'. ELEXON advised that BSCP40 is specific in that the Implementation Date must be a calendar date.

ELEXON suggested that the best approach would be for the ISG to defer its decision and put the CP on hold until such time as another BMRS software change is raised. The ISG could then consider the revised costs of the CP as part of a wider package of changes. ISG Members agreed to this approach, noting that there was a likelihood that article 9 of [Regulation \(EU\) No 1227/2011](#) on wholesale energy market integrity and transparency (REMIT) would lead to future changes to the BMRS software. The ISG therefore agreed to defer a decision on CP1381 until it could be implemented in parallel with another BMRS change.

Parallel implementation with P291

[P291](#) 'REMIT Inside Information Reporting Platform for GB Electricity' was raised on 30 January 2013. REMIT is an EU regulation that came into force in December 2011 and is aimed at preventing market abuse in the



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wholesale energy markets. P291 proposed to use the BMRS as a platform to publish the necessary information to meet the requirements of REMIT inside information reporting for the GB electricity sector. The Authority approved this Modification on 16 August 2013 for implementation on 31 December 2014.

The impacts and costs of CP1381 were re-assessed on the basis that it would be implemented alongside P291 on 31 December 2014. ELEXON presented the revised costs for CP1381 during a verbal update to the ISG at its August 2013 meeting. ELEXON advised the ISG that the revised costs for CP1381 were estimated to be £22k if the CP was implemented alongside P291, representing a cost saving of approximately a third on the standalone costs.

One ISG Member questioned whether the negative WINDFOR values would be displayed on the BMRS or whether the changes would only enable these values to be accepted. ELEXON responded that the system changes would enable the BMRS to accept and report the negative WINDFOR values, resulting the following:

- Negative values will appear in the Peak Wind Generation Forecast table on the Electricity Data Summary page.
- The Wind Forecast Out-turn graph on that same page will show negative values and the y-axis will be adjusted accordingly.
- Negative values will appear in the XML and CSV downloads available by clicking the 'Current' link under the Wind Forecast Out-turn graph.
- Any negative values will appear in the WINDFOR TIBCO message.

Further information on the ISG's final views on CP1381 can be found in Section 5 of this document.