



THIS **FIRM FREQUENCY RESPONSE AGREEMENT** is made on the [ ] day of [ ] 2005

## **BETWEEN**

- (1) **NATIONAL GRID ELECTRICITY TRANSMISSION PLC** a company registered in England with number 2366977 whose registered office is at 1-3 Strand, London, WC2N 5EH ("**NGET**", which expression shall include its successors and/or permitted assigns); and
- (2) [ ] a company registered in [ ] with number [ ] whose registered office is at [ ] ("**Provider**", which expression shall include its successors and/or permitted assigns).

## **WHEREAS**

- (A) The **Provider** is, or will by the **Commencement Date**, be bound by the terms of the **Balancing and Settlement Code**.
- (B) This **Firm Frequency Response Agreement** is entered into in respect of one or more **FFR Unit(s)** each comprising a single **BM Unit** within the **Provider's** [ ] **Power Station**, in anticipation of the submission by the **Provider** of **FFR Tenders** in respect of such **FFR Unit(s)** in accordance with the **Tender Rules and Standard Contract Terms**.
- (C) Accordingly, the applicable provisions of this **Firm Frequency Response Agreement** shall apply with respect to each **FFR Tender** submitted by the **Provider**, and with respect to each relevant **FFR Unit** shall form part of each and any **FFR Contract** formed in relation thereto.

**NOW IT IS HEREBY AGREED** as follows:

### **1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION**

Unless the subject matter or context otherwise requires or is inconsistent therewith, and unless defined herein, terms and expressions defined in Section 6 of the **Tender Rules and Standard Contract Terms** have the same meanings, interpretations or constructions in this **Firm Frequency Response Agreement**. Unless the subject matter or context otherwise requires or is inconsistent therewith, in this **Firm Frequency Response Agreement** the terms set out in Appendix 1 shall have the meanings set out respectively therein.

### **2. TENDER RULES AND STANDARD CONTRACT TERMS**

- 2.1 Subject to Sub-Clause 2.2, the **Parties** hereby agree to be bound by, and to comply with, the applicable provisions of the **Tender Rules and Standard**

**Contract Terms** with respect to the submission of **FFR Tenders** and any **FFR Contract** formed pursuant thereto.

2.2 The **Tender Rules and Standard Contract Terms** shall be read and construed subject to the special conditions (if any) set out in Appendix 2.

2.3 The **Provider** agrees that the relevant provisions as to determination of the payments to be made between **NGET** and the **Provider** in consequence of events of default set out in Section 3 of the **Tender Rules and Standard Contract Terms** are reasonable in light of the anticipated harm and the difficulty of estimating or calculating actual damages. The **Provider** accordingly waives the right to contest those provisions as an unreasonable penalty or otherwise.

### 3. COMMENCEMENT AND TERM

3.1 This **Firm Frequency Response Agreement** shall come into force on the date hereof and shall continue in force and effect until terminated by either **Party** by not less than two months notice in writing to the other (but not so as to expire during the subsistence of any **FFR Contract** in respect of any **FFR Unit**) or until earlier termination in accordance with the **Tender Rules and Standard Contract Terms**.

3.2 In accordance with the **Tender Rules and Standard Contract Terms**, this **Firm Frequency Response Agreement** may terminate in respect of one or more only of the **FFR Units**, and such termination shall be without prejudice to the continuing effect of the **Firm Frequency Response Agreement** in relation to such other of the **FFR Unit(s)**.

### 4. PROVISION OF FIRM FREQUENCY RESPONSE

Without limiting the generality of Sub-Clause 2.1, upon the formation of each **FFR Contract** pursuant to and in accordance with the **Tender Rules and Standard Contract Terms**, the **Provider** hereby agrees to provide **Firm Frequency Response** to **NGET** from the relevant **FFR Unit(s)** upon and subject to the applicable terms and conditions set out in the **Tender Rules and Standard Contract Terms** and by reference to Clause 5.

### 5. DATA TABLES

5.1 For the purposes of each and every **FFR Tender** in respect of any **FFR Unit**, the **Parties** hereby agree that for any **FFR Confirmed Part Load Point** the **Frequency Response** to be provided from that **FFR Unit**, and (where applicable) the payments to be made by **National Grid** in respect thereof, shall be ascertained by reference to the applicable **FFR Capability Data Tables** and **FFR Power Delivery Data Tables** set out and described as such in *DELETE AS APPROPRIATE [the Mandatory Services Agreement]* [Appendix 4].

5.2 For the purposes of Sub-Clause 5.1, the **Parties** hereby agree that:-

- (a) the figures set out in such **FFR Capability Data Tables** represent, for each applicable **Genset Deload**, the amount of **Primary Response**, **Secondary Response** and **High Frequency Response** referred to therein;
- (b) such **FFR Capability Data Tables** include a summary response table whose figures represent, for each applicable **Genset Deload**, the capabilities in respect of **Primary Response**, **Secondary Response** and **High Frequency Response** at given levels of **De-Load** referred to therein; and
- (c) the figures set out in such **FFR Power Delivery Data Tables** represent, for each **Genset Deload**, the **Frequency Response** that is deemed to be delivered in respect of **Primary Response**, **Secondary Response** and **High Frequency Response**.

## 6. **SUBSTITUTE FFR UNITS**

For the purposes of the **Tender Rules and Standard Contract Terms**, the **Parties** hereby agree that the **BM Unit(s)** (if any) shown respectively against each **FFR Unit** in Appendix 5 shall be those suitable for nomination by the **Provider** as **Substitute FFR Unit(s)** under and in accordance with the provisions thereof, although such inclusion in Appendix 5 shall not prejudice the discretion of **NGET** to accept or decline any nomination made by the **Provider**.

## 7. **VARIATIONS**

No variation to this **Firm Frequency Response Agreement** shall be effective unless made in writing and signed by or on behalf of both **NGET** and the **Provider**.

## 8. **NOTICES**

For the purposes of this **Firm Frequency Response Agreement**, unless and until otherwise notified by the relevant **Party** to the other in accordance with paragraph 5.8 of the **Tender Rules and Standard Contract Terms**, any notice or other communication to be given by **NGET** or the **Provider** to the other under, or in connection with matters contemplated by, this **Firm Frequency Response Agreement** shall be sent to the following address and/or facsimile number and marked for the attention of the person named below:

**NGET:** National Grid  
Contracts and Trading  
NGT House  
Warwick Technology Park



this **Firm Frequency Response Agreement** shall be deemed to be a valid signature thereof provided that the **Party** so delivering a facsimile hereby undertakes to deliver an original copy of this **Firm Frequency Response Agreement** forthwith following such facsimile transmission.

**IN WITNESS WHEREOF** the hands of the duly authorised representatives of the parties hereto at the date first above written

SIGNED BY )  
**[name]** )  
for and on behalf of )  
**NATIONAL GRID ELECTRICITY TRANSMISSION PLC** )

SIGNED BY )  
**[name]** )  
for and on behalf of )  
**[Provider]** )

## APPENDIX 1 – FURTHER DEFINITIONS

<b>“Commencement Date”</b>	the date being the <b>Service Day</b> from which this <b>Firm Frequency Response Agreement</b> shall apply as specified in Clause 3;
<b>“FFR Units”</b>	each of the <b>BM Unit(s)</b> identified in Appendix 3;
<b>[“Mandatory Services Agreement”</b>	the agreement between the <b>Parties</b> described as such relating to the <b>Power Station</b> at which the <b>FFR Units</b> are located, as amended from time to time;]
<b>“Tender Rules and Standard Contract Terms”</b>	the document entitled “Firm Frequency Response Tender Rules and Standard Contract Terms” published by <b>NGET</b> and as revised from time to time in accordance with its terms.

## **APPENDIX 2 – SPECIAL CONDITIONS**

**APPENDIX 3 – FFR UNIT(S)**

## APPENDIX 4 – DATA TABLES

### SECTION A FFR Power Capability Data Tables

Station:

BM Unit Nos:

Table 1		Low Frequency Response - Mode D					
Genset De-Load (MW)	df <sub>p</sub> (Hz)	Primary Response (MW)	Secondary Response (MW)				
			df <sub>s</sub> = - 0.1Hz	df <sub>s</sub> = - 0.2Hz	df <sub>s</sub> = - 0.3Hz	df <sub>s</sub> = - 0.4Hz	df <sub>s</sub> = - 0.5Hz
	-0.1						
	-0.2						
	-0.3						
	-0.4						
	-0.5						
	-0.6						
	-0.7						
	-0.8						
	-0.1						
	-0.2						
	-0.3						
	-0.4						
	-0.5						
	-0.6						
	-0.7						
	-0.8						
	-0.1						
	-0.2						
	-0.3						
	-0.4						
	-0.5						
	-0.6						
	-0.7						
	-0.8						
	-0.1						
	-0.2						
	-0.3						
	-0.4						
	-0.5						
	-0.6						
	-0.7						
	-0.8						
	-0.1						
	-0.2						
	-0.3						
	-0.4						
	-0.5						
	-0.6						
	-0.7						
	-0.8						

Station:  
 BM Unit Nos:

Table 2	High Frequency Response (MW) – Mode D				
Genset De-Load (MW)	Frequency Deviation from Target Frequency				
	df <sub>h</sub> = +0.1 Hz	df <sub>h</sub> = +0.2 Hz	df <sub>h</sub> = +0.3 Hz	df <sub>h</sub> = +0.4 Hz	df <sub>h</sub> = +0.5 Hz

[In relation to the levels of Response capability pursuant to Section 3 of the **Tender Rules and Standard Contract Terms** and Table 2 above it is agreed that for low operating outputs, the **High Frequency Response** capability will be limited such that the general level will under normal operating conditions not be caused to drop below [ ] MW.]

[For the purpose of sub-paragraph 3.6.1(a) of the **Tender Rules and Standard Contract Terms** the level of **Response** capability for a **Frequency Deviation** of 0.0 Hz shall be 0.0 MW.]

## SECTION B

### FFR Power Delivery Data Tables

Station:  
BM Unit Nos:

<b>Primary Response Power Delivery - Mode D</b>						
Frequency Deviation (Hz)	Genset De-Load (MW)					
-0.1						
-0.2						
-0.3						
-0.4						
-0.5						

<b>Primary &amp; Secondary Response Power Delivery - Mode D</b>						
Frequency Deviation (Hz)	Genset De-Load (MW)					
-0.1						
-0.2						
-0.3						
-0.4						
-0.5						

<b>High Frequency Response Power Delivery - Mode D</b>						
Frequency Deviation (Hz)	Genset De-Load (MW)					
+0.1						
+0.2						
+0.3						
+0.4						
+0.5						

The figures for Genset De-Load in the tables shall be taken from the figures for Genset De-Load shown in Table 1 of this Section A.

**APPENDIX 5 - SUBSTITUTE FFR UNITS**

<b>FFR Unit</b>	<b>Suitable Substitute FFR Unit</b>