

Annual Industry Consultation

Proposed Revisions to the System Management Action
Flagging Methodology Statement

Following Industry Consultation

A Report by National Grid
In accordance with Condition C16 of its
Electricity Transmission Licence

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Executive Summary

National Grid has carried out an annual review of the System Management Action Flagging Methodology (SMAF) Statement in accordance with Standard Condition C16 of the National Grid Electricity Transmission Licence.

As a result of this annual review, National Grid has proposed changes to the SMAF Statement via an industry consultation document published on 23rd December 2011.

Industry responses to the consultation were requested by 2nd February 2012. Three responses were received.

This report provides details of the outcome of the consultation process undertaken by National Grid.

Recommendation

Following industry consultation, National Grid recommends that the Authority approves the revised version of the SMAF Statement attached as Annex 3. This version incorporates both the revisions originally proposed by National Grid and the changes to the revisions as a result of the industry consultation.

If the Authority does not approve the proposed changes in Annex 3, National Grid recommends that the Authority approves the proposed changes in Appendix A of the consultation document. This version incorporates the changes originally proposed by National Grid.

If the Authority does not approve either of the proposed changes; the existing version of the SMAF Statement will remain in place.

Subject to approval by the Authority, the proposed changes will become effective from 1st April 2012.

1 Introduction

In accordance with Standard Condition 16 (C16) of its Electricity Transmission Licence, National Grid has consulted with the industry on the proposed changes to the System Management Action Flagging Methodology (SMAF) Statement.

The consultation was published on 23rd December 2011 and requested responses by 2nd February 2012. National Grid is then required to submit a post-consultation report to the Authority within seven days.

The consultation document is attached in the Annex to this document (Annex 1) along with the supporting, change marked SMAF Statement.

National Grid consulted with the industry on the following proposed changes:

Reference	Change	Comment
Part B Section 3 The balancing services that will be SO-Flagged	Insert: <u>Black Start Warming</u> BMUs that are warmed and run to maintain black start capability should be SO-Flagged, i.e. any BM Start-Up instructions and BOAs sent to the BMU in question should be SO-Flagged.	A new paragraph inserted
Complete document	General wording and typo updates	General document revision

This report provides details of the outcome of the annual consultation process undertaken by National Grid.

2 Industry Responses

Three industry responses were received; from IBM (UK) Limited (on behalf of Scottish Power), E.ON, and EDF.

The consultation questions and full industry responses are attached in full as Annex 2, Summary responses are included here:

No	Question	ScottishPower	E.ON	EDF
1	<i>Do you agree that the changes proposed to the SMAF, shown in Table 1, have been implemented correctly to the SMAF in Appendix A?</i>	Yes	Yes	Yes
2	<i>Do you agree that the changes proposed to the SMAF, shown in Table 1 and in Appendix A, should be made?</i>	Yes	Yes	Yes
3	<i>Do you have any other comments in relation to the proposed changes to the SMAF?</i>	No	No	Yes

2.1 Proposed Changes

Annex 1 contains the supporting change-marked version of the SMAF Statement issued with the original consultation. Following receipt of industry comments, further changes were made in addition to the original changes, in support of the requests to promote greater clarity of terminology, and consistency with other formal documentation. All additional changes

have been identified as such within the document included as Annex 3 – Revisions to proposed changes to the SMAF Statement (Post Consultation).

2.2 Industry Feedback on Consultation Document

Industry responses to the consultation questions are shown below, together with National Grid's view; only the consultation questions which provided rationale for responses are shown.

Consultation Q1 - Do you agree that the changes proposed to the SMAF, shown in Table 1, have been implemented correctly to the SMAF in Appendix A?

Industry Response: As this is a statement by which the SO 'flags' its actions for the sole purpose of managing the stability of the Grid system (rather than energy management) and that it is clear to us of what it indicates, we therefore agree that they are appropriate.

Industry Response: This appears so.

Industry Response: Yes, but both should be improved. The text does not accurately capture the principle and intent of the proposed change. See comments below.

National Grid's View:

National Grid notes the requirement for further clarity. Subsequent changes have been made to the SMAF Statement following comments received, details of which follow as responses to Q2 and Q3.

Consultation Q2: Do you agree that the changes proposed to the SMAF, shown in Table 1 and in Appendix A, should be made?

Industry Response: ScottishPower agrees that Black Start is a 'System' activity and therefore should be 'SO flagged'.
The other housekeeping changes appear appropriate.

Industry Response: Yes in principle, but see the comments below on the detailed text.

Black Start capability contracted by National Grid has some similarity in principle with contracted reserve, some of the cost of which is reflected in imbalance price through BSAD price adjusters.

However, the circumstances of Black Start actually being required are exceptional and if used contract and meter volume notifications are suspended with all physical volume subject to the single imbalance price. Therefore, the cost is effectively shared rather than being targeted on those in imbalance. Given that the cost of utilisation in earnest is effectively shared (in a Black Start situation); that the other costs of holding the capability are effectively shared (not in BSAD); and that instructions by the SO for testing capability might not be related to prevailing system imbalance, there is an argument that the costs of testing the capability should be likewise shared, considered a "system" service, SO-Flagged.

It can also be argued that all the cost of maintaining the capability of a Black Start station, including warming and running from time to time, could or should be borne by the provider of the service and reflected in the price at which the service is contracted. In that case, the SO would not be required to instruct operation for this purpose; the presumably higher contract cost would be shared (in BSUoS) and the SO-Flagging of such instructions would not be an issue.

For the plant operator, the benefit of giving responsibility for such operation to the SO is presumably that the SO takes on the cost. Hopefully from the point of view of other users this would be reflected in correspondingly reduced Black Start contract capability costs.

For a station that would otherwise rarely be warmed or run, the SO may be able to achieve additional value over that achievable by the owner, for example by optimising operation in conjunction with other system reserve or balancing requirements, compared with the value the owner might get using it for its own purposes. This suggests the SO might use testing to assist balancing or reserve holding, which in turn suggests the action could find its way into imbalance prices, despite being SO-Flagged.

Although we accept the principle of SO-Flagging for such instructions, we think the detailed wording could be improved:

Table 1 and Page 8 of the proposed revised SMAF Statement say:

“Black Start Warming

BMUs that are warmed and run to maintain black start capability should be SO Flagged, i.e. any BM Start-Up instructions and BOAs sent to the BMU in question should be SO-Flagged.”

Although particular BM Units may be identified at certain times as being ones on which any action is to be flagged, it is not BMUs themselves that are SO-Flagged (see step 8 on page 15). Instructions to BMUs do not include SO-Flag information. It is the actions requested by the SO and reported in BSAD that might be flagged. In the case of BM Start-Up instructions, the “option fee” component might or might not be flagged. If it is SO-Flagged, the BSAD methodology says it will not be included in the Buy Price Adjuster (BPA) calculation, and it is not clear whether it would be reported at all. In the case of subsequent energy actions arising from a BM Start-Up instruction, these will presumably be reported, whether SO-Flagged or not. This text should be clarified, and should specify whether or how the SO-Flag for the actions associated with a BM Start-Up would be reported.

Also, there could conceivably be circumstances where plant could be warmed for the purpose of testing Black Start capability but is subsequently utilised for normal balancing, in which case the cost of the normal balancing action should not be SO-Flagged. The text should be clear that only actions specifically to maintain black start capability should be SO-Flagged, and that a normal balancing instruction following warming-only for black start capability should not be SO-Flagged.

National Grid’s View:

As a consequence of the comments made, National Grid has reworded the original proposed change to the sentence on page 8 of the SMAF Statement to:

“BOAs issued to BMUs that are warmed and run to maintain Black Start capability should be SO-Flagged. For the avoidance of doubt, all BM Start-Up instructions including, instructions associated with Black Start warming are accounted for within the Balancing Services Adjustment Data (BSAD) Methodology Statement.”

The respondent also refers to circumstances where plant could be warmed for the purpose of testing Black Start capability, but is subsequently utilised for normal balancing. The respondent considers that the text should be clear that only specific actions taken to maintain Black Start capability should be SO-Flagged.

National Grid does not consider that additional clarification is required to identify that only those actions taken for System reasons will be SO-Flagged. The circumstances described apply equally to plant instructed for Transmission Constraint purposes (and SO-Flagged) and subsequently used for normal energy balancing (and not Flagged). We consider that the introduction to the SMAF Statement and Part B, Background to SO-Flagging, identifies clearly that only System actions will be flagged.

Consultation Q3: Do you have any other comments in relation to the changes proposed to the SMAF?

Industry Response: On page 7 of the change marked text: “There is one form of emergency [action](#) that will always be classified for system management reasons and will consequentially always be SO-Flagged – emergency deenergisation instructions.” Suggest “...classified as being for system management...” instead of “... classified for system management reasons...”

National Grid’s View:

National Grid supports the request for clarity and has made the following revision following comment:

Page 7: Reworded to “classified as being for system management”.

Other detailed comments on the text of the SMAF Statement.

We have other detailed comments on the text of the SMAF Statement:

Page 5: “However, in summary, transmission constraint occurs when there is a limit on the ability of the national electricity transmission system, or any part of it, to transmit the power supplied onto the national electricity transmission system to the location of demand.”

We think it would be more accurate to say “... when there is a limit on the ability of the national transmission system to transmit the power that participants wish to deliver to, or offtake from, the system at particular locations”. This avoids an interpretation that a constraint is a limit on the ability of the system to accommodate consumer demand.

National Grid’s View:

National Grid considers that the wording related to transmission constraints is a reflection of the wording outlined in the Transmission Licence. For consistency with the Transmission Licence, it is not appropriate to change the definition of licence related terms in the SMAF Statement.

Page 6: “All Bid-Offer Acceptances (BOAs) taken within the Balancing Mechanism (BM) in relation to Balancing Mechanism Units (BMUs) will be considered to determine whether they were used for system management reasons”
Comma required after “considered”.

Page 7: “costs associated” should be “associated costs”. Should this be “associated option fee costs” to distinguish from total costs?

Page 7/8: “emergency instructions”, “emergency deenergisation instruction”, “system to generator operational intertripping” are defined terms under the CUSC and Grid Code: should they be capitalised” like other defined terms?

Page 9: “Whether such balancing services are SO-Flagged will be contained within the BSAD and submitted in accordance with the BSAD methodology statement.”

The sentence could be misinterpreted to suggest that the determination of the flag could be made in the BSAD methodology. This interpretation would be avoided if the sentence were to say “Information on whether or not such balancing services have been SO-Flagged ...”

Our understanding is that the SMAF is intended to describe the criteria for whether or not actions will be SO-Flagged, and the BSAD is intended to describe how actions and flags are reported, specifically for use as adjustments in the determination of imbalance prices under the BSC.

National Grid’s View:

National Grid notes the request for clarity of some sections of wording. These sections, which do not reflect wording within the Transmission Licence, have been revised following above comment.

Page 6: comma added

Page 7: wording changed to “associated costs”

Page 7/8: defined terms capitalised

Page 9: wording changed to “Information on whether or not such balancing services have been SO-Flagged”

Page 12: “A transmission constraint is defined as: any limit on the ability of the national electricity transmission system, or any part of it, to transmit the power supplied onto the national electricity transmission system to the location where the demand for that power is situated, such limit arising as a result of any one or more of.. “

As for the comment above on the meaning of “transmission constraint”, we don’t think this describes transmission constraints well. It suggests that power is supplied onto the system, but might not be able to be transmitted to the demand for it because of system limitations. Because electricity cannot easily be stored, and in any case is not stored on the transmission system itself, this is not correct. We think there are two types of electricity transmission constraint:

1. The transmission system simply cannot accommodate the demand for electricity from it, regardless of where electricity is delivered to it. The system is designed to avoid this absolute limit, which would result in reasonable demand not being met. This is not the usual meaning of a constraint. Demand Control is used in the rare situation where, for whatever reason, the transmission system is unable to support demand on it, as well as the separate situation of insufficient generation to meet demand. But historically Demand Control is not in itself usually considered a constraint action.
2. The transmission system cannot accommodate the preferred delivery and offtake flows, and their location, of its individual users together with the preferred balancing actions of the SO, but can accommodate demand by means of a different mix of delivery and offtake flows and their location. This is the usual form of a constraint, where preferred delivery flows, and to a lesser extent offtake flows, might have to be varied to meet constraints on particular parts of the system in order to meet demand using a different pattern of flows.

This could be captured by a different definition:

“A transmission constraint is defined as: any limit on the ability of the national electricity transmission system, or any part of it, to transmit the preferred delivery and offtake flows of its users at particular locations and the preferred balancing actions of the System Operator. A different mix of delivery and offtake flows and their location, managed by the System Operator, can usually alleviate such constraints. Such a limit can arise as a result of one or more of: ...”

National Grid’s View:

National Grid considers that the wording related to transmission constraints is a reflection of the wording outlined in the Transmission Licence. For consistency with the Transmission Licence, it is not appropriate to change the definition of licence related terms in the SMAF Statement.

3 Recommendation

National Grid notes the support given by the industry respondees to the proposed changes to the SMAF Statement and has carefully considered each of the responses to the changes proposed by National Grid within the consultation. National Grid has provided its views at the end of each relevant subsection in Section 2.2.

As a result of the industry responses, National Grid has, where appropriate, revised the proposed changes to the SMAF Statement. The revised SMAF statement is attached in the Annex to this report (Annex 3). These additional changes have been shown after “accepting” the initially proposed revisions.

National Grid recommends that the Authority approves the proposed changes to the SMAF Statement, attached as Annex 3.

Annex 1 - Consultation Document (including original proposed changes to the SMAF Statement)

See separate document.

Annex 2 - Industry Responses to the Consultation Questions

See separate document.

Annex 3 - Revisions to proposed changes to the SMAF Statement (Post Consultation)

See separate document.