

## CSA CLAUSE 4: BLACK START CAPABILITY

### 4. **BLACK START CAPABILITY**

#### 4.1 **Introduction**

The **BS Service Provider** agrees to provide **The Company** with the **Part 2 System Ancillary Service of Black Start Capability**, and this Clause 4 and Schedule E set out provisions relating to such service including the payments to be made by **The Company** to the **BS Service Provider** in respect thereof.

#### 4.2 **Definitions**

In this Clause 4 and Schedule E the following terms shall have the meanings ascribed to them below:-

<b>“Acceptable Security”</b>	has the meaning attributed to it in Sub-Clause 4.6.4.4;
<b>“Additional Works Period”</b>	has the meaning given to it in Annexure B;
<b>“Annual Availability Shortfall Payments”</b>	means the payments calculated in accordance with Schedule E, Section 2, Part II to be made by the <b>BS Service Provider</b> to <b>The Company</b> in the circumstances set out in Annexure C to this Clause 4 and representing repayment of part of the <b>Works Contribution Payment</b> ;
<b>“Assessment Period”</b>	has the meaning attributed to it in Sub-Clause 4.15.1;
<b>“Assurance Visit”</b>	has the meaning attributed to it in Sub-Clause 4.19.2;
<b>“Auxiliaries”</b>	means any item of <b>Plant</b> and/or <b>Apparatus</b> not directly a part of [the boiler plant or] <b>[Generating Unit] [DC Converter] [HVDC Converter Station] [Power Park Module]</b> , but required for the [boiler plant's] [or <b>Generating Unit's] [DC Converter's] [HVDC Converter Station's] [Power Park Module's]</b> functional operation;
<b>“Auxiliary Contracted MW”</b>	means the respective level of MW available for <b>Black Start</b> from each <b>BS Auxiliary Unit</b> specified in Schedule E, Section 1, Part II;
<b>[“Balancing and Ancillary Services Agreement”</b>	means, in relation to a <b>HVDC System</b> , an agreement with that title relating to the provision of services to <b>The Company</b> over that <b>HVDC System</b> ;

<b>“Black Start”</b>	means the procedure necessary for a recovery from a <b>Total Shutdown</b> or <b>Partial Shutdown</b> ;
<b>“Black Start Capability”</b>	means an ability in respect of <b>Black Start Plant</b> to <b>Start-Up</b> from <b>Shutdown</b> and to energise a part of the <b>System</b> upon instruction from the <b>Company</b> , within two hours, without an external electrical energy supply and including the obligations of the <b>BS Service Provider</b> contained in Sub-Clause 4.8.4 in addition to and without prejudice to the <b>BS Service Provider’s</b> obligations under the <b>Grid Code</b> with regard to <b>Black Starts</b> ;
<b>“Black Start Contracted MW”</b>	means that amount of <b>Active Power</b> specified in Schedule E, Section 1, Part I (or such other amount agreed from time to time between the <b>BS Service Provider</b> and the <b>Grid Operator</b> pursuant to Sub-Clauses 4.8.6 to 4.8.10 inclusive) which shall not, where applicable, include <b>Active Power</b> supplied by the <b>BS Auxiliary Units</b> to the <b>Black Start Plant</b> for the purposes of a <b>Black Start Situation</b> ;
<b>“Black Start Instruction”</b>	has the meaning attributed to it in Sub-Clause 4.10.1;
<b>“Black Start Plant”</b>	means a <b>Power-Generating Facility</b> or a <b>HVDC System</b> , which includes the relevant site and specific technical requirements for the <b>Power-Generating Facility</b> , or the <b>HVDC System</b> to provide the <b>Black Start Service</b> ;
<b>“Black Start Service”</b>	means the obligations of the <b>BS Service Provider</b> more particularly referred to in Sub-Clause 4.8 (which, where applicable, shall be in addition to and without prejudice to the <b>BS Service Provider’s</b> obligations under the <b>Grid Code</b> with regard to <b>Black Start Capability</b> ), to include in addition the procedure for running down and testing of <b>Plant</b> in <b>Reproving Assessments</b> ;
<b>“Black Start Situation”</b>	means the period of time beginning when <b>The Company</b> issues a declaration to the <b>BS Service Provider</b> in accordance with <b>Grid Code OC 9.4.6</b> that a <b>Partial Shutdown</b> or a <b>Total Shutdown</b> exists and ending when <b>The Company</b> issues a declaration to the <b>BS Service Provider</b> in accordance with <b>Grid Code OC 9.4.7.9</b> ;
<b>“Black Start Station”</b>	has the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Black Start Test”</b>	means a test carried out by a <b>BS Service Provider</b> on the instructions of the <b>Company</b> , in

	order to demonstrate the <b>Black Start Capability</b> of its <b>Black Start Plant</b> ;
<b>“Black Start Test and Parameters Procedures”</b>	means, in respect of any <b>Black Start Test</b> , the parameters agreed between the <b>Parties</b> pursuant to Sub-Clause 4.20.2 as the same may be amended;
<b>“Black Start Test Period”</b>	means, in relation to any <b>Black Start Test</b> , the period from and including the start time to and including the end time each as comprised within the <b>Black Start Test Parameters and Procedures</b> ;
<b>“Black Start Test Settlement Period”</b>	means a <b>Settlement Period</b> comprised in a <b>Black Start Test Period</b> ;
<b>“BS Auxiliary Units”</b>	means a power source with the ability to start without external supplies and provide sufficient output to enable the delivery of the <b>Black Start Service</b> at the <b>Black Start Plant</b> identified in Schedule E, Section 1, Part II;
<b>“BS Gensets”</b>	means the <b>Generating Units</b> specified in Schedule E, Section 1, Part I;
<b>“BS HVDC System”</b>	means a <b>HVDC System</b> that is the subject of a contractual obligation to maintain <b>Black Start Capability</b> ;
<b>“BS Service Provider”</b>	means the <b>Generator</b> or the <b>HVDC Owner</b> , as the case may be;
<b>“Capability Assessment”</b>	has the meaning attributed to it in Sub-Clause 4.20.1.2;
<b>“Capacity Agreement”</b>	has the meaning given to that term in the Electricity Capacity Regulations 2014;
<b>“Commissioning Assessment”</b>	has the meaning attributed to it in paragraph 1 of Part I of Annexure A to this Clause 4;
<b>“Competent Authority”</b>	has the meaning attributed to it in the <b>CUSC</b> ;
<b>“Connection Event”</b>	has the meaning attributed to it in Sub-Clause 4.8.4.3;
<b>“Consents”</b>	means all and any consent, licence, approval, permission, wayleave or other right of whatever nature whether governmental or regulatory in character or otherwise necessary for the provision of by the <b>BS Service Provider</b> of the <b>Black Start Service</b> , including where relevant the construction and installation of the <b>BS Auxiliary Units</b> ;

<b>“Dead Line Charge Test”</b>	means the test more particularly described in Part 2 of Annexure D to this Clause 4;
<b>“Effective Date”</b>	[REDACTED]
<b>“Escrow Account”</b>	has the meaning attributed to it in Sub-Clause 4.6.4.4;
<b>“Event of Default”</b>	has the meaning attributed to it in Sub-Clause 4.13;
<b>“Expiry Date”</b>	means 24:00 hours on the date immediately preceding the [REDACTED] anniversary of the <b>Service Commencement Date</b> ;
<b>“External Costs”</b>	costs incurred by the <b>BS Service Provider</b> to third party contractors arising directly from the <b>Works</b> and falling within the categories of cost described as external costs in Part VI of Annexure A;
<b>“Final Consent Date”</b>	has the meaning attributed to it in Sub-Clause 4.3.1;
<b>“GB Converter Station”</b>	in relation to an <b>HVDC System</b> , the <b>HVDC Converter Station</b> located in GB;
<b>“HVDC Converter Station”</b>	has the meaning given to it in the <b>Grid Code</b> ;
<b>“HVDC System”</b>	has the meaning given to it in the <b>Grid Code</b> ;
<b>“Internal Costs”</b>	costs incurred by the <b>BS Service Provider</b> internally arising directly from the <b>Works</b> and falling within the categories of cost described as internal costs in Part VI of Annexure A;
<b>“Legal Requirement”</b>	means any order of a <b>Competent Authority</b> , Act of Parliament, Directive, regulations or licence, consent or similar provision issued by a <b>Competent Authority</b> ;
<b>“Local Joint Restoration Plan”</b>	means a plan specific to each <b>Black Start Station</b> or <b>BS HVDC System</b> to enable a rapid restoration of the <b>National Electricity Transmission System</b> in the event of a <b>Black Start Situation</b> and which is more particularly described in Sub-Clause 4.8.4;
<b>“Minimum Non Zero Time”<sup>1</sup></b>	has the meaning attributed to the term in Appendix 1 of <b>Grid Code BC1</b> ;
<b>“Monthly Availability Payment”</b>	means an amount determined in accordance with Sub-Clause 4.6.1.2;

<sup>1</sup> NB This definition will need to be reconsidered in the context of updating the testing provisions in clause 4.20 for a HVDC System

<b>“Non-Performing Party”</b>	has the meaning attributed to it in Clause 4.24;
<b>“Partial Shutdown”</b>	means the same as a <b>Total Shutdown</b> except that all generation has ceased in a separate part of the <b>Total System</b> and there is no electricity supply from <b>External Interconnections</b> or other parts of the <b>Total System</b> to that part of the <b>Total System</b> and, therefore, that part of the <b>Total System</b> is shutdown, with the result that it is not possible for that part of the <b>Total System</b> to begin to function again without <b>The Company’s</b> direction relating to a <b>Black Start Situation</b> ;
<b>“Power-Generating Facility”</b>	means a facility that converts primary energy into electrical energy and which consists of one or more <b>Power-Generating Modules</b> connected to a network at one or more connection points;
<b>“Power-Generating Module”</b>	means either a synchronous power-generating module or a <b>Power Park Module</b> ;
<b>“Power Island”</b>	means the independent operation of a whole network or part of a network that is isolated after being disconnected from the interconnected system, having at least one power-generating module or <b>HVDC System</b> supplying power to this network and controlling the frequency and voltage;
<b>“Power Park Module”</b>	has the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Provisional Service Commencement Date”</b>	has the meaning attributed to it in paragraph 4.1 of Part I of Annexure A to this Clause 4;
<b>“Rated Bank”</b>	has the meaning attributed to it in Sub-Clause 4.6.4.4;
<b>“Re-assessment Availability Date”</b>	has the meaning attributed to it in paragraph 4.1 of Part I of Annexure A to this Clause 4;
<b>“Relevant Third Parties”</b>	has the meaning attributed to it in Sub-Clause 4.12.1;
<b>“Remote Synchronisation”</b>	means synchronisation of a power-generating module or <b>HVDC System</b> by closure of a circuit breaker which is not under the direct control of the <b>BS Service Provider</b> ;
<b>“Remote Synchronisation Test” or “RST”</b>	means the test more particularly described in Part 1 of Annexure D to this Clause 4;
<b>“Repayment Amount”</b>	means payments calculated in accordance with Schedule E, Section 2, Part I to be made by the <b>BS Service Provider</b> to <b>The Company</b> in the circumstances set out in Annexure B to this

	Clause 4 and representing repayments in whole or in part of <b>Monthly Availability Payments</b> ;
<b>“Reproving Assessment”</b>	means a test which <b>The Company</b> may require the <b>BS Service Provider</b> to carry out to verify the restoration of <b>Black Start Capability</b> of the <b>Black Start Plant</b> as more particularly described in Sub-Clause 4.9.4.2(b);
<b>“Reserve Service”</b>	means <b>Short Term Operating Reserve</b> or any similar service procured by <b>The Company</b> being a service under which <b>The Company</b> has access to sources of extra power in the form of either generation or demand reduction to be able to deal with unforeseen demand increase and/or generation unavailability but not including any reserves provided under a <b>Capacity Agreement</b> ;
<b>“Reserve Service Contract”</b>	means each and every contract relating to the <b>Black Start Plant</b> only between <b>The Company</b> and the <b>BS Service Provider</b> for the provision by the <b>BS Service Provider</b> of a <b>Reserve Service</b> ;
<b>“Service Commencement Date”</b>	means either: -  (a) (where the <b>Black Start Plant</b> passes the first <b>Commissioning Assessment</b> ) 00.00 hours on the <b>Provisional Service Commencement Date</b> ; or  (b) (in all other cases) 00.00 hours on the first day of the calendar month immediately following the date on which the <b>Black Start Plant</b> has successfully completed a second or subsequent <b>Commissioning Assessment</b> in accordance with the provisions of Annexure A to this Clause 4;
<b>“Short Term Operating Reserve”</b>	the meaning attributed to it in the <b>Standard Contract Terms</b> ;
<b>“Shutdown”</b>	means, in relation to a <b>Generating Unit</b> , the condition of a <b>Generating Unit</b> where the generator rotor is at rest or (where applicable) on barring; or, in relation to a <b>HVDC System</b> , the DC circuit is open;
<b>“Standard Contract Terms”</b>	means the document entitled <b>“Short Term Operating Reserve Standard Contract Terms”</b> published by <b>The Company</b> and as revised from time to time in accordance with its terms;
<b>“Start-up”</b>	means: in relation to a <b>Generating Unit</b> , the action of bringing the <b>Generating Unit</b> from <b>Shutdown</b>

	to <b>Synchronous Speed</b> ; or, in the case of a <b>HVDC System</b> , the action of closing the DC circuit;
“ <b>Target Availability</b> ”	means, in relation to an <b>Assessment Period</b> , the target availability for <b>Black Start Capability</b> as specified in the table set out in Section 4 of Schedule E;
“ <b>Target Commencement Date</b> ”	means [ ] or such later date as the <b>BS Service Provider</b> and <b>The Company</b> may agree in writing;
“ <b>Technical Parameters</b> ”	means those technical parameters related to the <b>Black Start Service</b> set out in Schedule E, Section 1, Part III (as the same may be revised from time to time in accordance with Sub-Clauses 4.8.6 to 4.8.10 inclusive);
“ <b>Time to Connection Event</b> ”	means the period of time specified as such in Schedule E, Section 1, Part III (or such other period of time agreed from time to time between <b>The Company</b> and the <b>BS Service Provider</b> pursuant to Sub-Clauses 4.8.6 to 4.8.10 inclusive);
“ <b>Total Shutdown</b> ”	means the situation existing when all generation has ceased and there is no electricity supply from <b>External Interconnections</b> and, therefore, the <b>Total System</b> has shutdown with the result that it is not possible for the <b>Total System</b> to begin to function again without <b>The Company’s</b> directions relating to a <b>Black Start</b> ;
“ <b>Transmission Owner</b> ”	means National Grid Electricity Transmission plc (registered no. 02366977);
“ <b>Unit Board</b> ”	has the meaning attributed to it in the <b>Grid Code</b> ;
“ <b>Valid Invoice</b> ”	has the meaning attributed to it in Sub-Clause 4.6.3.3;
“ <b>Valid Invoice Deadline</b> ”	has the meaning attributed to it in Sub-Clause 4.6.3.3;
“ <b>Voltage Control Mode</b> ”	means the automatic voltage regulator selected to auto and being off is the automatic voltage regulator selected to manual;
“ <b>Works</b> ”	means those works relating to the <b>Black Start Plant</b> more particularly specified in Part III and Part IV of Annexure A to this Clause 4;
“ <b>Works Contribution</b> ”	means the reimbursement by <b>The Company</b> to the <b>BS Service Provider</b> of the costs incurred by the <b>BS Service Provider</b> arising directly from the

	<b>Works</b> , to be made by <b>The Company</b> , as more particularly described in Sub-Clause 4.6.1.1;
<b>“Works Contribution Payments”</b>	means the payments to be made under Sub-clause 4.6.3 for the purposes of the <b>Works Contribution</b> ;
<b>“Works Contribution Period”</b>	means each period of [ ] months during the period of the <b>Works Programme</b> ;
<b>“Works Contribution Refund Payment”</b>	means a payment calculated in accordance with Schedule E, Section 2, Part III to be made by the <b>BS Service Provider</b> to <b>The Company</b> in the circumstances referred to therein and representing repayment of all or part of the <b>Works Contribution Payments</b> ; and
<b>“Works Programme”</b>	means the programme for completion of the <b>Works</b> more particularly specified in Part IV of Annexure A to this Clause 4.

#### 4.3 **Conditions Precedent**

- 4.3.1 Save for the obligation of **The Company** to pay to the **BS Service Provider** the **Works Contribution Payment** pursuant to Sub-Clause 4.6.3 and the obligations of the **Parties** in this Sub-Clause 4.3.1 and Sub-Clauses 4.6.4 and 4.17.2, the respective obligations of the **Parties** under this Clause 4 are, subject to Sub-Clause 4.3.2, conditional upon the satisfaction of each of the following conditions precedent not later than [XXXXXX] or such later date as may be agreed in writing between the **Parties** (the “**Final Consent Date**”):
- 4.3.1.1 all **Consents** or amendments to **Consents** which have a material bearing on the ability of the **BS Service Provider** to perform its obligations under this Clause 4 including without limitation pursuant to Section 36 of the **Act** having been granted for a period of not less than the period of this Clause 4 either unconditionally or, if subject to conditions and the **BS Service Provider** having determined in its sole discretion to satisfy or fulfil such conditions, such conditions having been satisfied, fulfilled or accepted by the **BS Service Provider**;
- 4.3.1.2 the variation to the **Bilateral Agreement**<sup>2</sup> for the **Black Start Plant** the subject of this **Agreement** having been executed by the **BS Service Provider** and **The Company** and all provisions therein having a material bearing on the ability or liability of the **BS Service Provider** to perform its obligations under this Clause 4 being binding and unconditional in all respects;
- 4.3.1.3 the agreement for construction of the **Works** referred to in Annexure A to this Clause 4 having been entered into and having become unconditional in all respects and the **BS Service Provider** having obtained such other approvals (including

<sup>2</sup> NB The Connection Agreement may need amending



board, shareholder, lender and counter-parties to contracts approvals) as it may consider appropriate;

- 4.3.1.4 in the case of a **BS Service Provider** providing the **Black Start Service** through an **HVDC System**, the variation to the **Balancing and Ancillary Services Agreement** for that **HVDC System** having been executed by the **BS Service Provider**, the **Externally Interconnected System Operator** and **The Company** and all provisions therein having a material bearing on the ability or liability of the **BS Service Provider** to perform its obligations under this Clause 4 being binding and unconditional in all respects;
- 4.3.1.5 where applicable, any sub-contract for the supply of electrical energy required by the **BS Provider** for the purposes of providing the **Black Start Capability** has been executed by the parties thereto and (save as to the coming into effect of this Clause 4) is unconditional and in full force and effect; and
- 4.3.1.6 receipt by **The Company** of **Acceptable Security** (defined in Sub-Clause 4.6.4.4) in accordance with Sub-Clause 4.6.4.2 to secure possible repayment of the **Works Contribution Payment** in accordance with the provisions of Sub-Clause 4.6.4.
- 4.3.2 The **BS Service Provider** shall be entitled at its option to waive one or both of the conditions precedent specified in Sub-Clauses 4.3.1.1 and 4.3.1.3 by notice in writing to **The Company** and **The Company** shall be entitled at its option to waive any other condition precedent by notice in writing to the **BS Service Provider**.
- 4.3.3 When each of the conditions precedent (other than that specified in Sub-Clause 4.3.1.6) have been satisfied or (where permitted) waived, the **BS Service Provider** shall forthwith give written notice to that effect to **The Company**, and **The Company** shall similarly notify the **BS Service Provider** in respect of the condition precedent specified in Sub-Clause 4.3.1.6. Such notices shall be conclusive and binding on the **Parties** as to the satisfaction or waiver thereof. [Without prejudice to the foregoing, the **BS Service Provider** shall notify **The Company** forthwith upon the granting of a consent under Section 36 of the **Act** in respect of the **BS Auxiliary Unit** and, for the purposes of Sub-Clause 4.3.1.1, such notification shall be accompanied by a copy of such consent.]<sup>3</sup>
- 4.3.4 Subject to the provisions of Sub-Clause 4.3.2 the **BS Service Provider** undertakes to use its reasonable endeavours to fulfil the conditions precedent specified in Sub-Clause 4.3.1 as soon as reasonably practicable but in any event not later than the **Final Consent Date**.
- 4.3.5 If any of the conditions precedent specified in Sub-Clause 4.3.1 has not either been satisfied (or where permitted waived) by the **Final Consent Date**, then the provisions of this Clause 4 shall thereupon cease to have any effect and

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<sup>3</sup> Delete where not relevant

the **Parties** shall have no rights against each other with respect to any breach of any of the provisions of this Sub-Clause 4.3.

#### 4.4 **Works**

Both **Parties** shall comply with their respective obligations set out in Annexure A to this Clause 4 in relation to the commissioning of the **Works**.

#### 4.5 **Term**

4.5.1 Subject to the provisions of Sub-Clause 4.3, the obligations of the **BS Service Provider** hereunder to provide the **Black Start Service** shall apply at all times from the **Service Commencement Date** until the **Expiry Date** subject to and in accordance with the provisions of this Clause 4 and, save where expressly provided otherwise in this Clause 4 and the Schedules, “term of Clause 4” shall be construed accordingly.

4.5.2 If the provisions of this Clause 4 shall not by then have terminated, not later than 12 months prior to the **Expiry Date** the **Parties** shall meet to discuss whether the provisions of this Clause 4 should be extended for a period beyond the **Expiry Date** and if so the duration of such extension and the terms (including prices) upon which the **Black Start Service** shall continue to be provided by the **BS Service Provider**. In the absence of any agreement between the **Parties** the provisions of this Clause 4 shall cease to apply in respect of periods after the **Expiry Date**.

4.5.3 Without prejudice to the other rights of termination in this **Agreement** after the **Service Commencement Date**, **The Company** shall be entitled to terminate the provisions of this Clause 4 prior to the **Service Commencement Date** in the manner specified in paragraphs [9, 10, 11, 12 and 15]<sup>4</sup> of Part I of Annexure A to this Clause 4 whereupon, if all or part of the **Works Contribution** has been paid by **The Company** to the **BS Service Provider** in accordance with the provisions of Sub-Clause 4.6.3 (but not otherwise), the **BS Service Provider** shall pay to **The Company** in accordance with Clause [8][4 of the MASA] a **Works Contribution Refund Payment** calculated in accordance with the formula in Schedule E, Section 2, Part III. For the avoidance of doubt, the **Works Contribution Refund Payment** in those circumstances shall constitute repayment of the **Works Contribution** (together with interest thereon at the **Base Rate**) referred to at Sub-Clause 4.6.1.

#### 4.6 **Payments**

##### ***Payments for Availability of Black Start Service***

4.6.1 **The Company** shall make the following availability payments to the **BS Service Provider** in accordance with the terms of this Clause 4 :-

4.6.1.1 sums by way of reimbursement of certain of the **BS Service Provider's Internal Costs** and **External Costs** up to the maximum aggregate amount of £[REDACTED]

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<sup>4</sup> These cross-references may need updating for a HVDC System, depending on the changes required to Annexure A.

] (the “**Works Contribution**”), payable subject to and in accordance with Sub-Clauses 4.6.3 and 4.6.4; and

4.6.1.2 with effect from the **Provisional Service Commencement Date**, and in accordance with Sub-Clause 4.6.5, a **Monthly Availability Payment** (the “**Monthly Availability Payment**”) calculated in accordance with Schedule E, Section 2, Part I in respect of all **Settlement Periods** in each calendar month in which:

- (a) paragraph 4.1 of Part I of Annexure A to this Clause 4 shall apply; and/or
- (b) the **Black Start Plant** shall have the **Black Start Capability**.

4.6.2 For the avoidance of doubt, in accordance with the provisions of this Clause 4 the **Works Contribution** may become repayable by the **BS Service Provider** to **The Company** (in whole or in part) by way of **Annual Availability Shortfall Payments** and/or a **Works Contribution Refund Payment** and/or a **Valid Invoice Failure Payment** (but not otherwise), and the **Monthly Availability Payments** may become repayable by the **BS Service Provider** to **The Company** (in whole or in part) by way of **Repayment Amounts** (but not otherwise).

#### 4.6.3 **Works Contribution Payments**

4.6.3.1 **The Company** shall, by reference to each **Works Contribution Period**, pay to the **BS Service Provider** a **Works Contribution Payment** in respect of the **Internal Costs** and **External Costs** incurred by the **BS Service Provider** in that **Works Contribution Period** subject to:

- (a) provision by the **BS Service Provider** to **The Company** of **Acceptable Security** in accordance with Sub-Clause 4.6.4.4; and
- (b) receipt by **The Company** from the **BS Service Provider** of **Valid Invoices**.

4.6.3.2 Not used

4.6.3.3 Not used

4.6.3.4 For the purpose of Sub-Clause 4.6.3.1, a “**Valid Invoice**” shall mean an invoice issued by the **BS Service Provider**:-

- (a) that itemises **Internal Costs** and **External Costs** separately;
- (b) to the extent relating to **External Costs**, that does not exceed, when aggregated with all other **External Costs** so invoiced, the sum of £ [ ] (exclusive of VAT) and is supported by copy invoices from the relevant third party contractors and such other evidence as **The Company** may reasonably require, save to the extent that the **BS Service Provider** is unable, having used reasonable endeavours, to obtain such evidence from its third party contractors; and/or
- (c) to the extent relating to **Internal Costs**, that does not exceed, when aggregated with all other **Internal Costs** so invoiced, the sum of £ [ ] (exclusive of VAT) and includes a description which is reasonably satisfactory to **The Company** of that part of the **Works** to which such

invoice relates and is supported by such other evidence as **The Company** may reasonably require,

provided always that, in each case, the invoiced sums shall be limited to reasonable costs which have been reasonably incurred and which the **BS Service Provider** shall have used its reasonable endeavours to mitigate.

4.6.3.5 Not used

4.6.3.6 Following receipt of any invoice in respect of the **Works** submitted by the **BS Service Provider** in accordance with Sub-Clause 4.6.3.1, **The Company** shall, as soon as reasonably practicable thereafter, notify the **BS Service Provider** and provide a reason where **The Company** determines (acting reasonably) that such invoice is not a **Valid Invoice** and the **BS Service Provider** shall submit a replacement invoice which is a **Valid Invoice** as soon as reasonably practicable thereafter.

4.6.3.7 Each **Valid Invoice** shall be paid by **The Company** within 42 days after receipt.

4.6.3.8 Not used

#### **Security**

4.6.4 The following provisions shall apply with respect to security against possible repayments of the **Works Contribution**:

4.6.4.1 The **BS Service Provider** shall, as a condition of the payment by **The Company** of each **Works Contribution Payment** pursuant to Sub-Clause 4.6.1.1 and until payment of any **Works Contribution Refund Payment** or any **Annual Availability Shortfall Payment** applicable to the **Assessment Period** ending on the **Expiry Date** (or completion of the calculation indicating that no such **Annual Availability Shortfall Payment** is applicable) provide security against possible repayment of the **Works Contribution** under this **Agreement** as provided below.

4.6.4.2 Until the **Service Commencement Date**, the security provided must be **Acceptable Security** for not less than the secured amount being the amount from time to time of the **Works Contribution Refund Payment** which would be payable upon termination as calculated in accordance with Schedule E, Section 2, Part III including any value added tax payable on such amount. Where such **Acceptable Security** is a bond or letter of credit this shall be issued for a period of not less than six months. If for any reason the bond or letter of credit has an **Expiry Date** occurring prior to the **Service Commencement Date**, the **BS Service Provider** shall provide a replacement bond or letter of credit with an appropriately extended **Expiry Date** or other equivalent **Acceptable Security** not later than 45 days before the expiry of the bond, letter of credit or other equivalent **Acceptable Security** and, if the **BS Service Provider** fails to so provide a replacement bond or letter of credit, **The Company** shall be entitled to call the bond, letter of credit or other equivalent **Acceptable Security**.

4.6.4.3 From and including the **Service Commencement Date** the security described in Sub-Clause 4.6.4.2 above shall be replaced (so that there is no gap in coverage) by security consisting of **Acceptable Security** for not less than the secured amount referred to in Sub-Clause 4.6.4.5 below. Where such **Acceptable Security** is a bond or letter of credit this shall (except in the case of the final period) be issued for a period of not less than six months and thereafter replaced by the **BS Service**

**Provider** at least 45 days prior to the expiry of the previous bond, letter of credit or other equivalent **Acceptable Security**. If the **BS Service Provider** fails to so provide a replacement bond, letter of credit or other equivalent **Acceptable Security**, **The Company** shall be entitled to call the bond, letter of credit or other equivalent **Acceptable Security**.

4.6.4.4 In this Sub-Clause 4.6.4:

“**Acceptable Security**” shall mean: -

- (a) a first demand without proof or conditions irrevocable performance bond in a form reasonably satisfactory to **The Company** issued by a **Rated Bank** payable in Sterling in London; or
- (b) an irrevocable standby letter of credit in a form reasonably satisfactory to **The Company** issued by a **Rated Bank** payable in Sterling in London; or
- (c) a cash deposit in Sterling in an **Escrow Account**;
- (d) a parent company guarantee in terms and from an issuer satisfactory to **The Company**; or
- (e) such other form of security acceptable to **The Company** which shall be in such form as is included in **The Company's** then current policy and procedure.

“**Rated Bank**” shall mean a City of London branch of a bank with a rating of at least A- (Standard and Poor's long term rating) or A3 (Moody's long term rating).

“**Escrow Account**” shall mean a separately designated bank account in the name of **The Company** established by a mandate signed by both **The Company** and the **BS Service Provider** at a branch of Barclays Bank PLC or another bank in the City of London as notified by **The Company** to the **BS Service Provider**, bearing from (and including) the date of deposit of principal sums to (but excluding) the date of withdrawal of principal sums from such account a reasonable commercial rate of interest which shall be payable to the **BS Service Provider** but mandated for withdrawal of principal only by way of a call by **The Company** as referred to in Sub-Clause 4.6.4.6 below or by way of payment to the **BS Service Provider** to the extent of any reduction in the amount so secured and mandated for the transfer of any interest accrued to the **Escrow Account** quarterly to such bank account as the **BS Service Provider** may specify. **The Company** agrees to take any steps required to be taken by it for the release from the **Escrow Account** and payment to the **BS Service Provider** of such interest and any amount of principal in excess of the amount required to be secured at the relevant time.

4.6.4.5 The secured amount as referred to in Sub-Clause 4.6.4.3 above shall be for the maximum amount payable in respect of the **Works Contribution Refund Payment** as provided in Schedule E, Section 2, Part III at the relevant date including any value added tax payable on such amount.

4.6.4.6 **The Company** shall be entitled to call upon the security if: -

- (a) a **Works Contribution Refund Payment** or an **Annual Availability Shortfall Payment** has become payable under this **Agreement** and has

not been paid by the **BS Service Provider** in accordance with **Clause [8][4 of the MASA]**; or

- (b) other equivalent **Acceptable Security** of the required amount has not been put in place within the time periods provided for in this Sub-Clause 4.6.4. Where the security has been called for this reason, **The Company** shall repay the amount so called when the **BS Service Provider** puts in place the appropriate replacement security in accordance with this Sub-Clause 4.6.4.

4.6.4.7 If any bank or banks being the issuer of a bond or letter of credit shall suffer at any time a change of rating so as to fall below that required above the **BS Service Provider** shall forthwith on the **BS Service Provider** becoming aware of such occurrence notify **The Company** and within 14 days of the **BS Service Provider** becoming aware of such change of rating provide to **The Company** a replacement bond or letter of credit from a **Rated Bank** on the same terms as to amount and **Expiry Date** as the security being replaced or equivalent **Acceptable Security**. For the avoidance of doubt any such change of rating shall not during such 14 days constitute a breach under this **Agreement**, provided that the replacement security shall be provided, and from the date of its provision the security which it replaces shall be released by **The Company**.

4.6.4.8 The **BS Service Provider** shall on reasonable notice to **The Company** be entitled to request the substitution of any form of security then in place with any other **Acceptable Security** and on such replacement security being put in place **The Company** shall release the security first provided. The **BS Service Provider** may provide different security instruments to **The Company** at any time, each securing a different amount, provided that the number of security instruments does not exceed six at any time and that the aggregate sum secured is equal to the amount required to be secured under this Sub-Clause 4.6.4.

#### ***Monthly Availability Payments and Repayment Amounts***

4.6.5 In respect of each calendar month in the period commencing on the **Provisional Service Commencement Date** and ending on the **Expiry Date**, **The Company** shall calculate in accordance with the formulae set out in Schedule E, Section 2, Part I and by reference to the **Black Start Availability Price** (after indexation pursuant to Sub-Clause 4.6.6):-

4.6.5.1 the **Monthly Availability Payment**; and

4.6.5.2 any **Repayment Amount**,

and in connection therewith: -

- (a) where the **Monthly Availability Payment** exceeds the **Repayment Amount**, **The Company** shall pay the difference to the **BS Service Provider** in accordance with **Clause [8][4 of the MASA]**; or
- (b) where the **Repayment Amount** exceeds the **Monthly Availability Payment**, the **BS Service Provider** shall pay the difference to **The Company** in accordance with **Clause [8][4 of the MASA]**.

### ***Indexation***

- 4.6.6 The **Black Start Availability Price** shall be subject to indexation during the term of this Clause 4 in accordance with the provisions of Schedule E, Section 3, Part II. For the avoidance of doubt the **Works Contribution Payment** shall not be subject to indexation.

### ***Reserve Services***

- 4.6.7 The **Parties** acknowledge that they do not intend that the **BS Service Provider** should benefit from over recovery of its costs where a **BS Auxiliary Unit** at the **Power Station** is also contracted to provide a **Reserve Service** under a **Reserve Service Contract**. Accordingly, it is hereby agreed that the **BS Service Provider** will not offer terms to **The Company** for provision of a **Reserve Service** from the **BS Auxiliary Units** during all or part of the period ending on the **Expiry Date** without first seeking to agree in writing with **The Company** an appropriate reduction in the **Black Start Availability Price** for the duration of any resulting **Reserve Service Contract**. If no such agreement can be concluded, then **The Company** reserves the right to decline to enter into any new **Reserve Service Contract** with the **BS Service Provider**.

4.7 **Not used**

4.8 **Black Start Service**

### ***Service Description***

- 4.8.1 Subject to the provisions of this Clause 4, with effect from the **Service Commencement Date** and thereafter in all **Settlement Periods** until the **Expiry Date**, and in consideration of **The Company's** payments to the **BS Service Provider** in accordance with Sub-Clause 4.6, the **BS Service Provider** hereby agrees at all times (save where the **BS Service Provider** notifies **The Company** pursuant to Sub-Clause 4.9.1 that the **Black Start Plant** does not have the **Black Start Capability**) to maintain the **Black Start Plant** in a condition such that it is able to:-
  - 4.8.1.1 provide the **Black Start Capability** as described in Sub-Clauses 4.8.4 to 4.8.5 inclusive; and
  - 4.8.1.2 comply with valid instructions for initiation and implementation of the **Local Joint Restoration Plan**, so that, in the event of a **Total Shutdown** or a **Partial Shutdown** of the **National Electricity Transmission System**

[at least one of the **BS Gensets** at the **Power Station** is able to **Start-Up** from **Shutdown** and to energise a part of the **National Electricity Transmission System** and thereafter the local **User System** (in



accordance with the **Local Joint Restoration Plan**) and/or be **Synchronised** to the **National Electricity Transmission System** and the local **User System** (in accordance with the **Local Joint Restoration Plan**),]

[the **BS HVDC System** is able to **Start-Up** from **Shutdown** and to energise part of the **National Electricity Transmission System** and thereafter the local **User System** (in accordance with the **Local Joint Restoration Plan**) and/or be **Synchronised** to the **National Electricity Transmission System** and the local **User System** (in accordance with the **Local Joint Restoration Plan**),]<sup>5</sup>

upon instruction from **The Company**, in accordance with the **Time to Connection Event** as set out in Schedule E, Section 1, Part III, without an external electrical supply.

4.8.1.3 The **BS Service Provider** hereby further agrees with effect from the **Service Commencement Date** and thereafter until the **Expiry Date** to provide and maintain at the **Black Start Plant** (and, where necessary, replenish) all necessary consumables [(which shall include supplies of raw water, demineralised water] [and infrastructure for the supply of natural gas] to the **BS Auxiliary Units**), [maintain arrangements for supplies of natural gas to the **BS Auxiliary Units** at the appropriate time and the required pressure] and maintain communication channels for the **Black Start Plant** and other related supplies so that:

- (a) in a **Black Start Situation**, and by block and/or ramp loading in each case in accordance with Sub-Clauses 4.8.4 to 4.8.5 inclusive, **Active Power** from the **Black Start Plant** of at least the **Black Start Contracted MW** is capable of being provided and sustained for not less than the period specified in the **BS Service Provider's** tender submission for the **Black Start Service**; and
- (b) during a **Black Start Situation**:
  - (i) in the case of a **Black Start Station**, the **Power Station** is capable of providing sufficient **Active Power** to achieve a controlled **Shutdown** of the **BS Gensets** and perform a **Start-Up** of a [BS Genset/CCGT Unit within the relevant CCGT Module] at least three times; or
  - (ii) in the case of a **BS HVDC System**, the **HVDC System** is capable of importing to the **National Electricity Transmission System** sufficient **Active Power** to achieve re-energisation following a trip at least three times.

4.8.2 [It is acknowledged and agreed by the **BS Service Provider** that the **Power Station** shall be registered as a **Black Start Station** under the relevant **Bilateral Agreement** as provided in the variation referred to in Sub-Clause 4.3.1.2 for the purposes of the **Grid Code OC9.4.5.1** and that accordingly the **BS Service Provider's** obligations contained in this Clause 4

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<sup>5</sup> Delete the option that does not apply



shall be additional and without prejudice to those (if any) set out in the **Grid Code**.]

- 4.8.3 If, during a period which is the subject of a prior notification from the **BS Service Provider** to **The Company** pursuant to Sub-Clause 4.9.1 that the **Black Start Plant** does not have the **Black Start Capability**, **The Company** issues a declaration in accordance with **Grid Code OC 9.4.6** that a **Partial Shutdown** or a **Total Shutdown** exists, the **BS Service Provider** shall if required by **The Company** indicate whether and to what extent it is able to respond to **Black Start Instructions** and, if so, the basis upon which it will accept such instructions. Subject to the **Parties** reaching agreement thereto the **BS Service Provider** shall use its reasonable endeavours to meet any such request by **The Company** to perform the **Black Start Service**.

#### ***Black Start Capability***

- 4.8.4 Without prejudice to the **Grid Code**, the **Black Start Capability** shall comprise the capability in a **Black Start Situation** of the **Black Start Plant** to operate in accordance with the contracted characteristics and outputs specified in Schedule E, Section 1, Part III and, where required, (subject to Sub-Clause 4.9) to perform and re-perform the following actions upon receipt of a relevant instruction from **The Company**:-
- 4.8.4.1 in the case of a **Black Start Station**, and if applicable, maintaining suitable mains independent turbine barring and jacking facilities for all **BS Gensets** (independent of the **BS Auxiliary Units**) which will last for a minimum of 20 minutes after the loss of external alternating current supplies;
  - 4.8.4.2 immediately commence the procedure to enable **Start-Up** of the **Black Start Plant** from **Shutdown** with or without an external electrical supply (in the case of a **HVDC System**, to the **GB Converter Station**); and
  - 4.8.4.3 within the **Time to Connection Event**, energise part of the **National Electricity Transmission System** (which would then energise the local **Distribution System**) and/or local **Distribution System** from the **Connection Point** or be **Synchronised** to the **National Electricity Transmission System** or the local **Distribution System** or a part thereof (the "**Connection Event**") in accordance with the **Local Joint Restoration Plan**; and
  - 4.8.4.4 be capable of accepting individual loads which will be connected in the form of demand blocks in each case of up to the relevant figure specified in Schedule E, Section 1 and in the **Local Joint Restoration Plan**; and
  - 4.8.4.5 when a block load is connected to the **Black Start Plant** in accordance with Sub-Clause 4.8.4.4 above respond so that the **Frequency** of the **Power Island** should not fall below the minimum or above the maximum **Frequency** specified in Schedule E, Section 1, Part III and that the **Frequency** of the **Power Island** is restored to within statutory limits (above 49.5 Hz and, to the extent possible, below 50.5 Hz) within 10 seconds maintaining stable operation thereafter pending connection of the next block load; and
  - 4.8.4.6 be capable of operating within the loading restrictions set out in Schedule E, Section 1 and of accepting loading instructions issued by the **Grid Operator** and/or the

**Public Distribution System Operator** in accordance with the loading procedures specified in the **Local Joint Restoration Plan**; and

- 4.8.4.7 achieve a power output equal to the **Black Start Contracted MW** (or such lesser power output as may be instructed by **The Company**) within the loading period specified in Schedule E, Section 1 assuming loading is achieved by the connection of demand blocks in accordance with Sub-Clauses 4.8.4.4, 4.8.4.5 and 4.8.4.6 above; and
- 4.8.4.8 in order to achieve the power output within the loading period as specified in Sub-Clause 4.8.4.7 above, achieve the interim power output levels specified in Schedule E, Section 1 (or such other interim power output levels as agreed between the **BS Service Provider** and the **Grid Operator** from time to time) in the timescales therein specified, and further be capable of sustaining a power output equal to the **Black Start Contracted MW** (or such lower level of MW output as may be instructed by **The Company**) in accordance with Sub-Clause 4.8.1.3 until otherwise instructed by **The Company**; and
- 4.8.4.9 [without prejudice to the **BS Service Provider's** obligation to provide **Reactive Power** in accordance with **Grid Code CC6.3.2,**] provide **Reactive Power** [at no-load at the generator stator terminals (at rated terminal voltage)] [at the **GB Converter Station**] of at least the range specified in Schedule E, Section 1 (or such other range agreed between the **BS Service Provider** and the **Grid Operator** from time to time); and
- 4.8.4.10 operate in a **Frequency Sensitive Mode** in accordance with instructions issued by **The Company** pursuant to the **Grid Code** or as specified in the **Local Joint Restoration Plan**; and
- 4.8.4.11 operate in a **Voltage Control Mode** in accordance with instructions issued by **The Company** pursuant to the **Grid Code** or as specified in the **Local Joint Restoration Plan**; and
- 4.8.4.12 recommence all or part of the **Local Joint Restoration Plan** to the extent that any **BS Genset** or **HVDC System** is disconnected from the **National Electricity Transmission System** or **Demand** is disconnected from that **BS Genset** or **HVDC System** during a **Black Start Situation**; and
- 4.8.4.13 to co-operate with **The Company** to facilitate the provision of local 400kV, 275kV and 132kV sub-station indications to enable proper co-ordination of actions defined in the **Local Joint Restoration Plan** and to enable **Remote Synchronisation** to be co-ordinated from the **BS Service Provider's** control room; and
- 4.8.4.14 maintain provision of the **Black Start Service** in accordance with the provisions of this Sub-Clause 4.8.4 and Sub-Clause 4.8.1.3 (without reliance on **Auxiliaries** that could be adversely affected by deviations in the **Frequency** of the **System** or by other conditions affecting the **National Electricity Transmission System**) until notification from **The Company** to the **BS Service Provider** in accordance with **Grid Code OC 9.4.7.9** that the **Black Start Situation** no longer exists.

The precise operational and procedural requirements of and responses from the **Black Start Plant** will be more comprehensively set out in the **Local Joint Restoration Plan** provided always that the **Local Joint Restoration Plan** shall place no greater obligations upon the **BS Service Provider** than those contained within this Clause 4 . In relation thereto, in the event of any inconsistency between

the provisions of the **Local Joint Restoration Plan** and this Clause 4 the provisions of the **Local Joint Restoration Plan** shall prevail in so far as the inconsistency relates to procedural matters, otherwise the provisions of this Clause 4 shall prevail.

Subject to Sub-Clause 4.11 the **BS Service Provider** acknowledges that in a **Black Start Situation**, **The Company** may issue an instruction for operation of the **Black Start Plant** outside of the technical limitations comprising the **Black Start Capability** to the extent that, in the case of a Black Start Station, the instruction is to operate in accordance with **Dynamic Parameters** and other **BM Unit Data** submitted pursuant to **Grid Code BC1** (as amended from time to time).

- 4.8.5 The **BS Service Provider** warrants to **The Company** that it believes that operation of the **Black Start Plant** in accordance with the **Black Start Capability** set out in Sub-Clause 4.8.4 will be within its safe operating parameters (whether relating to personnel or **Plant** or **Apparatus**) and will not require the **BS Service Provider** to change generation on the **BS Gensets** or flow on the **BS HVDC System** for safety reasons pursuant to **Grid Code OC 9.4.7.4**.

***Revisions to Technical Parameters and/or the Black Start Capability requirements***

- 4.8.6 Subject always to Sub-Clause 4.8.7, the **BS Service Provider** may issue a request to **The Company** that one or more of the **Technical Parameters** and/or the **Black Start Capability** requirements (more particularly specified in Sub-Clause 4.8.4) be revised temporarily (such request to be confirmed by facsimile or other electronic means approved from time to time by **The Company** in the appropriate form set out in Schedule E, Section 5), and upon receipt of the **BS Service Provider's** facsimile confirmation of such request, **The Company** may at its sole discretion either accede to or decline such request provided always that any acceptance of such request may at **The Company's** sole discretion be immediately withdrawn at any time thereafter.
- 4.8.7 The **BS Service Provider** shall specify in any request made in accordance with Sub-Clause 4.8.6 the start time and expected end time between which any revisions to the **Technical Parameters** and/or the **Black Start Capability** requirements shall apply.
- 4.8.8 If **The Company** accepts any request made by the **BS Service Provider** pursuant to Sub-Clause 4.8.6, any such revisions shall apply from the start time specified by the **BS Service Provider**, until the end time specified by the **BS Service Provider** or any earlier time at which **The Company** withdraws its acceptance of the **BS Service Provider's** request pursuant to Sub-Clause 4.8.6.
- 4.8.9 If **The Company** declines (or withdraws any previous acceptance of) any request made by the **BS Service Provider** pursuant to Sub-Clause 4.8.6, then the original **Technical Parameters** and/or **Black Start Capability** requirements shall continue to apply (or be reinstated as the case may be), and for the avoidance of doubt if as a result the **BS Service Provider** is unable to maintain the **Black Start Capability** from the **Black Start Plant**

then it shall notify **The Company** accordingly in accordance with Sub-Clause 4.9.1.

- 4.8.10 For the avoidance of doubt, the revisions which may be requested by the **BS Service Provider** pursuant to Sub-Clause 4.8.6 may include without limitation reductions to quantities of consumables and/or other related supplies required to be provided and/or maintained by the **BS Service Provider** at the **Power Station** in accordance with Sub-Clause 4.8.1.3.

#### 4.9 **Absence of Black Start Capability**

##### ***Notification by BS Service Provider***

- 4.9.1 The **BS Service Provider** shall notify **The Company** by facsimile or other electronic means approved from time to time by **The Company** in the appropriate form set out in Schedule E, Section 5 as soon as reasonably practicable (but in any event within 20 minutes of it becoming aware that) if:-
- 4.9.1.1 the **Black Start Plant** does not or will not have any part of the **Black Start Capability** (or, to the extent not possible, a further notice stating the reasons shall be given as soon as reasonably practicable thereafter), and such notification shall include a brief explanation thereof, the time of commencement and the expected duration thereof;
- 4.9.1.2 (without prejudice to Sub-Clause 4.9.4.1) following the issue of a notification by the **BS Service Provider** in accordance with Sub-Clause 4.9.4.1, the **Black Start Capability** has been restored and such notification shall include the time of such restoration.
- 4.9.2 For the purposes of Sub-Clause 4.9.1 the **BS Service Provider** shall be deemed to have the knowledge of its operators at the **Black Start Plant**. The **BS Service Provider** undertakes to **The Company** that each notification given by its plant operators pursuant to Sub-Clause 4.9.1 shall reflect the true operating characteristics of the **Black Start Plant**.

##### ***Determination by The Company***

- 4.9.3 Notwithstanding Sub-Clause 4.9.1, the **Black Start Plant** may be determined by **The Company** not to have the **Black Start Capability** either:
- 4.9.3.1 (subject to review by the **Independent Expert**) by reference to inspections, **Assurance Visits** and testing carried out pursuant to Sub-Clauses 4.19 (*Inspections and Assurance Visits*) and **Error! Reference source not found.** (*Black Start Tests*); or
- 4.9.3.2 in accordance with the terms of Sub-Clause 4.12.3.
- 4.9.4 With effect from: -
- 4.9.4.1 the time at which the **Black Start Plant** is notified by the **BS Service Provider** or determined by **The Company** or, in the event of disagreement, by the **Independent**

**Expert** upon the reference of either **Party**, no longer to have the **Black Start Capability**; or

4.9.4.2 the commencement of the **Settlement Period** in which the respective **Event of Default** referred to in Sub-Clause 4.13 shall have occurred, the **Black Start Plant** shall be deemed not to have the **Black Start Capability** and no payments in respect of all subsequent **Settlement Periods** shall be payable by either **Party** to the other unless and until the **Black Start Capability** shall be deemed to be restored in accordance with the following provisions:-

- (a) The **BS Service Provider** shall as soon as reasonably practicable notify **The Company** by facsimile or other electronic means approved from time to time by **The Company** in the appropriate form set out in Schedule E, Section 5 of the time and date when it considers that the **Black Start Capability** is restored and shall, where unavailability of the **Black Start Service** was due to an **Event of Default**, give **The Company** a brief explanation as to the reason for such **Event of Default**.
- (b) Promptly following receipt of such notification and explanation, **The Company** may inform the **BS Service Provider** within five (5) **Business Days** that it wishes to conduct a test (a "**Reproving Assessment**") in order to verify such restoration of **Black Start Capability** and, in respect thereof, the relevant provisions of Sub-Clause **Error! Reference source not found. (Black Start Tests)** shall apply. The scope of a **Reproving Assessment** shall in each case have regard to the nature and extent of the circumstances which gave rise to the **Black Start Plant** no longer having the **Black Start Capability** and shall be discussed and agreed with the **BS Service Provider** (such agreement not to be unreasonably withheld or delayed). Without limiting the foregoing, a **Reproving Assessment** may include the monitoring of the normal operation of the **BS Gensets** or **BS HVDC System** and/or the **BS Auxiliary Units** (as appropriate).
- (c) If **The Company** fails to notify the **BS Service Provider** in accordance with paragraph (b) above that it wishes to carry out a **Reproving Assessment** then the **Black Start Capability** shall be deemed to have been restored with effect from the time set out in the notification by the **BS Service Provider** pursuant to paragraph (a) above and the **Monthly Availability Payments** shall become payable with effect from such time and date.
- (d) Promptly following receipt of notification from **The Company** that it wishes to conduct a **Reproving Assessment**, the **BS Service Provider** shall notify **The Company** of the time and date when the **Reproving Assessment** may be carried out which (unless **The Company** and the **BS Service Provider** otherwise agree in writing) shall be not earlier than 72 hours and not later than 168 hours following such notification. If the **BS Service Provider** unreasonably delays its notification, **The Company** may specify a time for the conduct of the **Reproving Assessment** on no less than 168 hours notice. **The Company** shall not unreasonably refuse to carry out a **Reproving Assessment** at the times and dates notified by the **BS Service Provider**. Without limitation, it shall be reasonable for **The Company** (by notice in writing to the **BS Service Provider**) to refuse to carry out the **Reproving Assessment** at the time and date notified by the **BS Service Provider** in order to minimise cost

implications or where the safety or security of the **System** may be compromised. Upon any refusal by **The Company** as aforesaid, the **BS Service Provider** shall notify **The Company** of an alternative time and date when the **Reproving Assessment** may be carried out and where the **BS Service Provider** unreasonably delays in sending such notification, **The Company** may specify a time for the conduct of the **Reproving Assessment** on no less than 168 hours notice.

- (e) If **The Company** fails to conduct a **Reproving Assessment** at the time and date notified by the **BS Service Provider** pursuant to paragraph (d) above, save in the circumstances therein set out, then (unless it is prevented from carrying out such **Reproving Assessment** by means of an act or default of the **BS Service Provider** or by reason of an event or circumstance of **Force Majeure**) the **Black Start Capability** shall be deemed to have been restored with effect from the time set out in the notification by the **BS Service Provider** pursuant to paragraph (a) above and the **Monthly Availability Payments** shall become payable with effect from such time and date.
  - (f) If the **BS Service Provider** passes a **Reproving Assessment**, then (subject to paragraph (g) below) the **Black Start Capability** shall be deemed to be restored with effect from the time and date notified by the **BS Service Provider** pursuant to paragraph (a) above and the **Monthly Availability Payments** shall become payable with effect from such time and date.
  - (g) If the **BS Service Provider** fails a **Reproving Assessment**, then paragraphs (a) to (d) above (inclusive) shall continue to apply and the **BS Service Provider** shall be required to re-notify **The Company** of the time and date when it considers that the **Black Start Capability** shall be restored, and the **Black Start Capability** shall only be deemed to be restored as from the earlier of:-
    - (i) the passing of a subsequent **Reproving Assessment**;
    - (ii) the date of the first notification where the first **Reproving Assessment** is determined to have been passed; or
    - (iii) if **The Company** fails to carry out a subsequent **Reproving Assessment**, with effect from the time of the last notification from the **BS Service Provider** to **The Company** that the **Black Start Capability** is restored.
  - (h) In relation to the conduct of all **Reproving Assessments** the provisions of Sub-Clause 4.20 shall apply.
  - (i) During any period of dispute as to a determination of **The Company** that the **Black Start Plant** no longer has the **Black Start Capability**, the provisions of Sub-Clause 4.9.5 shall apply.
- 4.9.5 For the avoidance of doubt, no payments shall be payable by either **Party** in respect of any **Settlement Periods** following a determination by **The Company** that the **Black Start Plant** no longer has the **Black Start Capability**, notwithstanding that the **BS Service Provider** shall have

requested a further test and/or made a reference to the **Independent Expert** pursuant to Sub-Clause 4.23, unless and until:-

- 4.9.5.1 the **BS Service Provider** passes such further test or the **Independent Expert** determines that such further test was passed, in which cases the **Monthly Availability Payments** in respect of the **Settlement Periods** since the first test shall become payable by **The Company** to the **BS Service Provider** by reference to the first practicable **Final Monthly Statement** issued following such further successful test together with interest thereon at the **Base Rate** from the date on which such payments would otherwise have been due and payable by **The Company**; or
- 4.9.5.2 the **Black Start Capability** shall be deemed to be restored in accordance with Sub-Clause 4.9.4.

#### 4.10 **Black Start Instruction**

- 4.10.1 During any **Black Start Situation** **The Company** shall give an instruction to the **BS Service Provider** as referred to in **Grid Code OC9.4** for implementation of the **Local Joint Restoration Plan** from the **Black Start Plant** (a "**Black Start Instruction**") which may comprise (subject to Sub-Clauses 4.8.4 and 4.11 (*Safety and Insurance*)), without limitation, any one or more of the instructions set out at Sub-Clauses 4.10.1.1 to 4.10.1.6 below. The **Local Joint Restoration Plan** shall set out who shall give the following instructions: -
  - 4.10.1.1 an instruction to **Start-Up** the **Black Start Plant**, without an external electrical supply (in the case of a, **BS HVDC System** without an external electrical supply to the **GB Converter Station**) and in accordance with the **Local Joint Restoration Plan**; and/or
  - 4.10.1.2 an instruction for the **Black Start Plant** to be connected to or **Synchronised** to the **National Electricity Transmission System** and the local **User System** (in accordance with the **Local Joint Restoration Plan**) or a part thereof; and/or
  - 4.10.1.3 an instruction for the **Black Start Plant** to maintain a specified voltage at **[the Commercial Boundary]**; and/or
  - 4.10.1.4 an instruction for the **Black Start Plant** to accept block loads within the range specified in Schedule E, Section 1, Part III; and/or
  - 4.10.1.5 an instruction for the **Black Start Plant** to operate in **Frequency Sensitive Mode**; and/or
  - 4.10.1.6 an instruction to switch in or out the **Power System Stabiliser**.

The modes of instruction specified in this Sub-Clause 4.10.1 are indicative only but all **Black Start Instructions** shall fall within the remit of this Clause 4, the **Local Joint Restoration Plan** and/or the **Grid Code**. The actual method of instruction and the detailed instruction formats for use in a **Black Start Situation** will be more comprehensively set out in the **Local Joint Restoration Plan**.

- 4.10.2 Subject and without prejudice to Sub-Clause 4.11 (*Safety and Insurance*) the **BS Service Provider** agrees that **The Company** may issue a **Black Start Instruction** for operation of the **Black Start Plant** outside of operating

capability as declared or redeclared to **The Company** pursuant to relevant provisions of the **Grid Code** but only to the extent the instruction is for operation in accordance with the relevant **Black Start Capability** or a capability otherwise agreed by the **BS Service Provider**.

4.10.3 The **BS Service Provider** acknowledges and agrees that a **Black Start Situation** will constitute an emergency situation as referred to in the **Grid Code** and that accordingly a **Black Start Instruction** may constitute an **Emergency Instruction**.

4.10.4 During any **Black Start Situation**, **The Company** shall provide the **BS Service Provider** with such information relating to the **National Electricity Transmission System** as **The Company**, in its reasonable opinion, shall consider to be necessary in order to enable the **BS Service Provider** to implement the **Local Joint Restoration Plan** or respond to instructions under the **Grid Code**.

#### 4.11 **Safety and Insurance**

4.11.1 Notwithstanding Sub-Clauses 4.8.5 and 4.10, **The Company** accepts that the decision to operate a **Black Start Plant** outside its safe operating parameters is one for the **BS Service Provider** alone, and accepts that the **BS Service Provider** may change generation or flow on that **Black Start Plant** if it believes it is necessary for safety reasons (whether relating to personnel or **Plant** or **Apparatus**).

4.11.2 The responsibility for injury to personnel and damage to **Plant** and **Apparatus** owned and/or operated by the **BS Service Provider** caused by operation of the **Black Start Plant** in a **Black Start Situation** (including without limitation any damage to a **BS Genset** caused by loss of barring) therefore rests with the **BS Service Provider** and **The Company** shall have no liability whatsoever in connection therewith.

4.11.3 The **BS Service Provider** shall indemnify and keep indemnified **The Company** in respect of liability for death or personal injury and/or damage to **Plant** and **Apparatus** owned and/or operated by **The Company** and arising out of or in connection with such operation of the **Black Start Plant** outside of its safe operating parameters save to the extent that: -

4.11.3.1 the **BS Service Provider** has notified **The Company** that the **Black Start Plant** cannot be operated within its safe operating parameters because of the



**Demand** experienced and **The Company** subsequently fails to comply with **Grid Code OC 9.4.7.4**;

- 4.11.3.2 such death or personal injury and/or damage to **Plant** and **Apparatus** is caused by **The Company's** negligent act or omission or default; and
- 4.11.3.3 the **BS Service Provider** has operated the **Black Start Plant** in accordance with **Good Industry Practice**.
- 4.11.4 The **BS Service Provider** shall insure for **Public Liability** risks with a reputable insurer with a minimum value of ten million pounds Sterling (£10,000,000) for each and every claim.
- 4.11.5 The **BS Service Provider** acknowledges and agrees that, for the purposes of Sub-Clause 4.11.3, references to **The Company** shall include the **Transmission Owner** and that, in addition to **The Company**, the **Transmission Owner** shall be entitled to enforce Sub-Clause 4.11.3.

#### 4.12 **Local Joint Restoration Plan and Training**

- 4.12.1 The **BS Service Provider** shall co-operate with **The Company** in the development, review and updating from time to time of a **Local Joint Restoration Plan** for the **Power Station** which shall be in a form to be agreed between the **Parties** (such agreement not to be unreasonably withheld or delayed) and one or more local **Public Distribution System Operators** and/or **User** and/or third party responsible for necessary consumables as referred to in Sub-Clause 4.8.1.3 (as the case may be) (together the "**Relevant Third Parties**"), and shall include details of the following:-
  - 4.12.1.1 the part of the **National Electricity Transmission System** and/or local **Distribution System** to be energised (in the case of the local **Distribution System** indirectly) by the **BS Service Provider** utilising the **Black Start Plant** and the methods by which this will be achieved;
  - 4.12.1.2 how the block loading of the **Black Start Plant** is to be achieved by direct communication between the **BS Service Provider**, the local **Public Distribution System Operator** and **The Company**;
  - 4.12.1.3 manner of operation during islanded conditions;
  - 4.12.1.4 telephone numbers of all **Parties** concerned and all other pertinent information of a similar nature; and
  - 4.12.1.5 the time periods required for the restoration of such necessary consumables.
- 4.12.2 In connection with Sub-Clause 4.12.1, the **BS Service Provider** shall ensure that all appropriate personnel at the **Black Start Plant** are made aware of the **Local Joint Restoration Plan** and receive appropriate training in respect thereof. Appropriate training shall be at the sole discretion of the **BS Service Provider** but may include the carrying out of one exercise a year (of no more than a reasonable duration) with various station staff (which may include the operation of any part of the **Local Joint Restoration Plan**). Upon reasonable request from the **BS Service Provider**, **The Company** shall use reasonable

endeavours (insofar as permitted by the **Grid Code** and subject as provided below) to co-operate with the **BS Service Provider** in the carrying out of any such exercise by the issue of suitable instructions (at times and for periods agreed with **The Company**) and, subject to the **BS Service Provider's** rights referred to in Sub-Clauses [ ], each **Party** shall bear its own additional staffing costs in connection with any such exercise. In respect of any exercises involving changes to the production profile of any **BM Unit** at the **BS Service Provider's Power Station**, the provisions of Sub-Clauses [ ] shall apply.

- 4.12.3 The **Parties** shall use reasonable endeavours to ensure that a **Local Joint Restoration Plan** has been developed by the **Service Commencement Date** and, in connection therewith, the **BS Service Provider** shall be responsible for procuring that all **Relevant Third Parties** co-operate in the development of such **Local Joint Restoration Plan**. In the event that a **Local Joint Restoration Plan** has not been agreed by the **Parties** and the **Relevant Third Parties** by the date being three months after the **Service Commencement Date** or such later date as may be agreed in writing by both **Parties**, **The Company** shall be entitled to notify the **BS Service Provider** in writing at any time thereafter that the **Black Start Plant** shall be deemed not to have any part of the **Black Start Capability** with effect from the date of such notification until such time as a **Local Joint Restoration Plan** has been developed and agreed by the **Parties** and the **Relevant Third Parties**.

#### 4.13 **Events of Default**

In relation to the **Black Start Service**, each of the events specified in Annexure B (*Events of Default and Consequences*) to this Clause 4 (and no others) shall constitute an "**Event of Default**" and shall result in the respective consequences also set out therein as if the same were set out in full in this Clause 4. For the avoidance of doubt, where one incident results in more than one **Event of Default**, **The Company** shall only be entitled to apply the respective consequence once.

#### 4.14 **Consequences of Events of Default**

- 4.14.1 The provisions of Annexure B (*Events of Default and Consequences*) to this Clause 4 shall apply in the case of an **Event of Default** and, subject to the provisions thereof, the amounts payable by the **BS Service Provider** to **The Company** in respect thereof shall be calculated in accordance with Schedule E, Section 2, Part I (in respect of a **Repayment Amount**) and Schedule E, SCHEDULE A section 2, Part III (in respect of a **Works Contribution Refund Payment**).
- 4.14.2 The **BS Service Provider** acknowledges and agrees that the provisions of Annexure B to this Clause 4 have been the subject of discussion and negotiation and are fair and reasonable having regard to the circumstances as at the date hereof and that in particular (but without limiting the foregoing) any monies which cease to be payable by **The Company** to the **BS Service Provider** hereunder, the aggregate number of hours expressed to be taken into account in calculating the **Monthly Availability Payments** payable to the **BS Service Provider** pursuant to this Clause 4, the **Repayment Amounts** and the **Works Contribution Refund Payments** have been calculated so as to reflect as fairly as possible the costs which are reasonably contemplated by the **Parties** at the date hereof as being likely to be incurred by **The Company** as a direct result of the **Events of Default** as referred to in Sub-

Clause 4.13 or (as the case may be) the termination of provision of the **Black Start Service**.

4.15 **Annual Assessment**

- 4.15.1 Following the expiry of each consecutive 12 month period of operation of this Clause 4 commencing from the **Service Commencement Date**, **The Company** shall undertake assessments of the extent of provision of the **Black Start Service** by the **BS Service Provider** over the immediately preceding 12 month period (the "**Assessment Period**") and shall notify the **BS Service Provider** accordingly within twelve (12) months following the end of the **Assessment Period**. If no such notification has been received by the **BS Service Provider** from **The Company** by the date falling twelve (12) months after the end of the **Assessment Period**, no such assessment shall be required.
- 4.15.2 The first assessment shall be carried out by determining in relation to each **Assessment Period** and by reference to Sub-Clauses 4.15.3 to 4.15.4 inclusive, the number of **Settlement Periods** during such **Assessment Period** in which the **Black Start Plant** has had the **Black Start Capability**.
- 4.15.3 If in respect of any period the **Black Start Plant** does not have the **Black Start Capability** due solely to **Force Majeure** then, to the extent that in respect of such period the **BS Service Provider** is able to demonstrate to **The Company's** reasonable satisfaction that it has been taking all reasonably practicable steps to restore the **Black Start Capability** of the **Black Start Plant**, the **Black Start Plant** shall be deemed to have had the **Black Start Capability** for the purposes of Annexure C (*Annual Assessment of Black Start Capability*) to this Clause 4.
- 4.15.4 **If the BS Service Provider gives The Company prior written notice of any period during which the BS Service Provider proposes to withdraw the Black Start Capability from the Black Start Plant in addition to the periods of scheduled maintenance specified in the table set out in Schedule E, Section 4 (including the duration of such period), The Company:**
  - 4.15.4.1 shall assess the likely consequences of such withdrawal; and
  - 4.15.4.2 may, at its discretion, agree in writing with the **BS Service Provider** to the proposed period of outage or propose an alternative period of outage.
- 4.15.5 If the **Parties** agree to a period of outage pursuant to Sub-Clause 4.15.4.2 the withdrawal of the **Black Start Capability** during the agreed period shall not be included in the **Annual Assessment** in accordance with Annexure C.
- 4.15.6 Where the **Parties** do not agree to a period of outage pursuant to Sub-Clause 4.15.4.2 the withdrawal of the **Black Start Capability** during any period shall be included in the availability assessment for **Annual Assessment** in accordance with Annexure C.
- 4.15.7 If the percentage of **Settlement Periods** in an **Assessment Period** that the **Black Start Plant** had the **Black Start Capability** is less than a **Black Start**

**Capability** percentage stated in Annexure C to this Clause 4 then the respective consequences stated in Annexure C to this Clause 4 shall apply.

- 4.15.8 In respect of each **Assessment Period**, a second assessment shall also be carried out of the number of **Settlement Periods** during such **Assessment Period** in which the **Black Start Plant** did not have the **Black Start Capability** due to **Force Majeure**. If the percentage of such **Settlement Periods** during such **Assessment Period** exceeds 75% then either **Party** shall be entitled to terminate this Clause 4 forthwith by notice in writing to the other to be served at any time until the end of one month following expiry of the relevant **Assessment Period** (or one month following completion of the assessment, if later). In respect of such termination, the **BS Service Provider** shall pay to **The Company** in accordance with Clause [8][4 of the **MASA**] a **Works Contribution Refund Payment** calculated in accordance with the formula in Schedule E, Section 2, Part III.
- 4.15.9 The first such **Assessment Period** shall commence on the **Service Commencement Date**. In the event of termination of the provisions of this Clause 4 during an **Assessment Period**, the availability of the **Black Start Plant** in respect of the period since the end of the last **Assessment Period** shall be assessed by **The Company** in accordance with this Sub-Clause 4.15 but in respect of such shorter period, and “**Assessment Period**” shall be construed accordingly.
- 4.15.10 Subject to Sub-Clauses 4.15.3 and 4.15.4, for the purposes of this Sub-Clause 4.15 and Schedule E, Section 2, periods when the **Black Start Plant** shall not have had the **Black Start Capability** shall be determined in accordance with Sub-Clause 4.9 and/or Sub-Clause 4.12.3.
- 4.16 Not used
- 4.17 **Termination**
- 4.17.1 Without prejudice to **The Company's** right to terminate the provisions of this Clause 4 prior to the **Service Commencement Date** pursuant to Sub-Clause 4.5.3 or in the circumstances described in Sub-Clause 4.15.8, **The Company** shall be entitled to terminate the provisions of this Clause 4 after the **Service Commencement Date** only in the following circumstances as specified in:
- 4.17.1.1 Annexure B (*Events of Default and Consequences*) to this Clause 4 as a consequence of one or more **Events of Default**; and
- 4.17.1.2 Annexure C (*Annual Assessment of Black Start Capability*) to this Clause 4.
- 4.17.2 Upon termination of this Clause 4 as referred to in Sub-Clause 4.17.1 or upon termination of this **Agreement** pursuant to Sub-Clause [10.1][7.1 of the **MASA**], the **BS Service Provider** shall pay to **The Company** in accordance

with Clause [8][4 of the MASA] a **Works Contribution Refund Payment** calculated in accordance with the formula in Schedule E, Section 2, Part III.

- 4.17.3 Termination of this Clause 4 shall, subject to Sub-Clause 4.3.5 be without prejudice to any rights of the **Parties** which shall have accrued at the time of such termination.

#### 4.18 **Instructions and Notifications**

- 4.18.1 All notifications, declarations, confirmations and other communications of whatever nature to be given by **The Company** to the **BS Service Provider** or vice versa pursuant to this Clause 4 which concern the availability and utilisation of the **Black Start Service** shall (unless otherwise specified to the contrary in this Clause 4 ) be given either:-

4.18.1.1 in accordance with the **Grid Code** (where applicable); or

4.18.1.2 by telephone,

and subsequently confirmed by facsimile or other electronic means approved from time to time by **The Company** in the appropriate form set out in Schedule E, Section 5 or by such other means as may be agreed in writing by the **Parties**.

#### 4.19 **Inspections and Assurance Visits**

##### ***Inspections***

- 4.19.1 To enable **The Company** to verify the capability of the **Black Start Plant** to provide the **Black Start Service**, the **BS Service Provider** shall permit **The Company** to inspect such of the following as **The Company** may reasonably require (in each case upon giving to the **BS Service Provider** not less than 24 hours prior notice):-

4.19.1.1 the **BS Gensets** or **HVDC Converter Station**;

4.19.1.2 the **Auxiliaries** (including without limitation the **BS Auxiliary Units**);

4.19.1.3 the **BS Service Provider's** other **Plant** and **Apparatus**, in relation to **Black Start Capability**, necessary consumables (which shall include supplies of raw water, demineralised water [and infrastructure for the supply of natural gas] to the **BS Auxiliary Units**), communication channels and other related supplies at the **Power Station**;

4.19.1.4 [arrangements that the **BS Service Provider** has in place for the supply of natural gas to the **BS Auxiliary Units** at the appropriate time and the required pressure;]

4.19.1.5 the **Local Joint Restoration Plan** and such evidence as **The Company** shall reasonably require to demonstrate compliance by the **BS Service Provider** with its obligations contained in this **Agreement**; and

4.19.1.6 any **Black Start Situation** procedure which has been or may in future be developed independently by the **BS Service Provider** in respect of the **Black Start Plant** giving specific guidance to that **Black Start Plant** in the event of a **Black Start**

**Situation** and which is or may at a future date be in current use at the **Black Start Plant**.

Such inspection shall be carried out without undue interference with the normal operation of the **Black Start Plant**.

#### ***Assurance Visits***

- 4.19.2 Without prejudice to, and in addition to, **The Company's** right to carry out inspections in accordance with Sub-Clause 4.19.1, the **BS Service Provider** shall, subject to Sub-Clause 4.19.3, not more than once in any calendar year, permit **The Company** to visit the **Black Start Plant** (upon **The Company** giving to the **BS Service Provider** not less than 168 hours' prior notice) so that **The Company** may ascertain to its reasonable satisfaction that the **BS Service Provider** has, in accordance with **Good Industry Practice**, implemented at the **Black Start Plant** appropriate technical, training and documentation procedures (an '**Assurance Visit**'). **Assurance Visits** shall be carried out without undue interference with the normal operation of the **Black Start Plant**.
- 4.19.3 Following receipt of any notice issued by **The Company** pursuant to Sub-Clause 4.19.2, the **BS Service Provider** may propose to **The Company** an alternative time and date for the **Assurance Visit**, provided that any such alternative time and date shall not be later than 28 **Settlement Days** following the time and date specified by **The Company** in its notice, and (at its option) **The Company** may agree to such alternative time and date. In the event that the **BS Service Provider** unreasonably delays the **Assurance Visit** beyond the time and date being 28 **Settlement Days** after the time and date for the **Assurance Visit** specified by **The Company** in its notice, then no **Monthly Availability Payments** shall accrue to the **BS Service Provider** in respect of the period commencing at the time and date for the **Assurance Visit** specified in **The Company's** notice and ending upon completion by **The Company** of an **Assurance Visit**.
- 4.19.4 If any dispute arises in relation to an inspection or **Assurance Visit**, then the **Parties** shall attempt to resolve the dispute by discussion but if they fail to reach agreement within three (3) **Business Days** of the commencement of discussions either **Party** may refer the matter to the **Independent Expert** for determination.

#### **4.20 Black Start Tests<sup>6</sup>**

***Obligations to carry out a Commissioning Assessment, Capability Assessment, Remote Synchronisation Test, Dead Line Charge Test and Repeating Assessment***

- 4.20.1 For the purposes of this Clause 4, **Black Start Tests** include **Commissioning Assessments, Capability Assessments, Remote Synchronisation Tests, Dead**

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<sup>6</sup> Clause 4.20 has been drafted for a power generating facility and will need to be adapted for an interconnector.

**Line Charge Tests and Repeating Assessments.** Subject always to the provisions of this Clause 4, the **BS Service Provider** shall:-

- 4.20.1.1 on written notice to **The Company** and not later than the **Target Commencement Date** (or such later date as may be determined in accordance with Part 1 of Annexure A) carry out a **Commissioning Assessment** in accordance with Part 1 of Annexure A (*Works Programme*);
- 4.20.1.2 on written notice to **The Company** and not later than the third anniversary of the **Service Commencement Date**, carry out a test (a "**Capability Assessment**") in accordance with the procedure set out in OC5.7.2 of the **Grid Code** provided always that not more than one **Capability Assessment** will be required to be undertaken by the **BS Service Provider** in any period of thirty-six (36) calendar months;
- 4.20.1.3 on written notice from **The Company** given not more than once in any two calendar years, carry out a **Remote Synchronisation Test**, to determine whether the **BS Gensets** or **BS HVDC System** and/or the **Auxiliaries** and their associated **Plant** and **Apparatus** are able to perform the processes described in Part 1 of Annexure D (*Remote Synchronisation Testing/Dead Line Charge Test*) and are otherwise capable of providing the **Black Start Service** in accordance with this Clause 4. Subject to the foregoing, **The Company** may undertake a **RST** at the time of conducting a **Capability Assessment** or at such other times as it may determine;
- 4.20.1.4 on written notice from **The Company** given not more than once in any two calendar years, carry out a **Dead Line Charge Test**, to determine whether the **BS Gensets** or **BS HVDC System** and/or the **Auxiliaries** and their associated **Plant** and **Apparatus** are able to perform the processes described in Part 2 of Annexure D (*Remote Synchronisation Testing/Dead Line Charge Test*) and are otherwise capable of providing the **Black Start Service** in accordance with this Clause 4. Subject to the foregoing, **The Company** may undertake a **Dead Line Charge Test** at the time of conducting a **Capability Assessment** or at such other times as it may determine; and
- 4.20.1.5 following written notice from **The Company** under Sub-Clause 4.9.4.2(b), carry out a **Repeating Assessment** in order to verify the restoration of **Black Start Capability** on such date as may be determined under Sub-Clause 4.9.4.2 in accordance the procedure set out in OC5.7.2 of the **Grid Code**.

***Black Start Test Procedure - Preparatory***

- 4.20.2 In respect of each **Black Start Test**, **The Company** and the **BS Service Provider** shall use all reasonable endeavours to agree, no later than four clear **Settlement Days** before the day on which the **Black Start Test** is due to be conducted, the **Black Start Test Parameters and Procedures** for the conduct of the **Black Start Test**, such agreement to be recorded in the form of a side letter. If no such agreement is reached by such date and **The Company**, acting reasonably, determines that such failure is due to the default of the **BS Service Provider**, then without prejudice to any other provision of this **Agreement** no **Monthly Availability Payments** shall accrue due to

the **BS Service Provider** from such date until the date when such agreement is finally reached.

4.20.3 The **Black Start Test Parameters and Procedures** shall comprise those matters necessary to meet the objectives referred to in Sub-Clause 4.20.1.1 (**Commissioning Assessment**), 4.20.1.2 (**Capability Assessment**), 4.20.1.3 (**RST**), 4.20.1.4 (**Dead Line Charge**) and 4.20.1.5 (**Reproving Assessments**), as applicable, and shall be consistent therewith, and shall in each case include (without limitation):

4.20.3.1 the **BM Unit** ID for each of the **BS Gensets** and **BM Unit** ID (or other identification) for each of the **BS Auxiliary Units**;

4.20.3.2 the proposed start time and end time for the **Black Start Test Period**, each determined in accordance with Sub-Clause 4.20.4;

4.20.3.3 a proposed running profile, together with underlying **Physical Notification** level and **Maximum Export Limit**, for each of the **BS Gensets** during the **Black Start Test** which meet the requirements of Sub-Clause 4.20.5; and

4.20.3.4 a proposed running profile for each of the **BS Auxiliary Units**.

#### ***Black Start Test Period***

4.20.4 The start time and end time of a **Black Start Test Period** referred to in Sub-Clause 4.20.3.2 shall, unless otherwise agreed by the **Parties** in writing, be determined as follows:

4.20.4.1 in the case where the running profile comprised within the **Black Start Test Parameters** indicates the **BS Gensets** being **Synchronised** in any **Settlement Periods** in the twelve hour period immediately prior to commencement of the **Black Start Test Period**:-

4.20.4.1.1 the start time shall be one hour prior to the time indicated in the running profile for the **BS Genset** to commence **De-Loading** in preparation for **Desynchronisation**; and

4.20.4.1.2 the end time shall be one hour after the time indicated in the running profile by which the **BS Gensets** shall have achieved an **Output** equal to its **Physical Notification** level;

4.20.4.2 if the running profile comprised within the **Black Start Test Parameters and Procedures** indicates the **BS Gensets** not being **Synchronised** in any **Settlement Period** in the twelve hour period immediately prior to commencement of the **Black Start Test Period**: -

4.20.4.2.1 the start time shall be one hour prior to the time indicated in the running profile for the opening of the final circuit breaker connecting the **Power Station** to the **National Electricity Transmission System** or **User**



**System** (as the case may be) in preparation for the **Synchronisation** of the **BS Gensets**; and

- 4.20.4.2.2 the end time shall be one hour after the time indicated by the running profile for the **BS Gensets** to achieve an **Output** equal to its **Physical Notification** level.
- 4.20.5 The underlying **Physical Notification** level for a **BS Genset** during the **Black Start Test** referred to in Sub-Clause 4.20.3.3 shall, unless otherwise agreed by the **Parties** in writing, be zero MW if the running profile of that **BS Genset** indicates it not being **Synchronised** in any **Settlement Period** in the twelve hour period immediately prior to commencement of the **Black Start Test Period**.
- 4.20.6 The **Dynamic Parameters** for the **BS Gensets** during the **Black Start Test** shall, unless otherwise agreed by the **Parties** in the **Black Start Test Parameters and Procedures**, be those **Dynamic Parameters** which applied at the time of the written notice under Sub-Clause 4.20.1 of the requirement for a **Black Start Test**.
- 4.20.7 Once agreed by the **Parties** in accordance with Sub-Clause 4.20.2, the **Black Start Test Parameters and Procedures** may subsequently be revised by agreement in writing of the **Parties** (not to be unreasonably withheld or delayed) but not so as to fall outside of the **Black Start Test Period**.

#### ***Black Start Test Procedure - Conduct***

- 4.20.8 In conducting a **Black Start Test**, **The Company** may assess the suitability of, and the performance of the **BS Service Provider's** personnel against, the terms of the **Local Joint Restoration Plan** and/or any **Black Start Situation** procedure which has been developed independently by the **BS Service Provider** (as more particularly referred to in Sub-Clause 4.19.1.6), and such assessment shall (inter alia) be taken into account when determining whether the **BS Service Provider** has passed or failed such **Black Start Test**.
- 4.20.9 Where **The Company** reasonably considers that any **Black Start Test**, other than a **Reproving Assessment** (in respect of which Sub-Clause 4.9.4.2(d) shall apply), would result in **The Company** incurring exceptional costs or the safety or security of the **System** being compromised, **The Company** may notify the **BS Service Provider** of the cancellation of such **Black Start Test**, in which event the **Parties** shall agree a new time for the conduct of such **Black Start Test** and Sub-Clauses 4.20.2 to 4.20.7 and this Sub-Clause 4.20.9 shall apply. Where the **BS Service Provider** unreasonably withholds or delays such agreement, **The Company** may specify a time for the conduct of such **Black Start Test** on no less than **[168 hours]** notice.

#### ***Notices***

- 4.20.10 The **BS Service Provider** shall use such telephone and facsimile numbers (or the address for such other electronic means approved from time to time by **The Company**) as may be notified to it by **The Company** from time to time for the purposes of notices to be given or confirmed pursuant to this Sub-Clause **Error! Reference source not found..** Service of such notice shall be without prejudice to the **BS Service Provider's**

obligations to notify **BM Unit Data** by means of the **EDL Equipment** pursuant to the **Grid Code** and/or the **Balancing and Settlement Code**.

#### ***Black Start Test - Costs***

- 4.20.11 Each **Party** shall bear its own costs incurred as a direct result of a **Commissioning Assessment**, a **Capability Assessment**, a **Dead Line Charge Test** and a **Remote Synchronisation Test** save where the **BS Service Provider** fails such **Commissioning Assessment**, **Capability Assessment**, **Dead Line Charge Test** or **Remote Synchronisation Test** (as the case may be), in which event the **BS Service Provider** shall, in addition to bearing its own costs, reimburse to **The Company** all of **The Company's** reasonable resource costs (other than costs incurred in connection with reconfiguring the **National Electricity Transmission System**) and expenses reasonably incurred as a direct result thereof. Additionally, the **BS Service Provider** shall reimburse to **The Company** all of **The Company's** reasonable costs reasonably incurred as a direct result of a **Reproving Assessment** conducted either following an **Event of Default** referred to in Sub-Clause 4.13 (*Events of Default*) or following failure by the **BS Service Provider** of a previous **Reproving Assessment**.

#### ***Disputes***

- 4.20.12 If a bona fide dispute relates to the performance of the **BS Gensets** or **BS HVDC System** and/or the **BS Auxiliary Units** or the results of a **Black Start Test**, **The Company** and the **BS Service Provider** shall attempt to resolve the dispute by discussion, and if they fail to reach agreement the **BS Service Provider** may require a further test. If the **BS Service Provider** passes such further **Black Start Test**, it shall be deemed to have passed the first test. If the **BS Service Provider** fails such further **Black Start Test** and a dispute arises in respect of that further test, then the **Parties** shall attempt to resolve the dispute by discussion but if they fail to reach agreement within three (3) **Business Days** of the commencement of such discussion either **Party** may refer the matter to the **Independent Expert** for determination. The **BS Service**

**Provider** shall not be treated as failing any **Black Start Test** if it has given notice of non-capability pursuant to Sub-Clause 4.9 either:-

- 4.20.12.1 before the notice of the relevant test is given in accordance with Sub-Clause 4.20.1; or
- 4.20.12.2 after the notice of the relevant test is given in accordance with Sub-Clause 4.20.1 in respect of matters which the **BS Service Provider** can reasonably demonstrate arose after the giving of such notice.

#### ***Forced Cooling***

- 4.20.13 If during any **Black Start Test** relating to a power generating facility a **BS Genset** at the **Power Station** is required to be **Shutdown**, any forced cooling of that **BS Genset** undertaken by the **BS Service Provider** shall be at its own cost.

#### ***Restrictions on Black Start Tests***

- 4.20.14 **The Company** shall not require a **Black Start Test** during periods when the **Black Start Plant** does not have or is deemed not to have the **Black Start Capability** by reason of: -
  - 4.20.14.1 a planned maintenance and/or inspection period agreed pursuant to the **Grid Code**;
  - 4.20.14.2 an event or circumstance of **Force Majeure**;
  - 4.20.14.3 notification in accordance with Sub-Clause 4.9.1; or
  - 4.20.14.4 the terms of this Clause 4 (including Sub-Clauses 4.9.3, 4.9.4, 4.9.5 and 4.12.3) or Annexure B (*Events of Default and Consequences*) to this Clause 4.

#### ***Damage to Plant and Apparatus***

- 4.20.15 For the avoidance of doubt, each **Party** shall bear the risk of, and the other **Party** shall have no liability to that **Party** in respect of, loss and damage to that **Party's Plant** and/or **Apparatus** caused during or as a result of any **Black Start Test** (whether due wholly or partly to the other **Party's** default or to the malfunction of its **Plant** or **Apparatus** or otherwise).

#### **4.21 Monitoring and Metering**

Without prejudice to any existing right of **The Company** to monitor and meter the provision of any **Ancillary Service**, **The Company** by agreement with the **BS Service Provider** (not to be unreasonably withheld or delayed) may monitor and/or meter the provision by the **BS Service Provider** of the **Black Start Service**.

#### **4.22 Changes to Other Documents**

- 4.22.1 The Parties agree to negotiate in good faith and use all reasonable endeavours to agree amendments to this Clause 4 in light of: -
  - 4.22.1.1 any changes to a Legal Requirement or industry documentation (including without limitation the Act, any Licence, the Balancing and Settlement Code, the Grid Code, the

Connection and Use of System Code, the Mandatory Services Agreement and/or the relevant Bilateral Agreement); or

4.22.1.2 the implementation of any new Legal Requirement,

resulting, in either case, in a material change to the manner of provision of the **Black Start Service** by the **BS Service Provider** and/or the basis of payments made to or by **The Company** under this Clause 4, such amendments to have the effect so far as reasonably practicable of making the provision of the **Black Start Service** by the **BS Service Provider** and/or (as the case may be) the basis of payments to or by **The Company** under this Clause 4 no more or less favourable to the respective **Party** as was the case before such variations took effect (ignoring all payments made to the **BS Service Provider** otherwise than pursuant to this **Agreement** which, as a result of the changes to industry documentation as referred to above, shall cease to be payable to the **BS Service Provider** or are otherwise varied).

4.22.2 Failing agreement in respect of the matters contained in Sub-Clause 4.22.1, within 30 days of a **Party** notifying the other **Party** that it intends to refer a matter to the **Independent Expert**, that **Party** shall have the right to invoke the provisions of Clause [19][15] (*Dispute Resolution*) [of the **MASA**].

4.22.3 It is agreed that neither **Party** shall be entitled to modify, alter or otherwise change the site specific technical conditions under Appendix F1 (relating to the **Black Start Service**) of the **Bilateral Agreement** for the **Power Station** the subject of this **Agreement** referred to in Sub-Clause 4.3.1.2 so as to remove the reference therein to **Black Start** during such time as terms dealing with the provision of and payment for such **Ancillary Service** are contained in this Clause 4 (as amended, varied or otherwise altered from time to time) and have not either terminated or expired in accordance with the provisions of this Clause 4.

#### 4.23 **Independent Expert**

4.23.1 Where any provision of this Clause 4 or Schedule E provides for a dispute or difference between the **Parties** to be referred to the **Independent Expert**, the following provisions shall apply:

4.23.1.1 the **Independent Expert** shall act as an expert and not as an arbitrator and shall decide those matters referred to him using his skill, experience and knowledge, and with regard to all such other matters as he in his sole discretion considers appropriate;

4.23.1.2 if the **Parties** cannot agree upon the selection of an **Independent Expert**, the selection shall be made by the President for the time being of the Law Society of England and Wales;

4.23.1.3 all references to the **Independent Expert** shall be made in writing by either **Party** with notice to the other being given contemporaneously, and the **Parties** shall promptly supply the **Independent Expert** with such documents and information as he may request when considering any referral;

4.23.1.4 the **Independent Expert** shall be requested to use his best endeavours to give his decision upon the question before him as soon as possible in writing following its

referral to him, his decision shall, in the absence of fraud or manifest error, be final and binding upon the **Parties**;

4.23.1.5 if the **Independent Expert** wishes to obtain independent professional and/or technical advice in connection with the question before him:

- a) he shall first provide the **Parties** with details of the name, organisation and estimated fees of the professional or technical adviser; and
- b) he may engage such advisers with the consent of the **Parties** (which consent shall not be unreasonably withheld or delayed) for the purposes of obtaining such professional and/or technical advice as he may reasonably require;

4.23.1.6 the **Independent Expert** shall not be held liable for any act or omission, and his written decision will be given without any liability on the **Independent Expert's** part to either **Party**, unless it shall be shown that he acted fraudulently or in bad faith;

4.23.1.7 save to the extent otherwise expressly provided herein, pending the determination by the **Independent Expert**, the **Parties** shall continue to the extent possible to perform their obligations; and

4.23.1.8 the **Independent Expert** shall at his discretion be entitled to order that the costs of the reference of a dispute to him shall be paid by the **Parties** in whatever proportions he thinks fit.

#### **4.24      Force Majeure**

4.24.1 If either **Party** (the "**Non-Performing Party**") shall be unable to carry out any of its obligations under this **Agreement** due to **Force Majeure**, then without prejudice to the other provisions of this Clause 4 this **Agreement** shall remain in effect but the **Non-Performing Party's** relevant obligations and the obligations of the other **Party** owed to the **Non-Performing Party** under this **Agreement**, shall be suspended for a period equal to the duration of **Force Majeure** provided that:-

- (a) the suspension of performance is of no greater scope and of no longer duration than is required by the **Force Majeure**;
- (b) no obligations of any **Party** that arose before the **Force Majeure** causing suspension of performance are excused as a result of the **Force Majeure**;
- (c) the **Non-Performing Party** gives the other **Party** prompt notice describing the circumstance of **Force Majeure**, including the nature of the occurrence and its expected duration, and continues to furnish regular reports with respect thereto during the period of **Force Majeure**;
- (d) the **Non-Performing Party** uses all reasonable efforts to remedy its inability to perform; and
- (e) as soon as reasonably practicable after the event which constitutes **Force Majeure** the **Parties** shall discuss how best to continue their operations so far as possible in accordance with this Clause 4 .

4.24.2 For the purposes of Sub-Clauses 4.6.1.2 and 4.6.4 the **Black Start Service** shall be unavailable and no **Monthly Availability Payment** or **Repayment Amount** shall fall

due in respect of and to the extent of any **Settlement Period** in which the **BS Service Provider** is unable to provide the **Black Start Service** due to **Force Majeure**.

- 4.24.3 The **Expiry Date** shall be extended by the aggregate of all **Settlement Periods** during the term of this Clause 4 in which the **BS Service Provider** is unable to provide the **Black Start Service** due to **Force Majeure**. The **Monthly Availability Payment** and/or the **Repayment Amount** that falls due during any such extension period shall be fixed at the levels set following the final indexation prior to the original **Expiry Date** and will not be subject to any further indexation.

#### 4.25 **IBM Unit Registration**

If during the term of this Clause 4 the registration of any or all of the **Black Start Plant** as (or as part of) a **BM Unit** changes, then the **Parties** shall use all reasonable endeavours to agree such variations to this Clause 4 and Schedule E as shall be necessary in consequence thereof. Failing agreement within 30 days, either **Party** shall have the right to refer the matter to the **Independent Expert** for determination whose decision shall be final and binding on the **Parties**].

#### 4.26 **No Announcement**

Notwithstanding [Sub-Clause 13.4], the **BS Service Provider** agrees that except as provided in Sub-Clause [13.4.2] it shall not make any public announcement or statement regarding the subject matter of this Clause 4 and/or the status of the **Power Station** or **HVDC System** as a **Black Start Plant** (whether prior to, during or after the term of Clause 4), and this Sub-Clause 4.26 shall continue to bind the **BS Service Provider** after termination of this Clause 4, in whole or in part, for whatever reason.

## ANNEXURE A TO CLAUSE 4 WORKS PROGRAMME <sup>7</sup>

### Part I

#### Timescale

1. The **BS Service Provider** shall use its reasonable endeavours to procure that the **Commissioning Assessment** is passed on or before the **Target Commencement Date**. The **Parties** agree that the milestone schedule shown in Part IV of this Annexure A represents an indicative schedule of progress of the **Works**. During progress of the **Works**, but in any event no later than 3 months prior to completion of the **Works**, both **Parties** shall use their reasonable endeavours to agree the precise technical specification for the test or sequence of tests (a "**Commissioning Assessment**") referred to in Part II below. Such **Commissioning Assessment** shall not include any requirement for **The Company** to issue **Bid-Offer Acceptances**. If the **Parties** shall have failed to reach agreement by the date 3 months prior to completion of the **Works**, then the matter shall be referred to the **Independent Expert** who shall determine in his absolute discretion the precise technical specification consistent with the summary procedure set out in Part II below.
2. The **BS Service Provider** shall provide to **The Company** monthly reports of how the **Works** are progressing which shall, inter alia, identify any delay or anticipated delay in completing the **Works** and how the **BS Service Provider** proposes to remedy or avoid any such delay or anticipated delay. Moreover, the **BS Service Provider** shall, if so requested by **The Company**, give to **The Company** such evidence as it shall reasonably require and, if necessary, allow **The Company's** representatives all reasonable access to the **Power Station** and to the **Auxiliaries and/or BS Gensets and Plant and Apparatus** owned or operated by the **BS Service Provider** to enable **The Company** to ascertain how the **Works** are progressing and that the **Works** are proceeding in accordance with the **Works Programme**. Furthermore, the **BS Service Provider** shall notify **The Company** of its intention to conduct an acceptance test of the **Auxiliaries** and shall, if so requested by **The Company** and at **The Company's** sole cost, allow **The Company's** representatives to be present at such a test as observers.
3. The **BS Service Provider** shall notify **The Company** in writing of the date when the **Works** are substantially completed and the **BS Gensets** and/or the **Auxiliaries** and their associated **Plant and Apparatus** are able in the **BS Service Provider's** opinion to provide the **Black Start Service**.
4. Following receipt of a notice issued by the **BS Service Provider** pursuant to paragraph 3 or 6 (as the case may be): -
  - 4.1 the **Works** shall be deemed to be available for the purposes of conducting a **Commissioning Assessment** with effect from the date specified in the notice given by the **BS Service Provider** in accordance with paragraph 3 (the "**Provisional Service Commencement Date**") or paragraph 6 (the "**Re-assessment Availability Date**") and the **BS Service Provider** shall (subject to

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<sup>7</sup> Note: this Annexure has been developed to cover the installation and commissioning of an auxiliary generating unit. It may need to be adapted in the case of a HVDC System or a Power Park Module and the changes required will be dependent on the specific works required.

paragraph 7) be entitled to receive **Monthly Availability Payments** with effect from the **Provisional Service Commencement Date**;

- 4.2        **The Company** shall, as soon as reasonably practicable after the **Provisional Service Commencement Date** or **Re-assessment Availability Date** (as the case may be), contact the **BS Service Provider** to agree the date on which the **BS Service Provider** shall carry out a **Commissioning Assessment**, the scope of which is set out in Part II of this Annexure A, to determine whether the **BS Gensets** and/or the **Auxiliaries** and their associated **Plant** and **Apparatus** have the **Black Start Capability** and are otherwise capable of providing the **Black Start Service** in accordance with Clause 4 . For the avoidance of doubt, the **Black Start Plant** shall not have the **Black Start Capability** until such time as a **Commissioning Assessment** has been passed in accordance with this Annexure A.
5.        Both **Parties** shall use their reasonable endeavours to ensure that the **Commissioning Assessment** is conducted as soon as possible and shall agree the date and time of the **Commissioning Assessment**, provided always that, although **The Company** shall not unreasonably refuse to carry out a **Commissioning Assessment** at any time and date that may be requested by the **BS Service Provider**, having regard to the cost implications **The Company** reserves the right to cancel any **Commissioning Assessment** previously agreed to be carried out. In such a case the **Parties** shall agree an alternative time and date when the **Commissioning Assessment** shall be carried out which shall be as soon as possible thereafter. Either **Party** may request the **Independent Expert** to be present at a **Commissioning Assessment**.
6.        As soon as possible after the date on which the **Commissioning Assessment** has been completed, **The Company** shall notify the **BS Service Provider** whether it has passed or failed the **Commissioning Assessment**. Subject to the provisions of paragraph 9, in the event that **The Company** notifies the **BS Service Provider** that in **The Company's** opinion (and giving reasons for that opinion) the **BS Service Provider** has failed any **Commissioning Assessment**, the **BS Service Provider** shall as soon as possible respond to **The Company**. If the **BS Service Provider** does not dispute that there has been a failure, it shall address the reason for the failure and shall subsequently notify **The Company** when the failure has been addressed, whereupon the provisions of paragraphs 4 and 5 shall apply. If the **BS Service Provider** disputes that there has been a failure, the **Parties** shall attempt to resolve the dispute by discussions, and if they fail to reach agreement within 3 **Business Days** of the commencement of such discussions either **Party** may refer the matter to the **Independent Expert** for determination and the provisions of paragraph 13 shall apply to such reference.
7.        Where the **BS Service Provider** is determined by **The Company** or (where appropriate) the **Independent Expert** to have passed the first **Commissioning Assessment** then the **Black Start Plant** shall be deemed to have had the **Black Start Capability** with effect from the **Provisional Service Commencement Date** and the **Provisional Service Commencement Date** shall constitute the **Service Commencement Date**. Where the **BS Service Provider** fails the first **Commissioning Assessment** then the **BS Service Provider** shall reimburse to **The Company** all **Monthly Availability Payments** received in respect of all periods from the **Provisional Service Commencement Date** by way of a **Repayment Amount** and shall not be entitled to receive **Monthly Availability Payments** in respect of the **Black Start Plant** for the period commencing on the date of failure of the first **Commissioning Assessment** and ending at 00.00 hours on the first day of the calendar month immediately following the date on which the



**BS Service Provider** has successfully completed a second or subsequent **Commissioning Assessment**.

8. For the avoidance of doubt, each **Party** shall bear the risk of, and the other **Party** shall have no liability to the **Party** in respect of, loss and damage to that **Party's Plant or Apparatus** caused during or as a result of any **Commissioning Assessment** (whether due wholly or partly to the other **Party's** default or the malfunction of its **Plant or Apparatus** or otherwise).
9. Subject always to paragraph 13.2 below, if the **BS Service Provider** shall fail a third successive **Commissioning Assessment**, **The Company** may serve written notice on the **BS Service Provider** terminating the provisions of Clause 4 and such notice shall take effect immediately.
10. Subject always to paragraphs 12 and 13.2 below, save to the extent due to an event or circumstance of **Force Majeure** or an act or omission of **The Company**, if the earlier of the date of a successful **Commissioning Assessment** or the date on which the **Works** are deemed to have been commissioned is:-
  - 10.1 after the **Target Commencement Date**, then save to the extent due to an event or circumstance of **Force Majeure** the **BS Service Provider** shall pay to **The Company** without deduction or set off liquidated damages at the daily rate of £3,000 per day in respect of the first 60 days after the **Target Commencement Date** and then £1,000 per day in respect of the next 120 days after the **Target Commencement Date** (reduced by the number of days between the date originally agreed for a **Commissioning Assessment** and any date subsequently agreed following cancellation by **The Company** pursuant to paragraph 5 above), provided always that such liquidated damages shall not in any event exceed £300,000; and
  - 10.2 more than 6 months after the **Target Commencement Date**, then **The Company** shall have the right to terminate Clause 4 by written notice to the **BS Service Provider** in accordance with Clause [16][12] (*Notices*) [of the **MASA**].
11. For the purposes of paragraph 10.1 liquidated damages shall be payable by the **BS Service Provider** to **The Company** on a monthly basis in accordance with Clause [8][4] (*Payment*) [of the **MASA**], and the due date shall be ascertained accordingly. If any payment of liquidated damages (not being a payment subject to a bona fide dispute) remains unpaid after the due date of payment and such non-payment continues unremedied at the expiry of 14 **Business Days** immediately following receipt by the **BS Service Provider** of written notice from **The Company** of such non-payment then **The Company** shall have the right to terminate Clause 4 by written notice to the **BS Service Provider** in accordance with Clause [16][12] (*Notices*) [of the **MASA**]. Without prejudice to such right of termination, **The Company** may set off all or any part of any liquidated damages due to it pursuant to this Annexure A against any payments due from it to the **BS Service Provider** pursuant to this **Agreement** and/or any **Mandatory Services Agreement** or other agreement for the provision of **Ancillary Services** to **The Company** to which the **BS Service Provider** is **Party**, and the **BS Service Provider** hereby consents to the exercise of such right.
12. If **Force Majeure** prevents successful completion of a **Commissioning Assessment** or deemed commissioning within 12 months after the **Target Commencement Date**, **The Company** shall have the right to terminate Clause 4 by written notice to the **BS Service Provider** given in accordance with Clause [16][12] (*Notices*) [of the **MASA**].]

13. Upon any referral to the **Independent Expert** in the circumstances provided in paragraph 6:-
- 13.1 the **BS Service Provider's** obligation to pay liquidated damages to **The Company** under paragraph 10.1 above shall continue notwithstanding the referral provided always that if the **Independent Expert** determines that the relevant **Commissioning Assessment** has been passed, then **The Company** shall repay to the **BS Service Provider** in accordance with **Clause [8][4] (Payment) [of the MASA]** any liquidated damages paid by the **BS Service Provider** pursuant to paragraph 10.1 above in respect of the period after such **Commissioning Assessment** together with interest thereon at the **Base Rate** from the date of payment by the **BS Service Provider**; and
- 13.2 **The Company's** right to terminate the provisions of Clause 4 under paragraphs 9 and 10.2 above shall be suspended and shall have no effect during the period commencing with such referral and ending on the date of determination by the **Independent Expert**.
14. If, following receipt of a monthly report pursuant to paragraph 2 above or in exercise of its rights pursuant to paragraph 2 above or otherwise, **The Company** has reasonable grounds for believing that the **Works** will not be completed on or before the **Target Commencement Date**, then it shall so notify the **BS Service Provider**. The **BS Service Provider** shall within 12 **Business Days** inform **The Company** of the reasons for the delay or anticipated delay and shall at the same time either submit to **The Company** its proposals for remedying or avoiding such delay or anticipated delay or alternatively shall notify **The Company** of such later date by which it reasonably expects the **Works** to be completed and commissioned.
15. If **The Company** has reasonable grounds for believing that despite the **BS Service Provider's** proposals (if any) for remedying or avoiding any delay or anticipated delay the **Works** will not be completed and commissioned within a period 6 months or (where any delay is caused by **Force Majeure**) 12 months after the **Target Commencement Date**, then **The Company** may request the **Independent Expert** to declare that the **Works** have been abandoned. Upon receipt of such a request, the **Independent Expert** shall determine in his sole opinion whether there is any reasonable prospect of the **Works** being completed by, or within 6 or 12 months (as the case may be) of, the **Target Commencement Date**. If the **Independent Expert** determines that there is no such reasonable prospect, then he shall so notify **The Company** and the **BS Service Provider** whereupon the following provisions shall apply:-
- 15.1 the **BS Service Provider** shall pay to **The Company** in accordance with **Clause [8][4] (Payment) [of the MASA]** an amount equal to a **Works Contribution Refund Payment** calculated in accordance with the formula in Schedule E, Section 2, Part III as if termination of Clause 4 had thereupon taken place by way of repayment of the **Works Contribution Payment** (together with interest thereon at the **Base Rate**) referred to at Clause 4.6.1.1;
- 15.2 if either:-
- 15.2.1 the **Works** are subsequently completed or commissioned within a period of 6 months or (where the delay is caused by **Force Majeure**) 12 months after the **Target Commencement Date**; or

15.2.2 before the expiry of such relevant period it is agreed by the **Parties** or determined pursuant to **Clause [19][15] (Dispute Resolution) [of the MASA]** that notwithstanding the Independent Expert's determination the **Works** had not at the date of his determination been abandoned and that there are reasonable grounds for believing that the **Works** will be completed before the expiry of such relevant period,

then by reference to the first practicable **Final Monthly Statement** following such completion and commissioning or agreement or determination (as the case may be) **The Company** shall repay to the **BS Service Provider** the amount paid and referred to in paragraph 15.1 together with interest thereon at the **Base Rate** from the date of payment to **The Company** referred to in paragraph 15.1 above;

15.3 if either:-

15.3.1 the **Works** are not subsequently completed or commissioned within a period of 6 months or (where the delay is caused by **Force Majeure**) 12 months after the **Target Commencement Date**; or

15.3.2 before the expiry of such relevant period it is agreed by the **Parties** or determined pursuant to **Clause [19][15] (Dispute Resolution) [of the MASA]** that the **Independent Expert** was correct in his determination that the **Works** had been abandoned or that there are no reasonable grounds for believing that the **Works** will be completed before the expiry of such relevant period,

then **The Company** shall thereupon be entitled to terminate Clause 4 forthwith by notice in writing to the **BS Service Provider** in accordance with **Clause [16][12] (Notices) [of the MASA]**.

## Part II

### Commissioning Assessment - Summary Procedure<sup>8</sup>

#### 1. Scope

The precise technical specification for a **Commissioning Assessment** will be comprehensively set out in a detailed specification to be agreed between the **Parties** no later than 3 months prior to the completion of the **Works** (such agreement not to be unreasonably withheld or delayed) or otherwise determined by the **Independent Expert** pursuant to paragraph 1 of Part I of this Annexure A.

#### 2. Purpose

The **Commissioning Assessment** will aim to demonstrate that with and without external power supplies to all or part of the **Power Station** the **BS Auxiliary Unit** can be independently started and in turn allow the reliable start-up of the **[main Gas Turbine Units and Steam Unit]** in the manner (including without limitation within the timescales) required by the **Black Start Capability** technical parameters.

#### 3. Specification

A full range of commissioning and **Plant** performance test will be carried out by the **BS Service Provider** to prove that the **BS Auxiliary Unit** performs correctly without detriment to the operation of the existing **BS Gensets**. The **Commissioning Assessment** may form part of these tests however they will be considered to be independent from them.

The **Commissioning Assessment** shall be deemed to be passed when the **Power Station** has demonstrated that it has performed adequately in all the following tests such that all **Parties** can have confidence that the **Black Start Capability** could be provided if the situation arose. It should be noted that performance tests of various types may be conducted after the **Commissioning Assessment** but these will not affect the ability of the **Power Station** to carry out a **Black Start Instruction**.

*Guidelines for Commissioning Assessments (full details to be provided by NGESO)*

Part A: Auxiliaries' Commissioning Assessment – Demonstration of Resilience

Part B: Demonstration of Black Start Capability

Part C: Black Start Telephony Systems

Part D: Local Joint Restoration Plan – Desktop Exercise

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<sup>8</sup> Note: this Part has been developed to cover the installation and commissioning of an auxiliary generating unit. It may need to be adapted in the case of a HVDC System or Power Park Module and the changes required will be dependent on the specific works required.

### **Part III**

**[Specification of BS Auxiliary Unit]**

**[To be completed]**

## Part IV

### Indicative Milestone Schedule<sup>9</sup>

MILESTONE ACTIVITY	LATEST TARGET
1. <b>The Company</b> exec approval	
2. Contract signing	
3. Complete preliminary functional specifications	
4. Environmental Statement completed	
5. Submit IPC Application	
6. Submit Section 36 Application	
7. Expected to receive Section 36 <b>Consents</b>	
8. Expected to receive IPC <b>Consents</b>	
9. Site access (enabling works)	
10. Site access (main civil)	
11. Civil construction completion	
12. Start of delivery of power converter system	
13. Complete pipe-work installation	
14. Complete electrical control & instrumentation installation	
15. Mechanical completion (i.e. the completion of the supply and installation of the power converter system and process <b>Plant</b> and equipment provided under contract to the <b>BS Service Provider</b> with the exception of minor defects and omissions).	
16. Cold commissioning complete	
17. Start hot commissioning	

<sup>9</sup> Note: this Part has been developed to cover the installation and commissioning of an auxiliary generating unit. It will need to be adapted in the case of a HVDC System or a Power Park Module and the changes required will be dependent on the specific works required.

18.	Completion of hot commissioning	
19.	<b>Black Start Capability</b> testing	
20.	<b>Target Commencement Date</b>	

**Part V**

**Not used**



## Part VI - Valid Invoices

[Insert list of required invoices for **Internal Costs** and **External Costs**]



**ANNEXURE B TO CLAUSE 4  
EVENTS OF DEFAULT AND CONSEQUENCES**

Event of Default (Capability) - Failure of first Commissioning Assessment	Consequences
Failure by the <b>BS Service Provider</b> of the first <b>Commissioning Assessment</b> conducted in accordance with Part I and Part II of Annexure A to Clause 4.	A <b>Repayment Amount</b> shall become payable by the <b>BS Service Provider</b> to <b>The Company</b> , being an amount calculated in accordance with Schedule E, Section 2, Part I.
Event of Default (Capability) - Notification of non-capability	Consequences
Save in respect of a planned maintenance or inspection period agreed pursuant to the <b>Grid Code</b> (evidenced by written notification(s) from the <b>BS Service Provider</b> under <b>Grid Code OC 2.4.1.2.3</b> and <b>2.4.1.2.4</b> ), failure by the <b>BS Service Provider</b> to notify <b>The Company</b> that the <b>Black Start Plant</b> does not or will not have the <b>Black Start Capability</b> in the manner referred to in Sub-Clause 4.9.1.1 (whether evidenced by a <b>Remote Synchronisation Test, Capability Assessment, Grid Code</b> test or otherwise).	<p>(1) The <b>Black Start Service</b> shall be deemed to be unavailable and Sub-Clause 4.9.4 shall apply; and</p> <p>(2) Upon the first and each successive <b>Event of Default</b> a <b>Repayment Amount</b> shall become payable by the <b>BS Service Provider</b> to <b>The Company</b>, being an amount calculated in accordance with Schedule E, Section 2, Part I; and</p> <p>(3) Upon the third and each successive <b>Event of Default</b> within each <b>Assessment Period</b> (reduced pro rata for any <b>Assessment Period</b> shorter than 12 months), in addition to (2) above, <b>The Company</b> shall have the right to terminate Clause 4 by notice in writing to the <b>BS Service Provider</b> to be served not later than 28 days following such third or successive <b>Event of Default</b>.</p>
Event of Default - Planned Maintenance and Inspection Periods	Consequences
In respect of a planned maintenance or inspection period agreed pursuant to the <b>Grid Code</b> (as evidenced by written notification(s) from the <b>BS Service Provider</b> under <b>Grid Code OC 2.4.1.2.3</b> and <b>2.4.1.2.4</b> ), failure by the <b>BS Service Provider</b> to notify <b>The Company</b> that the <b>Black Start Plant</b> does not or will not have the <b>Black Start Capability</b> in the manner referred to in Sub-Clause 4.9.1.1.	The <b>Black Start Service</b> shall be deemed to be unavailable during, and there shall be taken into account in the calculation of <b>Black Start Capability Payments</b> those <b>Settlement Periods</b> comprised in, the period commencing at 00.00 on the first day of the planned maintenance or inspection period agreed pursuant to the <b>Grid Code</b> (as notified by the <b>BS Service Provider</b> to <b>The Company</b> under <b>Grid Code OC 2.4.1.2.3</b> and <b>2.4.1.2.4</b> .) and ending at 24.00 hours on

	the last day of such planned maintenance or inspection period.
<b>Events of Default (Black Start Situation) - Black Start Instruction</b>	<b>Consequences</b>
<p>Save during a period the subject of a prior notification from the <b>BS Service Provider</b> to <b>The Company</b> as referred to in Sub-Clause 4.9.1 in which the <b>Black Start Plant</b> does not have the <b>Black Start Capability</b>, the failure by the <b>BS Service Provider</b> to comply with <b>The Company's</b> instruction for the initiation and implementation of the <b>Local Joint Restoration Plan</b> in accordance with Sub-Clause 4.10 save to the extent:-</p> <p>(a) the instruction requires the <b>BS Service Provider</b> to sustain the relevant <b>Black Start Contracted MW</b> (or such lesser power output agreed by the <b>BS Service Provider</b> and the <b>Grid Operator</b>) in any <b>Black Start Situation</b> for more than the number of hours and on the basis referred to in Sub-Clause 4.8.1.3; or</p> <p>(b) compliance with the instruction would mean the <b>Black Start Plant</b> could not keep within its safe operating parameters and a subsequent change in output from that <b>Black Start Plant</b> was demonstrated to <b>The Company's</b> reasonable satisfaction to be necessary for safety reasons (whether relating to personnel or <b>Plant</b> and <b>Apparatus</b>);</p> <p>(c) the failure was wholly and directly caused by the unavailability of or constraint on the <b>National Gas Transmission System</b> such that the <b>BS Service Provider</b> was unable to offtake gas in sufficient quantities at that part of the <b>National Gas Transmission System</b> to which the <b>Black Start Station</b> is connected; or</p>	<p>(1) The <b>Black Start Service</b> shall be deemed to be unavailable and Sub-Clause 4.9.4 shall apply; and</p> <p>(2) A <b>Repayment Amount</b> shall become payable by the <b>BS Service Provider</b> to <b>The Company</b>, being an amount calculated in accordance with Schedule E, Section 2 , Part I); and</p> <p>(3) In addition to (2) above, <b>The Company</b> shall have the right to terminate Clause 4 forthwith by notice in writing to the <b>BS Service Provider</b>.</p>

(d)	the failure was wholly and directly caused by an event or circumstance of <b>Force Majeure</b> .	
<b>Events of Default - Failure of Black Start Tests</b>		<b>Consequences</b>
The failure by the <b>BS Service Provider</b> to pass a <b>Reproving Assessment</b> carried out as a result of a failure of any <b>Black Start Test</b> (excluding an exercise pursuant to Sub-Clause 4.12).		<p>(1) The <b>Black Start Service</b> shall be deemed to be unavailable and Sub-Clause 4.9.4 shall apply; and</p> <p>(2) A <b>Repayment Amount</b> shall become payable by the <b>BS Service Provider</b> to <b>The Company</b>, being an amount calculated in accordance with Schedule E, Section 2, Part 1.</p>
The failure by the <b>BS Service Provider</b> of any <b>Reproving Assessment</b> carried out following failure of both a <b>Black Start Test</b> (excluding an exercise pursuant to Sub-Clause 4.12) and a subsequent <b>Reproving Assessment</b> .		<p>(1) The <b>Black Start Service</b> shall be deemed to be unavailable and Sub-Clause 4.9.4 shall apply; and</p> <p>(2) A <b>Repayment Amount</b> shall become payable by the <b>BS Service Provider</b> to <b>The Company</b>, being an amount calculated in accordance with Schedule E, Section 2, Part 1.</p> <p>(3) Upon the first and each successive <b>Event of Default</b>, <b>The Company</b> shall have the right to terminate Clause 4 by notice in writing to the <b>BS Service Provider</b>.</p> <p>(4) Without prejudice to (3) above, <b>The Company</b> may (at its option) meet with the <b>BS Service Provider</b> to discuss the reasons for failure of the <b>Black Start Test</b> and the subsequent <b>Reproving Assessments</b> and, subject to the <b>BS Service Provider</b> identifying the cause(s) for such failure and demonstrating to <b>The Company's</b> reasonable satisfaction that it is able to remove or address such cause(s) before the <b>Expiry Date</b>, <b>The Company</b> may (in its sole discretion) agree with the <b>BS Service Provider</b> a period during which the <b>BS Service Provider</b> shall (at its own cost) undertake additional works to ensure that the</p>

	<p><b>Black Start Capability</b> is restored (“<b>Additional Works Period</b>”). Where <b>The Company</b> agrees to an <b>Additional Works Period</b>, <b>The Company</b> shall only be permitted to terminate Clause 4 in accordance with (3) above, where either:-</p> <p>(i) the <b>BS Service Provider</b> advises that the additional works will not be completed within the <b>Additional Works Period</b>;</p> <p>(ii) following completion of the additional works, the <b>BS Service Provider</b> fails a subsequent <b>Reproving Test</b>.</p>
<b>Events of Default – Public Announcement</b>	<b>Consequences</b>
Any breach by the <b>BS Service Provider</b> of its obligation contained in Sub-Clause 4.26 ( <i>No Announcement</i> ).	<b>The Company</b> shall have the right to terminate Clause 4 forthwith by notice in writing to the <b>BS Service Provider</b> .

**ANNEXURE C TO CLAUSE 4**  
**ANNUAL ASSESSMENT OF BLACK START CAPABILITY**

% <b>Black Start Capability</b> over each <b>Assessment Period</b> by reference to <b>Target Availability</b> in the relevant <b>Assessment Period</b> (“ <b>TA<sub>y</sub></b> ”)	Consequences
≥ <b>TA<sub>y</sub></b>	None.
Year 1 < <b>TA<sub>y</sub></b> ≥ [85]% Year 2 < <b>TA<sub>y</sub></b> ≥ [85]% Year 3 < <b>TA<sub>y</sub></b> ≥ [85]% Year 4 < <b>TA<sub>y</sub></b> ≥ [85]% Year 5 < <b>TA<sub>y</sub></b> ≥ [85]%	The <b>BS Service Provider</b> shall pay to <b>The Company</b> in accordance with <b>Clause [8][4] (Payment) [of the MASA]</b> the <b>Annual Availability Shortfall Payment</b> calculated in accordance with the formulae set out in Schedule E, Section 2, Part II.
< [85]%	Either (at <b>The Company's</b> absolute discretion):  (1) The <b>BS Service Provider</b> shall pay to <b>The Company</b> in accordance with <b>Clause [8][4] (Payment) [of the MASA]</b> the <b>Annual Availability Shortfall Payment</b> calculated in accordance with the formulae set out in Schedule E, section 2 Part II; or  (2) <b>The Company</b> shall implement a reduction in the <b>Availability Price</b> specified in Schedule E, Section 3, Part I equivalent to the percentage unavailability of the <b>Black Start Capability</b> over the <b>Assessment Period</b> and shall revise the calculation of <b>Monthly Availability Payments</b> due to the <b>BS Service Provider</b> in respect of the <b>Assessment Period</b> accordingly and recover any overpayment of <b>Monthly Availability Payments</b> from the <b>BS Service Provider</b> by reference to the first practicable

	<p><b>Final Monthly Statement</b> after expiry of the <b>Assessment Period</b>. Further, the <b>Parties</b> shall discuss and endeavour to agree appropriate amendments to Clause 4 to reflect the reduced value to <b>The Company</b> of the <b>Black Start Service</b>. Provided always that, if no such agreement shall by then have been reached, <b>The Company</b> shall be entitled to terminate Clause 4 forthwith by notice in writing to the <b>BS Service Provider</b> to be served at any time until the end of one month following expiry of the relevant <b>Assessment Period</b> (or one month following completion of the assessment, if later).</p>
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**ANNEXURE D TO CLAUSE 4**  
**REMOTE SYNCHRONISATION TEST/DEAD LINE CHARGE TEST**

**PART 1 – RST SUMMARY PROCEDURE**

1. The precise technical requirements for a **RST** will be comprehensively set out in the '**RST** procedure' as amended from time to time and to be agreed by the **BS Service Provider** prior to the test (such agreement not be unreasonably withheld or delayed).
2. A **RST** will require the **BS Service Provider** to energise from dead a local busbar, a circuit(s), a transformer(s) and a remote busbar and then synchronise onto a live busbar that is already synchronised to the **National Electricity Transmission System**.
3. At the start of the energisation process, the **BS Service Provider** circuit breaker will be closed to energise the test part of the system. The energisation process may require, when the relevant circuit breaker is closed the voltage level to be gradually increased to meet a target HV voltage level.
4. The **BS Service Provider** may be required to operate for up to one hour at no load at **Synchronous Speed** while the **[Genset's/HVDC System's]** ability to control voltage and **Frequency** on the test system is verified. **[If forced cooling of the Genset is required to enable such operation to be permissible, then the cost of such cooling should be the sole responsibility of the BS Service Provider.]**
5. All reasonable care will be undertaken in preparing the **RST** procedure such that neither the energisation process nor the remote **Synchronisation** process will cause damage to **Plant** or equipment owned by the **BS Service Provider** or **The Company**, however all risks of damage to a **Party's Plant** or equipment shall be borne by that **Party**.
6. The **BS Service Provider** will be required to provide substation indications to enable the test to be co-ordinated from the **BS Service Provider's** control room.

**PART 2 – DEAD LINE CHARGE TEST SUMMARY PROCEDURE**

1. A **Dead Line Charge Test** will be carried out in the same manner as a **Remote Synchronisation Test** with the exception that the **Black Start Plant** is not synchronised to the **National Electricity Transmission System** at the remote busbar. This test confirms the **BS Service Provider's** ability to charge a dead part of the network and its ability to control parameters at the remote end.

**SCHEDULE E  
BLACK START CAPABILITY**

**SECTION 1 - DATA<sup>10</sup>**

**Part I**

**[Main Generating Unit(s)] [CCGT Module(s)] : [     ]**

**Black Start Contracted MW:[     ] MW**

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<sup>10</sup> **Note:** this Part has been developed to cover a Power Station and will need to be adapted for a HVDC System or a Power Park Module.

## Part II

[BS Auxiliary Unit(s):[ ]]

[Auxiliary Contracted MW:[ ]]

**Part III<sup>11</sup>**  
**(Ref: Sub-Clause 4.8.4)**

<b>Time to Connection Event</b> (minutes) (Ref: Sub-Clause 4.8.4.3)	[120 minutes] [the periods specified in respect of different warmth conditions in the table set out in Part IV below.] (or such other period agreed by the <b>Parties</b> in writing)
Individual Loads (Ref: Sub-Clause 4.8.4.4)	
Minimum <b>Frequency</b> Maximum <b>Frequency</b> (Ref: Sub-Clause 4.8.4.5)	[ ] Hz [ ] Hz
Loading Restrictions Minimum Stable Operating Level  Maximum period of running for MW output below that stated above (Ref: Sub-Clause 4.8.4.6)	[ ] MW  [ ] Minutes
Loading period (Ref: Sub-Clause 4.8.4.7)	[ ] minutes from the time of the <b>Connection Event</b>
Interim power output levels (MW) 1 2 3 (Ref: Sub-Clause 4.8.4.8)	 [ ] MW within ½ hour of <b>Connection Event</b> [ ] MW within 1 hour of <b>Connection Event</b> [ ] MW within 1½ of <b>Connection Event</b>
<b>Reactive Power</b> range (Mvar)	[ ] Mvar leading to [ ] Mvar lagging at <b>Minimum Output</b>

<sup>11</sup> Note: this Part will be updated with the contracted outputs based on the technical and commercial submissions in the tender.

This Part has been developed for a Power Station and will need to be adapted in the case of a HVDC System or Power Park Module.

(Ref: Sub-Clause 4.8.4.9)	
Resilience of supply, <b>Black Start Service</b>	[ ] hours
Resilience of Supply, <b>BS Auxiliary Unit(s)</b>	[ ] hours
Sequential <b>Black Starts</b>	[ ] starts
Short-circuit level (following the start of a system disturbance)	[ ]
Inertia value	[ ] MVA.s

## PART IV

### [TIME TO CONNECTION EVENT (WARMTH CONDITIONS)]<sup>12</sup>

Unit	Thermal Condition (TC)	Time to Connect [minutes]	Following a desynchronization, Unit will withstand in each TC for... [minutes]	Comments
GT I	Hot	[ ]	[ ]	
	Warm	[ ]	[ ]	
	Cold	[ ]	[ ]	
	Cold Bypass		[ ]	
GT II	Hot	[ ]	[ ]	
	Warm	[ ]	[ ]	
	Cold	[ ]	[ ]	
	Cold Bypass	[ ]	[ ]	
- ST	Hot	[ ]	Offline [ ] Hours	
	Warm	[ ]	Offline [ ] Hours	
	Cold	[ ]	Offline longer than [ ] Hours	

<sup>12</sup> Delete if not relevant

## SECTION 2 - FORMULAE

### Part I Availability Payments

#### 1. TOTAL MONTHLY PAYMENT

$$TMP_m = BSAP_m - RA_m$$

Where:

$TMP_m$  = total monthly payment by **The Company** to the **BS Service Provider** pursuant to Clause 4

$BSAP_m$  = defined in paragraph 2 below

$RA_m$  =  $RAF_m + RAC_m + RABSm$  as each is defined in paragraph 3 below

And if  $TMP_m$  is negative, then the **BS Service Provider** shall pay to **The Company** such amount in accordance with Clause [8][4] (*Payment*) of the **MASA**.

#### 2. MONTHLY AVAILABILITY PAYMENT

$$BSAP_m = \sum_{j=1}^{month} BSAP_j * BSAM_j$$

$BSAP_m$  = the aggregate **Monthly Availability Payments** payable in respect of calendar month m

$\sum_{j=1}^{month}$  = the summation over all **Settlement Periods j** in calendar month m

$BSAP_j$  = the **Black Start Availability Price** for all **Settlement Periods j** subject to indexation in accordance with Schedule E, Section 3, Part II

$BSAM_j$  = 0 in respect of each **Settlement Period j** in which the **Black Start Plant** does not, or is deemed not to, have the **Black Start Capability** in accordance with Sub-Clause 4.9, Sub-Clause 4.12.3 or Sub-Clause 4.19.3, otherwise 1

#### 3. REPAYMENT AMOUNTS

(a)

$$RAF_m = \sum_{n=1}^m BSAP_n$$

Where:

$RAF_m$  = the **Repayment Amount** referred to in the **Capability** (Failure of first **Commissioning Assessment**) section of the table in Annexure B to Clause 4

$\sum_{n=1}^m$  = the summation over all calendar months' m in the period commencing on the **Provisional Service Commencement Date** and ending on the date of failure of the first **Commissioning Assessment** in calendar month m

(b)

$$RAC_m = \sum_{EventofDefault} \min((BSAP_j * 480), \sum_{j=1}^{j=x} BSAP_j * BSAM_j)$$

Where:

$RAC_m$  = the **Repayment Amount** referred to in the Capability (Notification of non-capability) section of the table in Annexure B to Clause 4

$\sum_{EventofDefault}$  = the summation over each **Event of Default** referred to in the Capability section of the table in Annexure B to Clause 4

$\sum_{j=1}^{j=x}$  = the summation over each **Settlement Period j** prior to the **Event of Default** beginning with the **Settlement Period** in which the **Black Start Plant** was last demonstrated to **The Company's** reasonable satisfaction to have the **Black Start Capability**

(c)

$$RABS_m = \sum_{EventofDefault} \min((BSAP_j * 1440), \sum_{j=1}^{j=y} BSAP_j * BSAM_j)$$

Where:

$RABS_m$  = the **Repayment Amount** referred to in the **Black Start Situation** section of the table in Annexure B to Clause 4

$\sum_{EventofDefault}$  = the summation over each **Event of Default** referred to in the **Black Start Situation** section of the table in Annexure B to Clause 4

$\sum_{j=1}^{j=y}$  = the summation over each **Settlement Period j** prior to the **Event of Default** beginning with the commencement of Clause 4 or, if later, the last successful initiation and implementation of the **Local Joint Restoration Plan** in a **Black Start Situation** or during a **Grid Code test** or **Remote Synchronisation Test**

## Part II

### Annual Availability Shortfall Payment

#### 1. CALCULATION OF ANNUAL AVAILABILITY SHORTFALL PAYMENT

$$AASP_y = (MR_y * RFA_y)$$

$AASP_y$  = The total **Annual Availability Shortfall Payment** due to **The Company** from the **BS Service Provider** in respect of **Assessment Period y** (as defined in Sub-Clause 4.15.1)

$MR_y$  = As defined in paragraph 2 below

$RFA_y$  = Calculated in accordance with paragraph 3 below

#### 2. CALCULATION OF MAXIMUM AMOUNT REPAYABLE ( $MR_y$ ) IN RESPECT OF ANY SINGLE ASSESSMENT PERIOD

$$MR_y = (A * WCP + Id)$$

$MR_y$  = The maximum aggregate amount payable by the **BS Service Provider** to **The Company** by way of **Annual Availability Shortfall Payments** in respect of **Assessment Period y**

$A$  = A fraction, being the **Assessment Period y** divided by the term of Clause 4 (as defined in Sub-Clause 4.5)

$WCP$  = Amount of total **Works Contribution Payments**

$Id$  = Interest at the **Base Rate** calculated on  $WCP$  accruing on a daily basis over the number of days in **Assessment Period y**

#### 3. CALCULATION OF $RFA_y$ IN RESPECT OF ANY SINGLE ASSESSMENT PERIOD

$RFA_y$  = 0 if  $AA_y \geq TA_y$

Otherwise

$$RFA_y = (TA_y - AA_y) / TA_y$$

Where:

$TA_y$  = **Target Availability** as specified in the table set out in Section 4 to this Schedule E



$AA_y$  = Actual availability and is the percentage of **Settlement Periods** over **Assessment Period**  $y$  in which the **Black Start Plant** has had **Black Start Capability** (expressed as a fraction) as calculated below

Where:

$$AA_y = \frac{\sum_{j=0}^{12months} (BSAMA_j)}{SP}$$

$\sum_{j=0}^{12months}$  = the summation overall **Settlement Periods**  $j$  in **Assessment Period**  $y$

$BSAMA_j$  = 0 in respect of each **Settlement Period**  $j$  in which the **Black Start Plant** does not have **Black Start Capability** as provided in Sub-Clause 4.9 (excluding where due to events or circumstances of **Force Majeure** or where **The Company** has approved a period of withdrawal of **Black Start Capability** pursuant to Sub-Clause 4.15.4), otherwise 1

$SP$  = the number of **Settlement Periods**  $j$  in **Assessment Period**  $y$

### Part III

#### Works Contribution Refund Payment

The **Works Contribution Refund Payment** ( $WCRP_t$ ) referred to in Sub-Clauses 4.3.5, 4.5.3, 4.15.8, 4.17.2 and paragraph 15.1 of Annexure A shall be calculated in accordance with the following applicable formulae:-

$$WCRP_t = [(WCP_1 + I_1) * f_1] - \sum AASP_y$$

Where: -

$WCRP_t$  = the **Works Contribution Refund Payment** payable by the **BS Service Provider** to **The Company**

$WCP_1$  = the sum of all **Works Contribution Payments** (including VAT thereon) paid by **The Company** to the **BS Service Provider**

$I_1$  = Interest at the **Base Rate** calculated on  $WCP_1$  accruing on a daily basis from the date of payment of  $WCP_1$  by **The Company** until the date of repayment by the **BS Service Provider**

$f_1$  = a factor equal to either:

- (i) prior to the date of successful completion of the **Works**, 1: or
- (ii) from and including the date of successful completion of the **Works**

$$\frac{M_R}{M_T}$$

$M_R$  = the number of whole calendar months remaining until the **Expiry Date** as at the date of termination or (as the case may be) the date on which the event that triggers the **Works Contribution Refund** occurs

$M_T$  = in respect of  $WCRP_t$  the total number of whole calendar months in the period from the date of successful completion of the **Works** until the **Expiry Date**

$AASP_y$  = all **Annual Availability Shortfall Payments** paid or payable by the **BS Service Provider** to **The Company** over the term of Clause 4

**Part IV**  
**Not used**

## **SECTION 3 - PRICES**

### **Part I**

#### **Black Start Availability Price**

**£[ ]/Settlement Period**

## Part II

### Indexation Formulae

The prices specified in Schedule E, Section 3, Part I are specified at April 2022 values and will be adjusted annually (commencing on 1st April 2023) to take account of general price inflation. The index used will be the Retail Prices Index (RPI) with 1987 = 100 base.

The source of the RPI index is to be the monthly Office for National Statistics “Focus on Consumer Price Indices”.

The relevant price will therefore be increased (or reduced as appropriate) for the period April 2023 to March 2024 by the following factor:-

$$\frac{RPI_2}{RPI_1}$$

Where

$RPI_2$  is the RPI for March 2023

$RPI_1$  is the RPI for March 2022

The relevant price will then be increased (or reduced as appropriate) for the period April 2024 to March 2025 by the following factor:-

$$\frac{RPI_3}{RPI_1}$$

Where

$RPI_3$  is the RPI for March 2024

$RPI_1$  is the RPI for March 2022

In subsequent years indexation will continue in accordance with the above, with always the numerator of the factor representing the RPI of the year under consideration and the denominator of the factor being RPI for March 2022

In the event that RPI ceases to be published or is not published in respect of any relevant month or it is not practicable to use RPI because of a change in the method of compilation or some other reason, indexation for the purpose of this Part II shall be calculated by **The Company** using an index agreed by the **Parties** with a view to determining the relevant price after indexation that would be closest to the relevant price after indexation if RPI had continued to be available.

SECTION 4 - TARGET AVAILABILITY

Assessment Period:	Target Availability for Assessment Period y (TA <sub>y</sub> ):	Scheduled maintenance days in Assessment Period y:

## SECTION 5 - NOTIFICATION FORMATS

### NOTIFICATION OF NON-CAPABILITY AND RESTORATION OF CAPABILITY FOR BLACK START

**[NAME OF BS SERVICE PROVIDER]**

Optional Logo

Station .....Telephone:

Standby Tel:

Fax:

Standby Fax:

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#### NOTIFICATION TIME

HRS:MINS	DD/MM/YY

CONFIRMATION OF A TELEPHONE CONVERSATION? ✓	
BETWEEN OF NATIONAL GRID AND OF [NAME OF BS SERVICE PROVIDER]	

#### PERIOD OF NON-CAPABILITY

	TIME (hrs:mins)	DATE (dd/mm/yy)
COMMENCEMENT OF NON-CAPABILITY		
*ESTIMATED TIME/DATE OF RESTORATION		

\* Indicate estimated time/date of restoration and re-notify actual time/date of restoration when known using table below.

#### REASON FOR NON-CAPABILITY

--

#### RESTORATION OF-CAPABILITY

	TIME (hrs:mins)	DATE (dd/mm/yy)
TIME/DATE OF RESTORATION		

Fax Sent By (Print name):

Signature: .....

Date: .....

Time: .....

Acknowledged by National Grid Electricity System Operator Limited:

Signature: .....

Date: .....

Time: .....

<b>NATIONAL GRID USE ONLY</b>	<b>SENT TO O &amp; T SETTLEMENTS? ✓</b>	
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**National Grid Control Centre**

**Fax:**

**0870 602 4809**

**Standby Fax: 0870 602 4802**



## REQUEST TO REVISE CONTRACT DATA FOR BLACK START

**[NAME OF BS SERVICE PROVIDER]**

Optional Logo

Station .....Telephone:

Standby Tel:

Fax:

Standby Fax:

### NOTIFICATION TIME

<b>HRS:MINS</b>	<b>DD/MM/YY</b>	<b>CONFIRMATION OF A TELEPHONE CONVERSATION? ✓</b>	
		BETWEEN OF NATIONAL GRID AND OF [NAME OF BS SERVICE PROVIDER]	

### REDECLARATION OF CONTRACT DATA

STATION CONTRACTED (MW)		*National Grid ACCEPT ✓	National Grid REJECT ✗
EXISTING	PROPOSED		
<b>PROPOSED INTERIM POWER OUTPUT LEVELS</b>			
1 [            ] MW WITHIN [            ] MINS			
2 [            ] MW WITHIN [            ] MINS			
3 [            ] MW WITHIN [            ] MINS			

PROPOSED REACTIVE POWER RANGE (Mvars) AT MIN OUTPUT/GEN STATOR TERMINALS	*National Grid ACCEPT ✓	National Grid REJECT ✗
[            ] LEADING TO [            ] LAGGING		

TIME TO CONNECTION EVENT (MINS)		*National Grid ACCEPT ✓	National Grid REJECT ✗
EXISTING	PROPOSED		

DETAILS OF ANY OTHER REVISION(S) TO THE BLACK START CAPABILITY	*National Grid ACCEPT ✓	National Grid REJECT ✗

\*This agreement can be withdrawn at anytime by the Company and the contract parameters reinstated.

Fax Sent By (Print name):

Signature: .....

Date: .....

Time: .....

Acknowledged by **National Grid Electricity System Operator Limited:**

Signature: .....

Date: .....

Time: .....

<b>NATIONAL GRID USE ONLY</b>	SENT TO O & T SETTLEMENTS?✓	
	SENT TO O & T CONTRACTS?✓	

**National Grid Control Centre**

**Fax: 0870 602 4809**  
**Standby Fax: 0870 602 4802**

# **AGREEMENT OF BLACK START TEST PARAMETERS<sup>13</sup>**

[BS SERVICE PROVIDER'S NAME]  
[ ] POWER STATION

AGREEMENT REFERENCE NUMBER	IDENTITY OF BS GENSET [BM UNIT ID]	BLACK START TEST DATE	BLACK START TEST PERIOD START TIME	BLACK START TEST PERIOD END TIME

## **BS GENSET:**

PARAMETERS	[BM UNIT ID]
Physical Notification Level (MW)	
Maximum Export Limit (MW)	
Bid Price (£/MWh)	
Offer Price (£/MWh)	Equal to Bid Price
MZT (Hours)	
Min Desync Interval (Hours)	
Min Sync Interval(Hours)	

## **BS AUXILIARY UNIT:**

PARAMETERS	[BM UNIT ID]
Physical Notification Level	Zero
Maximum Export Limit (MW)	

PROPOSED RUNNING PROFILE(S) FOR THE BS GENSET	
Appended hereto.	

The aforementioned Black Start Test Parameters and Running Profiles are agreed pursuant to Sub-Clause [4.20] by:

Signature: ..... Date: ..... Time: .....

Authorised Signatory

On behalf of [ ]

Signature: ..... Date: ..... Time: .....

Electricity Balancing and Energy Trading Manager

On behalf of **National Grid Electricity System Operator Limited**

<sup>13</sup> This will require updating for a HVDC System or a Power Park Module

NATIONAL GRID USE ONLY	COPY TO CONTRACTS, OPS POLICY & SETTLEMENTS? ✓	
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## GENERAL DEFINITIONS FOUND IN SCHEDULE A OF CSA OR SCHEDULE B OF MASA

“the <b>Act</b> ”	the Electricity Act 1989;
“ <b>Active Power</b> ”	<p>the product of voltage and the in-phase component of alternating current measured in units of Watts and standard multiples thereof i.e.</p> <p>1000 Watts = 1kW</p> <p>1000 kW = 1MW</p> <p>1000 MW = 1GW</p> <p>1000 GW = 1TW</p>
“ <b>Adequate Procedures</b> ”	shall be determined in accordance with section 7(2) of the <b>Bribery Act</b> (and any guidance issued under section 8 of that Act);
“ <b>Agreed Ancillary Services</b> ”	<b>Part 2 System Ancillary Services and Commercial Ancillary Services;</b>
“ <b>Agreement</b> ”	this agreement (including the Schedules) as amended, extended, supplemented, novated or modified from time to time;
“ <b>Allowed Interruption</b> ”	the meaning attributed to it in the <b>CUSC</b> ;
“ <b>Ancillary Services</b> ”	<b>System Ancillary Services</b> and/or <b>Commercial Ancillary Services</b> , as the case may be;
“ <b>Apparatus</b> ”	all equipment in which electrical conductors are used, supported or of which they may form a part;
“ <b>Associated Person</b> ”	shall have the meaning ascribed to it in section 8 of the <b>Bribery Act</b> and shall include but is not limited to any employees, agents and/or subcontractors of the <b>BS Service Provider</b> or <b>The Company</b> as applicable in relation to the provision of <b>Agreed Ancillary Service(s)</b> ;
“ <b>Authority</b> ”	the Director General of Electricity Supply appointed for the time being pursuant to section 1 of the <b>Act</b> or, after the coming into force of section 1 of the Utilities Act 2000, the Gas and Electricity Markets Authority established by that section;
“ <b>Balancing and Settlement Code (BSC)</b> ”	the meaning attributed to it in the <b>Transmission Licence</b> ;
“ <b>Balancing Mechanism Window</b> ”	the meaning attributed to it in the <b>BSC</b> ;

<b>“Balancing Services Activity”</b>	the meaning attributed to it in the <b>Transmission Licence</b> ;
<b>“Base Rate”</b>	in respect of any day the rate per annum which is equal to the base lending rate from time to time of Barclays Bank plc as at the close of business on the immediately preceding <b>Business Day</b> ;
<b>“Bid-Offer Acceptance”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Bid-Offer Data”</b>	the meaning attributed to it in the <b>BSC</b> ;
<b>“Bid-Offer Pairs”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Bid Price”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Bilateral Agreement”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“BM Unit”</b>	the meaning attributed to it in the <b>BSC</b> , except for the purposes of this <b>Agreement</b> the reference to “a <b>Party</b> ” in the <b>BSC</b> shall be a reference to the <b>Generator</b> ;
<b>“BM Unit Data”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“BM Unit Metered Volume”</b>	the meaning attributed to it in the <b>BSC</b> ;
<b>“Bribery Act”</b>	the Bribery Act 2010 (and any amendment thereto);
<b>“BSC Framework Agreement”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Business Day”</b>	a week-day other than a Saturday on which banks are open for domestic business in the City of London;
<b>“Circuit Breaker”</b>	a mechanical switching device, capable of making carrying and breaking currents under normal circuit conditions and also of making, carrying for a specified time and breaking currents under specific abnormal circuit conditions, such as those of short circuit;
<b>“Combined Cycle Gas Turbine Module” or “CCGT Module”</b>	a collection of <b>Generating Units</b> (registered as a <b>CCGT Module</b> under the <b>Grid Code PC</b> ) comprising one or more <b>Gas Turbine Units</b> (or other gas based engine units) and one or more <b>Steam Units</b> where, in normal operation, the waste heat from the <b>Gas Turbine Units</b> is passed to the water/steam of the associated <b>Steam Unit</b> or <b>Steam Units</b> and where the component units within the <b>CCGT Module</b> are directly connected by steam or hot gas lines which enable those units to

	contribute to the efficiency of the combined cycle operation of the <b>CCGT Module</b> ;
<b>“Combined Cycle Gas Turbine Unit”</b>  <b>or “CCGT Unit”</b>	a <b>Generating Unit</b> within a <b>CCGT Module</b> ;
<b>“Commercial Ancillary Services”</b>	<b>Ancillary Services</b> other than the <b>System Ancillary Services</b> ;
<b>“Commercial Boundary”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Connection and Use of System Code (CUSC)”</b>	the <b>Connection and Use of System Code</b> designed by the <b>Secretary of State</b> as from time to time modified;
<b>“Connection Point”</b>	the connection of the <b>Power Station</b> to the <b>National Electricity Transmission System</b> , as more particularly described in the <b>Bilateral Agreement</b> for the <b>Power Station</b> ;
<b>“Connection Site”</b>	each location more particularly described in the relevant <b>Bilateral Agreement</b> at which the <b>BS Service Provider’s Equipment</b> and <b>Transmission Connection Assets</b> required to connect the <b>BS Service Provider</b> to the <b>National Electricity Transmission System</b> are situated or at which the <b>BS Service Provider’s Equipment</b> is connected to a <b>User System</b> ;
<b>“Construction Agreement”</b>	as defined in the <b>CUSC</b> ;
<b>“CUSC Framework Agreement”</b>	the meaning attributed to it in the <b>Transmission Licence</b> ;
<b>“Customer”</b>	a person to whom electrical power is provided (whether or not he is the same person as the person who provides the electrical power) other than power to meet <b>Station Demand</b> of that person;
<b>“Deenergise”</b>	the movement of any isolator breaker or switch or the removal of any fuse whereby no <b>Electricity</b> can flow to or from the relevant <b>System</b> at a <b>Connection Site</b> through the <b>BS Service Provider’s Equipment</b> and “ <b>Deenergised</b> ” shall be construed accordingly;
<b>“De-Load”</b>	as defined in the <b>CUSC</b> , and “ <b>De-Loading</b> ” shall be construed accordingly;
<b>“Demand”</b>	the demand of MW and Mvar of <b>Electricity</b> ;

<b>“Derogation”</b>	a direction issued by the <b>Authority</b> which relieves the <b>BS Service Provider</b> from its obligation under the <b>Generation Licence</b> to comply with such parts of the <b>Grid Code</b> as may be specified in such direction;
<b>“Desynchronisation”</b>	has the meaning attributed to it in the <b>Grid Code</b> and <b>“De-Synchronised”</b> and <b>“De-Synchronisation”</b> shall be construed accordingly;
<b>“Disconnect”</b>	permanent physical disconnection of the <b>BS Service Provider’s Equipment</b> at any given <b>Connection Site</b> and <b>“Disconnection”</b> shall be construed accordingly;
<b>“Distribution Code(s)”</b>	the <b>Distribution Code(s)</b> drawn up by <b>Public Distribution System Operators</b> pursuant to the terms of their respective <b>Licence(s)</b> as from time to time revised in accordance with those <b>Licences</b> ;
<b>“Distribution Licence”</b>	a licence issued under section 6(1)(c) of the <b>Act</b> ;
<b>“Dynamic Parameters”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“EDL Equipment”</b>	the electronic despatch mechanism by which the <b>Parties</b> communicate with respect to the <b>BM Unit(s)</b> at the <b>Generator’s Power Station</b> for the purposes of operation of the <b>Balancing Mechanism</b> and the utilisation of Balancing Services;
<b>“Electricity”</b>	<b>Active Energy</b> and <b>Reactive Energy</b> ;
<b>“Electricity Supply Arbitration Association”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Embedded”</b>	having a direct connection to a <b>User System</b> or the <b>System</b> of any <b>User</b> to which <b>Customers</b> and/or <b>Power Stations</b> are connected such connection being either a direct connection or a connection via a busbar of another <b>User</b> or of <b>The Company</b> (but with no other connection to the <b>National Electricity Transmission System</b> );
<b>“Emergency Instruction”</b>	has the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Energy” or “Active Energy”</b>	<p>the electrical energy produced, flowing or supplied by an electric circuit during a time interval, being the integral with respect to time of the instantaneous power, measured in units of Watt-hours or standard multiples thereof i.e.</p> <p>1000 Wh = 1kWh</p>



	1000 kWh = 1MWh 1000 MWh = 1GWh 1000 GWh = 1TWh
<b>“Energy Metering Equipment”</b>	the meaning attributed to the phrase “Metering Equipment” in the <b>Balancing and Settlement Code</b> ;
<b>“Enhanced Reactive Power Services”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“External Interconnection”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Final Monthly Statement”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Force Majeure”</b>	in relation to either <b>Party</b> to this <b>Agreement</b> any event or circumstance which is beyond the reasonable control of such <b>Party</b> (not being, without limitation an event or circumstance caused by the negligence or lack of care and attention of that <b>Party</b> or its officers or employees or through the unsuitability of the <b>Black Start Plant</b> to perform the <b>Black Start Service</b> as specified in this <b>Agreement</b> (whether by virtue of a design specification fault or otherwise) or a failure to maintain such <b>Plant</b> in accordance with <b>Good Industry Practice</b> or lack of funds of that <b>Party</b> ) but subject thereto including act of God, strike, lockout or other industrial disturbance, act of the public enemy, war declared or undeclared, threat of war, terrorist act, blockade, revolution, riot, insurrection, civil commotion, public demonstration, sabotage, act of vandalism, lightning, fire, storm, flood, earthquake, accumulation of snow or ice, lack of water arising from weather or environmental problems, explosion, governmental restraint, Act of Parliament, other legislation, bye law and Directive (not being any order, regulation or direction under Section 32, 33, 34 and 35 of the Electricity Act 1989);
<b>“Frequency”</b>	the number of alternating current cycles per second (expressed in Hertz) at which a <b>System</b> is running;
<b>“Frequency Sensitive Mode”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Gas Turbine Unit”</b>	a <b>Generating Unit</b> driven by a gas turbine, (for instance by an aero-engine);

<b>“Generating Unit”</b>	unless otherwise provided in this <b>Agreement</b> , any <b>Apparatus</b> which produces electricity including for the avoidance of doubt a <b>CCGT Unit</b> ;
<b>“Generation Licence”</b>	the licence granted to the <b>Generator</b> pursuant to section 6(1)(a) of the <b>Act</b> ;
<b>“BS Service Provider’s Equipment”</b>	<p>the <b>Plant</b> and <b>Apparatus</b> owned by the <b>BS Service Provider</b> (ascertained in the absence of agreement to the contrary by reference to the principles of ownership set out in <b>CUSC</b>) which</p> <p>(a) is connected to <b>Transmission Connection Assets</b> forming part of any particular <b>Connection Site</b> to which the <b>BS Service Provider</b> wishes so to connect; or</p> <p>(b) is connected to a <b>User System</b> to which the <b>BS Service Provider</b> wishes so to connect;</p>
<b>“Genset”</b>	a <b>Generating Unit</b> or <b>CCGT Module</b> at a <b>Large Power Station</b> ;
<b>“Good Industry Practice”</b>	the exercise of that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances;
<b>“Great Britain” or “GB”</b>	the meaning attributed to it in Schedule 1 of the <b>Transmission Licence</b> ;
<b>“Grid Code”</b>	the <b>Grid Code</b> drawn up pursuant to the <b>Transmission Licence</b> as from time to time revised in accordance with the <b>Transmission Licence</b> (and references in this <b>Agreement</b> to any specific provision or part of the <b>Grid Code</b> shall be construed as references to such provision or part as from time to time amended);
<b>“Grid Code BC”</b>	the Balancing Codes of the <b>Grid Code</b> ;
<b>“Grid Code CC”</b>	the Connection Conditions of <b>Grid Code</b> ;
<b>“Grid Code OC”</b>	the Operating Codes of the <b>Grid Code</b> ;
<b>“Grid Code PC”</b>	the Planning Code of the <b>Grid Code</b> ;
<b>“Grid Operator”</b>	the person who for the time being and from time to time is required by the terms of a <b>Licence</b> (inter alia) to implement the <b>Grid Code</b> ;

<b>“Grid Supply Point”</b>	a point of supply from the <b>National Electricity Transmission System</b> to <b>Network Operators</b> or <b>Non-Embedded Customers</b> ;
<b>“Independent Expert”</b>	<p>such expert agreed between the <b>Parties</b> from time to time Provided that</p> <p>(a) where the <b>Parties</b> fail to agree on a suitable expert within 30 days of either <b>Party</b> serving on the other notice of its intention to apply to the President of the Institute of Mechanical Engineers as mentioned below; or</p> <p>(b) where any <b>Independent Expert</b> appointed from time to time shall fail, refuse or cease to act in this capacity set out herein and no substitute expert of suitable standing and qualification can be agreed by the parties within 30 days,</p> <p>such expert as the President of the Institute of Mechanical Engineers shall, on the application of either <b>Party</b>, nominate shall be the <b>Independent Expert</b>;</p>
<b>“Large Power Station”</b>	as defined in the <b>Grid Code</b> ;
<b>“Licence”</b>	any one or more as appropriate of the <b>Licences</b> granted pursuant to section 6 of the <b>Act</b> ;
<b>“Mandatory Services Agreement”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Maximum Export Limit”</b>	the meaning attributed to it in BC1.A.1.3 of the <b>Grid Code</b> ;
<b>“Minimum Output”</b>	the meaning attributed to it in <b>Grid Code BC2.A.3.1</b> ;
<b>“National Electricity Transmission System”</b>	has the meaning attributed to it in the <b>CUSC</b> ;
<b>“Non-Embedded Customer”</b>	a <b>Customer</b> except for a <b>Network Operator</b> acting in its capacity as such receiving electricity direct from the <b>National Electricity Transmission System</b> irrespective of from whom it is supplied;
<b>“Offer Price”</b>	the meaning attributed to it in the <b>BSC</b> ;
<b>“Operational Metering Equipment”</b>	meters, instrument transformers (both voltage and current), transducers metering protection equipment including alarms circuitry and their associated outstations as may be necessary for the purposes of the <b>Grid Code CC6.5.6</b> and the

	corresponding provision of the relevant <b>Distribution Code</b> ;
<b>“Output”</b>	the actual <b>Active Power</b> or <b>Reactive Power</b> output achieved by a <b>BM Unit</b> ;
<b>“Part 1 System Ancillary Services”</b>	the meaning attributed to it in <b>Grid Code CC8.1</b> ;
<b>“Part 2 System Ancillary Services”</b>	the meaning attributed to it in <b>Grid Code CC8.1</b> ;
<b>“Party”</b>	each person for the time being and from time to time a party of this <b>Agreement</b> and any successor(s) in title to, or permitted assign(s) of, such person and <b>“Parties”</b> shall be construed accordingly;
<b>“Plant”</b>	fixed and movable items used in the generation and/or supply and/or transmission of electricity other than <b>Apparatus</b> ;
<b>“Physical Notification”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Power Station”</b>	[an installation comprising one or more <b>Generating Units</b> (even where separately sited) owned or controlled by the same <b>Generator</b> which may reasonably be considered as being managed as one <b>Power Station</b> , for the purposes of this <b>Agreement</b> being the <b>Generator’s Power Station</b> at [                    ];]
<b>“Power System Stabiliser”</b>	the meaning attributed to it in the <b>Grid Code</b> ;
<b>“Provisional Monthly Statement”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Public Distribution System Operator”</b>	a holder of a <b>Distribution Licence</b> who was the holder of, or is a successor to a company which was the holder or, a <b>Public Electricity Supply Licence</b> , relating to distribution activities in <b>Great Britain</b> ;
<b>“Public Electricity Supply Licence”</b>	a licence issued under section 6(1)(c) of the <b>Act</b> prior to the coming into force of section 30 of the Utilities Act 2000;
<b>“Reactive Energy”</b>	the integral with respect to time of <b>Reactive Power</b> ;
<b>“Reactive Power”</b>	the product of voltage and current and the sine of the phase angle between them measured in units of voltamperes reactive and standard multiples thereof i.e.,  1000 Var        =        1kvar

	1000 kVar = 1Mvar
<b>“Relevant Requirements”</b>	shall mean all applicable laws, statutes, regulations, and codes relating to anti-bribery and anti-corruption including but not limited to the <b>Bribery Act</b> .
<b>“Remote Transmission Assets”</b>	any <b>Plant</b> and <b>Apparatus</b> or meters owned by <b>The Company</b> which (a) are embedded in a <b>User System</b> and which are not directly connected by <b>Plant</b> and/or <b>Apparatus</b> owned by <b>The Company</b> to a sub-station owned by <b>The Company</b> and (b) are by agreement between <b>The Company</b> and such <b>User</b> under the direction and control of such <b>User</b> ;
<b>“Secretary of State”</b>	the meaning attributed to it in the <b>Act</b> ;
<b>“Settlement Period”</b>	a period of 30 minutes ending on the hour or half hour in each hour during a day;
<b>“Short Term Operating Reserve”</b>	the additional <b>Active Power</b> and/or the reduction in <b>Demand</b> from non-synchronised generating plant or demand sites which must be capable of being provided within 240 minutes of instruction by <b>The Company</b> and sustained for up to 2 hours for the purposes of balancing <b>Active Power</b> and <b>Demand</b> on the <b>National Electricity Transmission System</b> ;
<b>“Stable Export Limit”</b>	the meaning attributed to the term in Appendix 1 of <b>Grid Code BC1</b> ;
<b>“Station Demand”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Steam Unit”</b>	a <b>Generating Unit</b> whose primes mover converts the heat-energy in steam to mechanical energy;
<b>“Synchronised”</b>	the condition where an incoming <b>BM Unit</b> or <b>CCGT Unit</b> or <b>System</b> is connected to the busbars of another <b>System</b> so that the <b>Frequencies</b> and phase relationships of the <b>BM Unit</b> or <b>CCGT Unit</b> or the <b>System</b> , as the case may be, and the <b>System</b> to which it is connected are identical:  <b>“Synchronise”</b> and <b>“Synchronisation”</b> shall be construed accordingly;
<b>“Synchronous Speed”</b>	that speed required by a <b>BM Unit</b> or <b>CCGT Unit</b> to enable it to be <b>Synchronised</b> to a <b>System</b> ;
<b>“System”</b>	any <b>User System</b> or the <b>National Electricity Transmission System</b> as the case may be;
<b>“System Services”</b> Ancillary	<b>Part 1 System Ancillary Services</b> and <b>Part 2 System Ancillary Services</b> ;

<b>“Total System”</b>	the <b>National Electricity Transmission System</b> and all <b>User Systems</b> in <b>Great Britain</b> ;
<b>“Transmission Connection Assets”</b>	the meaning attributed to it in the <b>CUSC</b> ;
<b>“Transmission Licence”</b>	the licence granted to <b>The Company</b> under section 6(1)(b) of the <b>Act</b> ;
<b>“User”</b>	a person who is party to the <b>CUSC Framework Agreement</b> other than <b>The Company</b> ; and
<b>“User System”</b>	<p>any <b>System</b> owned or operated by a <b>User</b> comprising: -</p> <p>(a) <b>Generating Units</b>; and/or</p> <p>(b) systems consisting (wholly or mainly) of electric lines used for the distribution of electricity from <b>Grid Supply Points</b> or <b>Generating Units</b> or other entry points to the point of delivery to <b>Customers</b>, or other Units;</p> <p>and <b>Plant</b> and/or <b>Apparatus</b> connecting:</p> <p>(a) the <b>System</b> as described above; or</p> <p>(b) <b>Non-Embedded Customers</b> equipment;</p> <p>to the <b>National Electricity Transmission System</b> or to the relevant other <b>User System</b>, as the case may be. The <b>User System</b> includes any <b>Remote Transmission Assets</b> operated by such <b>User</b> or other person and any <b>Plant</b> and/or <b>Apparatus</b> and meters owned or operated by the <b>User</b> or other person in connection with the distribution of electricity but does not include any part of the <b>National Electricity Transmission System</b>.</p>