

5. **BM START-UP SERVICE**

5.1 **Introduction**

The **Generator** agrees to provide **The Company** with the **Commercial Ancillary Service** of **BM Start-Up Service**, and this Clause 5 and Schedule F set out provisions relating to such service including the payments to be made by **The Company** to the **Generator** in respect thereof. For the purposes of this **Agreement**, the provisions of Schedule C (Charging Principles) shall have no application to this Clause 5 and Schedule F and the **Commercial Ancillary Service** of **BM Start-Up Service**.

5.2 **Definitions**

5.2.1 In this Clause 5 and Schedule F the following terms shall have the meanings ascribed to them below:-

“**Advance Synchronisation Instruction**” means a **BM Start-Up Instruction** issued by **The Company** in respect of a **BM Unit** where, at the time of issue of such **BM Start-Up Instruction**, the **Earliest Synchronisation Time** is within the **Advance Synchronisation Period**;

“**Advance Synchronisation BM Unit**” has the meaning attributed to it in Sub-Clause 5.8.3;

“**Advance Synchronisation Cancellation Payment**” has the meaning attributed to it in Sub-Clause 5.8.5;

“**Advance Synchronisation Period**” means, in relation to an **Advance Synchronisation Instruction** in respect of a **BM Unit**, the period of time, equal to the prevailing **Minimum Non-Zero Time** plus the **Minimum Zero Time** for that **BM Unit**, which immediately precedes the planned time of **Synchronisation** of that **BM Unit** as indicated by the **Advance Synchronisation Related PN**;

“**Advance Synchronisation Related PN**” has the meaning attributed to it in Sub-Clause 5.8.3;

“**Bid-Offer Pair No 1**” means a **Bid-Offer Pair** with the **Bid-Offer Pair Number** n of “1”;

“**Bid Offer Pair Number n**” has the meaning attributed to it in the **Balancing and**

**Settlement Code;**

<b>“BM Start-Up”</b>	means the process of bringing one or more of the <b>BM Units</b> to <b>Hot Standby</b> at or before the <b>Hot Standby Target Time</b> ;
<b>“BM Start-Up Instruction”</b>	means an instruction pursuant to Sub-Clause 5.4.1 issued by <b>The Company</b> to the <b>Generator</b> in respect of a <b>BM Unit</b> to bring it to <b>Hot Standby</b> at or before the <b>Hot Standby Target Time</b> ;
<b>“BM Start-Up Payment”</b>	means an amount calculated in accordance with Schedule F, Section 2, Part I for the provision of <b>BM Start-Up</b> ;
<b>“BM Start-Up Price”</b>	means, in respect of a <b>BM Unit</b> and (where applicable) the <b>NDZ<sub>i</sub></b> , the relevant price specified in Schedule F, Section 3, Part I as amended from time to time in accordance with Sub-Clauses 5.12.1 to 5.12.4 (inclusive) and which shall, where appropriate, be determined in accordance with Sub-Clause 5.12.5;
<b>“BM Start-Up Repayment Amount”</b>	means a payment calculated in accordance with Schedule F, Section 2, Part I to be made by the <b>Generator</b> to <b>The Company</b> in the circumstances set out in Sub-Clause 5.10.2 and representing repayment of the <b>BM Start-Up Payment</b> ;
<b>“BM Start-Up Service”</b>	means the provision by the <b>Generator</b> from one or more of the <b>BM Units</b> of <b>BM Start-Up</b> and (in the absence of an <b>Instruction to Cease Start-Up</b> ) <b>Hot Standby</b> ;
<b>“BM Start-Up Time”</b>	means, in relation to any <b>BM Start-Up Instruction</b> , the point in time determined in accordance with the relevant formula in Schedule F, Section 2, Part I;
<b>“BM Unit(s)”</b>	means the <b>BM Unit(s)</b> specified in Schedule F, Section 1, Part I;
<b>“Cease Hot Standby Time”</b>	means the time of issue of an <b>Instruction to Cease Hot Standby</b> or otherwise such time as determined in

accordance with Section F, Section 2, Part III;

**“Cease Start-Up Time”**

means the time of issue of an **Instruction to Cease Start-Up** pursuant to Sub-Clause 5.5.1 or the time at which an **Instruction to Cease Start-Up** is deemed to have been given pursuant to either of Sub-Clause 5.5.2 or 5.5.3 or, if an **Instruction to Cease Start-Up** is neither issued pursuant to Sub-Clause 5.5.1 nor deemed to have been issued pursuant to either of Sub-Clause 5.5.2 or 5.5.3, the **Hot Standby Target Time**;

**“Committed Period”**

means, in respect of a **BM Start-Up Instruction** and the **BM Unit** to which such **BM Start-Up Instruction** relates, the period of time commencing at the **Hot Standby Target Time** and ending at either:-

- (i) the expiry of four hours; or
- (ii) (if earlier) the time that the **BM Unit Synchronises** pursuant to a **Bid-Offer Acceptance** (defined by reference to the **Point Acceptance Volume**  $qA_{it}^k$  for that **Bid-Offer Acceptance**) plus the **Minimum Non-Zero Time** prevailing at the time that such **Bid-Offer Acceptance** is issued;

**“Earliest Synchronisation Time”**

means the earliest time by which a **BM Unit** can **Synchronise** following issue of a **BM Start-Up Instruction**, being the period of time  $t_{nts}$  after the **Hot Standby Target Time**;

**“Hot Standby”**

means a condition of readiness to be able to **Synchronise** within the period of time  $t_{nts}$  and be able to attain an output in accordance with **Bid-Offer Data** and **Dynamic Parameters** and other **BM Unit Data** submitted in accordance with the **Balancing and Settlement Code** and **Grid Code**;

**“Hot Standby Payment”**

has the meaning attributed to it in Sub-Clause 5.11.1;

**“Hot Standby Price”**

means, in respect of a **BM Unit**, the relevant price specified in Schedule F, Section 3, Part II as amended

from time to time in accordance with Sub-Clauses 5.12.1 to 5.12.4 (inclusive) and which shall, where appropriate, be determined in accordance with Sub-Clause 5.12.5;

**“Hot Standby Target Time”**

means the point in time specified as such in the relevant **BM Start-Up Instruction**;

**“Instruction to Cease Hot Standby”**

means an instruction pursuant to any of Sub-Clauses 5.7.1, 5.7.2, 5.7.3 or 5.7.4 (as the case may be) issued or deemed to have been issued by **The Company** to the **Generator** in respect of a **BM Unit** to cease provision of **Hot Standby**;

**“Instruction to Cease Start-Up”**

means an instruction pursuant to any of Sub-Clauses 5.5.1, 5.5.2 or 5.5.3 (as the case may be) issued or deemed to have been issued by **The Company** to the **Generator** in respect of a **BM Unit** to cease provision of **BM Start-Up**;

**“Latest Synchronisation Time”**

means the latest time by which a **BM Unit** can **Synchronise** following issue of a **BM Start-Up Instruction** in respect of such **BM Unit**, being the period of time  $t_{nts}$  after expiry of the **Maximum Hot Standby Period**;

**“Maximum Hot Standby Period”**

means the period of time commencing at the **Hot Standby Target Time** during which a **BM Unit** may be required to provide the **Hot Standby** service and ending either:-

- (i) on the expiry of the period specified in Schedule F, Section 1, Part III or such longer period as may be agreed between the **Generator** and **The Company** from time to time; or
- (ii) (in the case of an **Advance Synchronisation Instruction**) on the earlier of:-
  - (a) the planned time of **Synchronisation** of the **BM Unit** as indicated in the **Physical Notification** which was submitted by the **Generator** in accordance with the **Grid Code** prior to the issue by **The Company** of the **Advance Synchronisation Instruction**; or
  - (b) the expiry of the period specified in

Schedule F, Section 1, Part III or such longer period as may be agreed between the **Generator** and **The Company** from time to time;

- “Minimum Zero Time”** has the meaning attributed to it in the **Grid Code**;
- “NDZ Range”** means each of the ranges for **NDZ<sub>i</sub>** specified in Schedule F, Section 1, Part II;
- “PN Check Period”** means either:-
- (i) (where Sub-Clause 5.5.1 applies) the period commencing upon the issue by **The Company** of an **Instruction to Cease Start-Up** and ending upon the expiry of four hours; or
  - (ii) (where Sub-Clause 5.7.1 applies) the period commencing upon the issue by **The Company** of an **Instruction to Cease Hot Standby** and ending upon the expiry of the **Committed Period**;
- “Point Acceptance Volume  $qA_{it}^k$ ”** has the meaning attributed to it in the **Balancing and Settlement Code** and, for the purposes of this Clause 5, the **Point Acceptance Volume  $qA_{it}^k$**  shall denote the spot time *t* at which the **Output** of **BM Unit i** deviates from zero MW in accordance with a **Bid-Offer Acceptance** issued by **The Company**;
- “Required Data Period”** means, in respect of a **BM Start-Up Instruction** and the **BM Unit** to which such **BM Start-Up Instruction** relates, the period of time from the **Earliest Synchronisation Time** to either:-
- (i) the **Latest Synchronisation Time** plus the **Minimum Non-Zero Time** prevailing in respect of that **BM Unit** at the time of issue of the **BM Start-Up Instruction**; or
  - (ii) (if earlier) the time that the **BM Unit Synchronises** pursuant to a **Bid-Offer Acceptance** (defined by reference to the **Point Acceptance Volume  $qA_{it}^k$**  for that **Bid-Offer Acceptance**) plus the **Minimum Non-Zero Time** prevailing in respect of that **BM**

**Unit** at the time of issue of the **Bid-Offer Acceptance**;

**“Service Commencement Date”** means 00.00 hours on 6 December 2011;

**“ $t_{hsb}$ ”** means the period of time that **Hot Standby** is provided by a **BM Unit**, determined in accordance with Schedule F, Section 2, Part II;

**“ $t_{nts}$ ”** means the relevant period of time, which must not be greater than 85 minutes, within which a **BM Unit** shall be able to **Synchronise** from a state of **Hot Standby**, determined in accordance with Schedule F, Section 1, Part I, by reference to the then prevailing **NDZ<sub>i</sub>** submitted by the **Generator** in relation to that **BM Unit** at the time of issue of the **BM Start-Up Instruction**;

**“ $t_{startup}$ ”** means the period of time that **BM Start-Up** is provided by a **BM Unit**, determined in accordance with Schedule F, Section 2, Part I.

5.2.2 In this Clause 5 and Schedule F unless the context otherwise requires, words and expressions defined in the **Balancing and Settlement Code** or the **Grid Code** and not otherwise defined in this **Agreement** shall have the meanings ascribed to them in the **Balancing and Settlement Code** or the **Grid Code** (as the case may be).

### 5.3 **Term**

5.3.1 The provisions of this Clause 5 shall come into effect on the **Service Commencement Date** and, unless this **Agreement** is terminated earlier in accordance with Clause 7 of the **MASA**, shall continue in force and effect until terminated by either **Party** giving to the other not less than 12 months’ written notice of termination.

5.3.2 The **Generator** may from time to time, by facsimile notice to **The Company** (or such other method as may be agreed in writing between the **Parties**), declare a period or periods of unavailability of the **Commercial Ancillary Service** of **BM Start-Up Service** from any one or more of the **BM Unit(s)**. Such notice shall be in the form specified in Schedule F, Section 4, Part I and (without limitation) shall specify the **BM Unit(s)** concerned and the commencement and the estimated time and date of expiry. Where the **Generator** becomes aware of any inaccuracy in the information which it has provided or the **Generator** receives more accurate information concerning the time and

date of expiry of the period or periods of unavailability, then the **Generator** shall issue a further notice in the form specified in Schedule F, Section 4, Part I to notify **The Company** thereof.

- 5.3.3 Notwithstanding Sub-Clause 5.3.2, the **BM Start-Up Service** shall not be required by **The Company** and shall therefore be deemed to be unavailable from a **BM Unit** in respect of all periods in which, in the absence of a **BM Start-Up Instruction**, the  $NDZ_i$  of that **BM Unit** is 85 minutes or less.

#### 5.4 **BM Start-Up Instruction**

- 5.4.1 Subject always to Sub-Clauses 5.3.2 and 5.3.3, **The Company** may issue to the **Generator** in respect of that **BM Unit** a **BM Start-Up Instruction**.
- 5.4.2 Each **BM Start-Up Instruction** shall specify a **Hot Standby Target Time**.
- 5.4.3 **The Company** shall not, without the prior agreement of the **Generator**, issue a **BM Start-Up Instruction** later than the **BM Start-Up Time**. Where the **Generator** agrees to the issue by **The Company** of a **BM Start-Up Instruction** later than the **BM Start-Up Time**, then where a payment falls due for **BM Start-Up** in accordance with Sub-Clause 5.10, such payment shall be payable in respect of the period from the **BM Start-Up Time**.
- 5.4.4 Upon receipt of a **BM Start-Up Instruction**, the **Generator** shall use all reasonable endeavours to bring the **BM Unit** to **Hot Standby** not later than the specified **Hot Standby Target Time**, and where the **Generator** is aware or becomes aware that this will not be possible shall notify **The Company** forthwith by telephone.
- 5.4.5 If, in respect of any **BM Unit**, an **Instruction to Cease Start-Up** is neither given by **The Company** pursuant to Sub-Clause 5.5.1, nor deemed to be given by **The Company** pursuant to either of Sub-Clause 5.5.2 or 5.5.3, then with effect from the **Hot Standby Target Time**, the **Generator** shall use all reasonable endeavours to commence providing **Hot Standby** from that **BM Unit** in accordance with Sub-Clause 5.6. For the avoidance of doubt, no instruction to this effect will be issued by **The Company** to the **Generator**.
- 5.4.6 Subject always to Sub-Clause 5.4.7, upon bringing the **BM Unit** to **Hot Standby**, the **Generator** shall:-
- (a) submit an  $NDZ_i$  for that **BM Unit** which is not greater than  $t_{nts}$  and shall use all reasonable endeavours to do so by the **Hot Standby Target Time**, such  $NDZ_i$  to be maintained until the earlier of the point at which that **BM Unit Synchronises** pursuant to any **Bid-Offer Acceptance** and the expiry of the **Maximum Hot Standby Period**;
  - (b) in respect of each **Settlement Period** comprised in the **Required Data Period**, either:-
    - (i) maintain; or
    - (ii) submit not later than the **Hot Standby Target Time**,

a **Stable Export Limit** and **Minimum Non-Zero Time** for that **BM Unit** which are less than or equal to the **Stable Export Limit** and **Minimum Non-Zero Time** prevailing at the time at which the **BM Start-Up Instruction** is issued;

(c) in respect of each **Settlement Period** comprised in the **Required Data Period**, either:-

- (i) maintain; or
- (ii) submit not later than the **Hot Standby Target Time**,

a **Bid-Offer Pair No 1** with:-

- (aa) a MW range from 0 MW to the **Stable Export Limit** (maintained or submitted in accordance with Sub-Clause 5.4.6(b) above) for that **BM Unit**; and
- (bb) an **Offer Price** of less than or equal to the **Offer Price** for the **Bid-Offer Pair No 1** which was prevailing in respect of that **Settlement Period** at the time at which the **BM Start-Up Instruction** is issued.

5.4.7 The data submitted by the **Generator** in accordance with Sub-Clause 5.4.6 shall be used by **The Company** to monitor the **Generator**'s provision of the **BM Start-Up Service** and the provisions of Sub-Clause 5.4.6 shall not relieve the **Generator** of any of its obligations or affect such obligations (where applicable) set out in the **Grid Code** and, where there is any conflict between the **Generator**'s obligations under Sub-Clause 5.4.6 and the **Generator**'s obligations under the **Grid Code**, the **Generator**'s obligations under the **Grid Code** shall prevail.

## 5.5 **Instruction to Cease Start-Up**

*Cessation initiated by The Company*

5.5.1 **The Company** may, at any time in the period commencing upon the issue of a **BM Start-Up Instruction** and ending at the specified **Hot Standby Target Time**, issue to the **Generator** an **Instruction to Cease Start-Up**. Upon the issue of such an instruction:-

- (a) the **PN Check Period** shall commence;
- (b) the **Generator** shall no longer be required to continue provision of **BM Start-Up** or bring the **BM Unit** to **Hot Standby** (including without limitation the requirement to submit data pursuant to Sub-Clause 5.4.6); and
- (c) the **Generator** shall use reasonable endeavours to review the **NDZ<sub>i</sub>** of the **BM Unit** and, where appropriate, submit a revised **NDZ<sub>i</sub>** in respect of the **BM Unit** in accordance with **Grid Code BC 2.5.3.1** to assist **The Company** in assessing its requirement for future use of the **BM Start-Up Service**.

5.5.2 An **Instruction to Cease Start-Up** shall be deemed to have been given by **The Company** to the **Generator** in respect of a **BM Unit** if, at any time prior to the specified **Hot Standby Target Time**, **The Company** issues an instruction that is treated as a **Bid-Offer Acceptance** (pursuant to **Grid Code BC 2.9.2.3**) or issues a **Bid- Offer Acceptance** (pursuant to **Grid Code BC 2.10**) in respect of that **BM Unit** (in which case the **Instruction to Cease Start-Up** shall be deemed to be given at the time the **BM Unit Synchronises**, defined by reference to the **Point Acceptance Volume  $qA_{it}^k$** ).

*Cessation initiated by the Generator*

5.5.3 Following the issue of a **BM Start-Up Instruction**, an **Instruction to Cease Start-Up** shall be deemed to have been given by **The Company** to the **Generator** in respect of a **BM Unit** if:-

(a) the **BM Unit** concerned **Synchronises** at any time prior to the specified **Hot Standby Target Time** otherwise than pursuant to a **Bid- Offer Acceptance**, in which case the **Instruction to Cease Start-Up** will be deemed to be given at the commencement of the **Settlement Period** in which the **BM Unit Synchronises**; or

(b) (subject to Sub-Clause 5.8.2) a **Physical Notification** of greater than zero is submitted in respect of the **BM Unit** concerned indicating **Synchronisation** at any time during the period commencing at the **BM Start-Up Time** and ending at the expiry of the **Committed Period**, in which case the **Instruction to Cease Start-Up** will be deemed to be given at the time the relevant **Physical Notification** is submitted in accordance with the **Grid Code**; or

(c) the **Maximum Export Limit** in respect of the **BM Unit** concerned which is to apply during the **Committed Period** is revised to:

- (i) less than the **Stable Export Limit**; and/or
- (ii) zero MW,

in respect of the **BM Unit** at any time prior to the specified **Hot Standby Target Time**, in which case the **Instruction to Cease Start-Up** will be deemed to be given at the time at which such revised **Maximum Export Limit** is submitted in accordance with the **Grid Code**.

5.5.4 In the event of a deemed **Instruction to Cease Start-Up** pursuant to either Sub-Clause 5.5.2 or 5.5.3, the **Generator** shall no longer be required to bring the **BM Unit** to **Hot Standby** (including without limitation the requirement to submit data pursuant to Sub-Clause 5.4.6).

## 5.6 Provision of Hot Standby

5.6.1 The **Generator** shall be deemed to have been instructed by **The Company** to provide **Hot Standby** with effect from the **Hot Standby Target Time** where, following issue of

a **BM Start-Up Instruction**, an **Instruction to Cease Start-Up** has neither been given by **The Company** pursuant to Sub-Clause 5.5.1 nor deemed to have been given by **The Company** pursuant to either of Sub-Clause 5.5.2 or 5.5.3.

5.6.2 The **Generator** shall provide **Hot Standby** from the relevant **BM Unit** until the earlier of expiry of the **Maximum Hot Standby Period** and any **Cease Hot Standby Time**.

## 5.7 **Instruction to Cease Hot Standby**

### *Cessation initiated by **The Company***

5.7.1 **The Company** may, at any time after the **Hot Standby Target Time** and prior to expiry of the **Maximum Hot Standby Period**, issue to the **Generator** an **Instruction to Cease Hot Standby**. Upon the issue of such an instruction, the **PN Check Period** shall commence and the **Generator** shall no longer be required to continue provision of **Hot Standby** (including without limitation the requirement to submit data pursuant to Sub-Clause 5.4.6).

5.7.2 An **Instruction to Cease Hot Standby** shall be deemed to have been given by **The Company** to the **Generator** in respect of that **BM Unit** if, at any time between the specified **Hot Standby Target Time** and the expiry of the **Maximum Hot Standby Period**, **The Company** issues a **Bid-Offer Acceptance** in respect of the **BM Unit**, in which case the **Instruction to Cease Hot Standby** shall be deemed to have been issued in accordance with the relevant formula in Schedule F, Section 2, Part III. For the avoidance of doubt, a **Bid-Offer Acceptance** which is reversed out by a subsequent **Bid-Offer Acceptance** shall nonetheless still deem an **Instruction to Cease Hot Standby** to have been given.

5.7.3 If an **Instruction to Cease Hot Standby** is neither issued by **The Company** pursuant to Sub-Clause 5.7.1 nor deemed to have been issued by **The Company** pursuant to Sub-Clause 5.7.2 or 5.7.4, then an **Instruction to Cease Hot Standby** shall be deemed to have been given by **The Company** at the expiry of the **Maximum Hot Standby Period**. The **Generator** shall endeavour to notify **The Company** of impending expiry of the **Maximum Hot Standby Period**.

### *Cessation initiated by the **Generator***

5.7.4 If during the **Committed Period**:-

- (a) the relevant **BM Unit Synchronises** otherwise than pursuant to a **Bid-Offer Acceptance** or a **Physical Notification**; or
- (b) a **Physical Notification** of greater than zero is submitted in respect of the relevant **BM Unit** indicating **Synchronisation** of that **BM Unit** at any time during the **Committed Period**; or
- (c) the **Maximum Export Limit** in respect of the relevant **BM Unit** is revised to:
  - (i) below the **Stable Export Limit**; and/or
  - (ii) zero MW,

then an **Instruction to Cease Hot Standby** in respect of that **BM Unit** shall be deemed to have been given by **The Company** to the **Generator**, and the **Cease Hot Standby Time** shall be determined in accordance with the relevant formula in Schedule F, Section 2, Part III.

- 5.7.5 In the event of a deemed **Instruction to Cease Hot Standby** pursuant to either Sub-Clause 5.7.3 or 5.7.4, the **Generator** shall cease provision of **Hot Standby** with effect from the **Cease Hot Standby Time** and shall no longer be required to comply with Sub-Clause 5.4.6.
- 5.7.6 Where a deemed **Instruction to Cease Hot Standby** has been issued by **The Company** pursuant to Sub-Clause 5.7.2 then the **Generator** shall cease provision of **Hot Standby** with effect from the **Cease Hot Standby Time** and shall, subject always to Sub-Clause 5.7.7, continue to comply with Sub-Clause 5.4.6 until the expiry of the **Required Data Period**.
- 5.7.7 Where Sub-Clause 5.7.6 applies and a **Physical Notification** of greater than zero is submitted in respect of the relevant **BM Unit** during any **Settlement Period(s)** comprised in the period commencing on expiry of the **Committed Period** and ending on expiry of the **Required Data Period**, then the **Generator** shall not be required to comply with Sub-Clause 5.4.6 in respect of the **BM Unit** and such **Settlement Period(s)**.

## 5.8 Advancing Synchronisation

### *Advance Synchronisation Instruction*

- 5.8.1 Notwithstanding and without prejudice to the other provisions of this Clause 5, where a **Physical Notification** is submitted by the **Generator** in respect of a **BM Unit** in accordance with the **Grid Code** indicating **Synchronisation** of that **BM Unit** in a **Settlement Period** and, subsequent thereto, **The Company** identifies a requirement for that **BM Unit** to **Synchronise** prior to that indicated time for **Synchronisation**, then provided always that **The Company's** required time of **Synchronisation** falls within the **Advance Synchronisation Period** (such that, for illustration but not so as to change the meaning of **Advance Synchronisation Instruction**, it would not be possible for the **BM Unit** to **Synchronise**, run and then **Re-Synchronise** ahead of the **Generator's** indicated time of **Synchronisation**), **The Company** may issue an **Advance Synchronisation Instruction** in respect of that **BM Unit**. An **Advance Synchronisation Instruction** will take the form of a **BM Start-Up Instruction** so that, save as provided in this Sub-Clause 5.8, all the provisions of this Clause 5 with respect to a **BM Start Up Instruction** shall apply to such **Advance Synchronisation Instruction**.

### *Data Submissions*

5.8.2 Where **The Company** issues an **Advance Synchronisation Instruction**, then the **Generator** shall not be obliged to comply with the terms of Sub-Clauses 5.4.6(b) and (c) in respect of the **BM Unit** in question.

*Revisions to the Synchronisation start time*

5.8.3 Where, in respect of any **BM Unit** (“the **Advance Synchronisation BM Unit**”), **The Company** issues an **Advance Synchronisation Instruction** and either:-

- (a) the **Physical Notification** prevailing at the time of the **Advance Synchronisation Instruction** (“the **Advance Synchronisation Related PN**”) remains unaltered as at **Gate Closure** in respect of the **Settlement Period** to which such **Advance Synchronisation Related PN** relates; or
- (b) the **Generator** submits a further **Physical Notification** in respect of the **Advance Synchronisation BM Unit** indicating a planned time of **Synchronisation** earlier than the time indicated in the **Advance Synchronisation Related PN**,

then no **BM Start-Up Payment** will be payable by **The Company** to the **Generator** in accordance with Sub-Clause 5.10.1 and, where Sub-Clause 5.8.3(b) applies, Sub-Clause 5.5.3(b) shall not apply.

5.8.4 Where **The Company** issues an **Advance Synchronisation Instruction** and the **Generator** revises the **Advance Synchronisation Related PN** to zero MW and/or submits a **Physical Notification** indicating a delay in **Synchronisation** of the **Advance Synchronisation BM Unit**, then:-

- (a) **The Company** shall issue an **Instruction to Cease Start-Up** or an **Instruction to Cease Hot Standby** in accordance with Sub-Clause 5.5.1 or 5.7.1 (as the case may be); and
- (b) no **BM Start-Up Payment** will be payable by **The Company** to the **Generator** in accordance with Sub-Clause 5.10.1.

If **The Company** still requires the **Advance Synchronisation BM Unit** to **Synchronise** at the time indicated in the **Advance Synchronisation Instruction**, then it shall issue a **BM Start-Up Instruction** in accordance with Sub-Clause 5.4 specifying such time as the **Hot Standby Target Time**.

*Advance Synchronisation Cancellation Payment*

5.8.5 Where following the issue of an **Advance Synchronisation Instruction**, **The Company** either:-

- (a) issues to the **Generator** an **Instruction to Cease Start-Up**;
- (b) issues to the **Generator** an **Instruction to Cease Hot Standby**; or
- (c) is deemed to have issued an **Instruction to Cease Hot Standby** upon expiry of the **Maximum Hot Standby Period** in accordance with Sub-Clause 5.7.3,

then the **Generator** shall no longer be required (as the case may be) to continue provision of **BM Start-Up** or bring the **Advance Synchronisation BM Unit** to **Hot**

**Standby** or continue provision of **Hot Standby** (including without limitation the requirement to submit data pursuant to Sub-Clause 5.4.6(a)) and, save where Sub-Clause 5.8.4 applies, **The Company** shall pay to the **Generator** an amount (“the **Advance Synchronisation Cancellation Payment**”) calculated by multiplying the number of hours comprised in the period between the **Earliest Synchronisation Time** and the time at which the **Advance Synchronisation BM Unit Synchronises** as indicated in the **Advance Synchronisation PN** by the applicable **Hot Standby Price**.

5.9 **Communications**

All **BM Start-Up Instructions** and **Instructions to Cease Hot Standby** required to be given under these terms shall be communicated by **The Company** to the **Generator** by way of an automatic logging device (or if unavailable for whatever reason by telephone or facsimile) or otherwise as may be agreed between the **Parties**.

5.10 **Payments for BM Start-Up**

*Payments from The Company to the Generator*

5.10.1 Subject always to Sub-Clause 5.10.3, **The Company** shall, in respect of each calendar month during the term of this Clause 5, calculate in accordance with the formulae in Schedule F, Section 2, Part I and by reference to the applicable **BM Start-Up Prices**:-

- (a) the **BM Start-Up Payment**; and
- (b) any **BM Start-Up Repayment Amount**,

and shall deduct any **BM Start-Up Repayment Amount** from the **BM Start-Up Payment** to determine the amount to be paid by **The Company** to the **Generator** in accordance with Clause 4 of the **MASA**.

*BM Start-Up Repayment Amounts*

5.10.2 A **BM Start-Up Repayment Amount** shall become payable by the **Generator** to **The Company** (being an amount calculated in accordance with the formulae in Schedule F, Section 2, Part I) if either:-

- (a) the **BM Unit** concerned **Synchronises** otherwise than pursuant to a **Bid-Offer Acceptance** or a **Physical Notification** of greater than zero is submitted in respect of the **BM Unit** concerned indicating **Synchronisation** of that **BM Unit** at any time during the period commencing at the **BM Start-Up Time** and ending at the expiry of either the **Committed Period** or, if an **Instruction to Cease Start-Up** or an **Instruction to Cease Hot Standby** has been issued by **The Company** pursuant to Sub-Clause 5.5.1 or 5.7.1 (as the case may be), the **PN Check Period**; or
- (b) (in the absence of an **Instruction to Cease BM Start-Up** issued by **The Company** pursuant to Sub-Clause 5.5.1) the **Maximum Export Limit** which is to apply during the **Committed Period** in respect of the **BM Unit** concerned is revised to:

- (i) below the **Stable Export Limit**; and/or
  - (ii) zero MW,
- at any time prior to the **Hot Standby Target Time**; or
- (c) in the absence of an **Instruction to Cease Start-Up** or an **Instruction to Cease Hot Standby**, the **Generator** fails to:-
- (i) submit and maintain in respect of the **BM Unit** concerned an **NDZ<sub>i</sub>** which is not greater than **t<sub>nts</sub>** in accordance with Sub-Clause 5.4.6(a); or
  - (ii) maintain or revise (as the case may be) the **Stable Export Limit** and/or **Minimum Non-Zero Time** for the duration of the **Required Data Period** in accordance with Sub-Clause 5.4.6(b); or
  - (iii) submit or maintain (as the case may be) a **Bid-Offer Pair** in accordance with Sub-Clause 5.4.6(c).
- 5.10.3 No payment shall be made by **The Company** for provision of **BM Start-Up** in the circumstances described in Sub-Clause 5.10.1 where either:-
- (a) the relevant **BM Start-Up Instruction** is an **Advance Synchronisation Instruction**; or
  - (b) an **Instruction to Cease Start-Up** is issued by **The Company** at any time prior to the **BM Start-Up Time**.

## 5.11 Payments for Hot Standby

- 5.11.1 Subject always to Sub-Clause 5.11.2, **The Company** shall make a payment to the **Generator** for the provision of **Hot Standby** (“the **Hot Standby Payment**”) in accordance with Clause 4 of the **MASA**, if, following the issue of a **BM Start-Up Instruction**:-
- (a) **The Company** issues an **Instruction to Cease Hot Standby** pursuant to Sub-Clause 5.7.1;
  - (b) **The Company** is deemed to have issued an **Instruction to Cease Hot Standby** pursuant to either of Sub-Clause 5.7.2 or 5.7.3, or
  - (c) in the case of a **BM Start-Up Instruction** comprising an **Advance Synchronisation Instruction** pursuant to Sub-Clause 5.8.1, the **Advance Synchronisation BM Unit Synchronises** at the time required by **The Company** in that **Advance Synchronisation Instruction**,
- such payment to be calculated in accordance with the relevant formulae in Schedule F, Section 2 Part II and Schedule F, Section 2, Part III and by reference to the duration of the provision of Hot Standby and the applicable Hot Standby Prices.
- 5.11.2 No **Hot Standby Payment** shall be made by **The Company** to the **Generator** pursuant to Sub-Clause 5.11.1 where either:-
- (a) the **BM Unit** concerned **Synchronises** otherwise than pursuant to a **Bid-Offer Acceptance** or an **Advance Synchronisation Instruction**, or a

- Physical Notification** of greater than zero is submitted in respect of the **BM Unit** concerned indicating **Synchronisation** of that **BM Unit** during the **Committed Period**; or
- (b) during the **Maximum Hot Standby Period**, the **Generator** has failed to maintain an **NDZ<sub>4</sub>** in accordance with Sub-Clause 5.4.6(a); or
  - (c) the **Generator** has failed to either:-
    - (i) maintain the **Stable Export Limit** and/or **Minimum Non-Zero Time** in accordance with Sub-Clause 5.4.6(b); or
    - (ii) submit a **Bid-Offer Pair** in accordance with Sub-Clause 5.4.6(c).

## 5.12 Review of Prices

- 5.12.1 The **Generator** may, from time to time, serve on **The Company** by facsimile in the form set out in Schedule F, Section 4, Part I (or such other method as may be agreed in writing between the **Parties**) a notification setting out details of any amendment(s) to any or all of the **BM Start-Up Prices** and **Hot Standby Prices** applicable to one or more of the **BM Units** (an “**Amendment Notification**”).
- 5.12.2 An **Amendment Notification** shall only be valid if it is received by **The Company** on a **Business Day** by 12.00 hours on that **Business Day**, and (subject always to Sub-Clause 5.12.5) a valid **Amendment Notification** shall be effective from 00.00 hours on the calendar day which is the third calendar day which follows that **Business Day**, so that by way of illustration:-
- (a) an **Amendment Notification** received by **The Company** by 12.00 hours on a Thursday shall be effective from 00.00 hours on the next following Sunday); and
  - (b) an **Amendment Notification** received on a **Business Day** but after 12.00 hours, or received on a day which is not a **Business Day**, shall be invalid.
- 5.12.3 **The Company** shall acknowledge receipt of an **Amendment Notification** as soon as reasonably practicable (and in any event within 24 hours of receipt or deemed receipt) by facsimile in the form set out in Schedule F, Section 4, Part II.
- 5.12.4 A valid **Amendment Notification** shall supersede all and any previous valid **Amendment Notifications** with respect to the contents thereof.
- 5.12.5 Where a **BM Start-Up Instruction** is issued by **The Company** in respect of a **BM Unit** and during the period when the **Generator** provides **BM Start-Up** and (where relevant) **Hot Standby** from that **BM Unit** in accordance with such **BM Start-Up Instruction** a valid **Amendment Notification** takes effect in relation to the **BM Start-Up Price** and/or **Hot Standby Price** applicable to that **BM Unit**, for the purposes of determining the **BM Start-Up Payment** and (where relevant) the **Hot Standby Payment** attributable to such provision of **BM Start-Up** and (where relevant) **Hot Standby**, the **BM Start-Up Price** and/or **Hot Standby Price** applicable prior to the

coming into effect of such **Amendment Notification** shall apply in place of the **BM Start-Up Price** and/or **Hot Standby Price** set out in such **Amendment Notification**.

5.13 **Publication**

5.13.1 For the purposes of this Clause 5, **The Company** shall publish on its website current pricing information with respect to all generators contracted to provide the **BM Start-Up Service** (for the avoidance of doubt whether or not the subject of any **BM Start-Up Instruction** from time to time) and shall use reasonable endeavours to ensure that all such prices so published are updated by the end of each **Business Day** to reflect any valid **Amendment Notifications** received on that **Business Day**, and for the purposes thereof the **Generator** consents to such disclosure by **The Company** with respect to its own **BM Start-Up Prices** and **Hot Standby Prices**.

5.13.2 **The Company** may also publish on its website shortly after the time of issue of a **BM Start-Up Instruction** in respect of a **BM Unit** the following information in respect of the provision of the **BM Start-Up Service** from that **BM Unit**:-

- (a) the identity of **BM Unit**;
- (b) whether the **BM Start-Up Instruction** is an **Advance Synchronisation Instruction**;
- (c) the **BM Start-Up Time**;
- (d) the highest **Maximum Export Limit** submitted by the **Generator** in respect of the **BM Unit** for the period commencing at the **Hot Standby Target Time** and ending four hours thereafter as at the time of issue of the **BM Start-Up Instruction** in relation to the **BM Unit**;
- (e) the estimated time of **Synchronisation**; and
- (f) the **Instruction to Cease Start-Up** time;

and to this extent, the **Generator** consents to the disclosure by **The Company** of such information.

**APPENDIX 2**

**SCHEDULE F**  
**BM START-UP**

**SECTION 1 - DATA**

**Part I**  
**BM Unit Data**

<b>BMU Name</b>	<b>BMU_1</b>	<b>BMU_2</b>	<b>BMU_3</b>	<b>BMU_4</b>
<b>NDZ<sub>i</sub> range</b> (at the time of issue of <b>BM Start-Up Instruction</b> )	<b>t<sub>nts</sub></b>	<b>t<sub>nts</sub></b>	<b>t<sub>nts</sub></b>	<b>t<sub>nts</sub></b>
85 min ≥ [x] minutes	[ ] minutes	[ ] minutes	[ ] minutes	[ ] minutes
[y] min. ≤ <b>NDZ<sub>i</sub></b> ≤ [x-1] min.	[ ] minutes	[ ] minutes	[ ] minutes	[ ] minutes
[z] min. ≤ <b>NDZ<sub>i</sub></b> ≤ [y-1] min.	[ ] minutes	[ ] minutes	[ ] minutes	[ ] minutes

**Part II**  
**NDZ Ranges**

<b>BMU Name</b>	<b>BMU_1</b>	<b>BMU_2</b>	<b>BMU_3</b>	<b>BMU_4</b>
<b>NDZ Range 1</b>	<i>0 &lt; NDZ<sub>i</sub> &lt;= NDZ1</i>	<i>0 &lt; NDZ<sub>i</sub> &lt;= NDZ1</i>	<i>0 &lt; NDZ<sub>i</sub> &lt;= NDZ1</i>	<i>0 &lt; NDZ<sub>i</sub> &lt;= NDZ1</i>
<b>[NDZ Range 2]</b>	<i>[NDZ1 &lt; NDZ<sub>i</sub> &lt;= NDZ2]</i>	<i>[NDZ1 &lt; NDZ<sub>i</sub> &lt;= NDZ2]</i>	<i>[NDZ1 &lt; NDZ<sub>i</sub> &lt;= NDZ2]</i>	<i>[NDZ1 &lt; NDZ<sub>i</sub> &lt;= NDZ2]</i>
<b>[NDZ Range 3]</b>	<i>[NDZ2 &lt; NDZ<sub>i</sub>]</i>	<i>[NDZ2 &lt; NDZ<sub>i</sub>]</i>	<i>[NDZ2 &lt; NDZ<sub>i</sub>]</i>	<i>[NDZ2 &lt; NDZ<sub>i</sub>]</i>

**Part III**  
**Hot Standby**

<b>Maximum Hot Standby Period:</b>	[ ] minutes
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## SECTION 2 - FORMULAE

### Part I BM Start-Up Payments

For each **BM Unit**, payment to the **Generator** in respect of provision of **BM Start-Up** during calendar month *m* shall be calculated in accordance with the following formulae:

$$SUP_m = \sum_{i \in m} (SUP_k - GRP_k)$$

Where:

$SUP_m$  = the total payment for **BM Start-Up** due to the **Generator** in month *m*

$\sum_{i \in m}$  = the summation over all instances of **BM Start-Up** in respect of **BM Unit** *i* occurring in calendar month *m*

$SUP_k$  = the **BM Start-Up Payment** due to the **Generator** in respect of the instance of **BM Start-Up** *k*

$$SUP_k = \lfloor \alpha \times t_{startup} \rfloor \times F1$$

$GRP_k$  = the **BM Start-Up Repayment Amount** due from the **Generator** in respect of the instance of **BM Start-Up** *k*

$$GRP_k = \lfloor \alpha \times t_{startup} \rfloor \times F1 \times F2$$

$\alpha$  = the applicable **BM Start-Up Price**

$t_{startup}$  = the number of hours of provision of **BM Start-Up** determined in accordance with the formula below:

$$t_{startup} = CST - BST$$

$CST$  = the **Cease Start-Up Time**

$BST$  = the **BM Start-Up Time**, determined in accordance with the formula below:

$$BST = HSTT + t_{ms} - NDZ_i$$

*HSTT* = the **Hot Standby Target Time**

*NDZ<sub>i</sub>* = the Notice to Deviate from Zero (as defined in **Grid Code BC1**) in respect of **BM Unit i** applicable to the time at which a **BM Start-Up Instruction** is issued by **The Company**

F1 = 0 where any of Sub-Clauses 5.10.3(a) or (b) applies, otherwise 1

F2 = 1 where any of Sub-Clauses 5.10.2(a), (b), or (c), applies, otherwise 0

**Part II**  
**Hot Standby Payments**

For each **BM Unit**, payment to the **Generator** in respect of provision of **Hot Standby** during calendar month *m* shall be calculated in accordance with the following formulae:

$$HSP_m = \sum_{i \in m} HSP_h$$

Where:

$HSP_m$  = the total payment for **Hot Standby** due to the **Generator** in calendar month *m*

$\sum_{i \in m}$  = the summation over all instances of **Hot Standby** occurring in calendar month *m* in respect of **BM Unit i**

$HSP_h$  = the **Hot Standby Payment** described in Sub-Clause 5.11 in respect of the instance of **Hot Standby h**

$$HSP_h = [\beta * t_{hsb}] * F3$$

$\beta$  = the applicable **Hot Standby Price**

$t_{hsb}$  = number of hours of provision of **Hot Standby** determined in accordance with the formula below:

$$t_{hsb} = CHST - HSTT$$

$CHST$  = **Cease Hot Standby Time** as determined in accordance with Schedule F, Section 2, Part III

$HSTT$  = **Hot Standby Target Time** or, if later, the time of submission of a revised **NDZ<sub>i</sub>** pursuant to Sub-Clause 5.4.6(a)

$F3$  = 0 where any of Sub-Clause, 5.11.2(a), (b) or (c) applies, otherwise 1

**Part III**  
**Cease Hot Standby Time**

For each instance of **Hot Standby** relating to a **BM Unit**, **Cease Hot Standby Time**, “CHST”, shall be determined as follows:

- (i) Where **Hot Standby** is provided and an **Instruction to Cease Hot Standby** is issued pursuant to Sub-Clause 5.7.1 or deemed to have been given in the circumstances described in Sub-Clause 5.7.3, then:

*CHST = time at which **Instruction to Cease Hot Standby** is issued or (as the case may be) deemed to be issued*

- (ii) Where **Hot Standby** is provided and an **Instruction to Cease Hot Standby** is deemed to have been given in the circumstances described in Sub-Clause 5.7.2 such that the time that the **BM Unit Synchronises** is defined by reference to the Point Acceptance Volume  $qA_{it}^k$ , “time X”, then:

*CHST = time X -  $t_{ms}$*

- (iii) Where **Hot Standby** is provided and an **Instruction to Cease Hot Standby** is deemed to have been given in the circumstances described in Sub-Clause 5.7.4(a), then:-

*CHST = the commencement of the **Settlement Period** in which  $QM_{ij}$  for the relevant **BM Unit** is greater than zero MW*

- (iv) Where **Hot Standby** is provided and an **Instruction to Cease Hot Standby** is deemed to have been given in the circumstances described in Sub-Clause 5.7.4(b), then:

*CHST = time at which the **Physical Notification** of greater than zero for the relevant **BM Unit** is submitted to **The Company***

- (v) Where **Hot Standby** is provided and an **Instruction to Cease Hot Standby** is deemed to have been given in the circumstances described in Sub-Clause 5.7.4(c), then:

*CHST = time at which the **Maximum Export Limit** of the relevant **BM Unit** is revised to:*  
*(i) less than the **Stable Export Limit**; and/or*  
*(ii) zero MW*

**SECTION 3 - PRICES**

**Part 1 - BM Start-Up**

<b>BM Unit</b>	<b>NDZ Range 1</b>	<b>[NDZ Range 2]</b>	<b>[NDZ Range 3]</b>
<b>BMU_1</b>	<i><math>\alpha 1</math> (£/h)</i>	<i>[<math>\alpha 2</math> (£/h)]</i>	<i>[<math>\alpha 3</math> (£/h)]</i>
<b>BMU_2</b>	<i><math>\alpha 1</math> (£/h)</i>	<i>[<math>\alpha 2</math> (£/h)]</i>	<i>[<math>\alpha 3</math> (£/h)]</i>
<b>BMU_3</b>	<i><math>\alpha 1</math> (£/h)</i>	<i>[<math>\alpha 2</math> (£/h)]</i>	<i>[<math>\alpha 3</math> (£/h)]</i>
<b>BMU_4</b>	<i><math>\alpha 1</math> (£/h)</i>	<i>[<math>\alpha 2</math> (£/h)]</i>	<i>[<math>\alpha 3</math> (£/h)]</i>

**Part II - Hot Standby**

<b>BM Unit</b>	<b><math>\beta</math> (£/h)</b>
<b>BMU_1</b>	<i><math>\beta</math></i>
<b>BMU_2</b>	<i><math>\beta</math></i>
<b>BMU_3</b>	<i><math>\beta</math></i>
<b>BMU_4</b>	<i><math>\beta</math></i>

**SECTION 4 - NOTIFICATION FORMATS**

**Part I**

(Pursuant to Sub-Clause 5.3.2)

**From:**  
**To:** National Grid Electricity Control Centre

**Fax:**  
**Fax:**

**Date:** .....

**Time:** .....

**BM Start-Up Service Availability Declaration**

The **Commercial Ancillary Service** of **BM Start-Up Service** is declared available/unavailable from one or more **BM Unit(s)** as follows:

**Power Station:**

--

BM Unit(s)	Available	Unavailable

<b>With Effect From (date/time)</b>	___/___/___	___:___
<b>Estimated end date/time (to be confirmed by subsequent declaration)</b>	___/___/___	___:___

<b>Signed by :</b>		
<b>Name</b>		
<b>Date/time</b>	___/___/___	___:___

**(Being authorised on behalf of the Generator to make this declaration.)**

**Note**

*This facsimile notification supersedes all previous notifications.*

**Part II**

(Pursuant to Sub-Clause 5.12)

**From:**  
**To: National Grid, Network Operations**

**Fax:**  
**Fax: 01926 656612**

**Date:** .....

**Time:** .....

**BM Start-Up Service Price Declaration**

In accordance with Sub-Clause 5.12.1 of the **Commercial Services Agreement**, the prices for the **BM Start-Up Service** shall be amended as follows:-

Contracted BM Unit	BM Start-Up Service Prices			
	Alpha1 (£/h)	Alpha2 (£/h)	Alpha3 (£/h)	Beta (£/h)
[BM Unit ID]				

--	--

**Signed by:** .....(signature)

**Name:** .....

For and on behalf of [                    ]

.....  
.....

**From: National Grid, Network Operations**

**Fax: 01926 656612**

**To:**

**Fax:**

**Date of Receipt:** .....

**Time:** .....

In accordance with Sub-Clause 5.12.3 of the **Commercial Services Agreement**, we **ACKNOWLEDGE** your **Amendment Notification** for prices for the **BM Start-Up Service** as set out in the above table.

**Signed by:** .....(signature)

**Name:** .....