

**(OC2)**

## OPERATIONAL PLANNING AND DATA PROVISION

## CONTENTS

(This contents page does not form part of the Grid Code)

Paragraph No/Title	Page Number
QC2.1 INTRODUCTION	2
QC2.2 OBJECTIVE	3
QC2.3 SCOPE	4
QC2.4 PROCEDURE	4
QC2.4.1 Co-ordination of outages	4
QC2.4.2 Data Requirements	15
QC2.4.3 Negative Reserve Active Power Margins	18
QC2.4.4 Frequency Sensitive Operation	19
QC2.4.6 Operating Margin Data Requirements	20
APPENDIX 1- PERFORMANCE CHART EXAMPLES	22
APPENDIX 2- GENERATION PLANNING PARAMETERS	25
APPENDIX 3- CCGT MODULE PLANNING MATRIX	27
APPENDIX 4- POWER PARK MODULE PLANNING MATRIX	28
APPENDIX 5- SYNCHRONOUS POWER GENERATING MODULE PLANNING MATRIX	29

Issue 6 Revision 23

OC2  
i

22 April 2024

~~OC2.1~~

i

<u>OC2.1 INTRODUCTION .....</u>	<u>2</u>
<u>OC2.2 SCOPE .....</u>	<u>4</u>
<u>OC2.3 PROCEDURE .....</u>	<u>5</u>
<u>OC2.3.1 Co-ordination of Outages.....</u>	<u>5</u>
<u>OC2.3.2 Data Requirements .....</u>	<u>25</u>
<u>OC2.3.3 Negative Reserve Active Power Margins .....</u>	<u>31</u>
<u>OC2.3.4 Frequency Sensitive Operation .....</u>	<u>34</u>
<u>OC2 APPENDIX 1– GENERATION PLANNING PARAMETERS .....</u>	<u>41</u>
<u>OC2 APPENDIX 2 – PLANNING MATRIX FOR GENERATING UNITS.....</u>	<u>47</u>
<u>OC2 APPENDIX 3 – POWER PARK MODULE PLANNING MATRIX.....</u>	<u>48</u>

## OC2.1 INTRODUCTION

OC2.1.1 **Operating Code No. 2** ("The objectives of OC2") is concerned with are:

- (a) —
- a) To facilitate the co-ordination of **Planned Outages** of the release of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **NETS** and **Power Park Modules**, **External Interconnections**, **Restoration Contractors**, **Users' Plant** and **Apparatus**;
  - b) To enable **The Company** to:
    - i. publish the **National Electricity Transmission System** and **Network Operators' Systems** for construction, repair and maintenance **NETS Surplus**;
  - (b) — provision by **The Company** establish the level of the **Surplus** for the **National Electricity Transmission System**:-
    - ii. (c) — the provision by **Generators** of **Generation Planning Parameters** for **Gensets**, including **Synchronous Negative Reserve Active Power Generating Module Planning Matrices**, **CCGT Module Planning Matrices** and **Power Park Module Planning Matrices**, to **The Company** for planning purposes only; and **Margin (NRAPM)**;
    - iii. (d) — the agreement plan the deployment of **Frequency Sensitive Mode**;
    - iv. establish **Operating Margin** parameters; and
    - v. agree, for release of **Existing Gas Cooled Reactor Plant** for outages in certain circumstances.
  - c) (e) — the **co-ordination** of outages on **Plant** and **Apparatus** necessary for the operation of **Restoration Plans** the **System Restoration Plan**;

- OC2.1.2 (a) **Operational Planning** involves planning, through various timescales, the **considering** matching of generation output with forecast **National Electricity Transmission System**, **NETS**, **Demand** together with and **Interconnector** flows in order to maintain a reserve of generation to provide a **margin**, taking into account outages on the **NETS** together with outages of **Users' Plant** and **Apparatus** over various timescales as described below, in addition to the ability to restore the **Total System**, in accordance with the requirements of the **Electricity System Restoration Standard**, following a **Total Shutdown** or **Partial Shutdown**, taking into account outages of certain **Power Generating Modules** (including **DC Connected Power Park Modules**), **Generating Units**, **Power Park Modules**, **External Interconnections**, **HVDC Systems** and **DC Converters**, **Restoration Contractor's Plant** and **Apparatus**, and of parts of the **National Electricity Transmission System** and of parts of **Network Operators' Systems** which is carried out to achieve, so far as possible, the standards of security and the **Electricity System Restoration Standard** set out in **The Company's Transmission Licence**, each **Relevant Transmission Licensee's Transmission Licence** or **Electricity Distribution Licence** as the case may be.
- (b) In general terms, there is an "envelope of opportunity" for the release of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules**, **Restoration Contractor's Plant** and **Apparatus** and **External Interconnections**, and for the release of parts of the **National Electricity Transmission System** and parts of the **Network Operator's User Systems** for outages. The envelope is defined by:-

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

- i) The difference between the total generation output expected from **Large Power Stations, Medium Power Stations and Demand**, the operational planning margin and taking into account **External Interconnections** and outages on the **Total System** whilst planning for the **System** operating under normal conditions; and
- ii) The availability and location of **Plant** and **Apparatus** required to discharge the requirements of the **Electricity System Restoration Standard** following a **Total System Shutdown or Partial System Shutdown**.

OC2.1.3 In this **OC2**, for the purpose of **Generator** and **Interconnector Owner** and **Restoration Contractor** outage co-ordination

OC2.1.3 **Restoration Contractors** should separately identify data which shall be provided in respect of **Plant** and **Apparatus** for which they have **Restoration Contracts**. **Restoration Contractors** with **Embedded Plant** and **Apparatus** need only provide data to the relevant **Network Operator** should they be required to do so by the **Distribution Code**, i.e., there is no need to provide identical data to **The Company**.

OC2.1.4 In **OC2**, **Year 0** means the current calendar year at any time, **Year 1** means the next calendar year at any time, **Year 2** means the calendar year after **Year 1**, etc. For the purpose of **Transmission** outage planning, **Year 0** means the current **Financial Year** at any time, **Year 1** means the next **Financial Year** at any time, **Year 2** means the **Financial Year** after **Year 1**, etc. References to 'weeks' in **OC2**.. and references to weeks are to calendar weeks as defined in ISO 8601.

OC2.1.4 5 References in **OC2** to a **Generator's** and **Interconnector Owner's** and **Restoration Contractor's** "best estimate" shall **bemean** that **Generator's** or **Interconnector Owner's** or **Restoration Contractor's** best estimate acting as a reasonable and prudent **Generator** or **Interconnector Owner** in all the circumstances.

OC2.1.5 References to **The Company** planning the **National Electricity Transmission System** outage programme on the basis of the **Final Generation Outage Programme**, are to **The Company** planning against the **Final Generation Outage Programme** current at the time it so plans.

OC2.1.6 Where in **OC2**, data is required to be submitted or information is to be given on a particular weekday, that data does not need to be submitted and that information does not need to be given on that day if it is not a **Business Day** or it falls within a holiday period (the occurrence and length of which shall be determined by **The Company**, in its reasonable discretion, and notified to **Users**). Instead, that data shall be submitted and/or that information shall be given on such other **Business Day** as **The Company** shall, in its reasonable discretion, determine. However, **The Company** may determine that that data and/or information need not be submitted or given at all, in which case it shall notify each **User** as appropriate.

OC2.1.7 In Scotland, it may be possible with the agreement of **The Company**, to reduce the administrative burden for **Users** in producing planning information where either the **active power** output or **demand** from a **Power Station** is small, or the **import** of a demand **User** is small.

OC2.1.7 Where in **OC2** there is a requirement to submit data or provide information on a particular day that falls on a non-**Business Day**, that data or information must be submitted by the next **Business Day** unless otherwise agreed in advance with **The Company**.

OC2.1.8 **Generators** and **Interconnector Owners** who have a **CUSC Contract** and who are also **Restoration Contractors**, need only submit the data once in respect of their **Plant** and **Apparatus**. **Generators** and **Interconnector Owners** who are also **Restoration Contractors**, are required to state for which **Plant** they have a **Restoration Contract**.

OC2.1.9 **Network Operators** who have a **Distribution Restoration Zone Plan** in place, shall notify **The Company** whenever an outage of a **Restoration Contractor's Plant** or **Apparatus** which contributes to a **Distribution Restoration Zone Plan** is unavailable or a circuit forming part of that **Distribution Restoration Zone Plan** is unavailable, making the operation of that **Distribution Restoration Zone Plan** unviable.

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.25 cm, Left

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted

Formatted: Normal, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.74 cm, Left

Formatted: Condensed by 0.1 pt

Formatted: Body Text, Space Before: 0.15 pt

Formatted: Font: 8.5 pt

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Normal, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.74 cm, Left

Formatted: Font: 8.5 pt

Formatted: Body Text, Space Before: 0.15 pt

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.74 cm, Left

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

## OC2.2 OBJECTIVE SCOPE

OC2.2.1 OC2 applies to **The Company** and to the following **Users**:

OC2.2.1 (a) The objective of **OC2** is to seek to enable **The Company** to harmonise outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Generating Units**, **Power Park Modules** and **External Interconnections** in order that such outages are co-ordinated (taking account of **Embedded Medium Power Stations**) between **Generators** and **Network Operators**, and that such outages are co-ordinated taking into account **National Electricity Transmission System** outages and other **System** outages, so far as possible to minimise the number and effect of constraints on the **National Electricity Transmission System** or any other **System** and ensure sufficient provisions are in place to restore the **Total System** in the event of a **Total Shutdown** or **Partial Shutdown**.

(b) In the case of **Network Operator' User Systems** directly connected to the **National Electricity Transmission System**, this means in particular that there will also need to be harmonisation of outages of **Embedded Power Generating Modules**, **Embedded Synchronous Generating Units** and **Embedded Power Park Modules**, and **National Electricity Transmission System** outages, with **Network Operators** in respect of their outages on those **Systems**. Outages of **Plant** and **Apparatus** of **Restoration Contractor's** and **Plant** and **Apparatus** of a **Network Operator's System** associated with a **Distribution Restoration Zone Plan** also need to be co-ordinated with outages on the **National Electricity Transmission System**.

OC2.2.2 The objective of **OC2** is also to enable the provision by **The Company** of the **Surplus** for the **National Electricity Transmission System** and the means necessary to restore the **System** following a **Total System Shutdown** or **Partial System Shutdown**.

- a) **Generators** in respect of their generating **Plant** which is directly connected to the **NETS** and to any generating **Plant** in **Embedded Large Power Stations**.
- b) **Network Operators**.

OC2.2.3 A further objective of **OC2** is to provide for the agreement for outages for **Existing Gas Cooled Reactor Plant** in certain circumstances and to enable a process to be followed in order to provide for that.

OC2.3 SCOPE

OC2.3.1 OC2 applies to **The Company**, and to **Users** which in **OC2** means:

- (a) **Generators**, only in respect of their **Large Power Stations** or their **Power Stations** which are directly connected to **National Electricity Transmission System** (and the term **Generator** in this **OC2** shall be construed accordingly);
- (b) **Network Operators**; and
- (c) **(c) Non-Embedded Customers**; and
- (d) **(d) HVDC System Owners** and **DC Converter Station** owners; and
- (e) **(e) Interconnector Owners** in respect of their **External Interconnections**; and
- (f) **(f) Restoration Contractors** who are party to a **Local Joint Restoration Zone Plan** and who have a **CUSC Contract** where such data has not already been provided in OC2.32.1(a), (c), (d) or (e).

OC2.3.2 **The Company** may provide to the **Relevant Transmission Licensees** any data which has been submitted to **The Company** by any **Users** in respect of **Relevant Units** pursuant to the following paragraphs of the **OC2**.

— OC2.4.1.2.1 —

— OC2.4.1.3.2 (a) —

Formatted: Normal, Indent: Left: 0.49 cm, Tab stops: 2.74 cm, Left

Formatted: Normal, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.74 cm, Left

Formatted: Font: 8.5 pt

Formatted: Body Text, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Space Before: 0.25 pt

Formatted: Condensed by 0.1 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt, Expanded by 0.4 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Heading 4, Indent: Left: 2.74 cm, Hanging: 0.75 cm, Space Before: 4.2 pt, Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.74 cm + Indent at: 3.38 cm, Tab stops: 3.49 cm, Left

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt, Not Bold, Condensed by 0.1 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt, Not Bold, Condensed by 0.1 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt, Not Bold, Condensed by 0.1 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.15 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.15 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

— OC2.4.1.3.2 (b)

— OC2.4.1.3.3

— OC2.4.2.1 (a)

## OC2.3 PROCEDURE

OC2.3.1

~~OC2.3.3~~ For the purpose of **OC2** only, the term **Output Usable** shall include the terms **Interconnector Export Capacity** and **Interconnector Import Capacity** where the term **Output Usable** is being applied to an **External Interconnection**.

OC2.4 PROCEDURE

### OC2.4.1 Co-ordination of Outages

~~OC2.43.1.1~~ Under **OC2** the interaction makes provision for information exchange between **The Company** and **Users** will be as follows the following parties;

- a) ~~(a)~~ Each **Generator**, and each **Interconnector Owner** and **The Company** In respect of outages of **Power Generating Module** (including **DC Connected Power Park Modules**, **Synchronous Generating Units**, **Power Park Modules** and **External Interconnection Circuits** and in respect of outages of other generating **Plant** and/or **Apparatus** directly connected to the **National Electricity Transmission System**; **NETS**.
- b) ~~(b)~~ The **Company** and each **Generator**, and each **Interconnector** or **Owner** in respect of **National Electricity Transmission System** **NETS** outages relevant to each the **Generator** (other than in respect of **Embedded Small Power Stations** and/or **Embedded Medium Power Stations**) and **Interconnector Owner**;
- c) ~~(c)~~ The **Company** and each **Network Operator** in respect of outages of all **Embedded Large Power Stations** and in respect of outages of other **Plant** and/or **Apparatus** relating to such **Embedded Large Power Stations**;
- d) ~~(d)~~ The **Company** and each **Network Operator** and each **Non-Embedded Customer** in respect of **National Electricity Transmission System** **NETS** outages relevant to the particular that **Network Operator** or **Non-Embedded Customer**;
- e) ~~(e)~~ Each **Network Operator** and each **Non-Embedded Customer** and **The Company** in respect of **User** outages on the **User's System** outage relevant to **The Company**; and in respect of **For Network Operators** only, outages of the **Network Operator's User System** that may affect have an impact on:
- an **Offshore Transmission System** connected to that **Network Operator's User System**;
  - that **Network Operator's** ability to operate a **Local Joint Restoration Plan** or **Distribution Restoration Zone Plan**.
- e)

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted



~~OC2.43.1.2 Data Provision Provision of Output Usable data of Power-Generating Modules, Generating Units, generating Plant and External Interconnection Circuits and Power Park Modules, and the Publication of National Surplus.~~

Formatted: Font: 12 pt

Formatted: Body Text, Space Before: 0.15 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted

~~OC2.43.1.2.1 In the event that:~~

Formatted: Normal, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.48 cm, Left

Formatted

Formatted: Font: 10 pt

Formatted

Formatted

~~If a Generator, Interconnector Owner, or Restoration Contractor referred to in OC2.3.1(a)-2.1 (f) where applicable:~~

~~a) experiences any unplanned change to the availability of a Generating Unit generating Plant, or an External Interconnection Circuit and/or Power-Generating Module and/or Power Park Module or makes a future plan which would impact the availability of a Generating Unit which is expected to last one Settlement Period or longer and up to three years ahead, the Generator and/or Power-Generating Module Interconnector Owner shall provide The Company with the best estimate of the revised Output Usable.~~

Formatted

~~a)b) makes a plan which would affect the availability of generating Plant or an External Interconnection Circuit and/or Power Park Module which is expected to last one Settlement Period or longer and up to three years ahead, resulting in a change of level in the Output Usable of that Generating Unit and/or Power-Generating Module and/or Power Park Module generating Plant or External Interconnection Circuit to a level below or above its previously notified availability, which is expected to last one Settlement Period or longer and up to three years ahead; or the Generator and/or Interconnector Owner shall provide The Company with the best estimate of the revised Output Usable.~~

Formatted: List Paragraph, Right: 2.7 cm, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.74 cm + Indent at: 3.49 cm, Tab stops: Not at 3.5 cm

Formatted

~~b) an Interconnector Owner referred to in OC2.3.1(e) experiences any unplanned change to the availability of an External Interconnection Circuit or makes a future plan which would impact the availability of an External Interconnection Circuit resulting in any change in the Output Usable of that External Interconnection Circuit below or above its previously notified availability, which is expected to last one Settlement Period or longer and up to three years ahead; or~~

~~c) a Restoration Contractors referred to in OC2.3.1(f) experiences any unplanned change to the availability of their generating Plant and Apparatus or External Interconnection Circuits or makes a future plan which would impact affect the availability of their Plant and Apparatus which would affect their ability generating Plant or External Interconnection Circuits, to contribute to a Local Joint Restoration Plan for which the Generator and/or Interconnector Owner is a Restoration Contractor, the Generator and/or Interconnector Owner shall provide The Company with the best estimate of the revised Output Usable.~~

Formatted

Formatted: List Paragraph, Right: 2.54 cm, Space Before: 5.05 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.74 cm + Indent at: 3.49 cm, Tab stops: 3.49 cm, Left + Not at 3.5

~~OC2.3.1.2.2 The Generator, Generators, Interconnector, Owner Owners and/or Restoration Contractor, as provided for in OC2.3.1(f) shall provide The Company with the best estimate of the revised available Output Usable profile using one of The Company's recommended platforms.~~

Formatted: Font: 8.5 pt, Bold

Formatted: Body Text, Space Before: 0.2 pt

Formatted

~~For Generators subject to EU Transparency Regulations the Generator shall provide the data within 1 hour of the unplanned change in availability occurring, and for a planned change to the availability, the Generator shall provide the data within 1 hour of planning the availability change in line with EU Transparency Regulations. For Generators not subject to EU Transparency Regulations the Generator shall provide the data within 24 hours of the unplanned change in availability occurring, and for a or of the change in planned change to the availability, the Generator shall provide the data within 24 hours of planning the availability change.~~

Formatted

~~For an unplanned change in availability, the Interconnector Owner shall provide the data within 1 hour of the unplanned change in availability occurring, and for a planned change to the availability, the Interconnector Owner shall provide the data within 1 hour of planning the availability change in line with EU Transparency Regulations.~~

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

~~If the **Generator** referred to in OC2.3.1(a) provides information relating to multi-shaft **Generating Units** then the detail of **generating Plant**, the individual shaft availability levels, that have been summed to produce the **Output Usable** should ~~must~~ also be defined within 24 hours provided at the same time. For those **Generators**, **Interconnector Owners** and/or **Restoration Contractor** subject to **Retained EU Law** (Commission Regulation (EU) 543/2013) the revised data must be provided within 1 hour of planning the availability change.~~

**Formatted**  
**Formatted:** Normal, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Tab stops: 2.74 cm, Left + Not at 3.5 cm

~~OC2.3.1.2.3~~ In the case of an **External Interconnection Circuit**, the details of the individual pole-capacity levels that have been summed to produce the **Output Usable** should also be defined within 24 hours.

**Formatted:** Font: 8.5 pt  
**Formatted**

~~OC2.3.1.2.4~~ In the case of **Restoration Contractors**, referred to in OC2.32.1(f), **Restoration Contractors** which are subject to an unplanned change in availability shall provide the data within 1 hour of the unplanned change and for a planned change to the availability, the **Restoration Contractor** shall provide the data within 1 hour of planning the availability change.

**Formatted**

~~OC2.3.1.2.5~~ **The Company** may, as appropriate, contact each **Generator** and each **Interconnector Owner** and each **Restoration Contractor** referred to in OC2.32.1(f), who has supplied information to seek clarification on their **Output Usable** submissions.

**Formatted**

~~OC2.43.1.2.2~~ ~~6~~ At a regular time interval, at least once per day (by 1600 hours) and up to ~~every~~ hour ~~every~~ hour ~~The Company~~ will:

**Formatted**  
**Formatted:** Body Text, Indent: Left: 0.49 cm, Hanging: 2 cm, Right: 2.14 cm, Line spacing: Multiple 1.11 li

(i) having taken into account the information notified to it by **Generators** and **Interconnector Owners** and **Restoration Contractor** as provided for in OC2.32.1(f) via the process defined in OC2.43.1.2.1 and taking into account:

**Formatted**  
**Formatted:** Font: 10 pt, English (United Kingdom)  
**Formatted**

- (1) **Demand** forecasts and details of proposed use of **Demand Control** received under OC1, and an **Operational Planning Margin** requirement set by **The Company** (the "OPMR"),
- (2) **National Electricity Transmission System** constraints and outages,
- (3) **Network Operator System** constraints and outages, known to **The Company**, and
- (4) the **Output Usable** required, in its view, to meet daily total MW requirements,

**Formatted**  
**Formatted**  
**Formatted**  
**Formatted**  
**Formatted**

Provide each **Generator** and each **Interconnector Owner** and each **Restoration Contractor** as provided for in OC2.32.1(f) (where required by **The Company**) in writing with any suggested amendments to the provisional **Output Usable** supplied by the **Generator** and **Interconnector Owner** and **Restoration Contractor** as provided for in OC2.32.1(f) which **The Company** believes necessary, and will advise **Generators** with **Large Power Stations** of the **Surpluses** for the **National Electricity Transmission System** and potential export limitations, which would occur without such amendments;

**Formatted**

(ii) calculate and submit to **BMRA**:

**Formatted:** Font: 10 pt, English (United Kingdom)

- 1. total generating **Output Usable** from **Generating Units** assumed to be available to the **Total System** (**National Output Useable**);
- 2. generating **Output Usable** by fuel type from **Generating Units** assumed to be available to the **Total System** (**Output Useable** by fuel type);
- 3. generating **Output Usable** by individual **Generating Units** assumed to be available to the **Total System** (**Output Useable** by **Generating Unit**);
- 4. total **Generating Plant Demand Margin** assumed to be available to the **Total System** (**This is sometimes referred to as the National Margin**);

**Formatted:** Font: 10 pt, English (United Kingdom)  
**Formatted:** Font: 10 pt, English (United Kingdom)  
**Formatted:** Font: 10 pt, English (United Kingdom)

**Formatted**  
**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



5. ~~total~~ **Generating Surplus** assumed to be available to the **Total System** (~~his is sometimes referred to as the National Surplus~~);

▲ with daily resolution, for at least the peak **Demand** of each day for 2 day-ahead to 14 day-ahead time scope, and

▲ with weekly resolution, for at least peak **Demand** of each week for 2 week-ahead up to 3 year-ahead time scope.

— ~~The calculation~~ Information from the calculations referred to in OC2.3.1.2.6 under (ii) will effectively define the envelope of opportunity for outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** and **Power Park Modules** covering both **Embedded** and directly connected **Large Power Stations**.

▲ **The Company** may, as appropriate, contact each **Generator** and each **Interconnector Owner** and **Restoration Contractor** (as provided for in OC2.32.1(f)) who has supplied information to seek clarification on outages and suggest amendments.

▲ (iii) Where a **Generator** or **Interconnector Owner** or a **Network Operator** or **Restoration Contractor** (as provided for in OC2.32.1(f)) ~~is unhappy~~ **has concerns** with the suggested amendments to its provisional outage programme (in the case of a **Generator** or **Interconnector Owner** or in the case of a **Restoration Contractor** as provided for in OC2.32.1(f)) or such potential outages (in the case of a **Network Operator**) it may contact **The Company** to explain its concerns and **The Company** and that **Generator**, **Interconnector Owner**, **Restoration Contractor** (as provided for in OC2.32.1(f)) or **Network Operator** will then discuss the problem and seek to resolve it.

▲ (iv) The possible resolution of the problem may require **The Company** or a **User** to contact other **Generators**, **Interconnector Owners**, **Restoration Contractors** (as provided for in OC2.32.1(f)) or **Network Operators**, and joint meetings of all parties may, if any **User** feels it would be helpful, be convened by **The Company**. The need for further discussions ~~be they on the telephone or at meetings, can only will~~ be determined at the time.

— Each **Generator** will provide **The Company** with updated **Output Usable** as per OC2.43.1 resulting from the above for **Generating Unit**, **Power Generating Module**, and **Power PartPark Module** outage programme covering both **Embedded** and non-**Embedded Large Power Stations**.

▲ **The Company** will then consider the updated **Output Usable** and ~~take~~ **take** this into account in the next calculation and submission to **BMRA**.

OC2.43.1.2.37. ▲ **The Company** retains the right to contact **Generators** with **Large Power Stations**, **Interconnector Owners** and **Network Operators** in reference to planned outages of their assets in timescales beyond the European Requirements (3 years) up to the 5 year ahead period to assist in the operational planning of **National Electricity Transmission** ~~Transmission~~ **System** outages.

OC2.43.1.3. ▲ **Planning of National Electricity Transmission System Outages**

— The outage planning process is undertaken annually for each of years 0-5 with each iteration making the plan more certain. **The Company** shall take into account **NETS** outages required

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: Not Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Font: 10 pt, English (United Kingdom)

Formatted: Expanded by 2.75 pt

Formatted: Condensed by 0.2 pt

Formatted: Condensed by 0.3 pt

Formatted: Condensed by 0.25 pt

Formatted: Condensed by 0.25 pt

Formatted: Condensed by 0.3 pt

Formatted: Condensed by 0.2 pt

Formatted: Condensed by 0.1 pt

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Right: 2.44 cm, Space Before: 5.9 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

as for maintenance, construction or refurbishment works.

OC2.43.1.3.1— Operational Planning Phase - Planning for Financial Years 2 to 5 inclusive ahead

~~The Company shall plan National Electricity Transmission System take into account NETS outages required in Years 2 to 5 inclusive required as a result of or, construction or refurbishment works. This contrasts with the Maintenance is taken into account in years 0-1 outage planning of National Electricity Transmission System outages required in Years 0 and 1 ahead, when The Company also takes into account National Electricity Transmission System outages required as a result of maintenance.~~

~~Users should bear in mind that The Company will plan the National Electricity Transmission System NETS outage programme on the basis of the previous year's Final Generation Outage Programme and if in the event. If a Generator's, an Interconnector, Owner's Owners, or Network Operator's outages differ from those contained in the Final Generation Outage Programme, or in the case of Network Operators, they differ from those known to The Company, or in any way conflict with the National Electricity Transmission System NETS outage programme, The Company needs not obliged to alter the National Electricity Transmission System NETS outage programme. Users should bear this in mind.~~

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Hanging: 2.43 cm, Right: 2.44 cm, Space Before: 7.25 pt

Formatted

Formatted

Formatted: Normal, Justified, Indent: Left: 2.54 cm, Right: 2.44 cm, Space Before: 5.8 pt, Line spacing: Multiple 1.1 li

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

OC2.4.1.3.2 — In each calendar year:

(a) By the end of week 8

Each

OC2.3.1.3.2 The timescales within which a **User** shall provide the required information to **The Company** is tabulated below. **Users** may identify their obligations in the relevant clauses using the matrix in figures 1, 3, 7, 9, 13, and 15 below. These figures are intended for guidance and to assist **Users** to navigate and identify their requirements more easily; however, the text prevails.

Key

Provides information

Receives information

Do nothing

	By the end of Week				
Party	8	13	28	30	34
Generator and/or Interconnector Owner	Do nothing	Provide Info	Receive Info	Do nothing	Receive Info
The Company	Receive Info		Provide Info		
Non-Embedded Customer	Do Nothing				
Network Operator	Provide Info	Receive Info			
Restoration Contractors as provided for in OC2.2.1(f)	Same as <b>Generator and/or Interconnector Owner</b> obligations.				

Figure 1: Overview of information exchange by party – NETS outage planning process from Week 8 to Week 34.

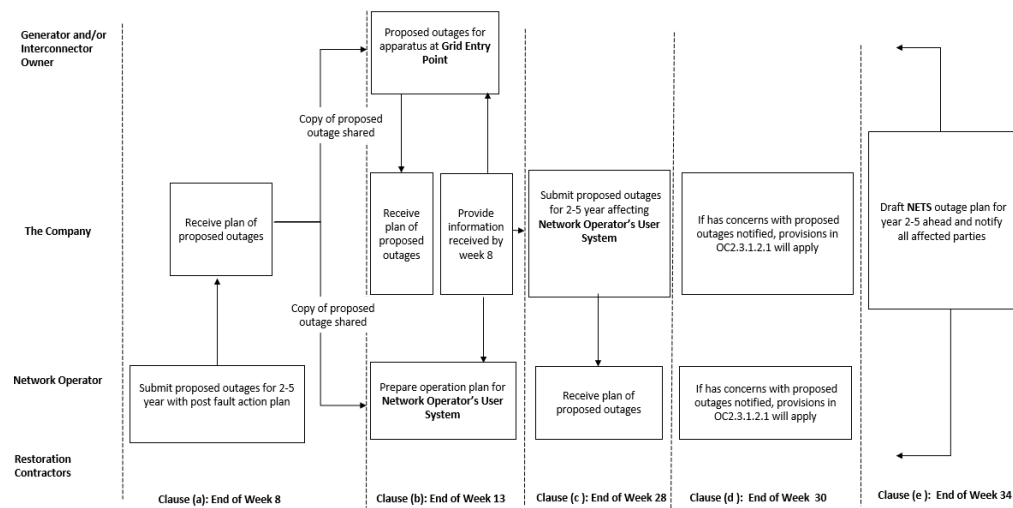


Figure 2: Overview of the NETS outage planning process from Week 8 to Week 34.

In each calendar year:

a. By the end of Week 8

Where the items i, ii and iii below may affect the performance of the **Total System** (which includes, but not limited to, outages of **User System Apparatus at Grid Supply Points**) each **Network Operator** will notifyprovide to, **The Company** in writing of details of:

i All proposed outages in Years 2-5 ahead in its **User System** which may affect the performance of the **Total System** (which includes but is not limited to outages of **User System Apparatus at Grid Supply Points** and outages which constrain the output of **Power Generating Modules** (including **DC Connected Power Park Modules**) and/or **Synchronous Generating Units** and/or **Power Park Modules Embedded** within that **User System**) and outages of its **Plant and Apparatus** that may affect the ability to activate and / or operate a **Distributed Restoration Zone Plan**.

ii Each **Network Operator** will notify **The Company** in writing of details of in relation to **Offshore Transmission Systems** all proposed outages in Years 2- 5 ahead in its **User System** which that may affect the declared values of **Maximum Export Capacity** and/or **Maximum Import Capacity** for each **Interface Point within its User System** together with the **Network Operator's** revised best estimate of the **Maximum Export Capacity** and/or **Maximum Import Capacity** during such outages: **Network Operators** will also notify **The Company** of any automatic and/or manual post fault actions that it intends to utiliseuse, or plans to utiliseuse during such outages.

iii (b) any outages of its **Apparatus** that may affect the ability to activate and/or operate a **Distributed Restoration Zone Plan**.

Formatted

Formatted

Formatted: List Paragraph, Right: 2.14 cm, Space Before: 6.1 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 4.49 cm + Indent at: 5.24 cm, Tab stops: 5.24 cm, Left

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

(e)

- b. By the end of week 13

i. Each Generator will inform The Company in writing of proposed outages in Years 2 - 5 ahead of Generator-owned Apparatus (eg. busbar selectors) other than Power Generating Modules (including DC Connected Power Park Modules) and/or Synchronous Generating Units, and/or Power Park Modules e.g., substation Apparatus not generating Plant) in Years 2 - 5, at each Grid Entry Point.

ii. The Company will provide to each Network Operator and to each Generator, and each Interconnector Owner, a copy of the information given to The Company, under paragraph (a) above (other than the information given by that Network Operator). In relation to a Network Operator, the data must only be used by that User in planning and operating that Network Operator's User System and must not be used for any other purpose or passed on to, or used by, any other business of that User or to, or by, any person within any other such business or elsewhere.

c. By the end of week 28

The Company will provide each Network Operator in writing with details of proposed outages in Years 2 - 5 ahead which may, in The Company's reasonable judgement, affect the performance of that Network Operator's User System.

d. (d) By the end of week 30

Where The Company or a Network Operator is unhappy has concerns with the proposed outages notified to it under (a), (b) or (c) above, as the case may be, equivalent the affected party should discuss their concerns with the notifying party; in this event the provisions to those set out in OC2.43.1.2-4 (d) will apply.

e. (e) By the end of week 34

The Company will draw up a draft National Electricity Transmission System NETS outage plan covering the period for Years 2 to 5 ahead and The Company will notify each Generator, Interconnector Owner, Restoration Contractor (as provided for in OC2.3.1(f)) and Network Operator in writing User of those aspects of the plan which may operationally affect such Generator (other than those aspects which may operationally affect Embedded Small Power Stations or Embedded Medium Power Stations) unless they are Restoration Contractors (as provided for in OC2.3.1(f)), Interconnector Owner or Network Operator that User. The Company will also indicate where a need may exist to issue other relevant operational instructions or notifications (including but not limited to the requirement for the arming of an Operational Intertipping scheme) or Emergency Instructions to Users, in accordance with BC2 to allow retain the necessary security of the National Electricity Transmission System to be maintained within the Licence Standards NETS.
- Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Left: 3.62 cm, Hanging: 0.63 cm, Space Before: 5.95 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.26 cm, Left

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Hanging: 0.75 cm, Right: 2.14 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 4.83 cm + Indent at: 5.24 cm, Tab stops: 5.23 cm, Left + 5.24 cm,

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Left: 3.57 cm, Hanging: 0.67 cm, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.24 cm, Left

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm
- Issue 6 Revision 3

OC2

V9

22 April 2024
- OC2 Redraft

**OC2.43.1.3.34 Operational Planning Phase – Planning for Financial Year 1 ahead**

— Each calendar year, **The Company** shall update the draft **National Electricity Transmission System** outage plan prepared under OC2.43.1.3.2 above and shall in addition take into account outages required as a result of maintenance work.-

Provides information

Receives information

Do nothing

	By the end of Week				By the end of Week			By the end of Week
Party	13	28	32		34	36		49
Generator and /or Interconnector Owner	Provide info	Do nothing			Receive info	Provide info	Do nothing	Receive info
The Company	Receive info	Provide info	Receive info	Provide info		Receive info	Provide info	
Non-Embedded Customer	Provide info	Receive info	Do nothing					Receive info
Network Operator	Do nothing	Receive info	Provide info	Do nothing	Receive info	Provide info	Do nothing	
Restoration Contractors as provided for in OC2.2.1(f)	Same as Generator and/or Interconnector Owner obligations							

Figure 3: OC2.3.1.4 Operational Planning Phase – Planning for Financial Year 1 ahead.

- Formatted: Condensed by 0.1 pt
- Formatted: Condensed by 0.1 pt
- Formatted: Condensed by 0.35 pt
- Formatted: Condensed by 0.4 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.3 pt
- Formatted: Condensed by 0.4 pt
- Formatted: Condensed by 0.3 pt
- Formatted: Condensed by 0.35 pt
- Formatted: Condensed by 0.35 pt
- Formatted: Body Text, Indent: Left: 0.49 cm, Tab stops: 3.09 cm, Left
- Formatted: Font: Bold
- Formatted: Body Text, Justified, Indent: Left: 3.1 cm, Right: 2.14 cm, Space Before: 7.2 pt, Line spacing: Multiple
- Formatted: Font: Bold, Font color: Custom Color(0,175,239))

- Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



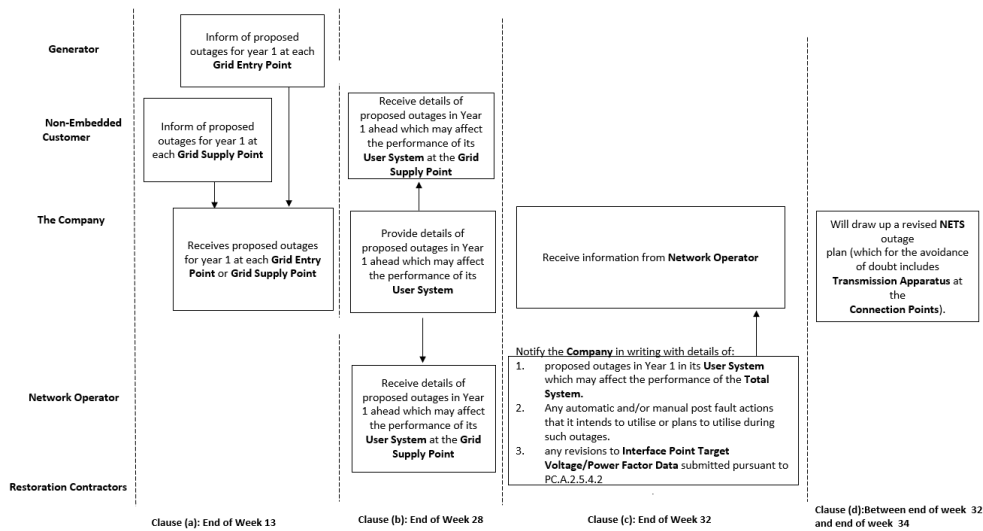


Figure 4: Summary of obligations in Operational Planning Phase from end of week 13 to end of week 34.

In each calendar year:

a. (a) By the end of week 13

Each Generators and Non-Embedded Customers will inform The Company in writing of proposed outages for Year 1 of Generator-owned Apparatus (e.g., substation Apparatus not generating Plant) at each Grid Entry Point (e.g., busbar selectors) other than Power Generating Modules (including DC Connected Power Park Modules), Synchronous Generating Units and/or Power Park Modules or Non-Embedded Customer-owned Apparatus, as the case may be, and at each Grid Supply Point (i.e., substation Apparatus).

b. (b) By the end of week 28

The Company will provide each Network Operator and each Non-Embedded Customer in writing with details of proposed outages in Year 1 ahead which may, in The Company's reasonable judgement, might affect the performance of its User System, or the Non-Embedded Customer Apparatus at the Grid Supply Point.

c. (c) By the end of week 32

Each Network Operator will notify The Company in writing with details of:

i. proposed outages in Year 1 in its User System which may affect the performance of the Total System (which includes but is not limited to outages of User System Apparatus at Grid Supply Points and outages which constrain the output of Power Generating Modules (including DC Connected Power Park Modules), Synchronous Generating Units and/or Power Park Modules Embedded within that User System) and outages of its Plant and Apparatus or Synchronous Generating Units and/or Power Park Modules Embedded within that may affect the ability to activate and/or operate a

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 7.1 pt

Formatted

Formatted: List Paragraph, Justified, Indent: Left: 3.62 cm, Hanging: 0.63 cm, Space Before: 7.1 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.26 cm, Left

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Left: 3.6 cm, Right: 2.14 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 3.49 cm + Indent at: 4.24 cm, Tab stops: 4.48 cm, Left + 4.49 cm, Left

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

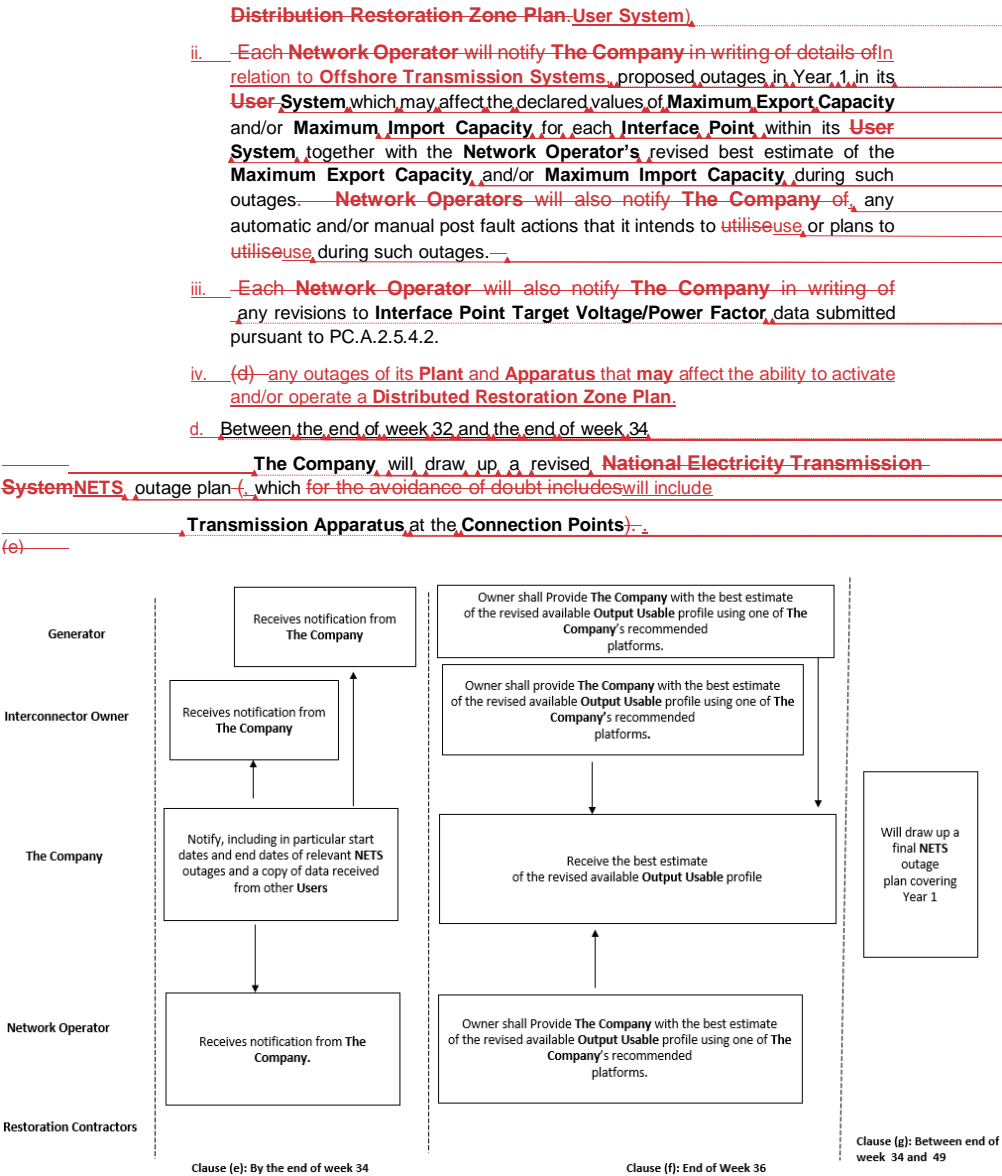


Figure 5: Summary of obligations in Operational Planning Phase from end of week 34 to end of week 49.

e. ~~By the end of week 34~~

**The Company will notify:**

Issue 6 Revision 3 OC15 22 April 2024

OC2 Redraft V9

Formatted: Font: 10 pt

Formatted

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Left, Indent: Left: 3.57 cm, Hanging: 0.59 cm, Space Before: 4.45 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.16 cm, Left

Formatted

Formatted

Formatted: Normal, Space Before: 7.1 pt

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Left, Indent: Left: 2.99 cm, Hanging: 0.75 cm, Space Before: 5.75 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 3.74 cm, Left

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

- Formatted**

ii. ~~The Company will provide~~Provide~~to each Network Operator and to each Generator and each Interconnector Owner and each Restoration Contractor (as provided for in OC2.3.1(f))~~User with a copy of the information given to The Company under paragraph (c) above<sup>1</sup> (other than the information given by that Network Operator). In relation to a Network Operator, the data must only be used by that User in planning and operating that Network Operator's User System and must not be used for any other purpose or passed on to, or used by, any other business of that User or to, or by, any person within any other such business or elsewhere.

Formatted

~~(f)~~

- Formatted:** Font: 10 pt

Formatted

g. ~~(g)~~ Between the end of week 34 and 49.

**Formatted**

~~The Company will draw up a final National Electricity Transmission System NETS outage plan covering Year 1.~~

**Formatted**

**Formatted**

- h. ~~(h)~~ By the end of week 49

**Formatted:** Normal, Indent: Left: 2.99 cm, Space Before: 7.15 pt

(i)

**Formatted**

**Formatted:** List Paragraph, Left, Indent: Left: 3.03 cm, Hanging: 0.63 cm, Space Before: 7.1 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 3.66 cm. Left

**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

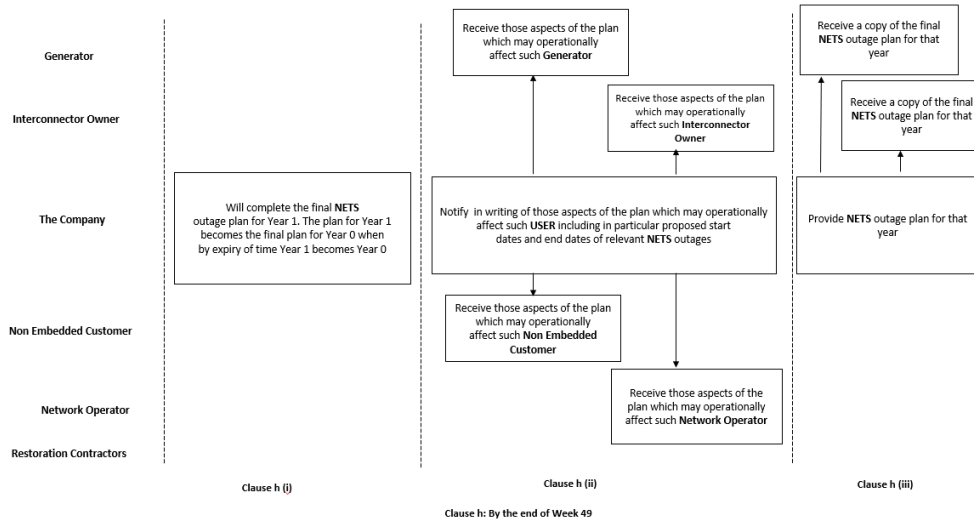


Figure 6: Summary of obligations in Operational Planning Phase by the end of week 49.

- (i) ~~The Company will complete the final National Electricity Transmission System~~NETS outage plan for Year 1. The plan for Year 1 becomes the final plan for Year 0 when by ~~expiry~~the passage of time Year 1 becomes Year 0.
- (ii) ~~(iii) The Company will notify each Generator, each Interconnector Owner, each Restoration Contractor (as provided for in OC2.3.1(f)) and each Network Operator in writing~~User of those aspects of the plan:
- ~~• which may operationally affect such Generator (other than those aspects which may operationally affect Embedded Small Power Stations or Embedded Medium Power Stations unless they are owned and/or operated by a, Interconnector Owner, Restoration Contractor (as provided for in OC2.3.1(f))s), Interconnector Owner or and, Network Operator, including in particular proposed start dates and end dates of relevant National Electricity Transmission System~~NETS outages. The Company will also indicate
  - ~~• where a need may exist to issue other operational instructions or notifications (including but not limited to for example, the requirement for the arming of an Operational Intertripping scheme) or Emergency Instructions to Users in accordance with BC2 to allowretain the necessary security of the National Electricity Transmission System to be maintained within the Licence Standards. The Company will also inform each relevant Non-Embedded Customer of the aspects of the plan which may affect it~~NETS.
- (iii) ~~(iii) In addition, in relation to the final National Electricity Transmission System outage plan for Year 1, The Company will provide to each Generator, and each Interconnector Owner, and each Restoration Contractor (as provided for in OC2.3.1(f)) a copy of the final National Electricity Transmission System~~NETS outage plan for that year. ~~OC2.4.1.3.42.3 contains provisions whereby updates of the final National Electricity~~

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Left: 3.74 cm, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 4.26 cm + Indent at: 5.01 cm, Tab stops: 4.48 cm, Left + 5.01 cm, Left

Formatted

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Right: 2.14 cm, Space Before: 6.25 pt, Line spacing: Multiple 1.1 li, Bulleted + Level: 2 + Aligned at: 4.37 cm + Indent at: 5.01 cm, Tab stops: 5.01 cm, Left + 5.01 cm, Left

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

~~Transmission System~~NETS, outage plan are provided. ~~The plan and the updates will be provided in writing. It should be noted~~Note that the final ~~National Electricity Transmission System~~NETS, outage plan for Year 1 and the any updates will not give a complete understanding of how the ~~National Electricity Transmission System~~NETS will operate in real time, where the ~~National Electricity Transmission System~~as the NETS operation may be affected by other factors which may not be known at the time of the plan and the updates. Therefore, ~~Users should place no reliance on the plan or the updates showing a set of~~be advised that unforeseen network conditions which will actually arise in real time may have an impact on the plan.

Formatted

i. ~~(f)~~ ~~Information Release~~ ~~Oror~~ Exchange

Formatted

— This paragraph (i) contains alternative requirements on ~~The Company~~, paragraph (zc) being an alternative to a combination of paragraphs (xa) and (yb). Paragraph (zc) will only apply in relation to a particular ~~User~~ if ~~The Company~~ and that ~~User~~ agree that ~~it should~~paragraph (c) rather than paragraph (a) and (b) apply, in which case paragraphs (x) and (y) will not apply. In the absence of any relevant, ~~Without any such~~ agreement between ~~The Company~~ and the ~~User~~, ~~The Company~~ will only be required to comply with paragraphs (xa) and (yb).

Formatted

~~Information Release~~ ~~Toto~~ Each Network Operator ~~Andand~~ Non-Embedded Customer

Formatted

— Between the end of Week 34 and ~~the end of week~~ 49 ~~The Company~~ will upon written request:

Formatted: Body Text, Justified, Indent: Left: 2.99 cm, Space Before: 6 pt

(a) ~~(x)~~ for radial systems, provide each ~~Network Operator~~ and ~~Non-Embedded Customer~~ with data to allow the calculation by the ~~Network Operator~~, and each ~~Non-Embedded Customer~~, of symmetrical and asymmetrical fault levels; and

Formatted

Formatted: Body Text, Justified, Indent: Left: 2.99 cm, Hanging: 0.75 cm, Right: 2.14 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.1 li

(b) ~~(y)~~ for interconnected ~~Systems~~, provide to each ~~Network Operator~~ an equivalent network, sufficient to allow the identification of symmetrical and asymmetrical fault levels, and power flows across interconnecting ~~User Systems~~ directly connected to the ~~National Electricity Transmission System~~NETS; or

Formatted

Formatted

~~System Data~~ Exchange

Formatted

(c) ~~(z)~~ as part of a process to facilitate understanding of the operation of the ~~Total System~~.

Formatted: Body Text, Justified, Indent: Left: 3.74 cm, Space Before: 5.95 pt

1. ~~(1)~~ ~~The Company~~ will make available to each ~~Network Operator~~, the ~~National Electricity Transmission System~~NETS Study Network Data Files covering Year 1 which are of relevance to that ~~User's System~~.

Formatted

Formatted

Formatted: Heading 4, Indent: Left: 5.76 cm, Space Before: 1.1 pt

2. ~~(2)~~ where ~~The Company~~ and a ~~User~~ have agreed to the use of data links between them, the ~~making available will be by way of allowing the User access to~~User may take a copy of the ~~National Electricity Transmission System~~NETS Study Network Data Files once during that period. The ~~User~~ may, ~~having taken that copy,~~ refer to the ~~copy that~~ as often as it wishes. ~~Such~~The access will be in a manner agreed by ~~The Company~~ and may be subject to separate agreements governing the manner of access agreement. In the absence of agreement, the copy of the ~~National Electricity Transmission~~

Formatted

Formatted: List Paragraph, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 3 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 7.47 cm + Indent at: 8.11 cm, Tab stops: 8.1 cm, Left + 8.11 cm, Left

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at: 8.5 cm + 15.31 cm

~~SystemNETS Study Network Data Files~~ will be given to the ~~User, on a disc, or in hard copy, as determined or by The Company;~~ other appropriate means.

Formatted

3. ~~(3)~~ the data contained in the ~~National Electricity Transmission SystemNETS Study Network Data Files~~ represents ~~The Company's~~ view of operating conditions although the actual conditions may be different;<sup>2</sup> ~~Data Files received by each Network Operator~~ must only be used by that ~~User~~ in planning and operating that ~~Network Operator's User System~~ and must not be used for any other purpose or passed on to, or used by, any other business of that ~~User~~ or to, or by, any person within any other such business or elsewhere. This also applies in the case of OC2.3.1.4

Formatted

4. ~~(4)~~ ~~The Company~~ will notify each ~~Network Operator~~, as soon as reasonably practicable after it has updated the ~~National Electricity Transmission SystemNETS Study Network Data Files~~ covering Year 1 that it has done so, when this update falls before the next annual update under this OC2.4.3.1.3.3~~(14)~~(i). ~~The Company~~ will then make available to each ~~Network Operator~~ who has received an earlier version ~~(and in respect of whom the agreement still exists);~~ the updated ~~National Electricity Transmission SystemNETS Study Network Files~~ covering the balance of Years 1 and 2 which remain given the passage of time, and which are of relevance to that ~~User's System~~. The provisions of paragraphs (2) and (3) above shall apply to the making available of these updates<sup>2</sup>;

Formatted

~~(5) the data from the National Electricity Transmission System Study Network Data Files received by each Network Operator must only be used by that User in planning and operating that Network Operator's User System and must not be used for any other purpose or passed on to, or used by, any other business of that User or to, or by, any person within any other such business or elsewhere.~~

OC2.4.3.1.3.4—5 Operational Planning Phase - Planning in Financial Year 0 down to the Programming Phase (and in ~~The case~~the Case of Load Transfer Capability, also during the Programming Phase)

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Hanging: 2.5 cm, Right: 2.14 cm, Space Before: 6.05 pt, Line spacing: Multiple 1.1 li

(a)

Party	Year 0 Anytime but not less than 8 weeks from requested change	14 days from date of request	Where necessary 8-52 weeks ahead
Generator and/or Interconnector	Provide info	Receive info	

Key  
Provides information  
Receives information  
Do nothing

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



Owner		
The Company	Receive info	Provide info
Non-Embedded Customer	Provide info	Receive info
Network Operator	Do nothing	Receive info
Restoration Contractors as provided for in OC2.2.1(f)	Same as Generator and/or Interconnector Owner obligations	

Figure 7: Operational Planning Phase - Planning in Financial Year 0 down to the NETS Programming Phase

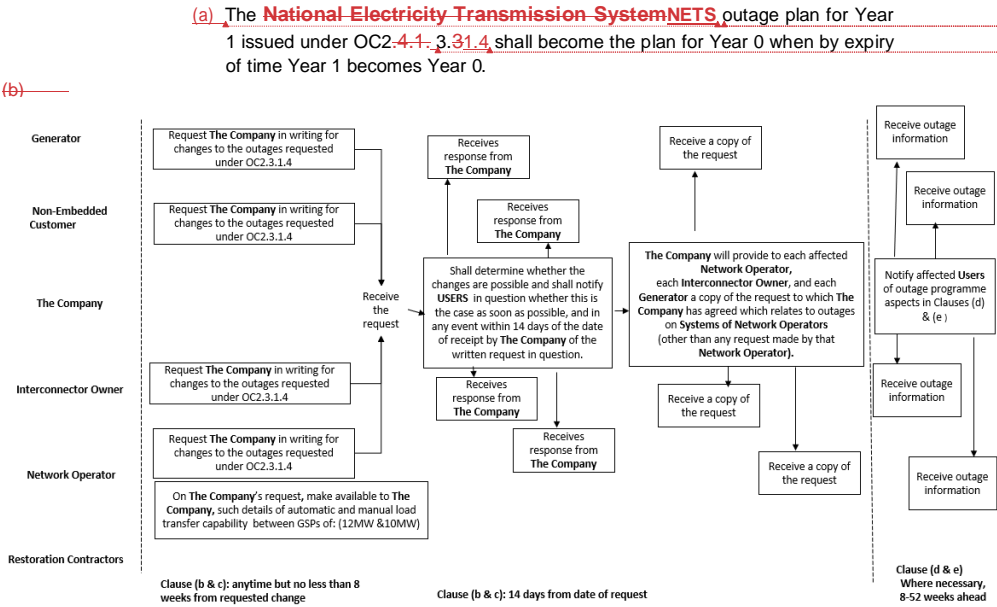


Figure 8: Summary of obligations in Operational Planning Phase Year 0

(b) Each ~~Generator or Interconnector Owner or Restoration Contractor~~ (as provided for in ~~OC2.3.1(f)~~) or ~~Network Operator or Non-Embedded Customer~~**User**, may at any time during Year 0, request ~~The Company~~ in writing for changes to the outages requested by them under ~~OC2.43.1.3-3.4~~. In relation to that part of Year 0, excluding the period 1-7 weeks from the date of request, ~~The Company~~ shall determine whether the changes are possible and shall notify the ~~Generator, Interconnector Owner, Restoration Contractor~~ (as provided for in ~~OC2.3.1(f)~~), ~~Network Operator or Non-Embedded Customer~~**User** in question whether this is the case as soon as possible, and in any event within 14 days of the date of receipt by ~~The Company~~ of the ~~written request in question~~.

Where ~~The Company~~ determines that ~~any change so the requested change~~ is possible and notifies the relevant ~~User~~ accordingly, ~~The Company~~ will provide to each ~~Network Operator, each Interconnector Owner, and each Generator and each Restoration Contractor~~ (as provided for in

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold, Font color: Custom Color(0,175,239))

Formatted: Font: 10 pt

Formatted: List Paragraph, Right: 2.14 cm, Space Before: 7.15 pt, Line spacing: Multiple 1.11 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.26 cm, Left + 4.26 cm, Left

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Body Text, Justified, Right: 2.13 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 2 + Alignment: Left + Aligned at: 3.74 cm + Indent at: 4.37 cm

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt, Expanded by 2 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

~~OC2.3.1(f))~~ ~~User~~, a copy of the request to which ~~The Company~~ has agreed which relates to outages on ~~Systems of Network Operators~~ (other than any request made by that ~~Network Operator~~). The information must only be used by that ~~Network Operator~~ in planning and operating that ~~Network Operator's User System~~ and must not be used for any other purpose or passed on to, or used by, any other business of that ~~User~~ or to, or by, any person within any other such business or elsewhere.

Formatted

~~(c) (e)~~ During Year 0 (including the ~~Programming Phase~~), each ~~Network Operator~~ shall at ~~The Company's~~ request, make available to ~~The Company~~, such details of automatic and manual load transfer capability of:

Formatted

i. ~~(i)~~ 12MW or more (averaged over any half hour) for England and Wales

Formatted

ii. ~~(ii)~~ 10MW or more (averaged over any half hour) for

Formatted

~~Scotland~~

~~between Grid Supply Points.~~

Formatted: Font: 10 pt

~~During Year 0 (including the Programming Phase) each Network Operator shall notify The Company of any revisions to the information provided pursuant to OC2.43.1.3.34 (c) for Interface Points as soon as reasonably practicable after the Network Operator becomes aware of the need to make such revisions.~~

Formatted

~~(d) (d)~~ When necessary, during Year 0, ~~The Company~~ will notify each ~~Generator~~, each ~~Interconnector Owner~~, each ~~Restoration Contractor~~ (as provided for in OC2.3.1(f)) and ~~Network Operator~~ and each ~~Non-Embedded Customer User~~, in writing, of those aspects of the ~~National Electricity Transmission System~~ ~~NETS~~ outage programme in the period from the 8<sup>th</sup> week ahead to the 52<sup>nd</sup> week ahead, which may, in ~~The Company's~~ ~~Company's~~ reasonable opinion, operationally affect that ~~Generator~~ (other than those aspects which may operationally affect ~~Embedded Small Power Stations~~ or ~~Embedded Medium Power Stations~~ unless they are owned and/or operated by a ~~Restoration Contractors~~ (as provided for in OC2.3.1(f)) ~~Interconnector Owner~~ or ~~Network Operator~~ or ~~Non-Embedded Customer User~~ including in particular the proposed start dates and end dates of relevant ~~National Electricity Transmission System~~ ~~NETS~~ outages.

Formatted

~~The Company~~ will also notify changes to information supplied by ~~The Company~~ pursuant to OC2.43.2.1.3.34(i)(xa) and (yb) except where in relation to a ~~User~~, information was supplied pursuant to OC2.3.1.4.1.3.3 (i)(zc). In ~~that~~ ~~this~~ ~~latter~~ case:-

Formatted

~~(i) (i)~~ ~~The Company~~ will, by way of update of the information supplied by it pursuant to OC2.3.1.4.1.3.3 (i)(zc), make available, at the first time, in Year 0 that it updates the ~~National Electricity Transmission System~~ ~~NETS~~ Study Network Data Files in respect of Year 0 (such update being an update on what was shown in respect of Year 1 which has then become Year 0) to each ~~Network Operator~~ who has received an earlier version under OC2.4.1.3.3(i)(z) (and in respect of whom the agreement still exists), of the ~~National Electricity Transmission System~~ of the ~~NETS~~ Study Network Data Files covering Year 0 which are of relevance to that ~~User's~~ ~~Network Operator's~~ System.

Formatted

~~(ii) (ii)~~ ~~The Company~~ will notify each relevant ~~Network Operator~~, as soon

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

as reasonably practicable after it has updated the **National Electricity Transmission System**~~NETS~~, **Study Network Data Files**, covering Year 0, that it has done so. **The Company** will then make available to each such **Network Operator**, the updated **National Electricity Transmission System**~~NETS~~, **Study Network Data Files**, covering the remaining balance of Year 0 ~~which remains given the passage of time, and which are of relevance to that User's System~~.

(iii) ~~(iii)~~ The provisions of OC2.3.1.4.1.3.3 (i)(zc)(2), (3) and (5) shall also apply to the provision of data under this part of OC2.4.1.3.4(d) ~~as if set out in full 3.1.4. (i).~~

~~The Company~~ will also indicate where a need may exist to issue other operational instructions or notifications ~~(including but not limited to for example~~, the requirement for the arming of an **Operational Intertripping** scheme) or **Emergency Instructions to Users** in accordance with BC2 to allow the necessary security of the **National Electricity Transmission System**~~NETS~~ to be maintained ~~within the Licence Standards~~ except in the case of a **Total Shutdown** or **Partial Shutdown** as provided for in OC9 4.3.

(e) —

(e) In addition, by the end of each month during Year 0, **The Company** will provide to each **Generator**, and each **Interconnector Owner**, and each **Restoration Contractor**, (as provided for in OC2.3.1(f)), a notice containing any revisions to the final **National Electricity Transmission System**~~NETS~~ outage plan for Year 1, ~~provided to the Generator or the Interconnector Owner or Restoration Contractor~~ (as provided for in OC2.3.1(f)) under OC2.4.1.3.3 or previously under this provision, whichever is the more recent.

Formatted

Formatted

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Right: 2.13 cm, Space Before: 5.95 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 3 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.26 cm, Left + 4.26 cm, Left

Formatted: Font: 10 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

OC2.43.1.3-5-6 Programming Phase

Party	Programming Phase
Generator and/ or Interconnector Owner	Receive Info
The Company	Provide info
Non-embedded Customer	Receive Info
Network Operator	Receive Info

Key

Provides information

Receives information

Do nothing

Figure 9: Programming Phase

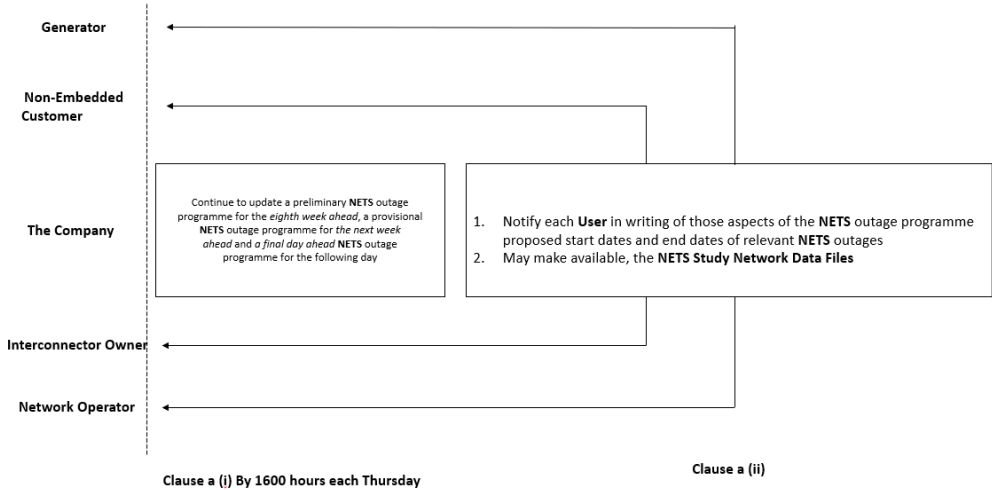


Figure 10: Summary of obligations in the Programming Phase by 1600 hours each Thursday

(a) 1600 hours each Monday, Tuesday, Wednesday and Thursday

(a) By 1600 hours each Thursday

- (i) (i) The Company shall prepare a final NETS outage programme for the following day.
- (ii) The Company shall notify each User of the factors set out in (b)(ii) below.

(b) By 1600 hours each Thursday

- (i) The Company shall continue to update a preliminary National Electricity Transmission SystemNETS outage programme for the eighth week ahead, a provisional National Electricity Transmission SystemNETS outage programme for the next week ahead and a final day ahead National Electricity Transmission SystemNETS outage programme for the following day.
- (ii) (ii) The Company will notify each Generator, Interconnector

Formatted: Condensed by 0.1 pt

Formatted: Condensed by 0.1 pt

Formatted: Condensed by 0.1 pt

Formatted: Expanded by 0.25 pt

Formatted: Condensed by 0.1 pt

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 6 pt, Tab stops: 3.66 cm, Left

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.4 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.3 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.25 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.35 pt

Formatted: Font: 10 pt

Formatted: List Paragraph, Space Before: 6.1 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.54 cm + Indent at: 3.17 cm, Tab stops: 4.26 cm, Left

Formatted: Font: 10 pt, Condensed by 0.3 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.25 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.35 pt

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: List Paragraph, Right: 2.13 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 4.37 cm + Indent at: 5.01 cm, Tab stops: 5.01 cm, Left + 5.01 cm, Left

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold, Font color: Custom Color(0,175,239))

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold, Font color: Custom Color(0,175,239))

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

~~Owner, Restoration Contractor~~ (as provided for in OC2.3.1(f)) and ~~Network Operator~~ and each ~~Non-Embedded Customer User~~, in writing of those aspects of the preliminary ~~National Electricity Transmission System~~ **NETS** outage programme which may operationally affect each ~~Generator~~ (other than those aspects which may operationally affect ~~Embedded Small Power Stations~~ or ~~Embedded Medium Power Stations~~ unless they are owned and/or operated by a ~~Restoration Contractor~~ (as provided for in OC2.3.1(f)) or ~~Interconnector Owner~~ or ~~Network Operator~~ and each ~~Non-Embedded Customer User~~ including in particular the proposed start dates and end dates of relevant ~~National Electricity Transmission System~~ **NETS** outages.

Formatted

~~The Company~~ will also notify changes to information supplied by ~~The Company~~ pursuant to OC2.43.1.3.3(i)(x4(a)) and (yb) except where in relation to a ~~User~~ information was supplied pursuant to OC2.3.1.4.1.3.3 (i)(zc). In that latter case:

Formatted

1) ~~(1)~~ **The Company** will, by way of update of the information supplied by it pursuant to OC2.43.1.3.34(i)(zc), make available the ~~National Electricity Transmission System~~ **NETS** Study Network Data Files for the next week ahead and.

Formatted

2) ~~(2)~~ **The Company** will notify each relevant ~~Network Operator~~, as soon as reasonably practicable after it has updated the ~~National Electricity Transmission System~~ **NETS** Study Network Data Files covering the next week ahead that it has done so, and

Formatted

3) ~~(3)~~ The provisions of OC2.43.1.3.3(f)(z4(c)(2)), (3) and (5) shall apply to the provision of data under this part of OC2.43.1.3.56. (a)(ii) as if set out in full.

Formatted

~~The Company~~ may make available, the ~~National Electricity Transmission System~~ **NETS** Study Network Data Files for the next week ahead where ~~The Company~~ and a particular ~~User~~ agree, and in such case the provisions of OC2.4.1.1.3.3(i)(x) and (y) and the provisions of OC2.4.1.3.4(d) and OC2.4.1.3.5(a) which relate to OC2.4.1.1.3.3(i)(x) and (y) shall not apply. In such case, the provisions of this OC2.4.1.3.5(a)(ii)2 and 3 shall apply to the provision of the data under this part of OC2.4.1.3.5(a)(ii) as if set out in full.

Formatted

~~The Company~~ will also indicate where a need may exist to arm an ~~Operational Intertripping~~ scheme, emergency switching, emergency ~~Demand~~ management or other measures including the issuing of other operational instructions or notifications or ~~Emergency Instructions to Users~~ in accordance with BC2 to allow the necessary security of the ~~National Electricity Transmission System~~ **NETS** to be maintained within the ~~Licence Standards~~.

Formatted

~~(c) (b)~~ By 1000 hours each Friday

Formatted

~~Generators, Interconnector Owners, Restoration Contractors~~ (as provided for in OC2.3.1(f)) and ~~Network Operators Users~~ will discuss with ~~The Company~~ and confirm in writing to ~~The Company~~ acceptance or otherwise of the requirements detailed under OC2.43.1.3.56(a) above.

Formatted

~~In respect of Embedded Transmission Systems~~ **Network Operators** shall confirm for the following week:

Formatted

Formatted

i. ~~(i)~~ the details of any outages of its ~~User~~ System that will restrict the

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

- ~~Maximum Export Capacity~~ and/or ~~Maximum Import Capacity~~ at any ~~Interface Points~~ within its ~~User System~~ for the following week; and
- ii. ~~(ii)~~ any changes to the previously declared values of the ~~Interface Point Target Voltage/Power Factor~~.
- ~~(d) (c)~~ By 1600 hours each Friday
- i. ~~(i)~~ The Company shall finalise the preliminary ~~National Electricity Transmission System~~~~NETS~~ outage programme up to the seventh week ahead. The Company will ~~endeavour to give as much notice as possible to~~ a ~~Generator~~ with nuclear ~~Large Power Stations~~ which may be operationally affected by an outage which is to be included in such programme.
- ii. ~~(ii)~~ The Company shall finalise the provisional ~~National Electricity Transmission System~~~~NETS~~ outage programme for the next week ahead.
- iii. ~~(iii)~~ The Company shall finalise the ~~National Electricity Transmission System~~~~NETS~~ outage programme for the weekend through to the next normal working day.
- iv. ~~(iv)~~ In each case, The Company will indicate the factors set out in ~~(a)(ii)~~ above, ~~(other than those aspects which may operationally affect Embedded Small Power Stations or Embedded Medium Power Stations unless they are owned and/or operated by a Restoration Contractor (as provided for in OC2.3.1(f)) to the relevant Generators and Network Operators and Non-Embedded Customers~~Users.
- v. ~~(v)~~ Where a ~~Generator~~ with nuclear ~~Large Power Stations~~ which may be operationally affected by the preliminary ~~National Electricity Transmission System~~~~NETS~~ outage programme referred to in ~~(i)~~ above, ~~(acting as a reasonable operator)~~ is concerned on ~~safety~~ grounds relating to ~~safety~~ about the effect which an outage within such outage programme might have on one or more of its nuclear ~~Large Power Stations~~, it may contact The Company to explain its concerns and discuss whether there is an alternative way of taking that outage ~~(having regard to technical feasibility)~~. If there is such an alternative way, but The Company refuses to adopt that alternative way in taking that outage, that ~~Generator~~ may involve the ~~Disputes Resolution Procedure~~ to decide on the way the outage should be taken. If there is no such alternative way, then The Company may take the outage despite that ~~Generator's~~ concerns.

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted: Font: 10 pt

**(d) By OC2.3.2 Data Requirements**

- ~~(a) OC2.3.2.1 1600 hours each Monday, Tuesday, Wednesday and Thursday~~
- (i) The Company shall prepare a final ~~National Electricity Transmission System~~ outage programme for the following day.
- (ii) The Company shall notify each ~~Generator~~ and each ~~Restoration Contractor~~ (as provided for in OC2.3.1(f)) and ~~Network Operator~~ and ~~Non-Embedded Customer~~ in writing of the factors set out in ~~(a)(ii)~~ above (other than those aspects which may operationally affect ~~Embedded Small Power Stations or Embedded Medium Power Stations unless they are owned and/or operated by a Restoration Contractor (as provided for in OC2.3.1(f))~~).

Formatted

Formatted: List Paragraph, Space Before: 6.1 pt, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.54 cm + Indent at: 3.17 cm, Tab stops: 4.26 cm, Left

Formatted

Formatted: Normal, Justified, Indent: Left: 0.49 cm, Hanging: 1.75 cm, Right: 2.14 cm, Line spacing: Multiple 1.1 li

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

**OC2.4.2 DATA REQUIREMENTS**

**OC2.4.2.1** When a **Statement of Readiness** under the **Bilateral Agreement** and/or **Construction**

Issue 6 Redraft

OC25

22 April 2024

OC2 Redraft

V9



**Agreement** is submitted, and thereafter in calendar week 24 in each calendar year,-

(a) ~~each Generator shall (subject to OC2.43.2.1(k))~~ in respect of each of its:-

(i) ~~Gensets (in the case of the Generation Planning Parameters); and~~

(ii) ~~CCGT Units within each of its CCGT Modules at a Large Power Station (in the case of the Generator Performance Chart)-~~

(iii) ~~:- Generating Units within each of its Synchronous Power Generating Modules at a Large Power Station (in the case of the Power-Generating Module Performance Chart and Synchronous Generating Unit Performance Chart)~~

(a) ~~submit to The Company in writing the Generation Planning Parameters and the Generator Performance Charts as required set out in Schedule 2 of the Data Registration Code.~~

(b) ~~Each shall meet the requirements of CC.6.3.2 or ECC.6.3.2 (as applicable) and shall The Generation Planning Parameters and the Generator Performance Chart(s) shall reasonably reflect the true operating characteristics of the Genset-Generating Unit and shall demonstrate that the Generating Unit meets the Reactive Power Plant performance requirements of CC.6.3.2 or ECC.6.3.2 (as applicable).~~

(c) ~~TheyThe Generation Planning Parameters and the Generator Performance Chart(s) shall be applied (unless revised under this OC2 or (in the case of the Generator Performance Chart only) BC1 in relation to Other Relevant Data) from the Completion Date in the case of the ones submitted with the Statement of Readiness and in the case of the ones submitted in calendar week 24, from the beginning of week 25 onwards.~~

(d) ~~TheyGenerator Performance Chart(s) shall be in the format indicated in the Planning Code Appendix 1 for these charts and as set out in Appendix 2 for the Generation Planning Parameters- shall be as set out in Appendix 1.~~

(e) ~~Any changes to the Generator Performance Chart or Generation Planning Parameters should be notified to The Company promptly- as soon as they are aware of the issue and are able to notify The Company through the necessary communication channels.~~

(f) ~~Generators should note that amendments to the composition of the Power Generating Module, CCGT Module or Power Park Module at Large Power Stations may only be made in accordance with the principles set out in PC.A.3.2.3 or PC.A.3.2.4 respectively as applicable. If in accordance with PC.A.3.2.3 or PC.A.3.2.4 an amendment is made, any consequential changes to the Generation Planning Parameters should be notified to The Company promptly. If in accordance with PC.A.3.2.3 an amendment is made, an updated CCGT Module Planning Matrix or Synchronous Power Generating Module Planning Matrix must be immediately submitted to The Company in accordance with this OC2.3.2.1(b).~~

(g) ~~The Generator Performance Chart must be as described in paragraphs (i) - (v) below and demonstrate the limitation on reactive capability of the System voltage at 3% above nominal. It must also include any limitations on output due to the prime mover (both maximum and minimum), Generating Unit step up transformer or User System.~~

(i) ~~For a Synchronous Generating Unit on a Generating Unit specific basis at the Generating Unit stator terminals. It must include details of the Generating Unit transformer parameters.-~~

(ii) ~~For a Non-Synchronous Generating Unit (excluding a Power Park~~

Formatted

Formatted

Formatted: Font: Bold

Formatted

Formatted: List Paragraph, Justified, Right: 2.13 cm, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 4.26 cm, Left + 4.26 cm, Left

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

- Unit) on a **Generating Unit**, specific basis at the **Grid Entry Point** (or **User System Entry Point** if Embedded).
- (iii) For a **Power Park Module**, on a **Power Park Module** specific basis at the **Grid Entry Point** (or **User System Entry Point** if Embedded).
- (iv) For a **DC Converter** on a **DC Converter** specific basis at the **Grid Entry Point** (or **User System Entry Point** if Embedded).

Formatted

- (iii) For a **Synchronous Generating Unit** within a **Synchronous Power Generating Module**, both the **Power-Generating Module Performance Chart** and **Synchronous Generating Unit Performance Chart** should be provided.

Formatted: Font: 10 pt

Formatted

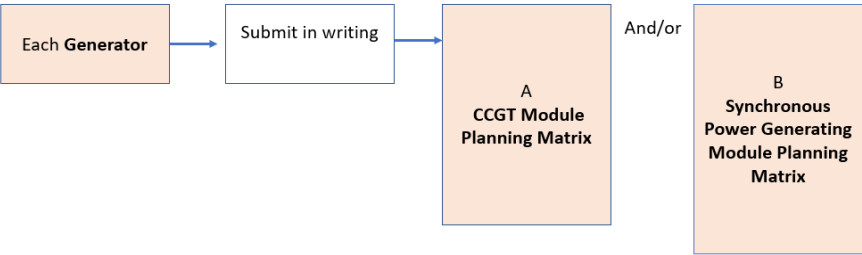
Formatted: List Paragraph, Right: 2.14 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 5.12 cm + Indent at: 5.76 cm, Tab stops: 5.75 cm, Left + 5.76 cm, Left

Formatted

- (h) (h) For each **CCGT Unit**, and any other **Generating Unit** or **Power Park Module** or **Power Generating Module**, whose performance varies significantly with ambient temperature, the **Generator Performance Chart** (including the **Power-Generating Module Performance Chart** and **Synchronous Generating Unit Performance Chart** in the case of **Synchronous Power Generating Modules**) shall show curves for at least two values of ambient temperature so that **The Company** can assess the variation in performance over all likely ambient temperatures by a process of linear interpolation or extrapolation. One of these curves shall be for the ambient temperature at which the **Generating Unit's** output, or **CCGT Module** or **Power Generating Module** at a **Large Power Station** output or **Power Park Module's** output, as appropriate, equals its **Registered Capacity**.

- (i) (i) The **Generation Planning Parameters** supplied under OC2.43.2.1 shall be used by **The Company** for operational planning purposes only and not in connection with the operation of the **Balancing Mechanism** (subject as otherwise permitted in the **BC**).

Formatted



Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Justified, Indent: Left: 0.19 cm, Hanging: 0.75 cm, Right: 2.13 cm, Space Before: 0.05 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.62 cm + Indent at: 4.26 cm, Tab stops: 0.94 cm, Left + 0.94 cm, Left

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

Figure 11: Types of Planning Matrices to be submitted by each Generator to The Company

- (i) Each **Generator**, shall in respect of each of its **Synchronous Power Generating Modules** or **CCGT Modules** (including those which are part of a **Synchronous Power Generating Module**) at **Large Power Stations** submit to **The Company**, in

w  
r  
i  
t  
i  
n  
g  
a  
S  
Y  
n  
c  
h  
r  
o  
n  
o  
u  
s  
P  
o  
w  
e  
r

~~-Generating Module Planning Matrix and/or a CCGT Module Planning Matrix and/or a Synchronous Power-Generating Module Planning Matrix.~~ It shall be prepared on a best estimate basis relating to how it is anticipated the ~~Synchronous Power-Generating Module or CCGT Module~~ will be running and ~~which~~ shall reasonably reflect the true operating characteristics of the ~~Power-Generating Module or CCGT Module~~. It will be applied (unless revised under this OC2) from the ~~Completion Date~~ in the case of the one submitted with the ~~Statement of Readiness~~, and in the case of the one submitted in calendar week 24, from the beginning of week 31 onwards. It must show the combination of ~~CCGT Units~~ or ~~Synchronous Power Generating Units~~ which would be running in relation to any given MW output, in the format indicated in Appendix 3 ~~of OC2~~.

Any changes must Each Generator submission:

- (i) shall be notified prepared on a best estimate basis relating to ~~The Company~~ promptly. ~~Generators~~ should note that amendments to how it is anticipated the composition of the ~~CCGT Module or Synchronous Power-Generating Module at Large Power Stations~~ may only will be made in accordance with the principles set out in PC.A.3.2.3. If in accordance with PC.A.3.2.3 an amendment is made, an updated ~~CCGT Module Planning Matrix~~ or ~~Synchronous Power~~ running and shall reasonably reflect the true operating characteristics of the ~~Power-Generating Module Planning Matrix~~ must.

Formatted

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

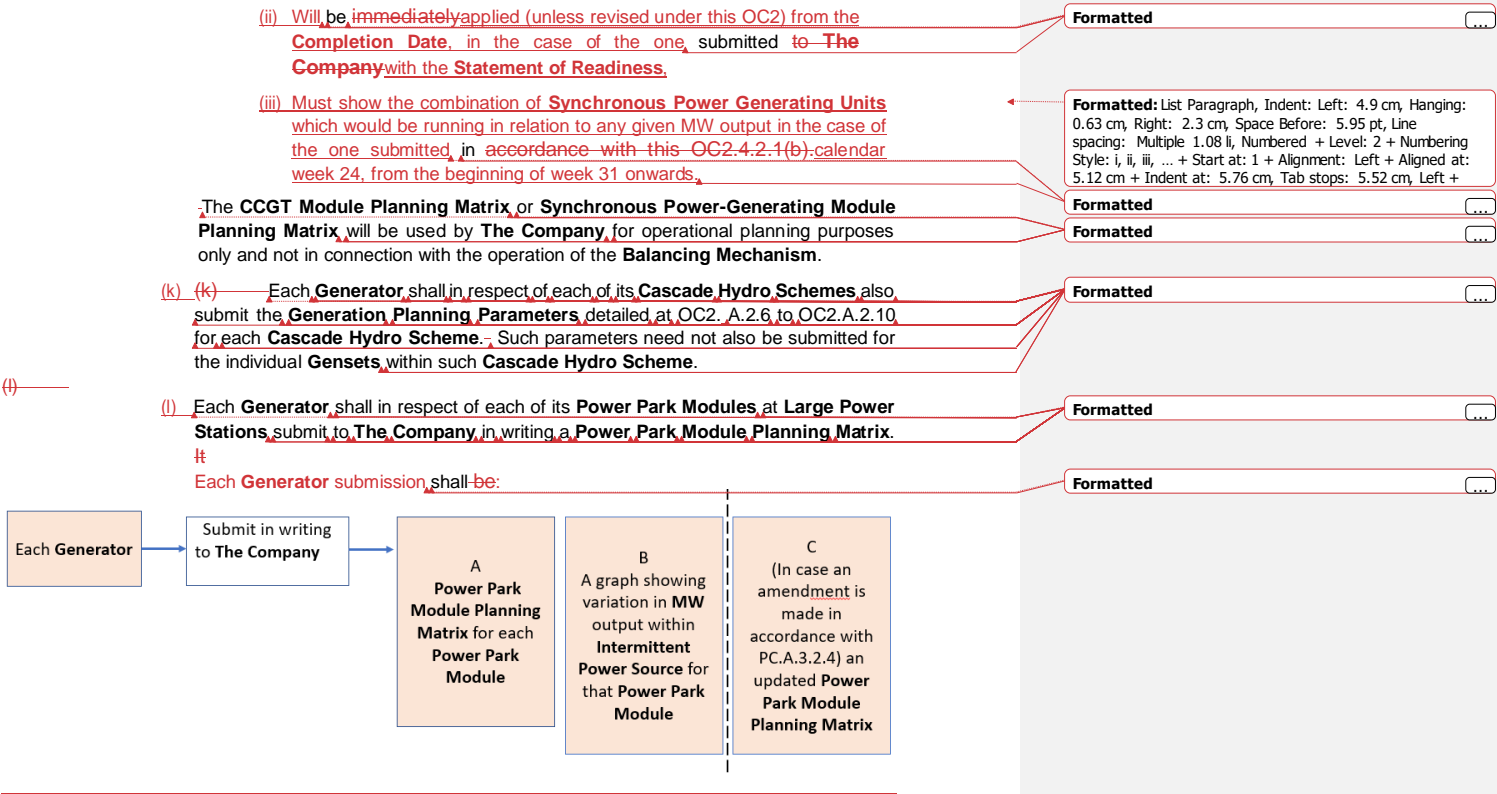
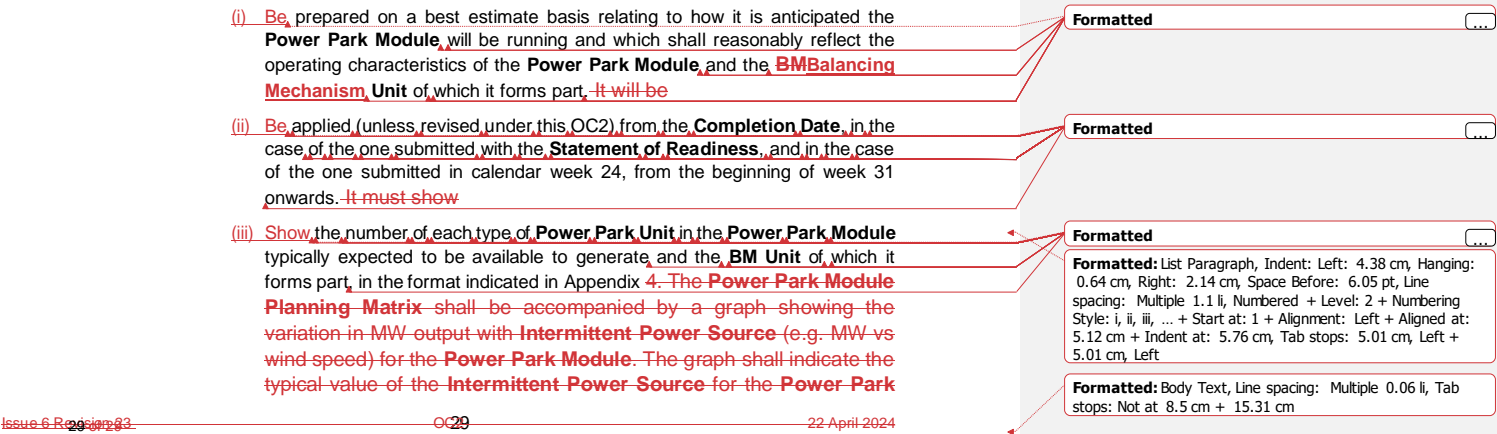


Figure 12: Best estimates information provided to The Company by each Generator.



~~Module 3 of OC2.~~

~~(iv) AnyBe prompt (in case of any changes must be notified to The Company promptly. Generators) and, should note that amendments to the composition of the Power Park Module at Large Power Stations may only be made in accordance with the principles set out in PC.A.3.2.4. If in accordance with PC.A.3.2.4 an amendment is made, an updated Power Park Module Planning Matrix must be immediately submitted to The Company in accordance with this OC2.4.2.1(a).~~

~~The Power Park Module Planning Matrix will be~~

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.15 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.15 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.2 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.15 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Condensed by 0.25 pt

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

(v) ~~Be~~ used by **The Company** for operational planning purposes only and not in connection with the operation of the **Balancing Mechanism**.

(m) ~~(m)~~ For each **Synchronous Generating Unit** ~~(including Synchronous Generating Units within a Power Generating Module)~~ where the **Generator** intends to adjust the **Generating Unit** terminal voltage in response to a **MVar** output ~~instruction~~ ~~instruction~~ or a **Target Voltage Level** ~~target voltage level~~ instruction in accordance with BC2.A.2.6 the **Generator Performance Chart** including the **Synchronous Generating Unit Performance Chart** shall show curves corresponding to the **Generating Unit** terminal voltage being controlled to its rated value and to its maximum value.

In the case of **Restoration Contractors** (as provided for in OC2.32.1(f)) who are **Generators**, it would ~~be~~ expected that the above data required in OC2.43.2.1 (a) – (m) would apply.

**Formatted**

**Formatted:** List Paragraph, Indent: Left: 4.38 cm, Hanging: 0.64 cm, Right: 2.14 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 5.12 cm + Indent at: 5.76 cm, Tab stops: 5.01 cm, Left + 5.01 cm, Left

**Formatted****Formatted**

OC2.43.2.2 – Each **Network Operator** shall by 1000 hrs on the day falling seven days before each **Operational Day** inform **The Company** in writing of any changes to the circuit details called for in PC.A.2.2.1 which it is anticipated will apply on that **Operational Day** (under BC1 revisions can be made to this data). This requirement shall also apply to circuits associated with a **Distributed Restoration Zone Plan**.

OC2.43.2.3 – Under **Retained EU Law** (Commission Regulation (EU) 543/2013), **Users** are required to submit certain data to the **Data Publisher** for publication. **The Company** is required to facilitate the collection, verification and processing of data from **Users** for onward transmission to the **Data Publisher** ~~data publisher~~.

Each **Generator** and **Restoration Contractor** (as provided for in OC2.32.1(f)), and each **Non-Embedded Customer** connected to or using the **National Electricity Transmission System** ~~NETS~~ shall provide **The Company** with such information as required by and set out in **DRC** Schedule 6 (**Users' Outage Data** ~~outage data~~, **EU Transparency Availability Data**) in the timescales detailed therein.

**Formatted:** Font: 10 pt**Formatted**

**Formatted:** Normal, Justified, Indent: Left: 0.49 cm, Hanging: 2.2 cm, Right: 2.13 cm, Line spacing: Multiple 1.1 li

**Formatted****Formatted**

### OC2.4.3 ~~NEGATIVE RESERVE ACTIVE POWER MARGINS~~ **3 Negative Reserve Active Power Margins**

OC2.43.3.1 – At a regular time interval, at least once each day (by 1600 hours) and ~~up to ten more frequently than~~ every hour **The Company** will, taking into account the **Generation Outage Programme** and forecast of **Output** ~~Usable~~ ~~Useable~~, supplied by each **Generator** and by each **Interconnector Owner**, defined in OC2.43.1.2.1, and forecast **Demand** for the minimum **Demand** period, calculate and publish:-

(1) ~~(1)~~ the level of the **System NRAPM** each day within the period 2 to 14 days ahead (inclusive) and for each week the level of risk of **System NRAPM** within the 2-52 week ahead period; and

(2) ~~(2)~~ the level of the **Localised NRAPM** (currently for the main constraint between England and Scotland only) for each day within the period 2 to 14 days ahead (inclusive) having taken into account the appropriate limit on transfers to and from the **System Constraint Group** and for each week the level of risk of **Localised NRAPM** within the 2-52 week ahead period.

#### OC2.3.3.2 Outages Adjustments

(a) ~~(a)~~ Under the ~~Where~~ necessary ~~circumstances~~ **The Company** will then

**Formatted:** Font: 10.5 pt**Formatted:** Body Text, Space Before: 0.05 pt**Formatted:** Heading 2**Formatted:** Font: 10 pt**Formatted**

**Formatted:** Normal, Justified, Indent: Left: 0.49 cm, Hanging: 2 cm, Right: 2.13 cm, Line spacing: Multiple 1.1 li

**Formatted****Formatted****Formatted**

**Formatted:** Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 6 pt

**Formatted**

**Formatted:** List Paragraph, Right: 2.14 cm, Space Before: 7.15 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.74 cm + Indent at: 4.37 cm, Tab stops: 4.37 cm, Left + 4.37 cm, Left

**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at: 8.5 cm + 15.31 cm

contact **Generators** in respect of their **Large Power Stations** and **Interconnector Owners** to discuss outages as set out in the following paragraphs of this OC2.4.3.4.3.2.

Formatted

- (b) ~~(b)~~ The Company will contact all **Generators** and **Interconnector Owners** in the case of low **System NRAPM** and will contact **Generators** in relation to relevant **Large Power Stations** and **Interconnector Owners** in the case of or low **Localised NRAPM**. The Company will raise with each **Generator** and **Interconnector Owner** the problems it is anticipating due to the low **System NRAPM** or **Localised NRAPM** and will discuss:

Formatted

- (1) ~~(1)~~ whether any change is possible to the estimate of **Genset generating Plant** inflexibility, and

Formatted

- (2) ~~(2)~~ whether **Genset generating Plant** or **External Interconnection** outages can be taken to coincide with the periods of low **System NRAPM** or **Localised NRAPM** ~~(as the case may be)~~.

Formatted

— In relation to **Generators** with nuclear **Large Power Stations** the discussions on outages can include the issue of whether outages can be taken for re-fuelling purposes to coincide with the relevant low **System NRAPM** and/or **Localised NRAPM** periods.

Formatted: List Paragraph, Right: 2.14 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 5.12 cm + Indent at: 5.76 cm, Tab stops: 5.75 cm, Left + 5.76 cm, Left

Formatted

Formatted: Font: 10 pt

Formatted

- (c) If agreement is reached with a **Generator** or an **Interconnector Owner**, then ~~such the~~ **Generator** or **Interconnector Owner** will ~~may~~ take such outage as agreed with **The Company** and the **Generator** or an **Interconnector Owner** will issue updates to will update its **Output UsableUseable** via the data provision process defined in OC2.4.3.1.2.1 and **The Company** will process the updated data which will then be included in the next published update of the **System NRAPM** and/or **Localised NRAPM**.

Formatted: Normal, Justified, Indent: Left: 5.57 cm, Right: 2.14 cm, Space Before: 6 pt, Line spacing: Multiple 1.1 li

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Right: 2.13 cm, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 3.74 cm + Indent at: 4.37 cm, Tab stops: 4.37 cm, Left + Not at 3.25 cm

- (d) ~~(d)~~ If on the day prior to an **Operational Day**, it is apparent from the **BM Unit Data** submitted by **Users** under **BC1** that **System NRAPM** and/or **Localised NRAPM** ~~(as the case may be)~~ is, in **The Company's** reasonable opinion, is too low, then in accordance with the procedures and requirements set out in BC1.5.5 **The Company** may contact **Users** to discuss whether changes to **Physical Notifications** are possible, and if they are, will reflect those in the operational plans for the next following **Operational Day** or will, in accordance with BC2.9.4 instruct **Generators** to **De-Synchronise** a specified **Genset specific generating Plant** for such period. — In determining which **Genset generating Plant** to so instruct, **BC2** provides that **The Company** will not (other than as referred to provided for below) consider in such determination (and accordingly shall not instruct to **De-Synchronise**) any **Genset generating Plant** within an **Existing Gas Cooled Reactor Plant**. **BC2** further provides that:—

Formatted

- (i) — **BC2** further provides that: -

Formatted: Font: 10 pt

- (i) **The Company** is permitted to instruct to **De-Synchronise** any **Gensets generating Plant** within an **Existing AGR Plant** if those **Gensets that generating Plant** within an **Existing AGR Plant** have has failed to offer to be flexible for the relevant instance at the request of **The Company** provided the request is within the **Existing AGR Plant Flexibility Limit**.

Formatted

Formatted: List Paragraph, Right: 2.13 cm, Space Before: 7.15 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Left + Aligned at: 5.57 cm + Indent at: 6.2 cm, Tab stops: 6.2 cm, Left + 6.2 cm, Left

Formatted

- (ii) ~~(ii)~~ **The Company** will only instruct to **De-Synchronise** any

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



~~Gensets~~generating Plant, within an Existing Magnox Reactor Plant or within an Existing AGR Plant (other than under (i) above), to De-Synchronise if the level of System NRAPM (taken together with System constraints) and/or Localised NRAPM is such that it is not possible to avoid De-Synchronising such Generating Unit or Power-Generating-Modulegenerating Plant, and provided the power flow across each External Interconnection is either at zero or results in an export of power from the Total System. This provisionapplies in all cases in the case of System NRAPM and in the case of Localised NRAPM, only when the power flow would have a relevant effect.

Formatted

OC2.3.4.4

FREQUENCY SENSITIVE OPERATION

Frequency Sensitive Operation

By 1600 hours each Wednesday

Formatted: Heading 2

OC2.4

Party	By 1600 hours each Wednesday		
Generator			Receive info
The Company	Provide info		
Non-embedded Customer	Do nothing		
Network Operator	Do nothing		

Key

Provides information

Receives information

Do nothing

Figure 13: Guaranteeing Sufficient Generators for Frequency Sensitive Operation

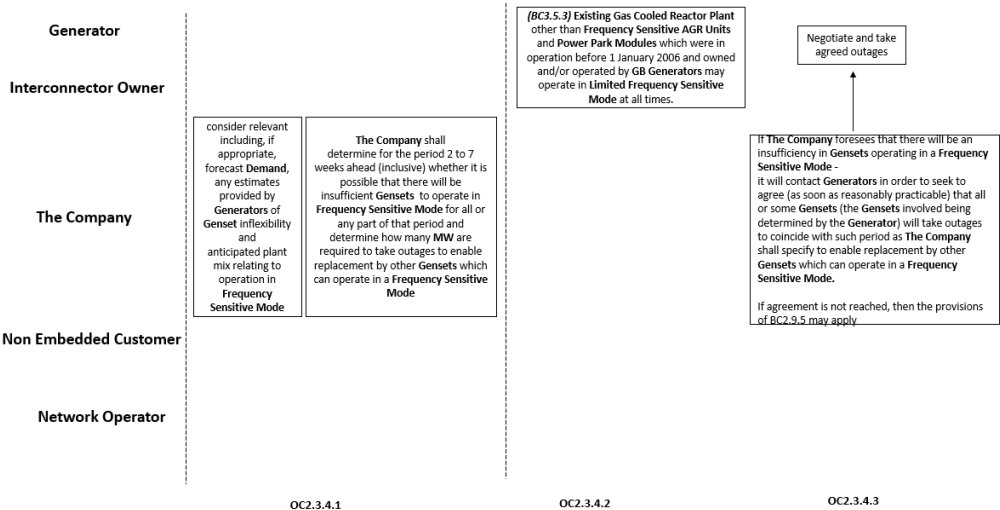


Figure 14: Summary of obligations during Frequency Sensitive Operation by 1600 hours each Wednesday

By 1600 hours each Wednesday

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

OC2.3.4.1

Using such information as **The Company** shall consider relevant including, ~~if appropriate,~~ forecast **Demand**, any estimates provided by **Generators** of ~~**Genset** generating **Plant**~~ inflexibility and anticipated plant mix relating to operation in ~~**Frequency Sensitive Mode**~~. **The Company** shall determine for the period 2 to 7 weeks ahead (inclusive) whether it is possible that there will be insufficient ~~**Gensets** generating **Plant**~~ to operate in **Frequency Sensitive Mode** (other than ~~those **Gensets** that~~ generating **Plant** within **Existing Gas Cooled Reactor Plant** which ~~are~~is permitted to operate in **Limited Frequency Sensitive Mode** at all times under BC3.5.3) ~~to operate in **Frequency Sensitive Mode** for all or any part of that period.~~ to operate in Frequency Sensitive Mode for all or any part of that period.

- Formatted: Condensed by 0.1 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold
- Formatted: Normal, Indent: Left: 2.99 cm, Right: 2.22 cm, Space Before: 1.3 pt, Line spacing: Multiple 1.1 li
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.2 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.15 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.2 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.25 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.15 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.25 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.05 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.25 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.15 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.15 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.25 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold, Expanded by 2 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Bold
- Formatted: Font: 10 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

~~OC2.4.4.3~~

OC2.3.4.3

## ~~QC2.4.6 OPERATING MARGIN DATA REQUIREMENTS~~

~~OC2-4.6~~

Key

- Provides information
- Receives information
- Do nothing

Party	By 1600 hours each Wednesday	Between 1600 hours each Wednesday and 1200 hours each Friday		By 1500hours each Friday	
Generator	Do nothing	Receive info	Provide info	Receive info	Provide info
The Company	Provide info		Receive info	Provide info	Receive info

Figure 15: For Gensets that are available for start from standby by Low Frequency Relay initiation with Fast Start Capability agreed pursuant to the Bilateral Agreement

**Formatted:** Expanded by 2 pt

**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

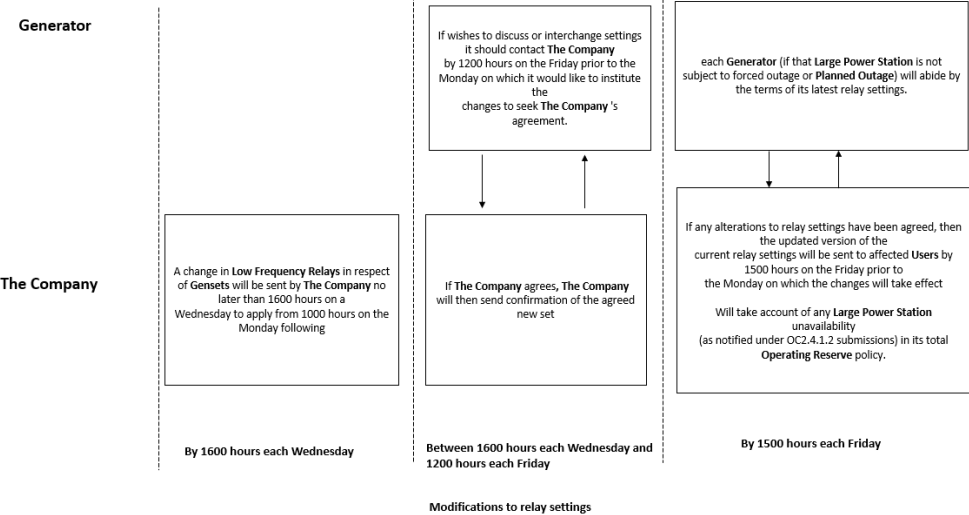


Figure 16: Summary of obligations under Operating Margin Data Requirements

**OC2.3.5.1** Modifications to relay Low Frequency Relay settings for Fast Start from standby

— 'Relay settings' in this OC2.4.63.5.1 refers to the settings of **Low Frequency Relays** in respect of **Gensets/generating Plant** that are available for start from standby by **Low Frequency Relay** initiation with **Fast Start Capability** agreed pursuant to the relevant **Bilateral Agreement**.

By 1600 hours each Wednesday

— A change in relay settings will be sent by **The Company** no later than 1600 hours on a Wednesday to apply from 1000 hours on the Monday following. The settings allocated to particular **Large Power Stations** may be interchanged between 49.70Hz and 49.60Hz (or such other **System Frequencies** as **The Company** may have specified) provided the overall capacity at each setting and **System** requirements can, in **The Company's** view, be met.

Between 1600 hours each Wednesday and 1200 hours each Friday

— If a **Generator** wishes to discuss or interchange settings it should contact **The Company** by 1200 hours on the Friday prior to the Monday on which it would like to institute the changes to seek **The Company's** agreement. If **The Company** agrees, **The Company** will then send confirmation of the agreed new settings.

By 1500 hours each Friday

— If any alterations to relay settings have been agreed, then the updated version of the current relay settings will be sent to affected **Users** by 1500 hours on the Friday prior to the Monday on which the changes will take effect. Once accepted, each **Generator** (if that **Large Power Station** is not subject to forced outage or **Planned Outage**) will abide by the terms of its latest relay settings.

— In addition, **The Company** will take account of any **Large Power Station** unavailability (as notified under OC2.4.1.2 submissions) in its total **Operating Reserve** policy.

— **The Company** may from time to time, for confirmation purposes only, issue the latest version of the current relay settings to each affected **Generator**.

**Formatted****Formatted:** Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 4.45 pt**Formatted****Formatted:** Normal, Indent: Left: 3.03 cm, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li**Formatted****Formatted:** Body Text, Justified, Indent: Left: 1.72 cm, First line: 1.27 cm**Formatted****Formatted****Formatted:** Body Text, Justified, Indent: Left: 2.99 cm, Space Before: 6.1 pt**Formatted****Formatted:** Body Text, Justified, Indent: Left: 2.99 cm, Right: 2.13 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li**Formatted****Formatted:** Body Text, Justified, Indent: Left: 2.99 cm, Space Before: 6.05 pt**Formatted****Formatted:** Body Text, Justified, Indent: Left: 2.99 cm, Right: 2.13 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li**Formatted****Formatted:** Font: Bold**OC2.4.63.5.2** Operational Planning Margin Requirements (OPMR)

— At a regular time interval, at least once each day (by 1600 hours) and **up to no more frequently than** every hour

— **The Company** will provide **an indication its best estimate** of the level of **Operating Reserve** to be utilised by **The Company** in connection with the operation of the **Balancing Mechanism** covering a 2-14 day ahead period (with a daily peak demand resolution) and the 2-52-week resolution (with a weekly resolution focusing on the peak demand of the week). This level shall be purely indicative.

— This **Operational Planning Margin** requirements indication will also note the possible level of **High Frequency Response** to be utilised by **The Company** in connection with the operation of the **Balancing Mechanism** in the week beginning with the **Operational Day** commencing during the subsequent Monday, which level shall be purely indicative.

**Formatted****Formatted:** Body Text, Justified, Indent: Left: 0.49 cm**Formatted:** Body Text, Justified, Indent: Left: 2.9 cm, Right: 2.14 cm, Space Before: 7.25 pt, Line spacing:**Formatted****Formatted****Formatted:** Normal, Justified, Indent: Left: 2.9 cm, Right: 2.14 cm, Space Before: 6 pt, Line spacing: Multiple 1.1 li**Formatted****Formatted:** Font: 10 pt**Formatted****Formatted:** List Paragraph, Indent: Left: 2.26 cm, Right: 2.14 cm, Space Before: 7.25 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 1.76 cm + Indent at: 2.39 cm, Tab stops: 2.39 cm, Left + 2.39 cm, Left + Not at: 3.5 cm**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at: 8.5 cm + 15.31 cm**OC2.4.7** 3.6 In the event that:

- a) a **Non-Embedded Customer** experiences the planned unavailability of its **Apparatus** resulting in the reduction of **Demand** of 100MW or more, or a change to the planned unavailability of its **Apparatus** resulting in a change in **Demand** of 100MW or more, for one **Settlement Period** or longer; or

b) a **Non-Embedded Customer** experiences a change in the actual availability of its **Apparatus** resulting in a change in **Demand** of 100MW or greater; or

- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.4 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.35 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.35 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.3 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.4 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.4 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.3 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.35 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.35 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.3 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.3 pt
- Formatted: Font: 10 pt
- Formatted: Font: 10 pt, Condensed by 0.05 pt
- Formatted: Font: 10 pt, Condensed by 0.1 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.2 pt
- Formatted: Condensed by 0.3 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.1 pt
- Formatted: Font: Bold
- Formatted: Font: Bold, Condensed by 0.25 pt
- Formatted: Condensed by 0.3 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.3 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Body Text, Justified, Indent: Left: 2.9 cm, Space Before: 1.2 pt, No bullets or numbering, Tab stops: Not at 3.5 cm

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



- c) a ~~Generator~~ experiences a planned unavailability of a ~~Generating Unit and/or Power-Generating Module~~ resulting in a change of 100MW or more in the ~~Output Usable/Useable~~ of that ~~Generating Unit and/or the associated Power-Generating Module~~ below its previously notified availability, which is expected to last one ~~Settlement Period~~ or longer and up to three years ahead; or
- d) a ~~Generator~~ experiences a change of 100MW or more in the ~~Maximum Export Limit of a Generating Unit~~ ~~any generating Plant~~, which is expected to last one ~~Settlement Period~~ or longer; or
- e) a ~~Generator~~ experiences a planned unavailability resulting in a change of 100MW or more in its aggregated ~~Output Usable/Useable~~ below its previously notified availability for a ~~Power Station~~ with a ~~Registered Capacity~~ of 200MW or more and which is expected to last one ~~Settlement Period~~ or longer and up to three years ahead, save where data has been provided pursuant to OC.2.4.73.6(c) above; or
- f) a ~~Generator~~ experiences a change of 100MW or more in the aggregated ~~Maximum Export Limit~~ of a ~~Power Station~~ with a ~~Registered Capacity~~ of 200MW or more, which is expected to last one ~~Settlement Period~~ or longer, save where data has been provided pursuant to OC.2.4.73.6(d) above;
- such ~~Non-Embedded Customer or Generator~~ shall provide ~~The Company~~ with the ~~EU Transparency Availability Data~~ in accordance with ~~DRC Schedule 6 (Users' Outage Data)~~ using ~~MODIS~~ and with reference to points ~~OC2.4.73.6(a) to (f)~~, ~~Retained EU Law~~, (Commission Regulation (EU) 543/2013) articles 7.1(a), 7.1(b), 15.1(a), 15.1(b), 15.1(c) and 15.1(d).

OC2.4.8 — 3.7 ~~The Company~~ will for each day publish the actual largest secured loss of generation (i.e. (ie, the loss of generation against which, as a requirement of the ~~Licence Standards~~, the ~~National Electricity Transmission System~~ ~~NETS~~ must be secured) or loss of import from ~~External Interconnections~~ for each settlement period on ~~The Company's~~ website.—

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Indent: Left: 2.26 cm, Right: 2.13 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 1.76 cm + Indent at: 2.39 cm, Tab stops: 2.39 cm, Left + Not at 3.5 cm

Formatted

Formatted

Formatted

Formatted

Formatted: Font: 11 pt

Formatted: Body Text

Formatted

Formatted

Formatted

Formatted: Font: 10 pt, Not Bold

Formatted: Body Text, Indent: Left: 0.49 cm, First line: 0 cm

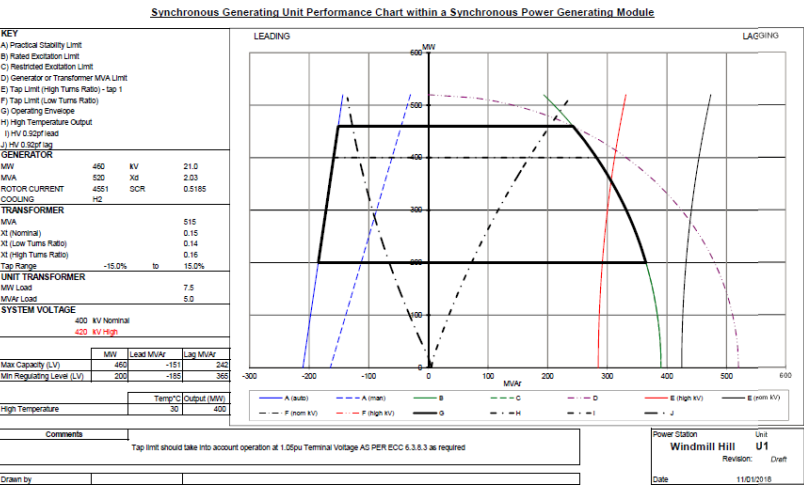
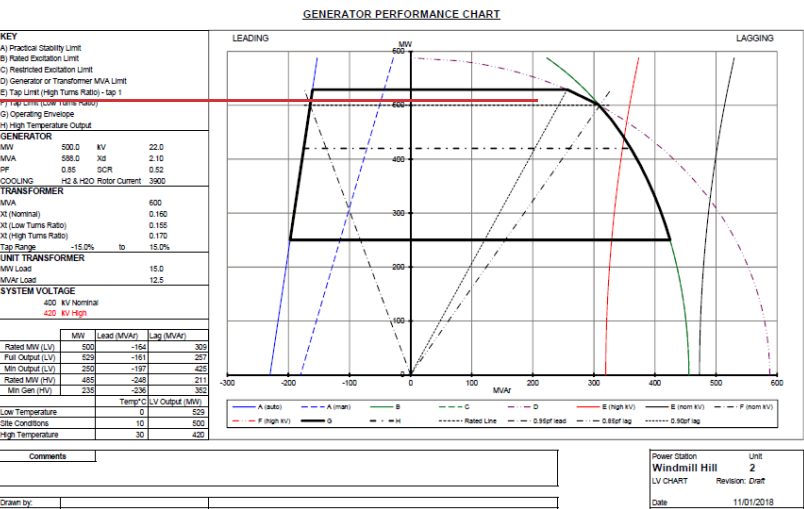
Formatted: Font: 11 pt

Formatted: Body Text

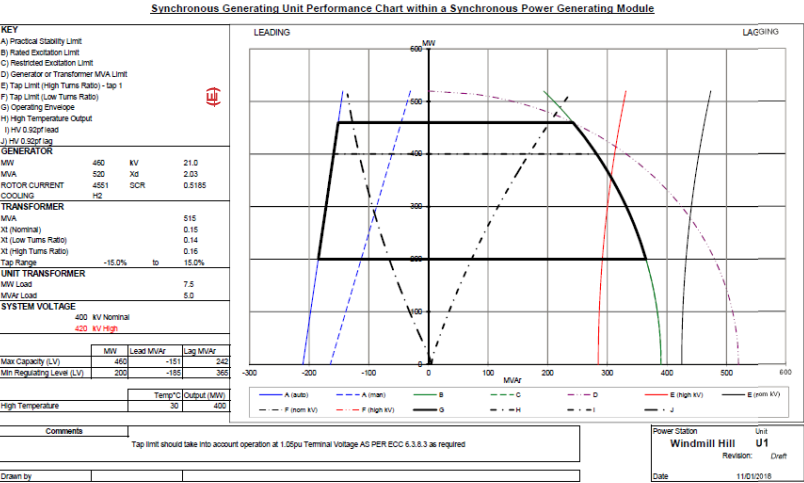
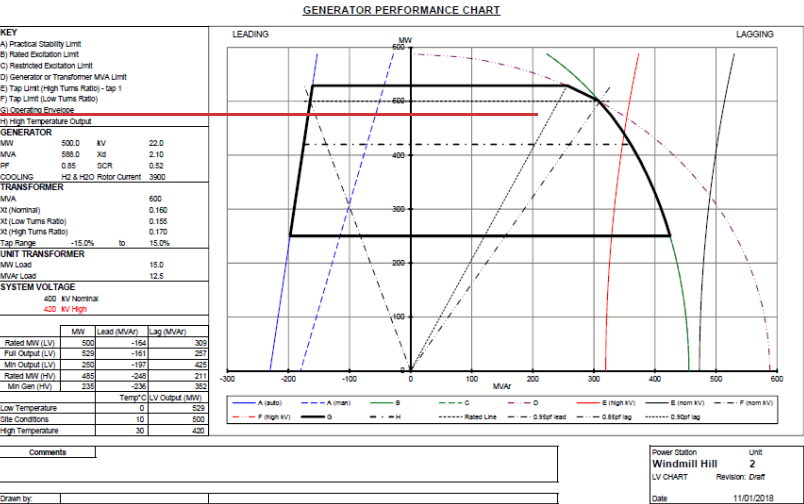
Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

OC2 APPENDIX 1 -- PERFORMANCE CHART EXAMPLES

Formatted: Font: 11 pt, Not Bold

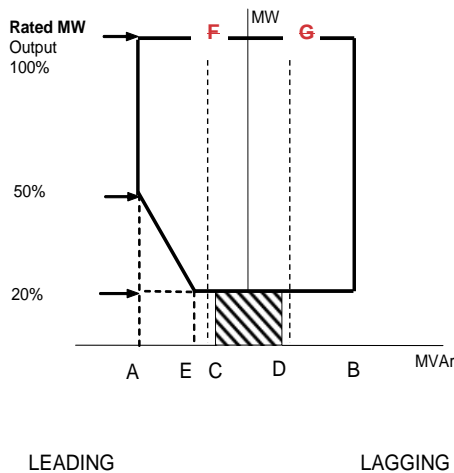


Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

POWER PARK MODULE PERFORMANCE CHART AT THE CONNECTION POINT OR USER'S SYSTEM ENTRY POINT



- Point A is equivalent (in MVar) to: 0.95 leading **Power Factor** at **Rated MW** output
- Point B is equivalent (in MVar) to: 0.95 lagging **Power Factor** at **Rated MW** output
- Point C is equivalent (in MVar) to: -5% of **Rated MW** output
- Point D is equivalent (in MVar) to: +5% of **Rated MW** output
- Point E is equivalent (in MVar) to: -12% of **Rated MW** output
- Line F is equivalent (in MVar) to: Leading **Power Factor Reactive Despatch Network Restriction**
- Line G is equivalent (in MVar) to: Lagging **Power Factor Reactive Despatch Network Restriction**



Where a **Reactive Despatch Network Restriction** is in place which requires following of local voltage conditions, alternatively to Line F and G, please check this box.

Formatted: Heading 1, Left

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

APPENDIX 2 – GENERATION PLANNING PARAMETERS

OC2.A.2 Generation Planning Parameters

— The following parameters are required in respect of each **Genset**.

OC2.A.2.1 Regime Unavailability

— Where applicable the following information must be recorded for each **Genset**.

— Earliest synchronising time:

- Monday
- Tuesday to Friday
- Saturday to Sunday

— Latest de-synchronising time:

- Monday to Thursday
- Friday
- Saturday to Sunday

OC2.A.2.2 Synchronising Intervals

(a) (a) — The synchronising interval between **GensetsGenerating Units** in a **Synchronising Group** assuming all **GensetsGenerating Units** have been **Shutdown** for 48 hours:

(b) —

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.63 cm, Space Before: 13.45 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Body Text, Indent: Left: 2.99 cm, Space Before: 7.2 pt

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 7.1 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Body Text, Indent: Left: 2.99 cm, Space Before: 7.1 pt

Formatted

Formatted: Font: 10 pt, Condensed by 0.1 pt

Formatted: List Paragraph, Right: 11.1 cm, Space Before: 7.25 pt, Line spacing: Multiple 1.62 li, Bulleted + Level: 1 + Aligned at: 2.99 cm + Indent at: 3.74 cm, Tab stops: 3.74 cm, Left

Formatted

Formatted: Body Text, Indent: Left: 3.74 cm, Right: 12.29 cm, Space Before: 0.05 pt, Line spacing: Multiple 1.62 li

Formatted

Formatted: Font: 10 pt

Formatted: List Paragraph, Right: 10.8 cm, Line spacing: Multiple 1.63 li, Bulleted + Level: 1 + Aligned at: 2.99 cm + Indent at: 3.74 cm, Tab stops: 3.74 cm, Left

Formatted: Condensed by 0.1 pt

Formatted: Body Text, Indent: Left: 3.74 cm, Line spacing: Exactly 11.35 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, First line: 3.25 cm, Right: 12.29 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.62 li, Tab stops: 2.99 cm, Left

Formatted

Formatted: Font: 10 pt

Formatted

Formatted: Normal, Indent: Left: 3.74 cm, Space Before: 1.2 pt

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

(b) The ~~Synchronising Group~~ within the ~~Power Station~~ to which each ~~GensetGenerating Units~~ should be allocated.

OC2.A.2.3 ~~De-Synchronising Interval~~

~~— A fixed value De-Synchronising interval between Gensets within a Synchronising Group.~~

OC2.A.2.4 ~~Synchronising Generation~~

~~— The amount of MW produced at the moment of Synchronising assuming the GensetGenerating Unit has been Shutdown for 48 hours.~~

OC2.A.2.5 ~~Minimum Non-zero time (MNZT)~~

~~— The minimum period on-load between Synchronising and De-Synchronising assuming the GensetGenerating Unit has been Shutdown for 48 hours.~~

OC2.A.2.6 ~~Run-Up rates~~

~~— A run-up characteristic consisting of up to three stages from Synchronising Generation to Output UsableUseable with up to two intervening break points assuming the GensetGenerating Unit has been Shutdown for 48 hours.~~

OC2.A.2.7 ~~Run-down rates~~

~~— A run-down characteristic consisting of up to three stages from Output UsableUseable to De-Synchronising with breakpoints at up to two intermediate load levels.~~

Formatted: Font: 10 pt

Formatted

Formatted: List Paragraph, Right: 2.13 cm, Space Before: 4.45 pt, Line spacing: Multiple 1.1 li, Numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.99 cm + Indent at: 3.74 cm, Tab stops: 3.74 cm, Left

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 6.05 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 5.8 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.1 li

Formatted: Portuguese (Brazil), Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 5.8 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.13 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.1 li

Formatted: Condensed by 0.1 pt

Formatted

Formatted: Body Text, Indent: Left: 0.49 cm, Space Before: 5.9 pt, Tab stops: 2.99 cm, Left

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.13 cm, Space Before: 7.25 pt, Line spacing: Multiple 1.1 li

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 6 pt

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.14 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.1 li

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

OC2.A.2.8 — Notice to Deviate from Zero (NDZ)

— The period of time normally required to Synchronise a GensetGenerating Unit following instruction from The Company assuming the GensetGenerating Unit has been Shutdown for 48 hours.

Formatted

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.13 cm, Space Before: 7.2 pt, Line spacing: Multiple 1.1 li

OC2.A.2.9 — Minimum Zero time (MZT)

— The minimum interval between De-Synchronising and Synchronising a GensetGenerating Unit.

Formatted: Portuguese (Brazil)

Formatted

Formatted: Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 6 pt

OC2.A.2.10 — Not used.

Formatted

Formatted: Normal, Justified, Indent: Left: 2.99 cm, Right: 2.14 cm, Space Before: 7.1 pt, Line spacing: Multiple 1.11 li

OC2.A.2.11 — Gas Turbine Units loading parameters

- Loading rate for fast starting
- Loading rate for slow starting

Formatted

Formatted: Body Text, Justified, Space Before: 5.8 pt

Formatted

Formatted: List Paragraph, Indent: Left: 2.99 cm, Hanging: 0.75 cm, Space Before: 7.1 pt, Bulleted + Level: 1 + Aligned at: 2.99 cm + Indent at: 3.74 cm, Tab stops: 3.74

Formatted

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm



**OC2 APPENDIX 3 - CCGT MODULE2 – PLANNING MATRIX FOR GENERATING UNITS**

CCGT Module Planning Matrix Example Form

CCGT Power Generating MODULE	CCGT GENERATING UNITS AVAILABLE									
OUTPUT USEABLE	OUTPUT USEABLE									
MW	150	150	150					100		
0MW to 150MW	t									
151MW to 250MW	t							t		
251MW to 300MW	t	t								
301MW to 400MW	t	t						t		
401MW to 450MW	t	t	t							
451MW to 550MW	t	t	t					t		

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted Table

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

Formatted

OC2 APPENDIX 4-3 – POWER PARK MODULE PLANNING MATRIX

Power Park Module Planning 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				

The **Power Park Module Planning 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**.

Formatted: Left: 1.76 cm, Right: 0.11 cm, Top: 2.36 cm, Bottom: 2.12 cm, Do not suppress endnotes, Width: 21.01 cm, Height: 29.7 cm, Header distance from edge: 1.26 cm, Footer distance from edge: 1.77 cm

Formatted: Heading 1, Left

Formatted: Font: 11.5 pt, Bold

Formatted: Body Text, Space Before: 0.35 pt, Tab stops: Not at 2.54 cm + 3.33 cm + 4.13 cm + 5.08 cm + 6.35 cm + 7.78 cm + 13.02 cm

Formatted: Condensed by 0.35 pt

Formatted: Condensed by 0.35 pt

Formatted: Condensed by 0.35 pt

Formatted: Condensed by 0.45 pt

Formatted: Condensed by 0.4 pt

Formatted: Condensed by 0.45 pt

Formatted: Condensed by 0.2 pt

Formatted: No underline

Formatted: Body Text, Right: 1.66 cm

Formatted: Font: Bold

Formatted: Font: Bold

Formatted: Body Text, Space Before: 0.15 pt, Tab stops: Not at -1.02 cm + 2.61 cm + 3.71 cm + 6.44 cm + 7.54 cm + 8.53 cm

Formatted: Font: 10 pt

Formatted: Normal, Justified, Indent: Left: 0.49 cm, Right: 2.13 cm, Line spacing: Multiple 1.1 li, Tab stops: Not at 0

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Bold

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Bold

Formatted: Font: 10 pt

Formatted: Font: 11 pt

Formatted: Body Text, Tab stops: Not at 0 cm

Formatted: Body Text, Space Before: 0.5 pt, Tab stops: Not at 0 cm

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

APPENDIX 5 – SYNCHRONOUS POWER GENERATING MODULE PLANNING MATRIX

Synchronous Power Generating Module Planning Matrix Example Form

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

<END OF OPERATING CODE NO. 2>

- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.2 pt
- Formatted: Condensed by 0.2 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.25 pt
- Formatted: Condensed by 0.15 pt
- Formatted: Condensed by 0.5 pt
- Formatted: Heading 4, Right: 1.51 cm

Formatted: Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm

**Formatted:** Font: Not Bold

**Formatted:** Body Text, Justified, Indent: Left: 0.49 cm, Space Before: 7.2 pt

**Formatted:** Body Text, Line spacing: Multiple 0.06 li, Tab stops: Not at 8.5 cm + 15.31 cm