

## Special Actions – PP11\_15

Stephen Curtis 17<sup>th</sup> February 2011



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## Special Actions

- ◆ Introduction  
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*How are special actions agreed?*
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## Special Actions: Introduction

- ◆ Are agreed actions to be taken by Users of the National Electricity Transmission system to maintain the integrity of the system in accordance with Licence Standards. (BC1.7.1)
- ◆ Agreed in advance between NGET and the relevant User as part of NGET's outage planning process. (BC1.7.2)
- ◆ Would be delivered following an instruction from NGET, typically following a fault on the transmission system
- ◆ Include:
  - ◆ a change in output of one or more generating sets at a power station at a rate that may differ from BM parameters
  - ◆ a transfer of load between GSPs by a DNO
  - ◆ a demand reduction by a DNO

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## Special Actions: Initial Agreement

- ◆ NGET will agree a special action to ensure that a specific action is available to maintain the integrity of the system following a fault.
- ◆ Often an agreed run down rate
- ◆ May be in line with a Generator's normal submitted dynamic parameters
- ◆ May be outside of the Generator's normal submitted dynamic parameters
- ◆ May be for a specific short term period, or long term or enduring basis
- ◆ "These special actions will be discussed and agreed with the relevant **User** as appropriate....". (BC1.7.2)
- ◆ Always agreed in advance with the Generator, normally by fax or email

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## Initial Agreement: sample fax

SPECIAL ACTION SHEET - [REDACTED]		APPENDIX AI
Date: 04/01/2011	Index No: [REDACTED]	
Initiator: [REDACTED]	Tel: 0118 936 3162	
National Planning, National Grid	Fax: 0118 936 3154	
The following <b>post fault action</b> will be available from 20/01/2011 to 20/04/2011 for system conditions in the North West area.		
<b>Special Action(s):</b>		
100MW of drops per unit in 10 minutes, or to SEL if higher, on request from NG.		
OR		
200MW of drops per unit in 20 minutes, or to SEL if higher, on request from NG.		
Agreed With: [REDACTED]	Tel: [REDACTED]	Fax: [REDACTED]
Signed:		
Date:		
At: [REDACTED]		
Comments:		

## Grid Code Provisions - Notification

- ◆ “**NGET** will normally issue the list of special actions to the relevant **Users** by 1700 hours on the day prior to the day to which they are to apply.” (BC1.7.3)
- ◆ In the Programming Phase NGET has to notify Generators (and others) of the planned outage programme and any operational effect, including “where a need may exist” for “issuing of other operational instructions” or “**Emergency Instructions**”. OC2.4.1.3.5 *(detail on following 2 slides if required)*
- ◆ These requirements are interpreted as follows:
  - Notification of DA special actions **daily**
  - Notification of 7WA and WA special actions on **Wednesdays**

## Notification: sample emails

### 7 Week ahead

Sent: Wednesday, January 26, 2011 10:57 AM  
To: XXXXXXXX  
Subject: National Grid Electricity  
Transmission plc Special Actions

The National Grid Company plc  
Transmission Requirements  
Telephone: 01189 363443  
E-mail: Tranreq@uk.ngrid.com

XXXXXXXXXXXXXX

All Special Actions Valid For At Least Part Of  
The Period 12/03/11 to 18/03/11:

Unit/Station: XXXXXXXX  
Start Date: 20/05/04  
End Date: Open  
Action: Drops of 10MW, per minute, per GT  
down to SEL.

Total of 20MW, per minute if both GTs are  
running at or near full load.

Agreed by: XXXXX

Please confirm your acceptance of the above  
by return email. If there are any queries  
please contact Transmission Requirements  
on the number above.

### Week ahead

Sent: Wednesday, January 26, 2011 10:53 AM  
To: XXXXXXXX  
Subject: National Grid Electricity  
Transmission plc Special Actions

The National Grid Company plc  
Transmission Requirements  
Telephone: 01189 363443  
E-mail: Tranreq@uk.ngrid.com

XXXXXXXXXX

Special Actions Valid For Week (29/01/11 to  
04/02/11):

Unit/Station: XXXXXXXX  
Start Date: 20/05/04  
End Date: Open  
Action: Drops of 10MW, per minute, per GT  
down to SEL.

Total of 20MW, per minute if both GTs are  
running at or near full load.

Agreed by: XXXXXXXX

Please confirm your acceptance of the above  
by return email. If there are any queries  
please contact Transmission Requirements  
on the number above.

### Dayahead

Sent: Wednesday, January 26, 2011 10:49 AM  
To: XXXXXXXX  
Subject: National Grid Electricity  
Transmission plc Special Actions

The National Grid Company plc  
Transmission Requirements  
Telephone: 01189 363443  
E-mail: Tranreq@uk.ngrid.com

XXXXXXXXXXXXXX

Special Actions Valid For Tomorrow  
(27/01/11):

Unit/Station: XXXX  
Action: Drops of 10MW, per minute, per GT  
down to SEL.

Total of 20MW, per minute if both GTs are  
running at or near full load.

Agreed by: XXXXX

Please confirm your acceptance of the above  
by return email. If there are any queries  
please contact Transmission Requirements  
on the number above.

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## Grid Code Provisions – Notification (detail #1)

### OC2.4.1.3.5

- (a) By 1600 hours each Thursday
- i) NGET shall continue to update a **preliminary National Electricity Transmission System** outage programme for the **eighth week ahead** a **provisional National Electricity Transmission System** outage programme for the **next week ahead** and a **final** day ahead **National Electricity Transmission System** outage programme for the **following day**.
  - ii) NGET will notify each **Generator** and **Network Operator** and each **Non-Embedded Customer**, in writing of those aspects of the **preliminary National Electricity Transmission System** outage programme **which may operationally affect** each **Generator**.....

NGET will also indicate where a need may exist to arm an **Operational Intertripping** scheme, emergency switching, emergency **Demand** management or other measures including the issuing of other **operational instructions or notifications or Emergency Instructions to Users** in accordance with **BC2** to allow the security of the **National Electricity Transmission System** to be maintained within the **Licence Standards**.

- (b) By 1000 hours each Friday

**Generators** and **Network Operators** will discuss with NGET and confirm in writing to NGET, **acceptance or otherwise** of the requirements detailed under **OC2.4.1.3.5**.....

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## Grid Code Provisions - Notification (detail #2)

### OC2.4.1.3.5

- (c) By 1600 hours each Friday
- (i) NGET shall finalise the preliminary **National Electricity Transmission System** outage programme up to the **seventh week ahead**. NGET will endeavour to give as much notice as possible to a **Generator** with nuclear **Large Power Stations** which may be operationally affected by an outage which is to be included in such programme.
  - (ii) NGET shall finalise the provisional **National Electricity Transmission System** outage programme for the next **week ahead**.
  - (iii) NGET shall finalise the **National Electricity Transmission System** outage programme for the **weekend** through to the **next normal working day**.
  - (iv) **In each case** NGET will indicate the factors set out in (a)(ii) above (other than those aspects which may operationally affect **Embedded Small Power Stations** or **Embedded Medium Power Stations**) to the **relevant Generators and Network Operators and Non- Embedded Customers**
- (d) By 1600 hours each Monday, Tuesday, Wednesday and Thursday
- (i) NGET shall prepare a final **National Electricity Transmission System** outage programme for the **following day**.
  - (ii) NGET shall notify each **Generator** and **Network Operator** and **Non-Embedded Customer** in writing of the factors set out in (a)(ii) above (other than those aspects which may operationally affect **Embedded Small Power Stations** or **Embedded Medium Power Stations**).

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## Grid Code Provisions – Instruction

- ◆ There is no such instruction as a ‘Special Instruction’
- ◆ Hence instruction of special actions is best covered by BC2.10

### **BC2.10** OTHER OPERATIONAL INSTRUCTIONS AND NOTIFICATIONS

BC2.10.1 **NGET** may, from time to time, need to issue **other instructions** or notification associated with the operation of the **National Electricity Transmission System.**”

BC2.10.2 Such instructions or notifications may include:

- a) .....
- d) .... arrangements for **change in output** to meet post fault security requirements;

BC2.10.3 .... NGET shall issue a **Bid-Offer Acceptance** or **Emergency Instruction** as appropriate

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## Instruction in practice, and settlement

- ◆ In view of the prompt response required and for the avoidance of any doubt, NGET policy is to request delivery of all special action in the form of an Emergency Instruction.
- ◆ Since special actions are only required to be taken post fault, many are agreed but very few are ever instructed
- ◆ Emergency Instructions will be treated as Bid-Offer Acceptances (BC2.9.2.3)
- ◆ There is no corresponding BOA issued at the time.
- ◆ National Grid will construct the BOA(s) post-event.
- ◆ Relevant BOA(s) sent by National Grid to BMRA/SAA within five working days.
- ◆ Cash flows will be calculated as for any other BOA, i.e. using prevailing Bid/Offer prices at time of issue of the instruction.

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## Special Actions: Summary

- ◆ Special Actions used to secure transmission system
- ◆ Notification process required to inform Users that NGET is reliant on Action to secure system
- ◆ Confirmation of continued availability by Users required to give comfort
- ◆ Form of Special Actions should give certainty
- ◆ Special Actions enacted by Emergency Instruction

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