



Procurement Guidelines Report

Report for the period
27 March 2001 to 30 April 2002

May 2002



CONTENTS

Executive Summary	3
Procurement Guidelines Report for the period – 27 March 2001 to 30 April 2002	
1 Introduction	
1.1 Purpose of Document	4
1.2 Reporting Period	4
2 Balancing Services	
2.1 Definition of Services	5
2.2 New Balancing Services	6
3 Service Procurement	
3.1 Relevant Balancing Services	7
3.2 Balancing Services Procured	7
- services procured via Market Arrangements	8
- services procured via Bi-lateral Contracts	11
4 Contact Details	18

Executive Summary

National Grid has been given discretion with regard to the procurement of Balancing Services, subject to a licence obligation to operate the transmission system in an efficient, economic and co-ordinated manner and under the umbrella of an incentive scheme.

We confirm that Balancing Services during the period covered by this report have been procured in accordance with the principles set out in the prevailing Procurement Guidelines.

Having taken relevant price and technical differences into account, we have contracted for Balancing Services in a non-discriminatory manner.

In contracting for the provision of Balancing Services we have purchased from the most economical sources available to us having regard to the quality, quantity and nature of such services at that time available for purchase.

The National Grid Company plc

Procurement Guidelines Report - 27 March 2001 to 30 April 2002.

1. Introduction

1.1 Purpose of Document

This document sets out the Procurement Guidelines Report ("Report") which The National Grid Company plc is required to establish in accordance with Special Licence Condition AA4 of the Transmission Licence. This Report provides information in respect of Balancing Services defined in the Procurement Guidelines. The Procurement Guidelines set out the kinds of Balancing Services which we may be interested in purchasing, together with the mechanisms by which we envisage purchasing such services.

This Report, which has been developed in consultation with the Authority/Director, covers each of the relevant services detailed in Table 1 of the Procurement Guidelines, and identifies contractual and market related information for each of the services.

Terms used herein shall have the same meanings given to them in the Transmission Licence, the Grid Code and/or the Balancing and Settlement Code as the case may be.

This document is available electronically from our website. Alternatively a copy may be requested from the Balancing Issues Manager. Full contact details are set out at the end of this document.

1.2 Reporting Period

This Report has been prepared in accordance with Special Licence Condition AA4.4 of the Transmission Licence. This condition states that the Report should be produced within one month after the publication date of the Procurement Guidelines, which are prepared in accordance with paragraph AA4.3 of the Transmission Licence. Version 2.0 of the Procurement Guidelines was approved and became effective from 1 May 2002, therefore the period of this report is 27 March 2001 to 30 April 2002.

2. Balancing Services

2.1 Definition of Services

The services that we need to procure in order to operate the transmission system in an efficient, economic and co-ordinated manner, constitute Balancing Services.

The Transmission Licence defines Balancing Services as:

- (a) ancillary services;
- (b) offers and bids made in the Balancing Mechanism; and
- (c) other services available to the Licensee which serve to assist the Licensee in operating the Licensee's Transmission System in accordance with the Act or the Conditions and/or in doing so efficiently and economically.

Ancillary Services

These services are described in Connection Condition 8 of the Grid Code and are services procured from Authorised Electricity Operators (AEOs) or persons that make interconnector transfers. These services can be mandatory or commercial in nature.

There are two broad types of Ancillary Service, defined in the Grid Code:

- System Ancillary Services
 - Part 1 - mandatory services required from all licensed generators; and
 - Part 2 - necessary services provided by some generators, on a site by site basis, to meet specific system requirements where agreement is reached
- Commercial Ancillary Services
 - Services are agreed bilaterally and set out, subject to satisfactory commercial terms, in an Ancillary Services Agreement.

Balancing Mechanism Offers and Bids

These are commercial services offered by generators and suppliers and procured through arrangements set out in Paragraph 5.1, Section Q of the Balancing and Settlement Code. They represent a willingness to increase or decrease a Balancing Mechanism Unit's (BMU's) generation or demand for electricity in exchange for payment. Accepted services are used to control the national and local balance of generation and demand.

Details of the acceptance of offers or bids in the Balancing Mechanism are excluded from this report, provided such an offer or bid was not made pursuant to any prior agreement. Further information on offer and bid acceptances for the period 27 March 2001 to 31 March 2002 is contained in the Balancing Principles Report, published by National Grid and available on our website, (www.nationalgridinfo.co.uk).

Other Services

Other Services are commercial services that can be entered into with any party, which are classified neither as Ancillary Services nor as Balancing Mechanism offers and bids. These services can be provided by parties who are not AEOs. This category would include any service provided by parties that are not signatories to the Balancing and Settlement Code. Other Services also include the purchase of energy in connection with efficient and economic operation of the transmission system. Purchases via bilateral forward contracts or through a recognised exchange fall within this category.

Further details about Balancing Services can be found in the Procurement Guidelines.

2.2 New Balancing Services

One new Balancing Service (Fast Reserve) has been implemented since the initial publication of the Procurement Guidelines effective from 27 March 2001. Details of this new service was included in a revised version of the Procurement Guidelines issued on 21 September 2001, and will be included in subsequent versions.

Fast Reserve

Fast Reserve is the rapid and reliable delivery of active power provided as an increased output from generation or a reduction in consumption from demand sources, following receipt of an acceptance / verbal confirmation from National Grid.

A Fast Reserve seminar was held by National Grid on 1 August 2001, where a process for procuring this Balancing Service was presented to industry participants.

This service has been procured on a monthly basis from October 2001 and Market Information and Market Reports have also been published monthly.

3. Service Procurement

3.1 Relevant Balancing Services

Balancing Services we expected to procure and have procured throughout the period covered by this report are:

- Reactive Power;
- Frequency Response;
- Black Start;
- Fast Start;
- Reserve Services - Fast Reserve, Standing Reserve, Warming;
- Intertrip;
- Emergency Assistance; and
- Energy Related Products.

Further definitions and descriptions of each Balancing Service can be found in the Procurement Guidelines and on the National Grid industry information website (www.nationalgridinfo.co.uk).

This Report excludes Balancing Services acquired solely through the acceptance of an offer or bid in the Balancing Mechanism, providing such offer or bid was not made pursuant to any prior agreement. Further information on offer and bid acceptances is contained within the Balancing Principles Statement Report.

3.2 Balancing Services Procured

For each of the Balancing Services detailed above, appropriate contract / market information is included in Table 1 below.

Table 1.

Services procured via Market Arrangements																			
Reactive Power	<p>Market Information</p> <p>National Grid manages the voltage of the supergrid system to meet Transmission Licence requirements for secure and stable power transmission and to ensure quality of supply to customers. National Grid ensures that reactive power resources are provided on a local basis to meet the constantly varying needs of the system and that there is sufficient reactive power reserve available to meet contingencies. Potential providers that fulfil the qualification criteria specified in CUSC schedule 3 may tender for a market agreement. Tenderers may elect to choose the length of their tender from a minimum of 12 months and thereafter in 6 month increments. Tenderers may tender for either ORPS (Obligatory Reactive Power Service) or ERPS (Enhanced Reactive Power Service).</p> <p>Three Reactive Power Market tender rounds have been held during the period. Tender round 7 effective from 1 April 2001, tender round 8 effective from 1 October 2001, and tender round 9 effective from 1 April 2002. The tender rounds define the start date of any contract awarded via the tender process. The information below relates to ORPS, as no ERPS contracts were entered into.</p> <table border="1"> <thead> <tr> <th>Tender Round</th> <th>Tenders Received</th> <th>Contracts Awarded</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>104</td> <td>43</td> </tr> <tr> <td>8</td> <td>39</td> <td>15</td> </tr> <tr> <td>9</td> <td>76</td> <td>32</td> </tr> </tbody> </table> <p>Further details are available at : http://www.nationalgridinfo.co.uk/balancing/mn_reactive.html</p> <p>During this period the following number of market agreements were effective:</p> <table border="1"> <tbody> <tr> <td>1 April 2001 – 30 September 2001</td> <td>54</td> </tr> <tr> <td>1 October 2001 - 31 March 2002</td> <td>58</td> </tr> <tr> <td>1 April 2002 – 30 April 2002</td> <td>48</td> </tr> </tbody> </table> <p>Weighted average Reactive contracted lagging MVAR under market agreements during the period of this report was 12112 MVAR. The system total MVAR lagging for the three tender rounds is 24975 (tender rounds 7 and 8) and 25154 (tender round 9). The weighted average percentage covered by Reactive Market contracts is 48.5%. The average £/MVAR per hour payment for Reactive Power Market Availability for the period April 2001 to March 2002 was £0.13/MVAR per hour.</p>	Tender Round	Tenders Received	Contracts Awarded	7	104	43	8	39	15	9	76	32	1 April 2001 – 30 September 2001	54	1 October 2001 - 31 March 2002	58	1 April 2002 – 30 April 2002	48
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Services procured via Market Arrangements

Fast Reserve

Market Information

Fast Reserve is a fast acting, reliable, flexible service provided by plant capable of increasing energy production or reducing energy consumption, at defined rates and within a defined time period.

All contracts were derived from market tenders. During the period covered by this report there have been 7 monthly tender rounds, from October 2001 to April 2002.

Month	Tenders Received	Contracts Awarded	Contracted Average MW
October 2001	6	2	500
November 2001	7	3	565
December 2001	8	2	365
January 2002	9	3	590
February 2002	9	3	415
March 2002	7	3	433
April 2002	5	2	343

The average availability payment for the full period was £3.93 / MW per hour.

Further details are available at: http://www.nationalgridinfo.co.uk/balancing/mn_fast_reserve2.html

Services procured via Market Arrangements

Standing Reserve

Market Information

Standing Reserve is provided by plant that is not synchronised but which can start within a defined time period.

Three tender rounds have been held during the period. The periods covered are Neta Go-Live (27 March 2001) to 31 March 2001, 1 April 2001 to 31 March 2002 and 1 April 2002 to 31 March 2003.

<u>Tender round</u>	<u>Tenders</u>	<u>Contracts</u>	<u>Contracted MW</u>
Neta Go-Live	74	53	1025
1 April 2001	103	99	1623
1 April 2002	107	98	1960

The average availability payment was £3.16 /MW per hour for Standing Reserve over the period 27 March 2001 to 30 April 2002.

Further details are available at: http://www.nationalgridinfo.co.uk/balancing/mn_standing.html

Services procured by Bilateral Contracts

Reactive Power

Contract Information

National Grid manages the voltage of the supergrid system to meet Transmission Licence requirements for secure and stable power transmission and to ensure quality of supply to customers. National Grid ensures that reactive power resources are provided on a local basis to meet the constantly varying needs of the system and that there is sufficient reactive power reserve available to meet contingencies. All generating units provide Reactive Power Capability and have the ability to vary their reactive power output as a requirement of the Grid Code.

Reactive Power Market Default service applies to those generators who are unsuccessful or elect not to tender for a Reactive Power Market Contract.

There were 155 Generator BMUs eligible to receive Reactive Power default energy payments during the period covered by this report.

For the Financial Year 2001/02 the Default Utilisation payment rate is £1.33/MVArh. Where the BMU is subject to the 'penalty rate' due to an event of default, the rate is £0.25/MVArh.

For the Financial Year 2002/03 the Default Utilisation payment rate is £1.35/MVArh. Where the BMU is subject to the 'penalty rate' due to an event of default, the rate is £0.27/MVArh.

Reactive Power charging principles are defined in CUSC Schedule 3, Appendix 7.

There was one Synchronous Compensation contract in place during the period of this report.

Services procured by Bilateral Contracts	
Mandatory Frequency Response	<p>Contract Information</p> <p>System frequency is a continuously changing variable that is determined and controlled by the careful balance between system demand and total generation. National Grid must ensure that sufficient generation and / or demand is held in automatic readiness to manage all credible frequency change contingencies. Mandatory Frequency Response is a service provided by generators to automatically change their output in response to a change in system frequency.</p> <p>Mandatory Frequency Response is provided by generators under the terms of the Grid Code, section CC6.3.7.</p> <p>The average Payment Rate was £2.73/MW per hour for Primary, £3.00/MW per hour for Secondary and £1.17/MW per hour for High Frequency response on the basis of Payment Rates applicable in the financial year 2001/02.</p> <p>Frequency Response charging principles are as defined in CUSC section 4.4.</p>
Black Start	<p>Contract Information</p> <p>All large power systems require some contingency arrangements to enable a restart in the unlikely event that all or part of the system shuts down. The process of restoring the power system is known as Black Start.</p> <p>The Black Start service is detailed in Grid Code OC9.</p> <p>There were 18 stations with agreements, no new agreements were entered into during the period covered by this report.</p> <p>The basis for providing availability is dependent on the duration of the contract in place.</p> <p>Pricing details have not been reported due to contractual confidentiality requirements.</p>

Services procured by Bilateral Contracts	
Fast Start	<p>Contract Information</p> <p>Fast Start is the ability of Open Cycle Gas Turbine (OCGT) plant to start rapidly from a standstill condition and to deliver its rated power output automatically within a defined time period.</p> <p>Fast Start is provided under the terms of the Grid Code, section CC6.3.14.</p> <p>There were 37 Fast Start contracts in place at 27 March 2001.</p> <p>The average Capability Payment Rate/hour is £10.59</p> <p>There has been no requirement for any additional Fast Start capability beyond the pre-NETA provision.</p>
Warming & Hot Standby	<p>Contract Information</p> <p>Warming is required to ensure that there is sufficient flexible plant available at Gate Closure. It involves contracting with plant to reduce its notice to deviate from zero and be available to submit a Balancing Mechanism offer that can be accepted within current Balancing Mechanism timescales.</p> <p>There were 62 BMUs contracted at 27 March 2001. No new contracts were entered into in the period 27 March 2001 to 31 March 2002.</p> <p>The average Contracted Warming Rate (alpha) was £6.47/MW per hour.</p> <p>The average Contracted Hot Standby Rate (beta) was £4.32/MW per hour.</p> <p>Further details are available at: http://www.nationalgridinfo.co.uk/balancing/mn_warming.asp</p>

Services procured by Bilateral Contracts	
Intertrip	<p>Contract Information</p> <p>This service is required to minimise the pre-transmission line fault output restrictions that may apply to Power Stations.</p> <p>There were 3 generation contracts in place during the period and 2 demand contracts.</p> <p>Pricing details have not been reported due to contractual confidentiality requirements.</p>
Emergency Assistance	<p>Contract Information</p> <p>Emergency Assistance provides for mutual support of the transmission system with other interconnected systems. This service is only required via Interconnectors.</p> <p>There were 3 contracts in place during the period.</p> <p>Pricing details have not been reported due to contractual confidentiality requirements.</p>
Commercial Frequency Response	<p>Contract Information</p> <p>Commercial Frequency Response provides for combinations of different technical characteristics (compared to mandatory frequency services) together with alternative pricing arrangements. National Grid contracts for such services when the anticipated cost is lower than the alternative service provision.</p> <p>There were 8 contracts in place during the period. Two contracts are with an agent representing a total of 23 service providers.</p> <p>Pricing details have not been reported due to contractual confidentiality requirements.</p>

Services procured by Bilateral Contracts

Energy Related Products

All information on Energy Related Products, unless otherwise stated, relates to the period 27 March 2001 to 31 March 2002.

Contract Information

During the period a total of 3,293 forward energy trades were undertaken. These were either done bilaterally via GTMAs, or on Power Exchanges. 96% of these trades related to sales of energy by National Grid. The total volume of these trades was 6.1GWh of National Grid purchases, and 1,171.1GWh of National Grid sales.

Grid Trade Master Agreements (GTMA)

GTMAs provide a generic framework to cover energy trading between counterparties. Schedule 7 is a standard amendment to the framework which allows for location specific transactions.

On 27 March 2001 there were 9 contracts in place and at 30 April 2002 there were 24 contracts in place.

Via these GTMAs, 750 trades were undertaken during the period 27 March 2001 to 31 March 2002 with a total of 16 counterparties. These trades were undertaken either bilaterally or via brokers.

The total volume associated with these transactions was 915.3GWh

Power Exchanges

National Grid has participated on the UKPX and APX Power Exchanges.

The total number of National Grid transactions on the Power Exchanges during the period was 2,478. The total volume associated with these transactions was 261.9GWh.

(continued on next page)

Services procured by Bilateral Contracts

**Energy Related
Products
- continued**

Contract Information continued

Locational Trades

System balancing trades may be undertaken to remove or alleviate real time problems such as downward regulation, provision of headroom, or to resolve locational issues. These trades are undertaken via the GTMA framework.

During the period 27 March 2001 to 31 March 2002 there were a total of 43 trades (purchases and sales). The total volume of BMU specific sales was 108,813 MWh at an average of £8.24/MWh and the total volume of BMU specific purchases was 34,734 MWh at an average of £28.36/MWh.

Option Trades

Energy option trades are undertaken to manage the uncertainty in our forward energy trading requirements, such as the risk of adverse price movements and perceived lack of liquidity issues in the forward markets. BMU-specific option trades are undertaken for reasons such as downward regulation, provision of headroom, or to resolve locational issues where there is sufficient uncertainty in our requirement.

There were 22 BMU specific call option trades, total volume 21,600 MWh, average strike price £43.92/MWh, average option premium £1.07/MWh. There was one pre-gate closure energy option.

Locational Balancing Services Contracts

These are required to meet locational balancing requirements, and are undertaken via bilaterally negotiated Balancing Services contracts.

There were 10 contracts.

Pricing details have not been reported due to contractual confidentiality requirements.

Services procured by Bilateral Contracts	
Transmission Related Agreements	<p>Contract Information</p> <p>Where connection arrangements result in a requirement for the output of a generator to be constrained due to events on the Transmission System the commercial process may be managed via a Transmission Related Agreement.</p> <p>There were 7 agreements in place at 27 March 2001 and 5 agreements in place at 30 April 2002.</p> <p>Pricing details have not been reported due to contractual confidentiality requirements.</p>

4. Future Reports and Further information

Future reports will be issued annually in accordance with Special Licence Condition AA4 of the Transmission Licence.

Copies of the Procurement Guidelines are available from National Grid on request. The most recent edition is available on the National Grid industry information website (www.nationalgridinfo.co.uk).

For further information relating to this report, or for a copy of the Procurement Guidelines, please contact:

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