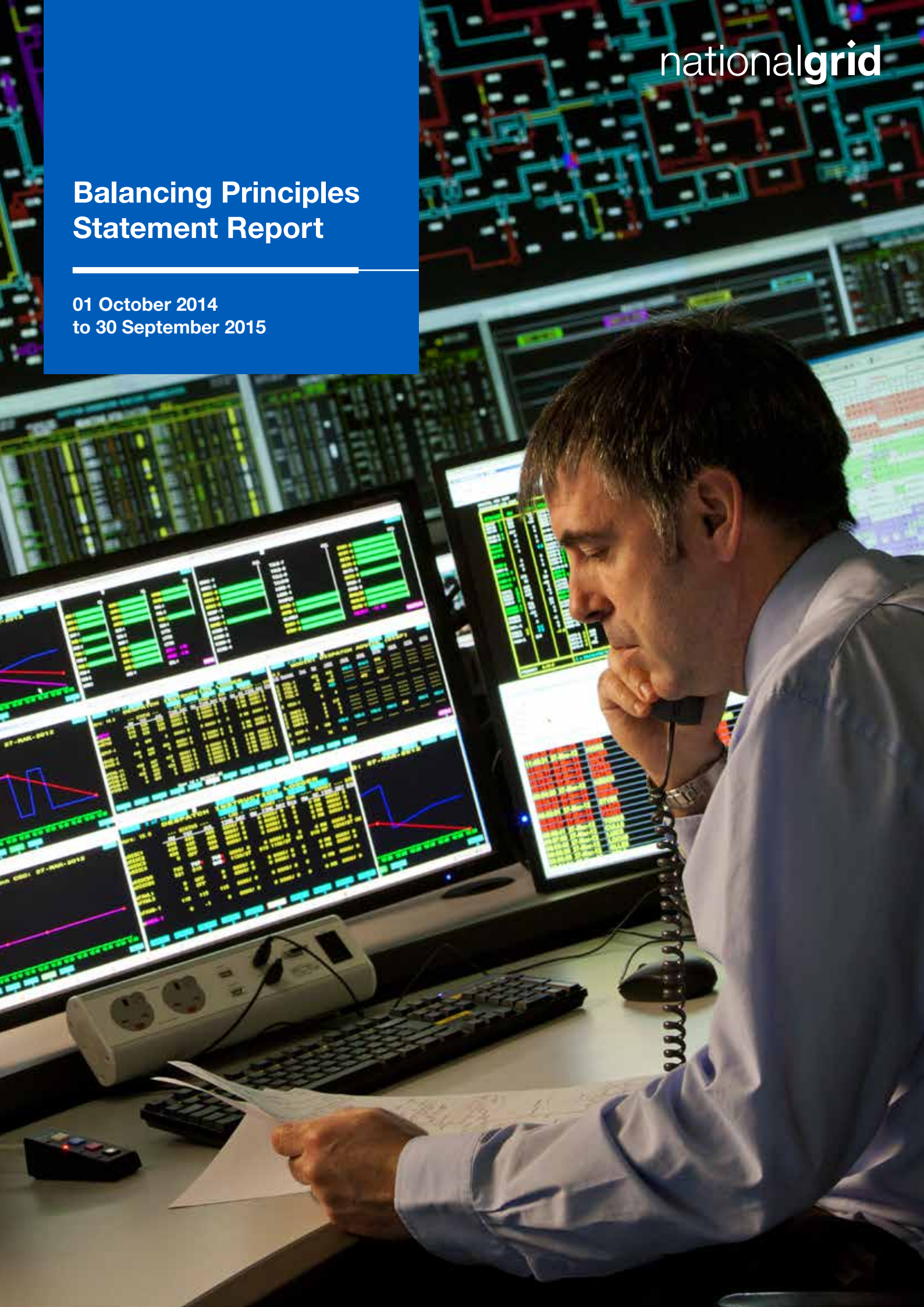


Balancing Principles Statement Report

01 October 2014
to 30 September 2015



Balancing Principles Statement Report

01 October 2014 to 30 September 2015

Contents

| | |
|--|----|
| Executive Summary | 03 |
| 1. BPS Part A: Introduction | 04 |
| 2. BPS Part B: General Principles | 04 |
| 2.1 Emergency Instructions | 05 |
| 2.2 Demand Control | 06 |
| 2.3 Negative Reserve Active Power Margin | 06 |
| 2.4 Black Start/Islanding | 06 |
| 2.5 Communication Failures | 07 |
| 2.6 Involuntary Reductions | 07 |
| 3. BPS Part C: Principles underlying Balancing Measures | 07 |
| 3.1 Treatment of BMUs disconnected by Transmission System faults | 08 |
| 3.2 Pre Gate Closure BMU Transactions..... | 08 |
| 4. BPS Part D: Transmission Constraint Management and Reserve/Response Principles | 08 |
| 5. BPS Part E: Day Ahead and Within Day Balancing Processes | 09 |
| 6. BPS Part F: Summary of GB Operational Security Standards | 09 |
| 7. BPS Part G: Exceptions to the BPS | 09 |
| 8. Future Reports | 10 |
| Appendix 1 – Overview of the Balancing Principles Statement | 10 |
| Appendix 2 - Emergency Instructions | 10 |
| Appendix 3 - Involuntary Reductions | 12 |
| Appendix 4 - Review opinion by PricewaterhouseCoopers | 13 |

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

Executive Summary

National Grid has developed the Balancing Principles Statement (BPS) in accordance with Licence requirements to define the broad framework within which balancing action decisions are made.

The BPS is intended to help electricity market participants understand actions National Grid may take to achieve the efficient, economic and co-ordinated operation of the transmission system. To assist with this we have also held regular industry forums where we have provided data, detailed explanations of our balancing actions and answers to questions raised by participants.

This report demonstrates that throughout the period from 1 October 2014 to 30 September 2015, National Grid has operated the National Electricity Transmission System (NETS) in accordance with the guidelines set out in the Balancing Principles Statement. Our compliance with the BPS is subject to independent external review. A statement from the External Auditor (PriceWaterhouseCoopers) accompanies this report.

Key events highlighted in this report:

- There were no Emergency Instructions issued to Balancing Mechanism Units (BMUs); however, there were 12 instances where a non BM participant was instructed down by Emergency Instruction due to localised Negative Reserve Active Power Margin Warnings (NRPAM). There were no requests for Maximum Generation Service.
- There were three occasions where Interconnector Emergency Assistance was requested by National Grid.
- No Demand Control instructions were issued over this reporting period.
- No NRAPM Warnings were issued. However, there were ten occasions when Localised NRAPM Warnings were issued in Scotland.
- There were no occasions of system or partial system shutdown or islanding. No Black Start services were called off.
- Our Balancing Mechanism IT systems achieved 99.86% availability (excluding planned outages) in this reporting period.
- There were two instances of Involuntary Reduction by BMUs coincident with each other.
- There were twenty-one occasions where BMUs were disconnected from the GB Transmission System due to faults. No Bid-Offer Acceptances (BOAs) were issued to these BMUs.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

1. BPS Part A: Introduction

National Grid has developed a Balancing Principles Statement (BPS) in accordance with Licence requirements in order to define the broad framework within which balancing action decisions are made. The BPS is intended to help electricity market participants understand actions National Grid may take to achieve the efficient, economic and co-ordinated operation of the National Electricity Transmission System.

An overview of the BPS is contained in Appendix 1.

Our compliance with the BPS is subject to independent external review and reflected in this annual report. Appendix 4 of this report contains an opinion from the external auditors.

2. BPS Part B: General Principles

The BPS is written to be consistent with our Transmission Licence obligation to operate the system in an efficient, economic and co-ordinated manner, whilst ensuring the security of the system at all times.

In determining which balancing measures to employ, we take account of various sources of information. These include Balancing Mechanism Unit (BMU) data, our demand forecasts, our Transmission outage plan, actual system conditions, and any other relevant data (Grid Code BC 1.4.2 (f)).

In certain circumstances, we may need to issue Emergency Instructions or Involuntary Reductions in order to preserve the integrity of the National Electricity Transmission System (NETS). These circumstances may include system events and situations involving the requirement for demand control, Negative Reserve Active Power Margin, Black Start, frequency response and communication failure. In these circumstances, it may be necessary to depart from normal Balancing Mechanism operation in accordance with Grid Code BC2.9.

Throughout the period from 1 October 2014 to 30 September 2015, National Grid has operated the GB Transmission Systems in accordance with the general principles set out in the Balancing Principles Statement.

We are permitted in certain circumstances to operate the system outside the normal principles of Balancing Mechanism operation (as described in the BPS). Specific occurrences are covered in more detail below.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

The following table summarises the reporting sections for the last 4 years

| Category | Oct 2011 - Sep 2012 | Oct 2012 - Sep 2013 | Oct 2013 - Sep 2014 | Oct 2014 - Sep 2015 |
|---|------------------------|------------------------|------------------------|------------------------|
| Emergency Instructions | 1 | 8 | 0 | 0 ⁵ |
| Interconnector Emergency Assistance | 3 | 4 | 3 | 3 |
| Demand Control | 1 | 0 | 0 | 0 |
| NRAPM Warnings | 0 ¹ | 0 ³ | 0 ⁴ | 0 ⁶ |
| Black Start/ Islanding | 0 | 0 | 0 | 0 |
| Maximum Generation Service | 0 | 0 | 0 | 0 |
| Availability of National Grid Balancing Mechanism systems | 99.99% | 100% | 99.94% | 99.86% |
| Involuntary Reductions | 3 | 2 | 7 | 2 |
| No. of BMUs disconnected by Transmission System Faults | 112 | 27 | 14 | 21 |

Note 1: Localised NRAPM issued for Scotland due to High wind Output forecast overnight 16/08/2012.

Note 2: Due to inconsistent reporting for 2011-12 all generation, not just BMUs were included in the figure published for BMUs disconnected by transmission faults. The results above now refer to BMUs only number of units disconnected.

Note 3: 5 localised NRAPMs issued for Scotland throughout the year.

Note 4: 3 localised NRAPMs issued for Scotland throughout the year.

Note 5: 12 Emergency instructions issued to BELLA wind farms (non BM participants).

Note 6: 10 localised NRAPMs issued for Scotland throughout the year.

2.1 Emergency Instructions

In certain circumstances, it may be necessary for National Grid to issue Emergency Instructions in order to preserve the integrity of the National Electricity Transmission System and any synchronously connected external system. In such circumstances, it may be necessary to depart from normal Balancing Mechanism operation in accordance with BC2.9 of the Grid Code.

There were no instances of Emergency Instructions issued to BMUs; however, there were twelve instances where an Emergency Instruction was issued to wind generation units not active in the BM. See Appendix 2 for details.

There were no requests made for Maximum Generation Service.

There were three occasions where Interconnector Emergency Assistance was requested by National Grid. There was no occasion where Interconnector Emergency Assistance provided by National Grid. (Grid Code section BC2.9.6).

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

2.2 Demand Control

A situation may arise in BM timescales where there is insufficient active power generation available to meet demand, or there may be local operating problems on part of the transmission system. Under these circumstances, it may be necessary for Network Operators and National Grid to make provisions for the reduction of demand in accordance with Grid Code OC6.

No Demand Control Actions were issued during the reporting year.

2.3 Negative Reserve Active Power Margin

In order to ensure system security, National Grid must always be able to schedule sufficient frequency responsive plant to contain system frequency against the largest credible loss of generation or demand. Under conditions of low system demand (particularly overnight demand minimums during summer weekends), the generation notified to us may not include enough plant capable of providing this response. Under these circumstances, we would normally accept bids to desynchronise un-responsive plant and accept offers to replace this plant with more responsive generation.

However, in extreme cases, there could be an insufficient volume of bids available to reduce the level of unresponsive generation. In these circumstances, National Grid issues Negative Reserve Active Power Margin (NRAPM) warnings to the market to signal the shortage of responsive plant and request additional plant flexibility. If the NRAPM warnings have no effect, as a last resort National Grid could instruct plant to desynchronise under these NRAPM conditions

in accordance with Grid Code section BC2.9.4. A localised NRAPM is issued where the same conditions exist, but in a localised area, usually due to a constraint on the system.

No NRAPM warnings were issued nationally. However, there were ten localised NRAPM warnings issued for constraint groups in Scotland.

Details of such local NRAPM warnings are covered in Appendix 2, which provides details of Emergency Instructions issued to non BM participants.

2.4 Black Start / Islanding

Under extreme conditions (e.g. multiple circuit tripping during severe weather), parts of the National Electricity Transmission System could become disconnected from the main system, or islanded. In addition, there could be a “partial shutdown” where all generation has ceased within an island, or a “total shutdown” where all generation has ceased in the total system and there is no electricity supply from external Interconnectors.

Grid Code section OC9 describes the implementation of recovery procedures following a total or partial shutdown (Black Starts), the re-synchronisation of islands and the Joint System Incidents Procedure which would apply under the above circumstances. National Grid has Ancillary Service contracts with certain generators to provide a Black Start capability to re-establish supply following a partial or total system shutdown.

There were no occasions of system or partial system shutdown or islanding. No Black Start services were called off (excluding routine testing).

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

2.5 Communication Failures

This subject is covered in both Grid Code BC2.9.7 and BPS Part B section 5(g). A communication failure is defined in the BPS as an “unplanned outage of the electronic data communication facilities or National Grid’s associated computing facilities preventing normal Balancing Mechanism operation”. Under these circumstances, National Grid will normally issue a “National Grid Balancing Mechanism IT System Failure” as soon as it is reasonably able to do so. This will normally be issued via the Balancing Mechanism Reporting System (BMRS), where possible will indicate the likely duration of the outage.

Our Balancing Mechanism IT systems achieved 99.86% availability (excluding planned outages) in this reporting period. Two unplanned outages were reported in January 2015 with a total outage time of 4 hours and 9 minutes.

2.6 Involuntary Reductions

This subject is covered in BPS Part B Section 6. Under certain exceptional circumstances, National Grid may need to instruct reductions in generation or demand before all valid and relevant Balancing Mechanism bids or offers have been accepted. This could be to preserve system response or reactive reserve levels, or as a result of automatic measures (e.g. the operation of an intertrip not covered by commercial agreements), or because communication problems prevent other relevant bids or offers being instructed. Involuntary Reductions include Demand Reduction and Disconnection referred to in Grid Code OC6.

There was one occasion where the output of 2 BM units was reduced involuntarily due to transmission equipment issues. See Appendix 3.

3. BPS Part C: Principles underlying Balancing Measures

There are a number of principles described in the BPS that underpin the measures National Grid will take to balance the system. The balancing measures include the acceptance of bids and offers, utilisation of Balancing Service contracts, other commercial services, instruction of Emergency Actions and other Involuntary Reductions. These measures are called off in cost order unless this is not possible under circumstances described in Part C section 5. Part C also describes the treatment of BMUs disconnected by Transmission System faults.

We have used balancing measures in cost order wherever possible during this reporting period, with exceptions being in line with the circumstances described in BPS Part C section 5. For more information on Balancing Services please see the National Grid website under Balancing Services, Monthly Balancing Services Summary Report. See Appendix 4 from our auditor.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

3.1 Treatment of BMUs disconnected by Transmission System faults

This subject is referred to in BPS Part C paragraph 6. Following transmission system faults, BMUs may become instantaneously disconnected from the transmission system. Under such circumstances following the fault and prior to reconnection, we would only issue a BOA to the affected BMUs if the trade provides immediate assistance to us in controlling the transmission system.

There were 21 occasions where BMUs were disconnected due to Transmission System faults. These are summarised in the table below. No BOAs were issued to these BMUs. No BOAs were issued to these units post event.

| Number of BMUS Disconnected | SHETL | SP | NGT |
|-----------------------------|-------|----|-----|
| Weather | 0 | 0 | 0 |
| Transmission Eqpt. Failure | 13 | 2 | 3 |
| Field Issues | 1 | 1 | 1 |
| Unknown | 0 | 0 | 0 |

3.2 Pre Gate Closure BMU Transactions

Contracts will be entered into outside the BM when we anticipate a shortage of appropriate Offers and Bids in the BM to meet system security requirements, or if we consider that such contracts will lead to a reduction in overall cost or provide technical characteristics that are not available through BM Offers and Bids.

No Pre Gate Closure BMU Transactions (PGBTs) were issued in this reporting period. When PGBTs are issued they would be reported on the Monthly Balancing Services Reports on the National Grid website.

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Services-Reports/>

4. BPS Part D: Transmission Constraint Management and Reserve/Response Principles

We employ a number of principles for the management of transmission constraints and response/reserve holdings. These include outage planning from year ahead to day ahead, security studies, constraint cost forecasting and negotiating Balancing Service contracts. BPS Part D also describes the calculation of response and reserve holding levels, allocation of holdings with due regard to cost, delivery dynamics and transmission constraints, and regaining levels of response holding following delivery.

We have managed transmission constraints and response/reserve holdings during this reporting period in line with the principles described in BPS Part D.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

5. BPS Part E: Day Ahead and Within Day Balancing Processes

BPS Part E describes the Day Ahead and Within Day balancing processes – the Scheduling and Control phases. At the Day Ahead stage, this includes publishing day ahead demand forecasts, performing security studies, calculating reserve/response levels and calculating half hourly system plant margins. It also includes forecasting constraint costs, calling off Balancing Service contracts and revising the national and Zonal margin data.

Within Day includes releasing revisions to the demand forecasts and margin data to the Balancing Mechanism Reporting System, performing additional security studies, reassessing the need to call off Balancing Service contracts, and balancing the system minute by minute through the deployment of Balancing Services on an economic basis.

[We have managed the Day Ahead and Within Day balancing processes during this reporting period in line with the principles described in BPS Part E.](#)

6. BPS Part F: Summary of GB Operational Security Standards

BPS Part F summarises the Operational Security Standards used by National Grid. We operate the system within these standards in order to maintain system security. The system is normally secured against certain specific “secured events” which are defined in Part F – for example the fault outage of a double circuit overhead line.

We have planned and operated the GB Transmission System to a single GB Security and Quality of Supply Standard (GB SQSS).

The Loss of supply and frequency or voltage excursions outside statutory limits are reported separately in accordance with Standard Condition C17 of the Transmission Licence.

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Performance-Reports/>

7. BPS Part G: Exceptions to the BPS

Infrequently, circumstances may arise which require us to operate outside the principles described in the BPS. The specific examples identified in BPS Part G are:-

- Black start
- System islanding
- When emergency control centre evacuation procedures have been invoked or widespread communication problems
- Circumstances where operating within the BPS would prejudice the safe and secure operation of the system
- Insufficient time available to balance the system in accordance with the BPS

[Actions were taken as described in the subsections above to ensure the safe and secure operation of the GB transmission system, to avoid breaching our statutory obligations or where insufficient time was available to employ alternative measures to achieve balancing.](#)

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

8. Future Reports

BPS reports are prepared by National Grid in accordance with the timetable set out in our Transmission Licence Standard Condition C16.

For further information on this report, please contact:

Compliance Assurance Manager

E-mail: BM.liaisonandcompliance@nationalgrid.com

Appendix 1 – Overview of the Balancing Principles Statement

I. The Purpose of the Balancing Principles Statement

The BPS has been developed by National Grid to assist electricity market participants to understand our actions in achieving the efficient, economic and co-ordinated operation of the transmission system.

National Grid is required by Transmission Licence Standard Condition C16 section 5 to establish and maintain a BPS to define the broad framework within which we make balancing action decisions.

II. Changes to the BPS

The BPS is approved by OFGEM and may only be modified in accordance with the processes set out in Transmission Licence Standard Condition C16.

Where changes are required to the BPS in advance of the annual update then, subject to approval, a BPS supplement may be issued.

The current version of the BPS (version 14.0) was issued on 1 April 2016. The changes to these versions were due to the annual review of the BPS.

III. Further information

Copies of the BPS are available from the National Grid website.

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-framework/Transmission-license-C16-statements/>

For further enquiries relating to the BPS, please contact:

Head of Commercial Frameworks – Electricity
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Email address

BalancingServices@nationalgrid.com

Appendix 2 - Emergency Instructions

List of non BM participants instructed via emergency action

Non BM participants are intermittent or embedded generation who choose to not actively participate in the Balancing Mechanism. These units do not submit physical notifications or bid offer data to the Balancing Settlement Code Company (BSCCo)-Elexon, and are therefore not liable for Balancing Services Use of System Costs. However, if they are positioned in an area with transmission constraints and would resolve the overloading of circuits, they can be instructed to come off the system via an emergency instruction. It must be noted that these actions are only taken when no other options are available. The following 12 units were instructed off the system via an Emergency Instruction; of these nine Localised Negative Reserve Active Power Margin system warnings were in force.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

| Non BM Participant (NG ID) | Time From | Time To | NRAPM in Force |
|----------------------------|------------------|------------------|----------------|
| ACHYW-1 | 30/09/2013 13:12 | 01/10/2013 00:41 | |
| BTUIW-1 | 26/10/2014 01:32 | 26/10/2014 22:14 | Yes |
| TANGW-1 | 26/10/2014 16:50 | 27/10/2014 06:43 | Yes |
| BTUIW-1 | 26/10/2014 22:14 | 27/10/2014 06:55 | Yes |
| BTUIW-1 | 27/10/2014 21:49 | 27/10/2014 22:18 | |
| CMSTW-1 | 01/07/2015 15:59 | 01/07/2015 17:16 | Yes |
| CMSTW-1 | 07/05/2015 09:04 | 07/05/2015 10:08 | Yes |
| AKGLW-1 | 12/05/2015 23:19 | 12/05/2015 23:31 | |
| FRBRW-1 | 06/06/2015 11:36 | 06/06/2015 13:59 | Yes |
| CMSTW-1 | 01/07/2015 15:59 | 01/07/2015 17:16 | Yes |
| FRBRW-1 | 10/07/2015 13:47 | 10/07/2015 18:04 | Yes |
| BTUIW-1 | 27/08/2015 02:14 | 27/08/2015 04:02 | Yes |

More information on non BM participants (Bilateral Embedded Licence Exemptible Large Power Station Agreement (BEGA) bilateral contracts) can be found on the National Grid website

<http://www2.nationalgrid.com/uk/services/electricity-connections/new-connection/>

Nine Localised NRAPM warning were issued

- **Saturday, 25-Oct-2014:** Localised NRAPM issued to generators within the KILSLOEX constraint due to the prevailing outage plan with various hydro units unable to accept bid on plant due to water management issues. The warning was in force from 19:30 to 11:00 the following day. Bid volume shortfall was 50MW.
- **Sunday, 26-Oct-2014:** Localised NRAPM Localised NRAPM issued to generators within the Scotex constraint due to high winds speeds and several restrictions on hydro plant due to water management issues. The warning was in force between 02:30 and 06:30 with a bid shortfall of 100MW. Beinn an Tuirc unit 1 windfarm (BTUIW-1) and Tangy windfarm (TANGW-1) were instructed down by Emergency Instruction.
- **Wednesday, 18-Feb-2015:** Localised NRAPM issued within the SSENWEX9 group (Highlands and western islands) due to the existing outage plan, high wind speeds and restrictions on hydro units due to water management issues. This Localised NRAPM was then further increased to Scotland as the bid volume shortfall of 400MW at 20:30. Blackhillock-Berryburn circuit was returned from outage at 17:18 at 8hours notice. The bid required bid volume reducing to 200MW. The warning was in force from 22:00 to 06:00 the following day.
- **Sunday, 03-May-2015:** Localised NRAPM issued for the SHEDEX constraint group. A fault on the Beuly- Conagill- Dounreay 275kV circuit caused the constraint to become active from 00:15 where feasible BM actions became insufficient. The warning was in force from 01:00 to 08:00.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

- **Thursday, 07-May-2015:** Localised NRAPM issued for the SHEDEX constraint group. Due to the risk of high winds uprooting trees adjacent to the Beauly-Alness-Shin West 132kV circuit SHETL informed ENCC that the circuit would be faulted from 08:00hrs on Thursday 7th May to allow the trees to be cleared. An assessment of the expected flows across the constraint boundary indicated a 25MW shortfall of bid volume between 08:00 and 17:00. Camster windfarm (CMSTW-1) was instructed by Emergency Instruction.
- **Saturday 6-Jun-2015:** A localised NRAPM was issued for the Beauly group as there 10MW shortfall of bid volume to take in the BM. Fairburn windfarm (FRBRW-1) was instructed by Emergency Instruction. The warning was in force between 11:30 and 16:00.
- **Wednesday, 01-Jul-2015:** Due to circuit faults in the Dounray-Shin area, high loading of the alternative Mybster circuit was identified. Camster windfarm was instructed off by Emergency Instruction as there were no other feasible bids available in the BM. The localised NRAPM was then issued at 16:10 to cover the time between 15:59 to 18:00 when the restoration of the circuits was expected. The NRAPM warning was cancelled at 18:00.
- **Friday, 10-Jul-2015:** Following all available BM actions flow across the CORIEXP constraint boundary indicate a shortfall of 20MW whilst forecast wind and water level remained high. Fairburn windfarm was instructed by Emergency Instruction to reduce output to manage the group. The localised NRAPM was in force issued at between 13:50 to 23:00.

- **Thursday, 27-Aug-/2016:** Localised NRAPM warning issued for the Ivarary group at 02:30. Following overloading on Inveraray-Port Ann-Carradale East circuit. To reduce the overloading, Beinn An Tuirc unit 1 windfarm was instructed by Emergency Instruction as no other BM options were identified. . The localised NRAPM was in force between 02:00 and 07:00.

Appendix 3 - Involuntary Reductions

10 Dec 2014 Hadyard Hill windfarm and Longannet unit 1

Commercial intertrip schemes are agreements between the Transmission Operators and generation units and are used to secure the transmission system during adverse operating conditions. On 10 November 2014 15:36, whilst one of these schemes was being enacted, Kilmarnock South – Strathaven / Hunterston – Strathaven 400kV double circuit tripped on protection, subsequently tripping off Mark Hill windfarm and the Moyle interconnector (note the loss Mark Hill windfarm is included in section 3.1). A net loss of -79 MW was incurred as the interconnector was exporting at the time. Coincident with the double circuit trip half of Hadyard Hill windfarm tripped off the system with a loss of approximately 50 MW. Longannet unit 1 was also seen to rapidly deload its output and eventually desynchronised at 15:41. Supplies were offered back to Moyle interconnector at 15:45 and the other windfarms at 16:20.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

Appendix 4 Review opinion by PricewaterhouseCoopers



Private & Confidential

The Directors
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

14 December 2015

Our ref: DJG

Dear Sirs

Report on compliance with the Balancing Principles Statement for the year ended 30 September 2015 (“the Year”)

- 1 We have reviewed the extent to which National Grid Electricity Transmission plc (“NGET”), in its procurement and use of Balancing Services, has complied with the Balancing Principles Statement (“BPS”) for the year ended 30 September 2015. We have undertaken this review in accordance with the Form of Agreement 4538/03/SW agreed between ourselves and National Grid Company Plc on 8 March 2004, which was subject to Amendment Number 3 which was agreed on 7 August 2008 and Amendment Number 4 which was agreed on 30 September 2011.
- 2 Unless the context otherwise requires, words and expressions defined in the BPS, which is a document prepared by NGET pursuant to Paragraph 5 of Condition 16 of its Transmission Licence, have the same meanings in this report as in that statement. During the Year, the BPS has not been updated. Version 12.0 dated 1 January 2014 is the most recent version effective in the Year.

Respective responsibilities of NGET and Balancing Principles Statement Auditor

- 3 NGET is responsible for taking all reasonable steps to ensure its compliance with the BPS, in respect of its use of Balancing Services. It is our responsibility, within the Terms of Reference, to review on a sample basis, the compliance of NGET with the BPS in respect of the use of Balancing Services. This work is performed with a view to expressing an independent opinion as to whether NGET has complied with the relevant requirements in the Balancing Principles Statement.

*PricewaterhouseCoopers LLP, 3 Forbury Place, 23 Forbury Road, Reading, Berkshire RG1 3JH
T: +44 (0) 118 959 7111, F: +44 (0) 118 938 3020, www.pwc.co.uk*

PricewaterhouseCoopers LLP is a limited liability partnership registered in England with registered number OC303525. The registered office of PricewaterhouseCoopers LLP is 1 Embankment Place, London WC2N 6RH. PricewaterhouseCoopers LLP is authorised and regulated by the Financial Services Authority for designated investment business.

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

Appendix 4 Review opinion by PricewaterhouseCoopers



Basis of review and scope of work

- 4 We have performed the engagement in line with the requirements of the International Standard on Assurance Engagement 3000, which provides guidance on 'Assurance engagements other than audits or reviews of historical financial information'.
- 5 We have planned and performed our review in accordance with our review approach dated 2 November 2015, which we have agreed with NGET and which is set out in our document "Supplement to the Balancing Principles Statement report for the year ended 30 September 2015" ("the Supplement") which we have sent to both NGET and the Office of Gas and Electricity Markets ("Ofgem").
- 6 The Supplement provides a detailed description of the approach we have adopted to the review. In particular, it describes those aspects of Balancing Services that we have examined during our review and those which are outside the scope of this review. Our review included an examination, on a test basis, of both the Balancing Services procured and used by NGET, and of the estimates and judgements made by NGET in using Balancing Services. This report should be read in conjunction with the Supplement.
- 7 In reaching our conclusion we assessed the risk of a material breach of the way NGET has used Balancing Services compared with the requirements of the BPS, whether caused by fraud or other irregularity or error, and determined the adequacy of procedures and controls established by NGET to eliminate or reduce such risks.

Opinion

- 8 In our opinion, NGET has complied with the relevant requirements in the Balancing Principles Statement in all material respects, during the year ended 30 September 2015, with regards to:
 - the receipt and validation (including application of default data) of Physical Notification ("PN") data;
 - the consistency of demand and operational data provided to market participants during the Day Ahead and within day balancing processes to data used internally by NGET and confirmation that the required timetable for the issue of this data has been met;
 - the call off of Balancing Services in cost order during the Day Ahead balancing process. Balancing Services to include Ancillary Services active power contracts only;
 - the call off of Balancing Services in cost order during the within day balancing process. Balancing Services to include Ancillary Services active power contracts and accepted Bids and Offers in the Balancing Mechanism including Pre Gate Closure BMU Transactions ("PGBTs"); and

Balancing Principles Statement Report

01 October 2014 to 30 September 2015

Appendix 4 Review opinion by PricewaterhouseCoopers



- NGET's adherence to internal operating procedures for activities that impact the call off of Balancing Services during the day-ahead and within day balancing processes. For the avoidance of doubt, this includes internal operating procedures that relate to the management of transmission constraints and response/reserve holdings during the day-ahead and within day balancing processes.

Use of this report

- 9 This report is intended solely for the use of the Directors of NGET and Ofgem. While we acknowledge that this report will be published on the NGET website, this is for information purposes only and we do not intend that it should be relied upon by anyone other than the parties mentioned above.
- 10 The maintenance and integrity of that website is the responsibility of the Directors of NGET. The work that we carried out does not involve consideration of the maintenance and integrity of that website and, accordingly, we accept no responsibility for any changes that may have occurred to this report since it was initially presented on the website.
- 11 This report has been prepared in the expectation that NGET and Ofgem will have sufficient experience of Balancing Services to understand the scope of our review without further background explanation.

Yours faithfully

A handwritten signature in black ink, appearing to read 'D. Bend', is written over a horizontal line.

PricewaterhouseCoopers LLP, Reading
Chartered Accountants

Balancing Principles Statement Report

01 October 2014 to 30 September 2015