nationalgrid

Stage 03: Report to the Authority

Grid Code

GC0044 Grid Code Changes Resulting From BSC Modification P276

What stage is this document at?

01 Workgroup Report

02 Industry

03

Report to the Authority

Consultation

This proposal seeks to modify the Grid Code to implement the consequential changes necessary to fully deliver the solution agreed under BSC modification P276 'Introduce an additional trigger/threshold for suspending the market in the event of a Partial Shutdown'.

The purpose of this document is to assist the Authority in its decision of whether to implement the proposed Grid Code Modification.

Published on: 19 June 2013



National Grid recommends:

Implementation of GC0044 as it better facilitates the Applicable Grid Code Objectives (i), (ii), (iii)



High Impact:

BSC Trading Parties National Electricity Transmission System Operator Elexon



Medium Impact:

None identified



Low Impact:

Notification Agents (ECVNAs and MVRNAs)

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Page 1 of 22

Contents

1	Executive Summary	. 3
2	Why Change?	. 4
3	Solution	5
4	Impact & Assessment	. 6
	Consultation Responses	
	nex 1 - Proposed Legal Text	
	nex 2 - Consultation Responses	
, vi i i		• •



Any Questions?

Contact:

Nick Sargent



Nick.Sargent @nationalgrid.com



01926 653873

Proposer:
Nick Sargent
National Grid

About this document

This document is the Report to the Authority for GC0044 which contains the responses to the Industry Consultation and the National Grid recommendation. The purpose of this document is to assist the Authority in their decision whether to implement the GC0044 proposed changes.

The revisions to the Grid Code proposed by National Grid and sent to the Authority require approval by that body and will, if approved, come into force on such date (or dates) of which Authorised Electricity Operators will be notified by National Grid, in accordance with the Authority's approval.

Document Control

Version	Date	Author	Change Reference
1.0	19 Jun 2013	National Grid	Final Report to the
			Authority

GC0044 Report to the
Authority

19 June 2013

Version 1.0

Page 2 of 22

1 Executive Summary

- 1.1 The Balancing and Settlement Code currently suspends the Balancing Mechanism when the System Operator declares a Partial or Total Shutdown. Such suspension under a Partial Shutdown was considered unnecessary for a small loss of demand, where continuation of the market would be less disruptive.
- 1.2 National Grid proposed BSC Modification P276, Introduce an additional trigger/threshold for suspending the market in the event of a Partial Shutdown¹ to address the situation of automatic declaration of market suspension following a Partial Shutdown. Ofgem approved P276 in July 2012 with an implementation date of 31 March 2014².
- 1.3 Consequential changes to the Grid Code are required to fully implement the solution developed under P276 and this has been progressed under GC0044.
- 1.4 The draft Industry Consultation GC0044 was agreed by the GCRP on 19 April 2013 and went to industry consultation for a period of 20 business days, ending on 5 June 2013³.
- 1.5 Two responses were received, both of which were supportive of the proposed changes. The comments made by one respondent are addressed in Section 5 of this report.

National Grid Recommendation

1.6 National Grid supports the implementation of GC0044 as a consequential change to the Grid Code following the approval of P276. GC0044 better facilitates the Applicable Grid Code Objectives (i), (ii), and (iii) and ensures the Grid Code delivers the P276 solution.

http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 3 of 22

¹ http://www.elexon.co.uk/mod-proposal/p276-introduce-an-additional-triggerthreshold-for-suspending-the-market-in-the-event-of-a-partial-shutdown/

² http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=117&refer=Licensing/ElecCodes/BSCode/BSC

2 Why Change?

- 2.1 The changes under BSC Modification P276 require National Grid to monitor the loss of demand from the point of Partial Shutdown. Should the aggregate loss exceed a pre-agreed threshold value, or if forecast data is no longer available, and in any case no longer than 72 hours after the Partial Shutdown, then National Grid shall inform Elexon and the market will be suspended from a point to be determined by the BSCCo.
- 2.2 In order to differentiate between a Partial Shutdown where the Balancing Mechanism is not suspended and a Partial or Total Shutdown with suspension of the Balancing Mechanism, changes are proposed to the Grid Code Glossary & Definitions (GD), Balancing Codes (BC2), and Operating Codes (OC9).
- 2.3 Should the Grid Code text in each of the Glossary & Definitions (GD), Balancing Code 2 (BC2), and Operating Code 9 (OC9) not be changed to reflect the approved BSC Modification P276, there will be no operational differentiation between Total and Partial Shutdown, resulting in incorrect operational procedures being undertaken at the time that a Partial Shutdown is declared, and subsequently thereafter.

Solution

- 3.1 To ensure the Grid Code correctly reflects the requirements of BSC Modification P276, National Grid recommends the following changes:
 - Grid Code Glossary & Definitions (GD) is amended to include additional definitions for the introduction of Baseline Forecast and Market Suspension Threshold.
 - Grid Code BC2 is amended to clarify the issuing of Emergency Instructions under continuation, or suspension, of the market.
 - Grid Code OC9 is amended to include a separate reference to the situation arising under a Partial Shutdown and the criteria that must be met before a Market Suspension occurs.
- Without the recommended changes, there would be inconsistency between the BSC and the Grid Code over the treatment of market suspension following a Partial Shutdown.

4 Impact & Assessment

Impact on the Grid Code

- 4.1 GC0044 requires amendments to the following parts of the Grid Code:
 - Glossary & Definitions: Insertion of new definitions for 'Baseline Forecast' and 'Market Suspension Threshold'.
 - Balancing Codes BC2: Each scenario of a Black Start situation, with and without a subsequent market suspension, needs to be identified and added to the list of occurrences of when Emergency Instructions need not be prefixed with the term "this is an Emergency Instruction".
 - Operating Codes OC9: Inclusion of text to differentiate between a Total Shutdown and a Partial Shutdown, with or without market suspension, and the processes to be followed as a result of each situation.
- 4.2 The text required to give effect to the proposal is contained in Annex 1 of this document.

Impact on National Electricity Transmission System (NETS)

4.3 There is no impact identified for the NETS following the proposed changes.

Impact on Grid Code Users

4.4 Consequential changes to the text of the Grid Code will ensure that revisions to operational procedures following a Partial Shutdown will provide greater clarity to Grid Code Users.

Impact on Greenhouse Gas emissions

4.5 There is no impact identified on Greenhouse Gas emissions following the proposed changes.

Assessment against Grid Code Objectives

- 4.6 National Grid considers that GC0044 would better facilitate the Grid Code objective:
 - (i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity; Yes enables the System Operator to operate the Transmission System in the most efficient manner without being constrained by concerns about triggering market suspension.

 Being aware of the consequences of triggering market suspension following a Partial Shutdown, the System Operator could be reluctant to initially consider the option of issuing Black Start instructions under the Grid Code following small/localised shutdowns, even if this is the quickest way to resolve the situation in hand.
 - to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);

Yes – by ensuring that BSC Parties not directly involved in the Partial Shutdown are not unnecessarily exposed to uneconomic market disruption.

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 6 of 22

- (iii) subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole; and
 - Yes by ensuring that avoiding market suspension allows those generators not directly affected by the loss of system to continue to operate and compete with each other.
- (iv) to efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency.

The proposal has a neutral impact on this objective.

Impact on core industry documents

4.7 The proposed modification does not impact on any core industry documents.

Impact on other industry documents

4.8 The proposed modification does not impact on any other industry documents.

Implementation

4.9 National Grid proposes that GC0044 should be implemented on 31 March 2014, being the Implementation Date approved by the Authority for P276 and therefore, the date that the BSC P276 legal text becomes effective.

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Page 7 of 22

5 Consultation Responses

- 5.1 National Grid has consulted Authorised Electricity Operators (AEOs) on this issue. The consultation period opened on 7 May 2013 and closed on 5 June 2013. Two responses were received during the consultation period.
- 5.2 The below table provides an overview of the two responses received. Copies of the responses are included in Annex 2.

Ref	Company	Supportive	Comments
GC0044-CR- 01	RWE	Yes	 RWE is supportive of the proposed change GC0044 better facilitates the Applicable Grid Code objectives for the reasons given in the consultation RWE is supportive of the proposed implementation approach RWE provided substantial comments through the Grid Code Review Panel and these have been included in the proposed legal text
GC0044-CR- 02	Elexon	Yes	 Elexon agrees with the proposed changes and that the proposed Grid Code provisions are consistent with P276 GC0044 better facilitates the Applicable Grid Code objectives for the reasons given in the consultation document Elexon is a little confused by the proposed implementation approach for GC0044 with National Grid proposing implementation no later than 31st March 2013. Elexon recommends implementation on 31st March 2014 to prevent inconsistent Black Start provisions between Grid Code and the BSC Elexon suggests it may be useful for National Grid to provide further guidance in the area of Emergency Instructions Although not directly a Grid Code matter, the P276 Workgroup also recommended giving consideration to extending the CUSC Interruption Payment provisions to cover any Settlement Periods during Partial Shutdowns in which the Balancing Mechanism is not suspended.

GC0044 Report to the
Authority
19 June 2013
Version 1.0
Page 8 of 22

National Grid Comments on Responses

- 5.3 National Grid would like to thank all of the respondents for their comments regarding GC0044. Elexon raised some specific comments on the proposed changes which will be address here.
- 5.4 Elexon comment in response to Question 3.

[We] are a little confused by the proposed implementation approach for GC0044 as given in the consultation document:

"National Grid proposes GC0044 should be implemented no later than 31st March 2014, in line with changes to be made to the BSC, according to the direction given within the Authority's decision as part of the P276 BSC Modification".

We recommend that GC0044 is implemented on 31 March 2014, as this is the P276 Implementation Date approved by Ofgem and therefore the date that the approved BSC legal text becomes effective. If the Grid Code legal text is implemented earlier then this will result in inconsistent Black Start provisions between the Grid Code and the BSC.

- 5.4.1 By stating an implementation date of no later than 31st March 2014 in the consultation document, National Grid was indicating that the system changes required for monitoring the demand loss during a Partial Shutdown are developed and tested prior to the implementation date, becoming effective on the implementation date. We agree that changes within the Grid Code text should also become effective from 31st March 2013 and as such, have made this clear in this Report to the Authority Section 4.9.
- 5.5 Elexon comment in response to Question 4.

National Grid's advice to the P276 Workgroup was that, during a Partial Shutdown in which the Balancing Mechanism continues:

All instructions given by National Grid within the shutdown area will be Emergency Instructions under Grid Code BC2.9.1.2(e)(i); and

Outside the shutdown area, National Grid will be issuing a mixture of Emergency Instructions, normal Bid Offer Acceptances and Balancing Services Adjustment Actions. Some of the Emergency Instructions issued by National Grid outside the shutdown area may fall under BC2.9.1.2(e)(i) but others (e.g. MaxGen or Emergency Deenergisation) may not.

The P276 Workgroup's intention was that only those instructions issued under Grid Code BC2.9.1.2(e)(i) should be eligible for Black Start compensation under the BSC (see Sections 3 & 4 of the P276 Final Modification Report). BC2.9.1.2(e)(i) in turn refers to "the need to invoke the Black Start process or the Re-Synchronisation of De-Synchronised Island process in accordance with OC9".

In practice, the proposed Grid Code provisions place responsibility on National Grid to decide:

When to specify that an OC9 instruction to a Black Start Station or a Network Operator, which is part of an invoked Local Joint Restoration Plan, is not an Emergency Instruction; and

When to specify that an OC9 instruction to a User, who is not part of an invoked Local Joint Restoration Plan, is an Emergency Instruction.

We suggest that it may be useful for National Grid to provide some further guidance in this area as part of the GC0044 report to the Grid Code Review Panel and Ofgem and/or during implementation.

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 9 of 22

- 5.5.1 National Grid spoke with Elexon directly to ensure that our response would address Elexon's suggestion for further guidance. Elexon advised that additional clarification within this report rather than an additional formal guidance document would suffice.
- 5.5.2 The wording in OC9.4.7.4 was drafted to ensure consistency with BC2.9.2.2 (iii) and (iv) within the revised text (included as Annex 1) and allows National Grid the flexibility to utilise multiple options to restore the system following a Partial Shutdown. This is best illustrated with reference to scenarios and examples.
- (a) A Distribution Network Operator (DNO) may be party to an active Local Joint Restoration Plan (LJRP) whilst also having control of network still attached to the healthy system. This DNO would therefore have two relationships with the National Grid Control Room and although being part of the LJRP, and being issued with Emergency Instructions under OC9, could still be issued instructions regarding the healthy part of the network. The wording has been drafted to reflect this position.
- (b) With regard to the position of a User; a User within a shutdown area may subsequently become energised through restoration from the healthy system, rather than by the LJRP restoration which is in progress, as National Grid may use multiple options to energise the area of Partial Shutdown. The User, now having access to the healthy system would then receive instructions which are not Emergency Instructions.
- (c) During the final stages of the LJRP when the National Grid Control Room will be setting system parameters to achieve synchronisation of the Black Start energised island system to the healthy system, instructions may be required on either system to achieve, for example, voltage matching. Such an instruction is directly related to the invoked LJRP and as such, would be classified as an Emergency Instruction under OC9.
- 5.6 Elexon comment in response to Question 4.

While not directly a Grid Code matter, we note that the P276 Workgroup also recommended giving consideration to extending the CUSC Interruption Payment provisions to cover any Settlement Periods during Partial Shutdowns in which the Balancing Mechanism is not suspended (see Section 4 of the P276 Final Modification Report). Although the P276 solution does not require a CUSC change, if one is to be progressed then implementing it in parallel with P276 and GC0044 would give the industry maximum certainty of the rules.

5.6.1 National Grid is currently considering whether the CUSC Interruption Payment provisions should be extended to include Settlement Periods during a Partial Shutdown in which the Balancing Mechanism is not suspended. Should the review result in the requirement for a CUSC modification, this will be progressed as soon as possible, in accordance with the CUSC modification process, with due awareness of the P276 implementation date of 31 March 2014. The relevant code panels will be kept updated throughout the review process as required.

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Annex 1 - Proposed Legal Text

This section contains the proposed legal text to give effect to the proposals. The proposed new text is in red and is based on Grid Code Issue 5 Revision 03.

The following definitions shall be added to GD in alphabetical order:

"Baseline Forecast" Has the meaning given to the term 'baseline

forecast' in Section G of the BSC.

"Market Suspension

Threshold"

Has the meaning given to the term 'Market Suspension Threshold' in Section G of the

BSC.

Section BC shall be amended as follows. The changes are shown in red to reflect the changes to Section BC.

- BC2.9.2.2 **Emergency Instructions** will always be prefixed with the words "This is an **Emergency Instruction**" except in the case of:
 - (i) **Maximum Generation Service** instructed by electronic data communication facilities where the instruction will be issued in accordance with the provisions of the **Maximum Generation Service Agreement**; and
 - (ii) An an Emergency Deenergisation Instruction, where the Emergency Deenergisation Instruction will be pre-fixed with the words 'This is an Emergency Deenergisation Instruction'; and
 - (iii) during a **Black Start** situation where the **Balancing Mechanism** has been suspended, any instruction given by **NGET** will (unless **NGET** specifies otherwise) be deemed to be an **Emergency Instruction** and need not be pre-fixed with the words 'This is an **Emergency Instruction**'; and-
 - (iv) during a **Black Start** situation where the **Balancing Mechanism** has not been suspended, any instruction in relation to **Black Start Stations** and to **Network Operators** which are part of an invoked **Local Joint Restoration Plan** will (unless **NGET** specifies otherwise) be deemed to be an **Emergency Instruction** and need not be prefixed with the words 'This is an **Emergency Instruction**'.

In Scotland, any instruction in relation to **Gensets** that are not at **Black Start Stations**, but which are part of an invoked **Local Joint Restoration Plan** and are instructed in accordance with the provisions of that **Local Joint Restoration Plan**, will be deemed to be an **Emergency Instruction** and need not be prefixed with the words 'This is an **Emergency Instruction**'.

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Page 11 of 22

Section OC9 shall be amended as follows. The changes are shown in red and strike-out to reflect the changes to Section OC9.

- OC9.2.5 To identify and address as far as possible the events and processes necessary to enable the restoration of the **Total System**, after a **Total Shutdown** or **Partial Shutdown**. This is likely to require the following key processes to be implemented, typically, but not necessarily, in the order given below:
 - (i) Selectively implement Local Joint Restoration Plans
 - (ii) Expand Power Islands to supply Power Stations
 - (iii) Expand and merge **Power Islands** leading to **Total System** energisation
 - (iv) Selectively reconnect **Demand**
 - (v) Facilitate and co-ordinate returning the **Total System** back to normal operation
 - (vi) leading to the resumption Resumption of the **Balancing Mechanism** if suspended in accordance with the provisions of the **BSC**.

OC9.4.6 Black Start Situation

In the event of a **Total Shutdown** or **Partial Shutdown**, **NGET** will, as soon as reasonably practical, inform **Users** (or, in the case of a **Partial Shutdown**, **Users** which in **NGET's** opinion need to be informed) and the **BSCCo** that a **Total Shutdown**, or, as the case may be, a **Partial Shutdown**, exists and that **NGET** intends to implement a **Black Start**. **NGET** shall (as soon as is practicable) determine, in its reasonable opinion, the time and date with effect from which the **Total Shutdown** or **Partial Shutdown** commenced and **inform** notify **BSCCo** of that time and date.

In the event of a **Total Shutdown** and Following following such notification, in accordance with the provisions of the **BSC**, the **BSSCe BSCCo** will determine the **Settlement Period** with effect from which the **Balancing Mechanism** is suspended.

In the event of a **Partial Shutdown** and following such notification, the **Balancing Mechanism** will not be suspended until such time and date that the **Market Suspension Threshold** has been met, or deemed to have been met, in accordance with the provisions of the **BSC**. **NGET** shall carry out the monitoring activities required by paragraph G3.1 of the **BSC**.

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Page 12 of 22

Following determination by **NGET** pursuant to its obligations under the **BSC** that the **Market Suspension Threshold** has been met, or deemed to have been met, **NGET** shall (as soon as practicable) inform the **BSCCo** of that time and date at which the **Market Suspension Threshold** was met, or deemed to have been met, and the **BSCCo** will determine the **Settlement Period** in accordance with the provisions of the **BSC** with effect from which the **Balancing Mechanism** will be suspended.

Should **NGET** determine that the **Total System** is capable of returning to normal operation without meeting the **Market Suspension Threshold**, **NGET** will follow the procedure given in OC9.4.7.9.

The **Black Start** will conclude with effect from the time and date determined in accordance with OC9.4.7.10.

In respect of Scottish Transmission Systems, in exceptional circumstances, as specified in the Local Joint Restoration Plan, SPT or SHETL, may invoke such Local Joint Restoration Plan for its own Transmission System and Scottish Offshore Transmission Systems connected to it and operate within its provisions.

OC9.4.7.4 (a) Black Start following a Total Shutdown or where the Balancing Mechanism has been suspended following a Partial Shutdown

During a Black Start situation where the Balancing Mechanism has been suspended, all instructions to Power Stations and to Network Operators in relation to Black Start Stations and to Network Operators will be deemed to be Emergency Instructions in under BC2.9.2.2 (iii)₇. All such Emergency Instructions and will recognise any differing Black Start operational capabilities (however termed) set out in the relevant Ancillary Services Agreement in preference to the declared operational capability as registered pursuant to BC1 (or as amended from time to time in accordance with the BC). For the purposes of these instructions the Black Start will be an emergency circumstance under BC2.9.

In Scotland, **Gensets** that are not at **Black Start Stations**, but which are part of an invoked **Local Joint Restoration Plan**, may be instructed in accordance with the provisions of that **Local Joint Restoration Plan**.

During a Black Start situation, instructions in relation to Power Stations and to Network Operators which are not part of a Local Joint Restoration Plan, will be deemed to be Emergency Instructions in accordance with the BC2.9. For the purposes of these instructions the Black Start will be an emergency circumstance under BC2.9.

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 13 of 22

(b) <u>Black Start following a Partial Shutdown</u> where the Balancing Mechanism has not been suspended

During a Black Start situation where the Balancing Mechanism has not been suspended, instructions in relation to Black Start Stations and to Network Operators which are part of an invoked Local Joint Restoration Plan will (unless NGET specifies otherwise) be deemed to be Emergency Instructions under BC2.9.2.2 (iv) and will recognise any differing Black Start operational capabilities (however termed) set out in the relevant Ancillary Services Agreement in preference to the declared operational capability as registered pursuant to BC1 (or as amended from time to time in accordance with the BC). For the purposes of these instructions the Black Start will be an emergency circumstance under BC2.9.

During a **Black Start** situation where the **Balancing Mechanism** has not been suspended, **NGET** may issue instructions to **Users** other than **Black Start Stations** and **Network Operators** which are part of an invoked **Local Joint Restoration** Plan. Such instructions would be **Emergency Instructions** pursuant to BC2.9.1.2(e)(i) subject to the requirements of BC2.9.2.2 being met.

In Scotland, **Gensets** that are not at **Black Start Stations**, but which are part of an invoked **Local Joint Restoration Plan**, may be instructed in accordance with the provisions of that **Local Joint Restoration Plan**.

(b) (c) If during the **Demand** restoration process any **Genset** cannot, because of the **Demand** being experienced, keep within its safe operating parameters, the Generator shall, unless a Local Joint Restoration Plan is in operation, inform NGET. NGET will, where possible, either instruct **Demand** to be altered or will reconfigure the National Electricity Transmission System or will instruct a User to re-configure its System in order to alleviate the problem being experienced by the Generator. If a Local Joint Restoration Plan is in operation, then the arrangements set out therein shall apply. However, NGET accepts that any decision to keep a **Genset** operating, if outside its safe operating parameters, is one for the Generator concerned alone and accepts that the Generator may change generation on that Genset if it believes it is necessary for safety reasons (whether relating to personnel or Plant and/or Apparatus). If such a change is made without prior notice, then the Generator shall inform NGET as soon as reasonably practical (unless a Local Joint Restoration Plan is in operation in which case the arrangements set out therein shall apply).

GC0044 Report to the

Authority

19 June 2013

Version 1.0

Page 14 of 22

Return the Total System Back to Normal Operation

OC9.4.7.9 **NGET** shall, as soon as reasonably practical, inform **Users** and the **BSCCo** when the **Total System** could return to normal operation. Any such determination by **NGET** does not mean that the provisions of Section G paragraph 3 (Black Start) of the **BSC** shall cease to apply.

In making the determination that the **Total System** could return to normal operation, **NGET**, would consider, amongst other things, the following areas:

- (a) the extent to which the **National Electricity Transmission System** is contiguous and energised;
- (b) the integrity and stability of the **National Electricity Transmission System** and its ability to operate in accordance with the **Licence Standards**;
- (c) the impact that returning to normal may have on transmission constraints and the corresponding ability to maximise the **Demand** connected; and
- (d) the volume of generation or **Demand** not connected to the **National Electricity Transmission System**; and
- (e) the functionality of normal communication systems (i.e. EDT, **Control Telephony**, etc).

In the event that the **Balancing Mechanism** has been suspended, it will not resume until the start of the **Settlement Period** determined by the **BSC Panel** in accordance with paragraph G3.1.2(d)(i) of the BSC.

For the avoidance of doubt, until resumption of the **Balancing Mechanism**, the Conclusion of the **Black Start** the **Balancing Mechanism** is unlikely to be operational and **NGET** is likely to continue to issue **Emergency Instructions** in accordance with BC2.9.

Users shall use reasonable endeavours to submit **Physical notifications** ten hours prior to the start of the **Settlement Period** determined by the **BSC Panel** in accordance with paragraph G3.1.2(d)(i) of the BSC and as notified by **NGET** to **Users**, in preparation for a return to normal operations.

In the event that the **Balancing Mechanism** has not been suspended and **NGET** has determined that the **Total System** has returned to normal operation, **NGET** shall inform **Users** and the **BSCCo** as soon as possible of the time and date at which (in **NGET's** determination) the **Total System** returned to normal operation.

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 15 of 22

Conclusion of Black Start

- OC9.4.7.10 The provisions of this **OC9** shall cease to apply with effect from either:
 - (a) Where the **Balancing Mechanism** was suspended, the start of the **Settlement Period** that the **Balancing Mechanism** resumed normal operation, as determined by the **BSC Panel** and notified by the **BSCCo** in accordance with the provisions of the BSC; or
 - (b) Where the **Balancing Mechanism** was not suspended, the end of the **Settlement Period** determined and notified by the **BSCCo** (in accordance with the provisions of the BSC) and corresponding to the time and date that **NGET** determined that the **Total System** had returned to normal operation.

With effect from the time when the **BSCCo** has confirmed that the provisions of Section G, paragraph 3 are to cease to apply and that the **Balancing Mechanism** is re-established the **Black Start** will conclude and the **Total System** will be deemed to have returned to normal operation. Following such confirmation operation in accordance with the provisions of this OC9 shall cease.

Annex 2 - Consultation Responses

The following table provides a list of the responses received to the Grid Code Consultation GC0044.

Reference	Company
GC0044-CR-01	RWE
GC0044-CR-02	Elexon

GC0044 Report to the
Authority
19 June 2013
Version 1.0
Page 17 of 22

Grid Code Industry Consultation Response Proforma

GC0044 Grid Code changes resulting from BSC modification P276

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **5th June 2013** to <u>Grid.Code@nationalgrid.com</u>. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

These responses will be included in the Report to the Authority which is drafted by National Grid and submitted to the Authority for a decision.

Response: GC0044-CR-01

Respondent:	John Norbury Network Connections Manager RWE Supply & Trading GmbH Windmill Hill Business Park Whitehill Way Swindon SN5 6PB T +44 (0)1793 89 2667 M +44 (0)7795 354 382 mailto:john.norbury@rwe.com
Company Name:	RWE group of UK companies, including RWE Npower plc, RWE Npower Renewables Limited and RWE Supply & Trading GmbH

Industry Consultation Questions

1.	Do you agree with the proposed changes to the Grid Code?	RWE is supportive of the proposed change
2.	Do you believe that GC0044 better facilitates the Applicable Grid Code Objectives? Please include your reasoning.	Yes for the reasons given in the Consultation document
3.	Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	Yes

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 18 of 22

4.	Do you have any other	No. RWE has already provided substantial
	comments?	comments via the Grid Code Review Panel
		and these have been included in the
		proposed legal text.

Response: GC0044-CR-02

Respondent:	Kathryn Coffin, Senior Market Advisor (kathryn.coffin@elexon.co.uk)
Company Name:	ELEXON Limited (the Balancing and Settlement Code Company)

Industry Consultation Questions

1.	Do you agree with the proposed changes to the Grid Code?	Yes. ELEXON has reviewed the proposed Grid Code legal text for its consistency with: • The approved P276 BSC legal text (as attached to the P276 Final Modification Report); and • The P276 Workgroup's intended solution (as documented in the P276 Final Modification Report). ⁴
		We believe that the proposed Grid Code provisions are consistent with P276, based on our review and our earlier discussions with National Grid on the intention of the Grid Code wording
2.	Do you believe that GC0044 better facilitates the Applicable Grid Code Objectives? Please include your reasoning.	Yes, we agree that GC0044 will better facilitate Applicable Grid Code Objectives (i), (ii) and (iii) for the reasons stated in the consultation document.

 GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 19 of 22

3. Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.

Yes, however we are a little confused by the proposed implementation approach for GC0044 as given in the consultation document:

"National Grid proposes GC0044 should be implemented no later than 31st March 2014, in line with changes to be made to the BSC, according to the direction given within the Authority's decision as part of the P276 BSC Modification".

We recommend that GC0044 is implemented on 31 March 2014, as this is the P276 Implementation Date approved by Ofgem and therefore the date that the approved BSC legal text becomes effective. If the Grid Code legal text is implemented earlier then this will result in inconsistent Black Start provisions between the Grid Code and the BSC.

4. Do you have any other comments?

Yes.

National Grid's advice to the P276 Workgroup was that, during a Partial Shutdown in which the Balancing Mechanism continues:

- All instructions given by National Grid within the shutdown area will be Emergency Instructions under Grid Code BC2.9.1.2(e)(i); and
- Outside the shutdown area, National Grid will be issuing a mixture of Emergency Instructions, normal Bid Offer Acceptances and Balancing Services Adjustment Actions. Some of the Emergency Instructions issued by National Grid outside the shutdown area may fall under BC2.9.1.2(e)(i) but others (e.g. MaxGen or Emergency Deenergisation) may not.

The P276 Workgroup's intention was that only those instructions issued under Grid Code BC2.9.1.2(e)(i) should be eligible for black start compensation under the BSC (see Sections 3 & 4 of the P276 Final Modification Report). BC2.9.1.2(e)(i) in turn refers to "the need to invoke the Black Start process or the Re-Synchronisation of De-Synchronised Island process in accordance with OC9".

In practice, the proposed Grid Code provisions place responsibility on National Grid to decide:

- When to specify that an OC9 instruction to a Black Start Station or a Network Operator, which is part of an invoked Local Joint Restoration Plan, is not an Emergency Instruction; and
- When to specify that an OC9 instruction to a User, who is not part of an invoked Local Joint Restoration Plan, is an Emergency Instruction.

We suggest that it may be useful for National Grid to provide some further guidance in this area as part of the GC0044 report to the Grid Code Review Panel and Ofgem and/or during implementation.

While not directly a Grid Code matter, we note that the P276 Workgroup also recommended giving consideration to

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 21 of 22

extending the CUSC Interruption Payment
provisions to cover any Settlement Periods
during Partial Shutdowns in which the
Balancing Mechanism is not suspended (see
Section 4 of the P276 Final Modification
Report). Although the P276 solution does not
require a CUSC change, if one is to be
progressed then implementing it in parallel
with P276 and GC0044 would give the
industry maximum certainty of the rules.

GC0044 Report to the Authority

19 June 2013

Version 1.0

Page 22 of 22