BALANCING CODE NO. 1
(BC1)

PRE GATE CLOSURE PROCESS

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BC1.1 INTRODUCTION

Balancing Code No1 (BC1) sets out the procedure for:

(a) the submission of **BM Unit Data** and/or **Generating Unit Data** (which could be part of a **Power Generating Module**) by each **BM Participant**;

(b) the submission of certain **System** data by each **Network Operator**; and

(c) the provision of data by ~~**NGET**~~**The Company**,

in the period leading up to **Gate Closure**.

BC1.2 OBJECTIVE

The procedure for the submission of **BM Unit Data** and/or **Generating Unit Data** is intended to enable ~~**NGET**~~**The Company** to assess which **BM Units** and **Generating Units** (which could be part of a **Power Generating Module**) are expected to be operating in order that ~~**NGET**~~**The Company** can ensure (so far as possible) the integrity of the **National Electricity Transmission System**, and the security and quality of supply.

Where reference is made in this **BC1** to **Generating Units** and/or **Power Generating Modules** (unless otherwise stated) it only applies:

(a) to each **Generating Unit** which forms part of the **BM Unit** of a **Cascade Hydro Scheme**; and

(b) at an **Embedded Exemptable Large Power Station** where the relevant **Bilateral Agreement** specifies that compliance with **BC1** is required:

(i) to each **Generating Unit** which could be part of a **Synchronous Power Generating Module**, or

(ii) to each **Power Park Module** where the **Power Station** comprises **Power Park Modules**.

BC1.3 SCOPE

BC1 applies to ~~**NGET**~~**The Company** and to **Users**, which in this **BC1** means:-

(a) **BM Participants**;

(b) **Externally Interconnected System Operators**; and

(c) **Network Operators**.

BC1.4 SUBMISSION OF DATA

In the case of **BM Units** or **Generating Units Embedded** in a **User System**, any data submitted by **Users** under this **BC1** must represent the value of the data at the relevant **Grid Supply Point**.

BC1.4.1 Communication With Users

(a) Submission of **BM Unit Data** and **Generating Unit Data** by **Users** to ~~**NGET**~~**The Company** specified in BC1.4.2 to BC1.4.4 (with the exception of BC1.4.2(f)) is to be by use of electronic data communications facilities, as provided for in CC.6.5.8 or ECC.6.5.8 (as applicable). However, data specified in BC1.4.2(c) and BC1.4.2(e) only, may be submitted by telephone or fax.

(b) In the event of a failure of the electronic data communication facilities, the data to apply in relation to a pre-**Gate Closure** period will be determined in accordance with the **Data Validation**, **Consistency and Defaulting Rules**, based on the most recent data received and acknowledged by ~~**NGET**~~**The Company**.

(c) **Planned Maintenance Outages** will normally be arranged to take place during periods of low data transfer activity.

(d) Upon any **Planned Maintenance Outage**, or following an unplanned outage described in BC1.4.1(b) (where it is termed a "failure") in relation to a pre-**Gate Closure** period:

(i) **BM Participants** should continue to act in relation to any period of time in accordance with the **Physical Notifications** current at the time of the start of the **Planned Maintenance Outage** or the computer system failure in relation to each such period of time subject to the provisions of BC2.5.1. Depending on when in relation to **Gate Closure** the planned or unplanned maintenance outage arises such operation will either be operation in preparation for the relevant output in real time, or will be operation in real time. No further submissions of **BM Unit Data** and/or **Generating Unit Data** (other than data specified in BC1.4.2(c) and BC1.4.2(e)) should be attempted. Plant failure or similar problems causing significant deviation from **Physical Notification** should be notified to **~~NGET~~The Company** by the submission of a revision to **Export and Import Limits** in relation to the **BM Unit** and /or **Generating Unit** so affected;

(ii) during the outage, revisions to the data specified in BC1.4.2(c) and BC1.4.2(e) may be submitted. Communication between **Users Control Points** and **~~NGET~~The Company** during the outage will be conducted by telephone; and

(iii) no data will be transferred from **~~NGET~~The Company** to the **BMRA** until the communication facilities are re-established.

BC1.4.2 Day Ahead Submissions

Data for any **Operational Day** may be submitted to **~~NGET~~The Company** up to several days in advance of the day to which it applies, as provided in the **Data Validation, Consistency and Defaulting Rules**. However, **Interconnector Users** must submit **Physical Notifications**, and any associated data as necessary, each day by 11:00 hours in respect of the next following **Operational Day** in order that the information used in relation to the capability of the respective **External Interconnection** is expressly provided. **~~NGET~~The Company** shall not by the inclusion of this provision be prevented from utilising the provisions of BC1.4.5 if necessary.

The data may be modified by further data submissions at any time prior to **Gate Closure**, in accordance with the other provisions of **BC1**. The data to be used by **~~NGET~~The Company** for operational planning will be determined from the most recent data that has been received by **~~NGET~~The Company** by 11:00 hours on the day before the **Operational Day** to which the data applies, or from the data that has been defaulted at 11:00 hours on that day in accordance with BC1.4.5. Any subsequent revisions received by **~~NGET~~The Company** under the Grid Code will also be utilised by **~~NGET~~The Company**. In the case of all data items listed below, with the exception of item (e), **Dynamic Parameters** (Day Ahead), the latest submitted or defaulted data, as modified by any subsequent revisions, will be carried forward into operational timescales. The individual data items are listed below:

(a) Physical Notifications

Physical Notifications, being the data listed in **BC1** Appendix 1 under that heading, are required by **~~NGET~~The Company** at 11:00 hours each day for each **Settlement Period** of the next following **Operational Day**, in respect of;

(1) **BM Units**:

(i) with a **Demand Capacity** with a magnitude of 50MW or more in **~~NGET~~The Company's Transmission Area** or 10MW or more in **SHETL's Transmission Area** or 30MW or more in **SPT's Transmission Area**; or

(ii) comprising **Generating Units** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or **Power Generating Modules** and/or **CCGT Modules** and/or **Power Park Modules** in each case at **Large Power Stations**, **Medium Power Stations** and **Small Power Stations** where such **Small Power Stations** are directly connected to the **Transmission System**; or

(iii) where the **BM Participant** chooses to submit **Bid-Offer Data** in accordance

with BC1.4.2(d) for **BM Units** not falling within (i) or (ii) above,

and

(2) each **Generating Unit** where applicable under BC1.2.

Physical Notifications may be submitted to ~~**NGET**~~**The Company** by **BM Participants**, for the **BM Units**, and **Generating Units**, specified in this BC1.4.2(a) at an earlier time, or **BM Participants** may rely upon the provisions of BC1.4.5 to create the **Physical Notifications** by data defaulting pursuant to the **Grid Code** utilising the rules referred to in that paragraph at 11:00 hours in any day.

Physical Notifications (which must comply with the limits on maximum rates of change listed in **BC1** Appendix 1) must, subject to the following operating limits, represent the **Users** best estimate of expected input or output of **Active Power** and shall be prepared in accordance with **Good Industry Practice**. **Physical Notifications** for any **BM Unit**, and any **Generating Units**, should normally be consistent with the **Dynamic Parameters** and **Export and Import Limits** and must not reflect any **BM Unit** or any **Generating Units**, proposing to operate outside the limits of its **Demand Capacity** and (and in the case of **BM Units**) **Generation Capacity** and, in the case of a **BM Unit** comprising a **Generating Unit** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or **Power Generating Module** and/or **CCGT Module** and/or **Power Park Module**, its **Registered Capacity**.

These **Physical Notifications** provide, amongst other things, indicative **Synchronising** and **De-Synchronising** times to ~~**NGET**~~**The Company** in respect of any **BM Unit** comprising a **Generating Unit** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or **Power Generating Module** and/or **CCGT Module** and/or **Power Park Module**, and for any **Generating Units**, and provide an indication of significant **Demand** changes in respect of other **BM Units**.

(b) Quiescent Physical Notifications

Each **BM Participant** may, in respect of each of its **BM Units**, submit to ~~**NGET**~~**The Company** for each **Settlement Period** of the next following **Operational Day** the data listed in **BC1** Appendix 1 under the heading of "**Quiescent Physical Notifications**" to amend the data already held by ~~**NGET**~~**The Company** in relation to **Quiescent Physical Notifications**, which would otherwise apply for those **Settlement Periods**.

(c) Export and Import Limits

Each **BM Participant** may, in respect of each of its **BM Units** and its **Generating Units** submit to ~~**NGET**~~**The Company** for any part or for the whole of the next following **Operational Day** the data listed in **BC1** Appendix 1 under the heading of "**Export and Import Limits**" to amend the data already held by ~~**NGET**~~**The Company** in relation to **Export and Import Limits**, which would otherwise apply for those **Settlement Periods**.

Export and Import Limits respectively represent the maximum export to or import from the **National Electricity Transmission System** for a **BM Unit** and a **Generating Unit** and are the maximum levels that the **BM Participant** wishes to make available and must be prepared in accordance with **Good Industry Practice**.

(d) Bid-Offer Data

Each **BM Participant** may, in respect of each of its **BM Units**, but must not in respect of its **Generating Units** submit to ~~**NGET**~~**The Company** for any **Settlement Period** of the next following **Operational Day** the data listed in **BC1** Appendix 1 under the heading of "**Bid-Offer Data**" to amend the data already held by ~~**NGET**~~**The Company** in relation to **Bid-Offer Data**, which would otherwise apply to those **Settlement Periods**. The submitted **Bid-Offer Data** will be utilised by ~~**NGET**~~**The Company** in the preparation and analysis of its operational plans for the next following **Operational Day**. **Bid-Offer Data** may not be submitted unless an automatic logging device has been installed at the **Control Point** for the **BM Unit** in accordance with CC.6.5.8(b) or ECC.6.5.8(b) (as applicable).

(e) Dynamic Parameters (Day Ahead)

Each **BM Participant** may, in respect of each of its **BM Units**, but must not in respect of its **Generating Units** submit to ~~**NGET**~~**The Company** for the next following **Operational Day** the data listed in **BC1** Appendix 1 under the heading of "**Dynamic Parameters**" to amend that data already held by ~~**NGET**~~**The Company**.

These **Dynamic Parameters** shall reasonably reflect the expected true operating characteristics of the **BM Unit** and shall be prepared in accordance with **Good Industry Practice**. In any case where non-zero **QPN** data has been provided in accordance with BC1.4.2(b), the **Dynamic Parameters** will apply to the element being offered for control only, i.e. to the component of the **Physical Notification** between the **QPN** and the full level of the **Physical Notification**.

The **Dynamic Parameters** applicable to the next following **Operational Day** will be utilised by ~~**NGET**~~**The Company** in the preparation and analysis of its operational plans for the next following **Operational Day** and may be used to instruct certain **Ancillary Services**. For the avoidance of doubt, the **Dynamic Parameters** to be used in the current **Operational Day** will be those submitted in accordance with BC2.5.3.1.

(f) Other Relevant Data

By 11:00 hours each day, each **BM Participant**, in respect of each of its **BM Units** and **Generating Units** for which **Physical Notifications** are being submitted, shall, if it has not already done so, submit to ~~**NGET**~~**The Company** (save in respect of item (vi) and (vii) where the item shall be submitted only when reasonably required by ~~**NGET**~~**The Company**), in respect of the next following **Operational Day** the following:

(i) in the case of a **CCGT Module** and/or a **Synchronous Power Generating Module**, a **CCGT Module Matrix** and/or a **Synchronous Power Generating Module Matrix** as described in **BC1** Appendix 1;

(ii) details of any special factors which in the reasonable opinion of the **BM Participant** may have a material effect or present an enhanced risk of a material effect on the likely output (or consumption) of such **BM Unit(s)**. Such factors may include risks, or potential interruptions, to **BM Unit** fuel supplies, or developing plant problems, details of tripping tests, etc. This information will normally only be used to assist in determining the appropriate level of **Operating Margin** that is required under OC2.4.6;

(iii) in the case of **Generators**, any temporary changes, and their possible duration, to the **Registered Data** of such **BM Unit**;

(iv) in the case of **Suppliers**, details of **Customer Demand Management** taken into account in the preparation of its **BM Unit Data**;

(v) details of any other factors which ~~**NGET**~~**The Company** may take account of when issuing **Bid-Offer Acceptances** for a **BM Unit** (e.g., **Synchronising** or **De-Synchronising** Intervals);

(vi) in the case of a **Cascade Hydro Scheme**, the **Cascade Hydro Scheme Matrix** as described in **BC1** Appendix 1; and

(vii) in the case of a **Power Park Module**, a **Power Park Module Availability Matrix** as described in **BC1** Appendix 1.

(g) Joint BM Unit Data

BM Participants may submit **Joint BM Unit Data** in accordance with the provisions of the **BSC**. For the purposes of the Grid Code, such data shall be treated as data submitted under **BC1**.

BC1.4.3 Data Revisions

The **BM Unit Data**, and **Generating Unit Data**, derived at 1100 hours each day under BC1.4.2 above may need to be revised by the **BM Participant** for a number of reasons, including for example, changes to expected output or input arising from revised contractual positions, plant breakdowns, changes to expected **Synchronising** or **De-Synchronising** times, etc, occurring before **Gate Closure**. **BM Participants** should use reasonable endeavours to ensure that the data held by **~~NGET~~The Company** in relation to its **BM Units** and **Generating Units**, is accurate at all times. Revisions to **BM Unit Data**, and **Generating Unit Data** for any period of time up to **Gate Closure** should be submitted to **~~NGET~~The Company** as soon as reasonably practicable after a change becomes apparent to the **BM Participant**. **~~NGET~~The Company** will use reasonable endeavours to utilise the most recent data received from **Users**, subject to the application of the provisions of BC1.4.5, for its preparation and analysis of operational plans.

BC1.4.4 Receipt Of BM Unit Data Prior To Gate Closure

BM Participants submitting **Bid-Offer Data**, in respect of any **BM Unit** for use in the **Balancing Mechanism** for any particular **Settlement Period** in accordance with the **BSC**, must ensure that **Physical Notifications** and **Bid-Offer Data** for such **BM Units** are received in their entirety and logged into **~~NGET~~The Company's** computer systems by the time of **Gate Closure** for that **Settlement Period**. In all cases the data received will be subject to the application under the **Grid Code** of the provisions of BC1.4.5.

For the avoidance of doubt, no changes to the **Physical Notification**, **QPN** data or **Bid-Offer Data** for any **Settlement Period** may be submitted to **~~NGET~~The Company** after **Gate Closure** for that **Settlement Period**.

BC1.4.5 BM Unit Data Defaulting, Validity And Consistency Checking

In the event that no submission of any or all of the **BM Unit Data** and **Generating Unit Data** in accordance with BC1.4.2 in respect of an **Operational Day**, is received by **~~NGET~~The Company** by 11:00 hours on the day before that **Operational Day**, **~~NGET~~The Company** will apply the **Data Validation**, **Consistency and Defaulting Rules**, with the default rules applicable to **Physical Notifications**, **Quiescent Physical Notifications** and **Export and Import Limits** data selected as follows:

(a) for an **Interconnector Users BM Unit**, the defaulting rules will set some or all of the data for that **Operational Day** to zero, unless the relevant Interconnector arrangements, as agreed with **~~NGET~~The Company**, state otherwise (in which case (b) applies); and

(b) for all other **BM Units** or **Generating Units**, the defaulting rules will set some or all of the data for that **Operational Day** to the values prevailing in the current **Operational Day**.

A subsequent submission by a **User** of a data item which has been so defaulted under the **Grid Code** will operate as an amendment to that defaulted data and thereby replace it. Any such subsequent submission is itself subject to the application under the **Grid Code** of the **Data Validation**, **Consistency and Defaulting Rules**.

BM Unit Data and **Generating Unit Data** submitted in accordance with the provisions of BC1.4.2 to BC1.4.4 will be checked under the **Grid Code** for validity and consistency in accordance with the **Data Validation**, **Consistency and Defaulting Rules**. If any **BM Unit Data** and **Generating Unit Data** so submitted fails the data validity and consistency checking, this will result in the rejection of all data submitted for that **BM Unit** or **Generating Unit** included in the electronic data file containing that data item and that **BM Unit's** or **Generating Unit's** data items will be defaulted under the **Grid Code** in accordance with the **Data Validation**, **Consistency and Defaulting Rules**. Data for other **BM Units** and **Generating Units** included in the same electronic data file will not be affected by such rejection and will continue to be validated and checked for consistency prior to acceptance. In the event that rejection of any **BM Unit Data** and **Generating Unit Data** occurs, details will be made available to the relevant **BM Participant** via the electronic data communication facilities. In the event of a difference between the **BM Unit Data** for the **Cascade Hydro Scheme** and sum of the data submitted for the **Generating Units** forming part of such **Cascade Hydro Scheme**, the **BM Unit Data** shall take precedence.

BC1.4.6 Special Provisions Relating To Interconnector Users

(a) The total of the relevant **Physical Notifications** submitted by **Interconnector Users** in respect of any period of time should not exceed the capability (in MW) of the respective **External Interconnection** for that period of time. In the event that it does, then **~~NGET~~The Company** shall advise the **Externally Interconnected System Operator** accordingly. In the period between such advice and **Gate Closure**, one or more of the relevant **Interconnector Users** would be expected to submit revised **Physical Notifications** to **~~NGET~~The Company** to eliminate any such over-provision.

(b) In any case where, as a result of a reduction in the capability (in MW) of the **External Interconnection** in any period during an **Operational Day** which is agreed between **~~NGET~~The Company** and an **Externally Interconnected System Operator** after 0900 hours on the day before the beginning of such **Operational Day**, the total of the **Physical Notifications** in the relevant period using that **External Interconnection**, as stated in the **BM Unit Data** exceeds the reduced capability (in MW) of the respective **External Interconnection** in that period then **~~NGET~~The Company** shall notify the **Externally Interconnected System Operator** accordingly.

BC1.5 INFORMATION PROVIDED BY ~~NGET~~The Company

~~NGET~~The Company shall provide data to the **Balancing Mechanism Reporting Agent** or **BSCCo** each day in accordance with the requirements of the **BSC** in order that the data may be made available to **Users** via the **Balancing Mechanism Reporting Service** (or by such other means) in each case as provided in the **BSC**. Where **~~NGET~~The Company** provides such information associated with the secure operation of the **System** to the **Balancing Mechanism Reporting Agent**, the provision of that information is additionally provided for in the following sections of this BC1.5. **~~NGET~~The Company** shall be taken to have fulfilled its obligations to provide data under BC1.5.1, BC1.5.2, and BC1.5.3 by so providing such data to the **Balancing Mechanism Reporting Agent**.

BC1.5.1 Demand Estimates

Normally by 0900 hours each day, **~~NGET~~The Company** will make available to **Users** a forecast of **National Demand** and the **Demand** for a number of pre-determined constraint groups (which may be updated from time to time, as agreed between **~~NGET~~The Company** and **BSCCo**) for each **Settlement Period** of the next following **Operational Day**. Normally by 1200 hours each day, **~~NGET~~The Company** will make available to **Users** a forecast of **National Electricity Transmission System Demand** for each **Settlement Period** of the next **Operational Day**. Further details are provided in Appendix 2.

BC1.5.2 Indicated Margin And Indicated Imbalance

Normally by 1200 hours each day, ~~NGET~~**The Company** will make available to **Users** an **Indicated Margin** and an **Indicated Imbalance** for each **Settlement Period** of the next following **Operational Day**. ~~NGET~~**The Company** will use reasonable endeavours to utilise the most recent data received from **Users** in preparing for this release of data. Further details are provided in Appendix 2.

BC1.5.3 Provision Of Updated Information

~~NGET~~**The Company** will provide updated information on **Demand** and other information at various times throughout each day, as detailed in Appendix 2. ~~NGET~~**The Company** will use reasonable endeavours to utilise the most recent data received from **Users** in preparing for this release of data.

BC1.5.4 Reserve And System Margin

Contingency Reserve

(a) The amount of **Contingency Reserve** required at the day ahead stage and in subsequent timescales will be decided by ~~NGET~~**The Company** on the basis of historical trends in the reduction in availability of **Large Power Stations** and increases in forecast **Demand** up to real time operation. Where **Contingency Reserve** is to be allocated to thermal **Gensets**, ~~NGET~~**The Company** will instruct through a combination of **Ancillary Services** instructions and **Bid-Offer Acceptances**, the time at which such **Gensets** are required to synchronise, such instructions to be consistent with **Dynamic Parameters** and other contractual arrangements.

Operating Reserve

(b) The amount of **Operating Reserve** required at any time will be determined by ~~NGET~~**The Company** having regard to the **Demand** levels, **Large Power Station** availability shortfalls and the greater of the largest secured loss of generation (ie, the loss of generation against which, as a requirement of the **Licence Standards**, the **National Electricity Transmission System** must be secured) or loss of import from or sudden export to **External Interconnections**. ~~NGET~~**The Company** will allocate **Operating Reserve** to the appropriate **BM Units** and **Generating Units** so as to fulfil its requirements according to the **Ancillary Services** available to it and as provided in the **BC**.

System Margin

(c) In the period following 1200 hours each day and in relation to the following **Operational Day**, ~~NGET~~**The Company** will monitor the total of the Maximum Export Limit component of the **Export and Import Limits** received against forecast **National Electricity Transmission System Demand** and the **Operating Margin** and will take account of **Dynamic Parameters** to see whether the anticipated level of the **System Margin** for any period is insufficient.

(d) Where the level of the **System Margin** for any period is, in ~~NGET~~**The Company's** reasonable opinion, anticipated to be insufficient, ~~NGET~~**The Company** will send (by such data transmission facilities as have been agreed) a **National Electricity Transmission System Warning - Electricity Margin Notice** in accordance with OC7.4.8 to each **Generator**, **Supplier**, **Externally Interconnected System Operator**, **Network Operator** and **Non-Embedded Customer**.

(e) Where, in ~~NGET~~**The Company's** judgement the **System Margin** at any time during the current **Operational Day** is such that there is a high risk of **Demand** reduction being instructed, a **National Electricity Transmission System Warning - High Risk of Demand Reduction** will be issued, in accordance with OC7.4.8.

(f) The monitoring will be conducted on a regular basis and a revised **National Electricity Transmission System Warning** - **Electricity Margin Notice** or **High Risk of Demand Reduction** may be sent out from time to time, including within the post **Gate Closure** phase. This will reflect any changes in **Physical Notifications** and **Export and Import Limits** which have been notified to **~~NGET~~The Company**, and will reflect any **Demand Control** which has also been so notified. This will also reflect generally any changes in the forecast **Demand** and the relevant **Operating Margin**.

(g) To reflect changing conditions, a **National Electricity Transmission System Warning - Electricity Margin Notice** may be superseded by a **National Electricity Transmission System Warning - High Risk of Demand Reduction** and vice-versa.

(h) If the continuing monitoring identifies that the **System Margin** is anticipated, in **~~NGET~~The Company's** reasonable opinion, to be sufficient for the period for which previously a **National Electricity Transmission System Warning** had been issued, **~~NGET~~The Company** will send (by such data transmission facilities as have been agreed) a **Cancellation of National Electricity Transmission System Warning** to each **User** who had received a **National Electricity Transmission System Warning - Electricity Margin Notice** or **High Risk of Demand Reduction** for that period. The issue of a **Cancellation of National Electricity Transmission System Warning** is not an assurance by **~~NGET~~The Company** that in the event, the **System Margin** will be adequate, but reflects **~~NGET~~The Company's** reasonable opinion that the insufficiency is no longer anticipated.

(i) If continued monitoring indicates the **System Margin** becoming reduced **~~NGET~~The Company** may issue further **National Electricity Transmission System Warnings - Electricity Margin Notice** or **High Risk of Demand Reduction**.

(j) **~~NGET~~The Company** may issue a **National Electricity Transmission System Warning - Electricity Margin Notice** or **High Risk of Demand Reduction** for any period, not necessarily relating to the following **Operational Day**, where it has reason to believe there will be a reduced **System Margin** over a period (for example in periods of protracted **Plant** shortage, the provisions of OC7.4.8.6 apply).

BC1.5.5 System And Localised NRAPM (Negative Reserve Active Power Margin)

(a) (i) System Negative Reserve Active Power Margin

Synchronised Gensets must at all times be capable of reducing output such that the total reduction in output of all **Synchronised Gensets** is sufficient to offset the loss of the largest secured demand on the **System** and must be capable of sustaining this response;

(ii) Localised Negative Reserve Active Power Margin

Synchronised Gensets must at all times be capable of reducing output to allow transfers to and from the **System Constraint Group** (as the case may be) to be contained within such reasonable limit as **~~NGET~~The Company** may determine and must be capable of sustaining this response.

(b) **~~NGET~~The Company** will monitor the total of **Physical Notifications** of exporting **BM Units** and **Generating Units** (where appropriate) received against forecast **Demand** and, where relevant, the appropriate limit on transfers to and from a **System Constraint Group** and will take account of **Dynamic Parameters** and **Export and Import Limits** received to see whether the level of **System NRAPM** or **Localised NRAPM** for any period is likely to be insufficient. In addition, **~~NGET~~The Company** may increase the required margin of **System NRAPM** or **Localised NRAPM** to allow for variations in forecast **Demand**. In the case of **System NRAPM**, this may be by an amount (in **~~NGET~~The Company's** reasonable discretion) not exceeding five per cent of forecast **Demand** for the period in question. In the case of **Localised NRAPM**, this may be by an amount (in **~~NGET~~The Company's** reasonable discretion) not exceeding ten per cent of the forecast **Demand** for the period in question;

(c) Where the level of **System NRAPM** or **Localised NRAPM** for any period is, in ~~**NGET**~~**The Company**~~—~~**'s** reasonable opinion, likely to be insufficient ~~**NGET**~~**The Company** may contact all **Generators** in the case of low **System NRAPM** and may contact **Generators** in relation to relevant **Gensets** in the case of low **Localised NRAPM**. ~~**NGET**~~**The Company** will raise with each **Generator** the problems it is anticipating due to low **System NRAPM** or **Localised NRAPM** and will discuss whether, in advance of **Gate Closure**:-

(i) any change is possible in the **Physical Notification** of a **BM Unit** which has been notified to ~~**NGET**~~**The Company**; or

(ii) any change is possible to the **Physical Notification** of a **BM Unit** within an **Existing AGR Plant** within the **Existing AGR Plant Flexibility Limit**;

in relation to periods of low **System NRAPM** or (as the case may be) low **Localised NRAPM**. ~~**NGET**~~**The Company** will also notify each **Externally Interconnected System Operator** of the anticipated low **System NRAPM** or **Localised NRAPM** and request assistance in obtaining changes to **Physical Notifications** from **BM Units** in that **External System**.

(d) Following **Gate Closure**, the procedure of BC2.9.4 will apply.

BC1.6 SPECIAL PROVISIONS RELATING TO NETWORK OPERATORS

BC1.6.1 User System Data From Network Operators

(a) By 1000 hours each day each **Network Operator** will submit to ~~**NGET**~~**The Company** in writing, confirmation or notification of the following in respect of the next **Operational Day**:

(i) constraints on its **User System** which ~~**NGET**~~**The Company** may need to take into account in operating the **National Electricity Transmission System**. In this BC1.6.1 the term "constraints" shall include restrictions on the operation of **Embedded Power Generating Modules**, and/or **Embedded CCGT Units**, and/or **Embedded Power Park Modules** as a result of the **User System** to which the **Power Generating Module** and/or **CCGT Unit** and/or **Power Park Module** is connected at the **User System Entry Point** being operated or switched in a particular way, for example, splitting the relevant busbar. It is a matter for the **Network Operator** and the **Generator** to arrange the operation or switching, and to deal with any resulting consequences. The **Generator**, after consultation with the **Network Operator**, is responsible for ensuring that no **BM Unit Data** submitted to ~~**NGET**~~**The Company** can result in the violation of any such constraint on the **User System**.

(ii) the requirements of voltage control and MVAr reserves which ~~**NGET**~~**The Company** may need to take into account for **System** security reasons.

(iii) where applicable, updated best estimates of **Maximum Export Capacity** and **Maximum Import Capacity** and **Interface Point Target Voltage/Power Factor** for any **Interface Point** connected to its **User System** including any requirement for post-fault actions to be implemented on the relevant **Offshore Transmission System** by ~~**NGET**~~**The Company**.

(b) The form of the submission will be:

(i) that of a **BM Unit** output or consumption (for MW and for MVAr, in each case a fixed value or an operating range, on the **User System** at the **User System Entry Point**, namely in the case of a **BM Unit** comprising a **Generating Unit** (as defined in the Glossary and Definitions and not limited by BC1.2) on the higher voltage side of the generator step-up transformer, and/or in the case of a **Power Generating Module**, at the point of connection and/or in the case of a **Power Park Module**, at the point of connection) required for particular **BM Units** (identified in the submission) connected to that **User System** for each **Settlement Period** of the

next **Operational Day**;

(ii) adjusted in each case for MW by the conversion factors applicable for those **BM Units** to provide output or consumption at the relevant **Grid Supply Points**.

(c) At any time and from time to time, between 1000 hours each day and the expiry of the next **Operational Day**, each **Network Operator** must submit to ~~**NGET**~~**The Company** in writing any revisions to the information submitted under this BC1.6.1.

BC1.6.2 Notification Of Times To Network Operators

~~**NGET**~~**The Company** will make available indicative **Synchronising** and **De-Synchronising** times to each **Network Operator**, but only relating to **BM Units** comprising a **Generating Unit** (as defined in the Glossary and Definitions and not limited by BC1.2) or a **Power Park Module** or a **CCGT Module** and/or a **Power Generating Module**, **Embedded** within that **Network Operator's User System** and those **Gensets** directly connected to the **National Electricity Transmission System** which ~~**NGET**~~**The Company** has identified under **OC2** as being those which may, in the reasonable opinion of ~~**NGET**~~**The Company**, affect the integrity of that **User System**. If in preparing for the operation of the **Balancing Mechanism**, ~~**NGET**~~**The Company** becomes aware that a **BM Unit** directly connected to the **National Electricity Transmission System** may, in its reasonable opinion, affect the integrity of that other **User System** which, in the case of a **BM Unit** comprising a **Generating Unit** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or a **Power Generating Module** and/or a **CCGT Module** and/or a **Power Park Module**, it had not so identified under **OC2**, then ~~**NGET**~~**The Company** may make available details of its indicative **Synchronising** and **De-Synchronising** times to that other **User** and shall inform the relevant **BM Participant** that it has done so, identifying the **BM Unit** concerned.

BC1.7 SPECIAL ACTIONS

BC1.7.1 ~~**NGET**~~**The Company** may need to identify special actions (either pre- or post-fault) that need to be taken by specific **Users** in order to maintain the integrity of the **National Electricity Transmission System** in accordance with the **Licence Standards** and ~~**NGET**~~**The Company** **Operational Strategy**.

(a) For a **Generator** special actions will generally involve a **Load** change or a change of required Notice to Deviate from Zero NDZ, in a specific timescale on individual or groups of **Gensets**.

(b) For **Network Operators** these special actions will generally involve **Load** transfers between **Grid Supply Points** or arrangements for **Demand** reduction by manual or automatic means.

(c) For **Externally Interconnected System Operators** (in their co-ordinating role for **Interconnector Users** using their **External System**) these special actions will generally involve an increase or decrease of net power flows across an **External Interconnection** by either manual or automatic means.

BC1.7.2 These special actions will be discussed and agreed with the relevant **User** as appropriate. The actual implementation of these special actions may be part of an "emergency circumstances" procedure described under **BC2**. If not agreed, generation or **Demand** may be restricted or may be at risk.

BC1.7.3 ~~**NGET**~~**The Company** will normally issue the list of special actions to the relevant **Users** by 1700 hours on the day prior to the day to which they are to apply.

BC1.8 PROVISION OF REACTIVE POWER CAPABILITY

BC1.8.1 Under certain operating conditions ~~**NGET**~~**The Company** may identify through its **Operational Planning** that an area of the **National Electricity Transmission System** may have insufficient **Reactive Power** capability available to ensure that the operating voltage can be maintained in accordance with ~~**NGET**~~**The Company's Licence Standards**.

In respect of **Onshore Synchronous Generating Unit(s)** belonging to **GB Code Users**

(i) that have a **Connection Entry Capacity** in excess of **Rated MW** (or the **Connection Entry Capacity** of the **CCGT Module** exceeds the sum of **Rated MW** of the **Generating Units** comprising the **CCGT Module**); and

(ii) that are not capable of continuous operation at any point between the limits 0.85 **Power Factor** lagging and 0.95 **Power Factor** leading at the **Onshore Synchronous Generating Unit** terminals at **Active Power** output levels higher than **Rated MW**; and

(iii) that have either a **Completion Date** on or after 1st May 2009, or where its **Connection Entry Capacity** has been increased above **Rated MW** (or the **Connection Entry Capacity** of the **CCGT Module** has increased above the sum of **Rated MW** of the **Generating Units** comprising the **CCGT Module**) such increase takes effect on or after 1st May 2009 but only in respect of **GB Generators** that are classified as **GB Code Users** ; and

(iv) that are in an area of potentially insufficient **Reactive Power** capability as described in this clause BC1.8.1,

~~NGET~~The Company may instruct the **Onshore Synchronous Generating Unit(s)** to limit its submitted **Physical Notifications** to no higher than **Rated MW** (or the **Active Power** output at which it can operate continuously between the limits 0.85 **Power Factor** lagging to 0.95 **Power Factor** leading at its terminals if this is higher) for a period specified by **~~NGET~~The Company**. Such an instruction must be made at least 1 hour prior to **Gate Closure**, although **~~NGET~~The Company** will endeavour to give as much notice as possible. The instruction may require that a **Physical Notification** is re-submitted. The period covered by the instruction will not exceed the expected period for which the potential deficiency has been identified. Compliance with the instruction will not incur costs to **~~NGET~~The Company** in the **Balancing Mechanism**. The detailed provisions relating to such instructions will normally be set out in the relevant **Bilateral Agreement**.

BC1.8.2 BC1.8.1 shall not apply to **EU Code Users** where the obligations under CC.6.3.2(a) apply only to **GB Generators**. For the avoidance of doubt, **EU Code User's** are only required to satisfy the requirements of the **ECC's** and not the **CC's**.

APPENDIX 1 - BM UNIT DATA

BC1.A.1 More detail about valid values required under the **Grid Code** for **BM Unit Data** and **Generating Unit Data** may be identified by referring to the **Data Validation**, **Consistency and Defaulting Rules**. In the case of **Embedded BM Units** and **Generating Units** the **BM Unit Data** and the **Generating Unit Data** shall represent the value at the relevant **Grid Supply Point**. Where data is submitted on a **Generating Unit** basis, the provisions of this Appendix 1 shall in respect of such data submission apply as if references to **BM Unit** were replaced with **Generating Unit**. Where ~~**NGET**~~**The Company** and the relevant **User** agree, submission on a **Generating Unit** basis (in whole or in part) may be otherwise than in accordance with the provisions of the Appendix 1.

BC1.A.1.1 Physical Notifications

For each **BM Unit**, the **Physical Notification** is a series of MW figures and associated times, making up a profile of intended input or output of **Active Power** at the **Grid Entry Point** or **Grid Supply Point**, as appropriate. For each **Settlement Period**, the first "from time" should be at the start of the **Settlement Period** and the last "to time" should be at the end of the **Settlement Period**.

The input or output reflected in the **Physical Notification** for a single **BM Unit** (or the aggregate **Physical Notifications** for a collection of **BM Units** at a **Grid Entry Point** or **Grid Supply Point** or to be transferred across an **External Interconnection**, owned or controlled by a single **BM Participant**) must comply with the following limits regarding maximum rates of change, either for a single change or a series of related changes :

- for a change of up to 300MW — no limit;
- for a change greater than 300MW and less than 1000MW — 50MW per minute;
- for a change of 1000MW or more — 40MW per minute,

unless prior arrangements have been discussed and agreed with ~~**NGET**~~**The Company**. This limitation is not intended to limit the Run-Up or Run-Down Rates provided as **Dynamic Parameters**.

An example of the format of **Physical Notification** is shown below. The convention to be applied is that where it is proposed that the **BM Unit** will be importing, the **Physical Notification** is negative.

Data Name	BMU name	Time From	From level (MW)	Time To	To Level MW)
PN , TAGENT ,	BMUNIT01 ,	2001-11-03 06:30 ,	77 ,	2001-11-03 07:00 ,	100
PN , TAGENT ,	BMUNIT01 ,	2001-11-03 07:00 ,	100 ,	2001-11-03 07:12 ,	150
PN , TAGENT ,	BMUNIT01 ,	2001-11-03 07:12 ,	150 ,	2001-11-03 07:30 ,	175

A linear interpolation will be assumed between the **Physical Notification** From and To levels specified for the **BM Unit** by the **BM Participant**.

BC1.A.1.2 Quiescent Physical Notifications (QPN)

For each **BM Unit** (optional)	A series of MW figures and associated times, which describe the MW levels to be deducted from the **Physical Notification** of a **BM Unit** to determine a resultant operating level to which the **Dynamic Parameters** associated with that **BM Unit** apply.

An example of the format of data is shown below.

Data Name	BMU name	Time From	From level (MW)	Time To	To level (MW)
QPN	TAGENT	BMUNIT04	2001-11-03 06:30	-200	2001-11-03 07:00	-220
QPN	TAGENT	BMUNIT04	2001-11-03 07:00	-220	2001-11-03 07:18	-245
QPN	TAGENT	BMUNIT04	2001-11-03 07:18	-245	2001-11-03 07:30	-300

A linear interpolation will be assumed between the **QPN** From and To levels specified for the **BM Unit** by the **BM Participant**.

BC1.A.1.3 Export And Import Limits

BC1.A.1.3.1 Maximum Export Limit (MEL)

A series of MW figures and associated times, making up a profile of the maximum level at which the **BM Unit** may be exporting (in MW) to the **National Electricity Transmission System** at the **Grid Entry Point** or **Grid Supply Point**, as appropriate.

For a **Power Park Module,** the Maximum Export Limit should reflect the maximum possible **Active Power** output from each **Power Park Module** consistent with the data submitted within the **Power Park Module Availability Matrix** as defined under BC.1.A.1.8. For the avoidance of doubt, in the case of a **Power Park Module** this would equate to the **Registered Capacity** less the unavailable **Power Park Units** within the **Power Park Module** and not include weather corrected MW output from each **Power Park Unit**.

BC1.A.1.3.2 Maximum Import Limit (MIL)

A series of MW figures and associated times, making up a profile of the maximum level at which the **BM Unit** may be importing (in MW) from the **National Electricity Transmission System** at the **Grid Entry Point** or **Grid Supply Point**, as appropriate.

An example format of data is shown below. MEL must be positive or zero, and MIL must be negative or zero.

Data Name	BMU name	Time From	From level (MW)	Time To	To level (MW)
MEL	TAGENT	BMUNIT01	2001-11-03 05:00	410	2001-11-03 09:35	410
MEL	TAGENT	BMUNIT01	2001-11-03 09:35	450	2001-11-03 12:45	450
MIL	TAGENT	BMUNIT04	2001-11-03 06:30	-200	2001-11-03 07:00	-220

BC1.A.1.4 Bid-Offer Data

For each **BM Unit** for each **Settlement Period**:	Up to 10 Bid-Offer Pairs as defined in the **BSC**.

An example of the format of data is shown below.

Data	Name	BMU name	Time from	Time to	Pair ID	From Level (MW)	To Level (MW)	Offer (£/MWh)	Bid (£/MWh)
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	4	30	30	40	35
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	3	20	20	35	30
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	2	40	40	32	27
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	1	50	50	30	25
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	-1	-40	-40	25	20
BOD	TAGENT	BMUNIT01	2000-10-28 12:00	2000-10-28 13:30	-2	-30	-30	23	17

This example of Bid-Offer data is illustrated graphically below:

BC1.A.1.5 Dynamic Parameters

The **Dynamic Parameters** comprise:

- Up to three Run-Up Rate(s) and up to three Run-Down Rate(s), expressed in MW/minute and associated Run-Up Elbow(s) and Run-Down Elbow(s), expressed in MW for output and the same for input. It should be noted that Run-Up Rate(s) are applicable to a MW figure becoming more positive;
- Notice to Deviate from Zero (NDZ) output or input, being the notification time required for a **BM Unit** to start importing or exporting energy, from a zero **Physical Notification** level as a result of a **Bid-Offer Acceptance**, expressed in minutes;
- Notice to Deliver Offers (NTO) and Notice to Deliver Bids (NTB), expressed in minutes, indicating the notification time required for a **BM Unit** to start delivering Offers and Bids respectively from the time that the **Bid-Offer Acceptance** is issued. In the case of a **BM Unit** comprising a **Genset**, NTO and NTB will be set to a maximum period of two minutes;
- Minimum Zero Time (MZT), being either the minimum time that a **BM Unit** which has been exporting must operate at zero or be importing, before returning to exporting or the minimum time that a **BM Unit** which has been importing must operate at zero or be exporting before returning to importing, as a result of a **Bid-Offer Acceptance**, expressed in minutes;
- Minimum Non-Zero Time (MNZT), expressed in minutes, being the minimum time that a **BM Unit** can operate at a non-zero level as a result of a **Bid-Offer Acceptance**;
- Stable Export Limit (SEL) expressed in MW at the **Grid Entry Point** or **Grid Supply Point**, as appropriate, being the minimum value at which the **BM Unit** can, under stable conditions, export to the **National Electricity Transmission System**;
- Stable Import Limit (SIL) expressed in MW at the **Grid Entry Point** or **Grid Supply Point**, as appropriate, being the minimum value at which the **BM Unit** can, under stable conditions, import from the **National Electricity Transmission System**;
- Maximum Delivery Volume (MDV), expressed in MWh, being the maximum number of MWh of Offer (or Bid if MDV is negative) that a particular **BM Unit** may deliver within the associated Maximum Delivery Period (MDP), expressed in minutes, being the maximum period over which the MDV applies.
- Last Time to Cancel Synchronisation, expressed in minutes with an upper limit of 60 minutes, being the notification time required to cancel a **BM Unit's** transition from operation at zero. This parameter is only applicable where the transition arises either from a **Physical Notification** or, in the case where the **Physical Notification** is zero, a **Bid-Offer Acceptance**. There can be up to three Last Time to Cancel Synchronisation(s) each applicable for a range of values of Notice to Deviate from Zero.

BC1.A.1.6 CCGT Module Matrix

BC1.A.1.6.1 **CCGT Module Matrix** showing the combination of **CCGT Units** running in relation to any given MW output, in the form of the diagram illustrated below. The **CCGT Module Matrix** is designed to achieve certainty in knowing the number of **CCGT Units** synchronised to meet the **Physical Notification** and to achieve a **Bid-Offer Acceptance**.

BC1.A.1.6.2 In the case of a **Range CCGT Module**, and if the **Generator** so wishes, a request for the single **Grid Entry Point** at which power is provided from the **Range CCGT Module** to be changed in accordance with the provisions of BC1.A.1.6.4 below:

CCGT Module Matrix example form

CCGT MODULE ACTIVE POWER	**CCGT GENERATING UNITS*** AVAILABLE								
	1st GT	2nd GT	3rd GT	4th GT	5th GT	6th GT	1st ST	2nd ST	3rd ST
MW	**ACTIVE POWER OUTPUT**								
	150	150	150				100		
0MW to 150MW	/								
151MW to 250MW	/						/		
251MW to 300MW	/	/							
301MW to 400MW	/	/					/		
401MW to 450MW	/	/	/						
451MW to 550MW	/	/	/				/		

* as defined in the Glossary and Definitions and not limited by BC1.2

BC1.A.1.6.3 In the absence of the correct submission of a **CCGT Module Matrix** the last submitted (or deemed submitted) **CCGT Module Matrix** shall be taken to be the **CCGT Module Matrix** submitted hereunder.

BC1.A.1.6.4 The data may also include in the case of a **Range CCGT Module**, a request for the **Grid Entry Point** at which the power is provided from the **Range CCGT Module** to be changed with effect from the beginning of the following **Operational Day** to another specified single **Grid Entry Point** (there can be only one) to that being used for the current **Operational Day**. ~~**NGET**~~**The Company** will respond to this request by 1600 hours on the day of receipt of the request. If ~~**NGET**~~**The Company** agrees to the request (such agreement not to be unreasonably withheld), the **Generator** will operate the **Range CCGT Module** in accordance with the request. If ~~**NGET**~~**The Company** does not agree, the **Generator** will, if it produces power from that **Range CCGT Module**, continue to provide power from the **Range CCGT Module** to the **Grid Entry Point** being used at the time of the request. The request can only be made up to 1100 hours in respect of the following **Operational Day**. No subsequent request to change can be made after 1100 hours in respect of the following **Operational Day**. Nothing in this paragraph shall prevent the busbar at the **Grid Entry Point** being operated in separate sections.

BC1.A.1.6.5 The principles set out in PC.A.3.2.3 apply to the submission of a **CCGT Module Matrix** and accordingly the **CCGT Module Matrix** can only be amended as follows:

(a) Normal CCGT Module

if the **CCGT Module** is a **Normal CCGT Module**, the **CCGT Units** within that **CCGT Module** can only be amended such that the **CCGT Module** comprises different **CCGT Units** if ~~**NGET**~~**The Company** gives its prior consent in writing. Notice of the wish to amend the **CCGT Units** within such a **CCGT Module** must be given at least 6 months before it is wished for the amendment to take effect;

(b) Range CCGT Module

if the **CCGT Module** is a **Range CCGT Module**, the **CCGT Units** within that **CCGT Module** can only be amended such that the **CCGT Module** comprises different **CCGT Units** for a particular **Operational Day** if the relevant notification is given by 1100 hours on the day prior to the **Operational Day** in which the amendment is to take effect. No subsequent amendment may be made to the **CCGT Units** comprising the **CCGT Module** in respect of that particular **Operational Day**.

BC1.A.1.6.6 In the case of a **CCGT Module Matrix** submitted (or deemed to be submitted) as part of the other data for **CCGT Modules**, the output of the **CCGT Module** at any given instructed MW output must reflect the details given in the **CCGT Module Matrix**. It is accepted that in cases of change in MW in response to instructions issued by **~~NGET~~The Company** there may be a transitional variance to the conditions reflected in the **CCGT Module Matrix**. In achieving an instruction the range of number of **CCGT Units** envisaged in moving from one MW output level to the other must not be departed from. Each **Generator** shall notify **~~NGET~~The Company** as soon as practicable after the event of any such variance. It should be noted that there is a provision above for the **Generator** to revise the **CCGT Module Matrix**, subject always to the other provisions of this **BC1**;

BC1.A.1.6.7 Subject as provided above, **~~NGET~~The Company** will rely on the **CCGT Units** specified in such **CCGT Module Matrix** running as indicated in the **CCGT Module Matrix** when it issues an instruction in respect of the **CCGT Module**;

BC1.A.1.6.8 Subject as provided in BC1.A.1.6.5 above, any changes to the **CCGT Module Matrix** must be notified immediately to **~~NGET~~The Company** in accordance with the relevant provisions of **BC1**.

BC1.A.1.7 Cascade Hydro Scheme Matrix

BC1.A.1.7.1 A **Cascade Hydro Scheme Matrix** showing the performance of individual **Generating Units** forming part of a **Cascade Hydro Scheme** in response to **Bid-Offer Acceptance**. An example table is shown below:

Cascade Hydro Scheme Matrix example form

Plant	Synchronises when offer is greater than……..
Generating Unit 1	.....MW
Generating Unit 2	.....MW
Generating Unit 3	.....MW
Generating Unit 4	.....MW
Generating Unit 5	.....MW

BC1.A.1.8 Power Park Module Availability Matrix

BC1.A.1.8.1 **Power Park Module Availability Matrix** showing the number of each type of **Power Park Units** expected to be available is illustrated in the example form below. The **Power Park Module Availability Matrix** is designed to achieve certainty in knowing the number of **Power Park Units Synchronised** to meet the **Physical Notification** and to achieve a **Bid-Offer Acceptance** by specifying which **BM Unit** each **Power Park Module** forms part of. The **Power Park Module Availability Matrix** may have as many columns as are required to provide information on the different make and model for each type of **Power Park Unit** in a **Power Park Module** and as many rows as are required to provide information on the **Power Park Modules** within each **BM Unit**. The description is required to assist identification of the **Power Park Units** within the **Power Park Module** and correlation with data provided under the **Planning Code**.

Power Park Module Availability Matrix example form

BM Unit Name				
Power Park Module [unique identifier]				
POWER PARK UNIT AVAILABILITY	**POWER PARK UNITS**			
	Type A	Type B	Type C	Type D
Description (Make/Model)				
Number of units				
Power Park Module [unique identifier]				
POWER PARK UNIT AVAILABILITY	**POWER PARK UNITS**			
	Type A	Type B	Type C	Type D
Description (Make/Model)				
Number of units				

BC1.A.1.8.2 In the absence of the correct submission of a **Power Park Module Availability Matrix** the last submitted (or deemed submitted) **Power Park Module Availability Matrix** shall be taken to be the **Power Park Module Availability Matrix** submitted hereunder.

BC1.A.1.8.3 ~~**NGET**~~**The Company** will rely on the **Power Park Units**, **Power Park Modules** and **BM Units** specified in such **Power Park Module Availability Matrix** running as indicated in the **Power Park Module Availability Matrix** when it issues an instruction in respect of the **BM Unit**.

BC1.A.1.8.4 Subject as provided in PC.A.3.2.4 any changes to **Power Park Module** or **BM Unit** configuration, or availability of **Power Park Units** which affects the information set out in the **Power Park Module Availability Matrix** must be notified immediately to ~~**NGET**~~**The Company** in accordance with the relevant provisions of **BC1**. Initial notification may be by telephone. In some circumstances, such as a significant re-configuration of a **Power Park Module** due to an unplanned outage, a revised **Power Park Module Availability Matrix** must be supplied on ~~**NGET**~~**The Company's** request.

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BC1.A.1.9 **Synchronous Power Generating Module Matrix**

BC1.A.1.9.1 **Synchronous Power Generating Module Matrix** showing the combination of **Synchronous Power Generating Units** running in relation to any given MW output, in the form of the table illustrated below. The **Synchronous Power Generating Module Matrix** is designed to achieve certainty in knowing the number of **Synchronous Power Generating Units** synchronised to meet the **Physical Notification** and to achieve a **Bid-Offer Acceptance**.

BC1.A.1.9.2 This data need not be provided where a submission has been made in respect of BC1.A.1.6, BC1.A.1.7 or BC1.A.1.8

Synchronous Power Generating Module Matrix example form

SYNCHRONOUS POWER GENERATING MODULE MATRIX	**SYNCHRONOUS POWER GENERATING UNITS*** AVAILABLE								
	1st GT	2nd GT	3rd GT	4th GT	5th GT	6th GT	1st ST	2nd ST	3rd ST
MW	**ACTIVE POWER OUTPUT**								
	150	150	150				100		
0MW to 150MW	/								
151MW to 250MW	/						/		
251MW to 300MW	/	/							
301MW to 400MW	/	/					/		
401MW to 450MW	/	/	/						
451MW to 550MW	/	/	/				/		

* as defined in the Glossary and Definitions and not limited by BC1.2

BC1.A.1.9.3 In the absence of the correct submission of a **Synchronous Power Generating Module Matrix** the last submitted (or deemed submitted) **Synchronous Power Generating Module Matrix** shall be taken to be the **Synchronous Power Generating Module Matrix** submitted hereunder.

BC1.A.1.9.4 The principles set out in PC.A.3.2.5 apply to the submission of a **Synchronous Power Generating Module Matrix** and accordingly the **Synchronous Power Generating Module Matrix** can only be amended as if the **Synchronous Power Generating Units** within that **Synchronous Power Generating Module** can only be amended such that the **Synchronous Power Generating Module** comprises different **Synchronous Power Generating Units** if ~~**NGET**~~**The Company** gives its prior consent in writing. Notice of the wish to amend the **Synchronous Power Generating Units** within such a **Synchronous Power Generating Module** must be given at least 6 months before it is wished for the amendment to take effect;

BC1.A.1.9.5 In the case of a **Synchronous Power Generating Module Matrix** submitted (or deemed to be submitted) as part of the other data for **Synchronous Power Generating Modules**, the output of the **Synchronous Power Generating Module** at any given instructed MW output must reflect the details given in the **Synchronous Power Generating Module Matrix**. It is accepted that in cases of change in MW in response to instructions issued by ~~**NGET**~~**The Company** there may be a transitional variance to the conditions reflected in the **Synchronous Power Generating Module Matrix**. In achieving an instruction the range of number of **Synchronous Power Generating Units** envisaged in moving from one MW output level to the other must not be departed from. Each **Generator** shall notify ~~**NGET**~~**The Company** as soon as practicable after the event of any such variance. It should be noted that there is a provision above for the **Generator** to revise the **Synchronous Power Generating Module Matrix**, subject always to the other provisions of this **BC1**;

BC1.A.1.9.6 Subject as provided above, ~~**NGET**~~**The Company** will rely on the **Synchronous Power Generating Units** specified in such **Synchronous Power Generating Module Matrix** running as indicated in the **Synchronous Power Generating Module Matrix** when it issues an instruction in respect of the **Synchronous Power Generating Module**;

BC1.A.1.9.7 Subject as provided in BC1.A.1.9.4 above, any changes to the **Synchronous Power Generating Module Matrix** must be notified immediately to ~~**NGET**~~**The Company** in accordance with the relevant provisions of **BC1**.

APPENDIX 2 - DATA TO BE MADE AVAILABLE BY ~~NGET~~THE COMPANY

BC1.A.2.1 Initial Day Ahead Demand Forecast

Normally by 09:00 hours each day, values (in MW) for each **Settlement Period** of the next following **Operational Day** of the following data items:-

(i) Initial forecast of **National Demand**;

(II) Initial forecast of **Demand** for a number of predetermined constraint groups.

BC1.A.2.2 Initial Day Ahead Market Information

Normally by 12:00 hours each day, values (in MW) for each **Settlement Period** of the next following **Operational Day** of the following data items:-

(i) Initial National **Indicated Margin**

This is the difference between the sum of **BM Unit** MELs and the forecast of **National Electricity Transmission System Demand**.

(ii) Initial National **Indicated Imbalance**

This is the difference between the sum of **Physical Notifications** for **BM Units** comprising **Generating Units** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or **Power Generating Modules** and/or **CCGT Modules** and/or **Power Park Modules** and the forecast of **National Electricity Transmission System Demand**.

(iii) Forecast of **National Electricity Transmission System Demand**.

BC1.A.2.3 Current Day And Day Ahead Updated Market Information

Data will normally be made available by the times shown below for the associated periods of time:

Target Data Release Time	Period Start Time	Period End Time
02:00	02:00 D0	05:00 D+1
10:00	10:00 D0	05:00 D+1
16:00	05:00 D+1	05:00 D+2
16:30	16:30 D0	05:00 D+1
22:00	22:00 D0	05:00 D+2

In this table, D0 refers to the current day, D+1 refers to the next day and D+2 refers to the day following D+1.

In all cases, data will be ½ hourly average MW values calculated by ~~NGET~~**The Company**. Information to be released includes:

National Information

(i) National **Indicated Margin**;

(ii) National **Indicated Imbalance**;

(iii) Updated forecast of **National Electricity Transmission System Demand**.

Constraint Boundary Information (For Each Constraint Boundary)

(i) **Indicated Constraint Boundary Margin**;

This is the difference between the Constraint Boundary Transfer limit and the difference between the sum of **BM Unit** MELs and the forecast of local **Demand** within the constraint boundary.

(ii) Local **Indicated Imbalance**;

This is the difference between the sum of **Physical Notifications** for **BM Units** comprising **Generating Units** (as defined in the Glossary and Definitions and not limited by BC1.2) and/or **Power Generating Modules** and/or **CCGT Modules** and/or **Power Park Modules** and the forecast of local **Demand** within the constraint boundary.

(iii) Updated forecast of the local **Demand** within the constraint boundary.

< END OF BALANCING CODE NO. 1 >