
All Recipients of the Serviced Grid Code

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Dear Sir/Madam

THE SERVICED GRID CODE – ISSUE 5 REVISION 26

Issue 5 Revision 26 of the Grid Code has been approved by the Panel for implementation on **26 September 2018**.

In order to ensure your copy of the Grid Code remains up to date, you will need to replace the sections affected with the revised versions available on the National Grid website.

The revisions document provides an overview of the changes made to the Grid Code since the previous issue.

Yours faithfully

Rashpal Gata-Aura
Code Administrator
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Market Change Electricity
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SUMMARY OF CHANGES

The changes arise from the implementation of modifications proposed in the following Consultation Paper:

GC0115 – Legal Separation housekeeping ‘NGET to The Company’

Summary of Proposal

Upon approval of implementation of GC0115 – Self Governance -the Panel have given instruction for the housekeeping modification raised to rectify and address errors to ensure clarity and to reflect Legal Separation housekeeping “NGET to The Company”

The categories of Users affected by this revision to the Grid Code are: **All Grid Code Users**

GC0116 – Glossary Definitions

Summary of Proposal

Upon approval of implementation of GC0116 – Self Governance -the Panel have given instruction for the housekeeping modification raised to rectify and address errors to ensure clarity and to reflect Glossary Definitions.

The categories of Users affected by this revision to the Grid Code are: **All Grid Code Users**

THE GRID CODE

ISSUE 5

REVISION 26

26 September 2018

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PREFACE

(P)

(This section does not form part of the Grid Code)

P.1. The Grid Code sets out the operating procedures and principles governing the relationship between **The Company** and all Users of the **National Electricity Transmission System**, be they **Generators, DC Converter** owners, **Suppliers** or **Non-Embedded Customers**. The Grid Code specifies day-to-day procedures for both planning and operational purposes and covers both normal and exceptional circumstances.

P.2 The Grid Code is designed to:

- (i) permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;
- (ii) facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);
- (iii) promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole; and
- (iv) efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency.

and is conceived as a statement of what is optimal (particularly from a technical point of view) for all **Users** and **The Company** itself in relation to the planning, operation and use of the **National Electricity Transmission System**. It seeks to avoid any undue discrimination between **Users** and categories of **Users**.

P.3 The Grid Code is divided into the following sections:

- (a) a **Planning Code** which provides generally for the supply of certain information by **Users** in order for **The Company** to undertake the planning and development of the **National Electricity Transmission System**;
- (b) the **Connection Conditions** which specify minimum technical, design and operational criteria which must be complied with by **The Company** at **Connection Sites** and by **Users** connected to or seeking connection with the **National Electricity Transmission System** or by **Generators** (other than in respect of **Small Power Stations**) or **DC Converter** owners, connected to or seeking connection to a **User's System**;
- (c) the **Compliance Processes** which specify the process that must be followed by **The Company** and any **Generator** or **DC Converter Station** owner to demonstrate its compliance with the Grid Code in relation to its **Plant** and **Apparatus**.

- (d) an **Operating Code**, which is split into a number of sections and deals with **Demand forecasting (OC1)**; the co-ordination of the outage planning process in respect of **Large Power Stations**, the **National Electricity Transmission System** and **User Systems** for construction, repair and maintenance, and the provision of certain types of **Operating Margin** data (**OC2**); testing and monitoring of **Users (OC5)**; different forms of reducing **Demand (OC6)**; the reporting of scheduled and planned actions, and unexpected occurrences such as faults (**OC7**); the co-ordination, establishment and maintenance of **Isolation** and **Earthing** in order that work and/or testing can be carried out safely (**OC8**); certain aspects of contingency planning (**OC9**); the provision of written reports on occurrences such as faults in certain circumstances (**OC10**); the procedures for numbering and nomenclature of **HV Apparatus** at certain sites (**OC11**); and the procedures for the establishment of **System Tests (OC12)**;
- (e) a **Balancing Code**, which is split into three sections and deals with the submission of **BM Unit Data** from **BM Participants**, and of certain other information, for the following day and ahead of **Gate Closure (BC1)**; the post **Gate Closure** process (**BC2**); and the procedures and requirements in relation to **System Frequency** control (**BC3**);
- (f) a **Data Registration Code**, which sets out a unified listing of all data required by **The Company** from **Users**, and by **Users** from **The Company**, under the Grid Code;
- (g) **General Conditions**, which are intended to ensure, so far as possible, that the various sections of the Grid Code work together and work in practice and include provisions relating to the establishment of a **Grid Code Review Panel** and other provisions of a general nature.

P.4

This Preface is provided to **Users** and to prospective **Users** for information only and does not constitute part of the Grid Code.

< END OF PREFACE >

GLOSSARY & DEFINITIONS (GD)

GD.1 In the Grid Code the following words and expressions shall, unless the subject matter or context otherwise requires or is inconsistent therewith, bear the following meanings:

Access Group	<p>A group of Connection Points within which a User declares under the Planning Code</p> <p>(a) An interconnection and/or</p> <p>(b) A need to redistribute Demand between those Connection Points either pre-fault or post-fault</p> <p>Where a single Connection Point does not form part of an Access Group in accordance with the above, that single Connection Point shall be considered to be an Access Group in its own right.</p>
Access Period	<p>A period of time in respect of which each Transmission Interface Circuit is to be assessed as whether or not it is capable of being maintained as derived in accordance with PC.A.4.1.4. The period shall commence and end on specified calendar weeks.</p>
Act	<p>The Electricity Act 1989 (as amended by the Utilities Act 2000 and the Energy Act 2004).</p>
Active Energy	<p>The electrical energy produced, flowing or supplied by an electric circuit during a time interval, being the integral with respect to time of the instantaneous power, measured in units of watt-hours or standard multiples thereof, ie:</p> <p>1000 Wh = 1 kWh</p> <p>1000 kWh = 1 MWh</p> <p>1000 MWh = 1 GWh</p> <p>1000 GWh = 1 TWh</p>
Active Power	<p>The product of voltage and the in-phase component of alternating current measured in units of watts and standard multiples thereof, ie:</p> <p>1000 Watts = 1 kW</p> <p>1000 kW = 1 MW</p> <p>1000 MW = 1 GW</p> <p>1000 GW = 1 TW</p>

Additional BM Unit	Has the meaning as set out in the BSC
Affiliate	In relation to any person, any holding company or subsidiary of such person or any subsidiary of a holding company of such person, in each case within the meaning of Section 736, 736A and 736B of the Companies Act 1985 as substituted by section 144 of the Companies Act 1989 and, if that latter section is not in force at the Transfer Date , as if such section were in force at such date.
AF Rules	Has the meaning given to “allocation framework” in section 13(2) of the Energy Act 2013.
Agency	As defined in the Transmission Licence .
Aggregator	A BM Participant who controls one or more Additional BM Units or Secondary BM Units .
Aggregator Impact Matrix	Defined for an Additional BM Unit or a Secondary BM Unit . Provides data allowing NGET to model the result of a Bid-Offer Acceptance on each of the Grid Supply Points within the GSP Group over which the Additional BM Unit or Secondary BM Unit is defined
Alternate Member	Shall mean an alternate member for the Panel Members elected or appointed in accordance with this GR.7.2(a) or (b).
Ancillary Service	A System Ancillary Service and/or a Commercial Ancillary Service , as the case may be. An Ancillary Service may include one or more Demand Response Services .
Ancillary Services Agreement	An agreement between a User and The Company for the payment by The Company to that User in respect of the provision by such User of Ancillary Services .
Annual Average Cold Spell Conditions or ACS Conditions	A particular combination of weather elements which gives rise to a level of peak Demand within a Financial Year which has a 50% chance of being exceeded as a result of weather variation alone.
Apparent Power	The product of voltage and of alternating current measured in units of voltamperes and standard multiples thereof, ie: 1000 VA = 1 kVA 1000 kVA = 1 MVA
Apparatus	Other than in OC8 , means all equipment in which electrical conductors are used, supported or of which they may form a part. In OC8 it means High Voltage electrical circuits forming part of a System on which Safety Precautions may be applied to allow work and/or testing to be carried out on a System .
Approved Fast Track Proposal	Has the meaning given in GR.26.7, provided that no objection is received pursuant to GR.26.12.
Approved Grid Code Self-Governance Proposal	Has the meaning given in GR.24.10.
Approved Modification	Has the meaning given in GR.22.7

Authorised Certifier	An entity that issues Equipment Certificates and Power Generating Module Documents and whose accreditation is given by the national affiliate of the European cooperation for Accreditation ('EA'), established in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council (1).
Authorised Electricity Operator	Any person (other than The Company in its capacity as operator of the National Electricity Transmission System) who is authorised under the Act to generate, participate in the transmission of, distribute or supply electricity which shall include any Interconnector Owner or Interconnector User .
Authority-Led Modification	A Grid Code Modification Proposal in respect of a Significant Code Review , raised by the Authority pursuant to GR.17
Authority-Led Modification Report	Has the meaning given in GR.17.4.
Automatic Voltage Regulator or AVR	The continuously acting automatic equipment controlling the terminal voltage of a Synchronous Generating Unit or Synchronous Power Generating Module by comparing the actual terminal voltage with a reference value and controlling by appropriate means the output of an Exciter , depending on the deviations.
Authority for Access	An authority which grants the holder the right to unaccompanied access to sites containing exposed HV conductors.
Authority, The	The Authority established by section 1 (1) of the Utilities Act 2000.
Auxiliaries	Any item of Plant and/or Apparatus not directly a part of the boiler plant or Power Generating Module or Generating Unit or DC Converter or HVDC Equipment or Power Park Module , but required for the boiler plant's or Power Generating Module's or Generating Unit's or DC Converter's or HVDC Equipment's or Power Park Module's functional operation.
Auxiliary Diesel Engine	A diesel engine driving a Power Generating Module or Generating Unit which can supply a Unit Board or Station Board , which can start without an electrical power supply from outside the Power Station within which it is situated.
Auxiliary Gas Turbine	A Gas Turbine Unit , which can supply a Unit Board or Station Board , which can start without an electrical power supply from outside the Power Station within which it is situated.
Average Conditions	That combination of weather elements within a period of time which is the average of the observed values of those weather elements during equivalent periods over many years (sometimes referred to as normal weather).
Back-Up Protection	A Protection system which will operate when a system fault is not cleared by other Protection .
Balancing and Settlement Code or BSC	The code of that title as from time to time amended.

Balancing Code or BC	That portion of the Grid Code which specifies the Balancing Mechanism process.
Balancing Mechanism	Has the meaning set out in The Company's Transmission Licence
Balancing Mechanism Reporting Agent or BMRA	Has the meaning set out in the BSC .
Balancing Mechanism Reporting Service or BMRS	Has the meaning set out in the BSC .
Balancing Principles Statement	A statement prepared by The Company in accordance with Condition C16 of The Company's Transmission Licence .
Baseline Forecast	Has the meaning given to the term 'baseline forecast' in Section G of the BSC .
Bid-Offer Acceptance	(a) A communication issued by The Company in accordance with BC2.7; or (b) an Emergency Instruction to the extent provided for in BC2.9.2.3.
Bid-Offer Data	Has the meaning set out in the BSC .
Bilateral Agreement	Has the meaning set out in the CUSC
Black Start	The procedure necessary for a recovery from a Total Shutdown or Partial Shutdown .
Black Start Capability	An ability in respect of a Black Start Station , for at least one of its Gensets to Start-Up from Shutdown and to energise a part of the System and be Synchronised to the System upon instruction from The Company , within two hours, without an external electrical power supply.
Black Start Contract	An agreement between a Generator and The Company under which the Generator provides Black Start Capability and other associated services.
Black Start Stations	Power Stations which are registered, pursuant to the Bilateral Agreement with a User , as having a Black Start Capability .
Black Start Test	A Black Start Test carried out by a Generator with a Black Start Station , on the instructions of The Company , in order to demonstrate that a Black Start Station has a Black Start Capability .
Block Load Capability	The incremental Active Power steps, from no load to Rated MW , which a generator can instantaneously supply without causing it to trip or go outside the Frequency range of 47.5 – 52Hz (or an otherwise agreed Frequency range). The time between each incremental step shall also be provided.
BM Participant	A person who is responsible for and controls one or more BM Units or where a Bilateral Agreement specifies that a User is required to be treated as a BM Participant for the purposes of the Grid Code. For the avoidance of doubt, it does not imply that they must be active in the Balancing Mechanism .

BM Unit	Has the meaning set out in the BSC , except that for the purposes of the Grid Code the reference to “Party” in the BSC shall be a reference to User .
BM Unit Data	The collection of parameters associated with each BM Unit , as described in Appendix 1 of BC1 .
Boiler Time Constant	Determined at Registered Capacity or Maximum Capacity (as applicable), the boiler time constant will be construed in accordance with the principles of the IEEE Committee Report "Dynamic Models for Steam and Hydro Turbines in Power System Studies" published in 1973 which apply to such phrase.
British Standards or BS	Those standards and specifications approved by the British Standards Institution.
BSCCo	Has the meaning set out in the BSC .
BSC Panel	Has meaning set out for “Panel” in the BSC .
BS Station Test	A Black Start Test carried out by a Generator with a Black Start Station while the Black Start Station is disconnected from all external alternating current electrical supplies.
BS Unit Test	A Black Start Test carried out on a Generating Unit or a CCGT Unit or a Power Generating Module , as the case may be, at a Black Start Station while the Black Start Station remains connected to an external alternating current electrical supply.
Business Day	Any week day (other than a Saturday) on which banks are open for domestic business in the City of London.
Cancellation of National Electricity Transmission System Warning	The notification given to Users when a National Electricity Transmission System Warning is cancelled.
Capacity Market Documents	The Capacity Market Rules , The Electricity Capacity Regulations 2014 and any other Regulations made under Chapter 3 of Part 2 of the Energy Act 2013 which are in force from time to time.
Capacity Market Rules	The rules made under section 34 of the Energy Act 2013 as modified from time to time in accordance with that section and The Electricity Capacity Regulations 2014.

Cascade Hydro Scheme	<p>Two or more hydro-electric Generating Units, owned or controlled by the same Generator, which are located in the same water catchment area and are at different ordnance datums and which depend upon a common source of water for their operation, known as:</p> <ul style="list-style-type: none"> (a) Moriston (b) Killin (c) Garry (d) Conon (e) Clunie (f) Beaully <p>which will comprise more than one Power Station.</p>
Cascade Hydro Scheme Matrix	The matrix described in Appendix 1 to BC1 under the heading Cascade Hydro Scheme Matrix .
Caution Notice	A notice conveying a warning against interference.
Category 1 Intertripping Scheme	A System to Generator Operational Intertripping Scheme arising from a Variation to Connection Design following a request from the relevant User which is consistent with the criteria specified in the Security and Quality of Supply Standard .
Category 2 Intertripping Scheme	<p>A System to Generator Operational Intertripping Scheme which is:-</p> <ul style="list-style-type: none"> (i) required to alleviate an overload on a circuit which connects the Group containing the User's Connection Site to the National Electricity Transmission System; and (ii) installed in accordance with the requirements of the planning criteria of the Security and Quality of Supply Standard in order that measures can be taken to permit maintenance access for each transmission circuit and for such measures to be economically justified, <p>and the operation of which results in a reduction in Active Power on the overloaded circuits which connect the User's Connection Site to the rest of the National Electricity Transmission System which is equal to the reduction in Active Power from the Connection Site (once any system losses or third party system effects are discounted).</p>
Category 3 Intertripping Scheme	A System to Generator Operational Intertripping Scheme which, where agreed by The Company and the User , is installed to alleviate an overload on, and as an alternative to, the reinforcement of a third party system, such as the Distribution System of a Public Distribution System Operator .
Category 4 Intertripping Scheme	A System to Generator Operational Intertripping Scheme installed to enable the disconnection of the Connection Site from the National Electricity Transmission System in a controlled and efficient manner in order to facilitate the timely restoration of the National Electricity Transmission System .
CENELEC	European Committee for Electrotechnical Standardisation.

Citizens Advice	Means the National Association of Citizens Advice Bureaux.
Citizens Advice Scotland	Means the Scottish Association of Citizens Advice Bureaux.
CfD Counterparty	A person designated as a “CfD counterparty” under section 7(1) of the Energy Act 2013.
CfD Documents	The AF Rules , The Contracts for Difference (Allocation) Regulations 2014, The Contracts for Difference (Definition of Eligible Generator) Regulations 2014 and The Contracts for Difference (Electricity Supplier Obligations) Regulations 2014 and any other regulations made under Chapter 2 of Part 2 of the Energy Act 2013 which are in force from time to time.
CfD Settlement Services Provider	means any person: <ul style="list-style-type: none"> (i) appointed for the time being and from time to time by a CfD Counterparty; or (ii) who is designated by virtue of Section C1.2.1B of the Balancing and Settlement Code, <p>in either case to carry out any of the CFD settlement activities (or any successor entity performing CFD settlement activities).</p>
CCGT Module Matrix	The matrix described in Appendix 1 to BC1 under the heading CCGT Module Matrix .
CCGT Module Planning Matrix	A matrix in the form set out in Appendix 3 of OC2 showing the combination of CCGT Units within a CCGT Module which would be running in relation to any given MW output.
Closed Distribution System or CDSO	A distribution system classified pursuant to Article 28 of Directive 2009/72/EC as a Closed Distribution System by the Authority which distributes electricity within a geographically confined industrial, commercial or shared services site and does not supply household Customers , without prejudice to incidental use by a small number of households located within the area served by the System and with employment or similar associations with the owner of the System .
CM Administrative Parties	The Secretary of State , the CM Settlement Body , and any CM Settlement Services Provider .
CM Settlement Body	the Electricity Settlements Company Ltd or such other person as may from time to time be appointed as Settlement Body under regulation 80 of the Electricity Capacity Regulations 2014.
CM Settlement Services Provider	any person with whom the CM Settlement Body has entered into a contract to provide services to it in relation to the performance of its functions under the Capacity Market Documents .

Code Administration Code of Practice	Means the code of practice approved by the Authority and: (a) developed and maintained by the code administrators in existence from time to time; and (b) amended subject to the Authority's approval from time to time; and (c) re-published from time to time;
Code Administrator	Means The Company carrying out the role of Code Administrator in accordance with the General Conditions.
Combined Cycle Gas Turbine Module or CCGT Module	A collection of Generating Units (registered as a CCGT Module (which could be within a Power Generating Module) under the PC) comprising one or more Gas Turbine Units (or other gas based engine units) and one or more Steam Units where, in normal operation, the waste heat from the Gas Turbines is passed to the water/steam system of the associated Steam Unit or Steam Units and where the component units within the CCGT Module are directly connected by steam or hot gas lines which enable those units to contribute to the efficiency of the combined cycle operation of the CCGT Module .
Combined Cycle Gas Turbine Unit or CCGT Unit	A Generating Unit within a CCGT Module .
Commercial Ancillary Services	Ancillary Services , other than System Ancillary Services , utilised by The Company in operating the Total System if a User (or other person such as a Demand Response Provider) has agreed to provide them under an Ancillary Services Agreement or under a Bilateral Agreement with payment being dealt with under an Ancillary Services Agreement or in the case of Externally Interconnected System Operators or Interconnector Users , under any other agreement (and in the case of Externally Interconnected System Operators and Interconnector Users includes ancillary services equivalent to or similar to System Ancillary Services).
Commercial Boundary	Has the meaning set out in the CUSC
Committed Level	The expected Active Power output from a BM Unit after accepting a Bid-Offer Acceptance or RR Instruction or a combination of Bid-Offer Acceptances and RR Instructions
Committed Project Planning Data	Data relating to a User Development once the offer for a CUSC Contract is accepted.
Common Collection Busbar	A busbar within a Power Park Module to which the higher voltage side of two or more Power Park Unit generator transformers are connected.
Completion Date	Has the meaning set out in the Bilateral Agreement with each User to that term or in the absence of that term to such other term reflecting the date when a User is expected to connect to or start using the National Electricity Transmission System . In the case of an Embedded Medium Power Station or Embedded DC Converter Station or Embedded HVDC System having a similar meaning in relation to the Network Operator's System as set out in the Embedded Development Agreement .

Complex	A Connection Site together with the associated Power Station and/or Network Operator substation and/or associated Plant and/or Apparatus , as appropriate.
Compliance Processes or CP	That portion of the Grid Code which is identified as the Compliance Processes .
Compliance Statement	<p>A statement completed by the relevant User confirming compliance with each of the relevant Grid Code provisions, and the supporting evidence in respect of such compliance, of its:</p> <p>Generating Unit(s); or,</p> <p>Power Generating Modules (including DC Connected Power Park Modules); or,</p> <p>CCGT Module(s); or,</p> <p>Power Park Module(s); or,</p> <p>DC Converter(s); or</p> <p>HVDC Systems; or</p> <p>Plant and Apparatus at an EU Grid Supply Point owned or operated by a Network Operator; or</p> <p>Network Operator's entire distribution System where such Network Operator's distribution System comprises solely of Plant and Apparatus procured on or after 7 September 2018 and was connected to the National Electricity Transmission System on or after 18 August 2019. In this case, all connections to the National Electricity Transmission System would comprise only of EU Grid Supply Points; or</p> <p>Plant and Apparatus at an EU Grid Supply Point owned or operated by a Non-Embedded Customer where such Non-Embedded Customer is defined as an EU Code User;</p> <p>in the form provided by The Company to the relevant User or another format as agreed between the User and The Company.</p>
Configuration 1 AC Connected Offshore Power Park Module	One or more Offshore Power Park Modules that are connected to an AC Offshore Transmission System and that AC Offshore Transmission System is connected to only one Onshore substation and which has one or more Interface Points .
Configuration 2 AC Connected Offshore Power Park Module	One or more Offshore Power Park Modules that are connected to a meshed AC Offshore Transmission System and that AC Offshore Transmission System is connected to two or more Onshore substations at its Transmission Interface Points .
Configuration 1 DC Connected Power Park Module	One or more DC Connected Power Park Modules that are connected to an HVDC System or Transmission DC Converter and that HVDC System or Transmission DC Converter is connected to only one Onshore substation and which has one or more Interface Points .
Configuration 2 DC Connected Power Park Module	One or more DC Connected Power Park Modules that are connected to an HVDC System or Transmission DC Converter and that HVDC System or Transmission DC Converter is connected to only more than one Onshore substation at its Transmission Interface Points .
Connection Conditions or CC	That portion of the Grid Code which is identified as the Connection Conditions being applicable to GB Code Existing Users .

Connection Entry Capacity	Has the meaning set out in the CUSC
Connected Planning Data	Data which replaces data containing estimated values assumed for planning purposes by validated actual values and updated estimates for the future and by updated forecasts for Forecast Data items such as Demand .
Connection Point	A Grid Supply Point or Grid Entry Point , as the case may be.
Connection Site	A Transmission Site or User Site , as the case may be.
Construction Agreement	Has the meaning set out in the CUSC
Consumer Representative	Means the person appointed by the Citizens Advice or the Citizens Advice Scotland (or any successor body) representing all categories of customers, appointed in accordance with GR.4.2(b)
Contingency Reserve	The margin of generation over forecast Demand which is required in the period from 24 hours ahead down to real time to cover against uncertainties in Large Power Station availability and against both weather forecast and Demand forecast errors.
Control Calls	A telephone call whose destination and/or origin is a key on the control desk telephone keyboard at a Transmission Control Centre and which, for the purpose of Control Telephony , has the right to exercise priority over (ie. disconnect) a call of a lower status.
Control Centre	A location used for the purpose of control and operation of the National Electricity Transmission System or DC Converter Station owner's System or HVDC System Owner's System or a User System other than a Generator's System or an External System .
Control Engineer	A person nominated by the relevant party for the control of its Plant and Apparatus .
Control Person	The term used as an alternative to " Safety Co-ordinator " on the Site Responsibility Schedule only.
Control Phase	The Control Phase follows on from the Programming Phase and covers the period down to real time.

Control Point	<p>The point from which:-</p> <p>(a) A Non-Embedded Customer's Plant and Apparatus is controlled; or</p> <p>(b) A BM Unit at a Large Power Station or at a Medium Power Station or representing a Cascade Hydro Scheme or with a Demand Capacity with a magnitude of:</p> <p>(i) 50MW or more in NET's Transmission Area; or</p> <p>(ii) 30MW or more in SPT's Transmission Area; or</p> <p>(iii) 10MW or more in SHETL's Transmission Area,</p> <p>(iv) 10MW or more which is connected to an Offshore Transmission System</p> <p>is physically controlled by a BM Participant; or</p> <p>(c) In the case of any other BM Unit or Generating Unit (which could be part of a Power Generating Module), data submission is co-ordinated for a BM Participant and instructions are received from The Company,</p> <p>as the case may be. For a Generator this will normally be at a Power Station but may be at an alternative location agreed with The Company. In the case of a DC Converter Station or HVDC System, the Control Point will be at a location agreed with The Company. In the case of a BM Unit of an Interconnector User, the Control Point will be the Control Centre of the relevant Externally Interconnected System Operator.</p>
Control Telephony	<p>The principal method by which a User's Responsible Engineer/Operator and The Company Control Engineer(s) speak to one another for the purposes of control of the Total System in both normal and emergency operating conditions.</p>
Core Industry Document	<p>as defined in the Transmission Licence</p>
Core Industry Document Owner	<p>In relation to a Core Industry Document, the body(ies) or entity(ies) responsible for the management and operation of procedures for making changes to such document</p>
CUSC	<p>Has the meaning set out in The Company's Transmission Licence</p>
CUSC Contract	<p>One or more of the following agreements as envisaged in Standard Condition C1 of The Company's Transmission Licence:</p> <p>(a) the CUSC Framework Agreement;</p> <p>(b) a Bilateral Agreement;</p> <p>(c) a Construction Agreement</p> <p>or a variation to an existing Bilateral Agreement and/or Construction Agreement;</p>
CUSC Framework Agreement	<p>Has the meaning set out in The Company's Transmission Licence</p>
CUSC Party	<p>As defined in the Transmission Licence and "CUSC Parties" shall be construed accordingly.</p>

Customer	A person to whom electrical power is provided (whether or not he is the same person as the person who provides the electrical power).
Customer Demand Management	Reducing the supply of electricity to a Customer or disconnecting a Customer in a manner agreed for commercial purposes between a Supplier and its Customer .
Customer Demand Management Notification Level	The level above which a Supplier has to notify The Company of its proposed or achieved use of Customer Demand Management which is 12 MW in England and Wales and 5 MW in Scotland.
Customer Generating Plant	A Power Station or Generating Unit or Power Generating Module of a Customer to the extent that it operates the same exclusively to supply all or part of its own electricity requirements, and does not export electrical power to any part of the Total System .
Data Registration Code or DRC	That portion of the Grid Code which is identified as the Data Registration Code .
Data Validation, Consistency and Defaulting Rules	The rules relating to validity and consistency of data, and default data to be applied, in relation to data submitted under the Balancing Codes , to be applied by The Company under the Grid Code as set out in the document "Data Validation, Consistency and Defaulting Rules" - Issue 8, dated 25 th January 2012. The document is available on the National Grid website or upon request from The Company .
DC Connected Power Park Module	A Power Park Module that is connected to one or more HVDC Interface Points .
DC Converter	Any Onshore DC Converter or Offshore DC Converter as applicable to Existing User's .
DC Converter Station	An installation comprising one or more Onshore DC Converters connecting a direct current interconnector: to the The Company Transmission System ; or, (if the installation has a rating of 50MW or more) to a User System , and it shall form part of the External Interconnection to which it relates.
DC Network	All items of Plant and Apparatus connected together on the direct current side of a DC Converter or HVDC System .
DCUSA	The Distribution Connection and Use of System Agreement approved by the Authority and required to be maintained in force by each Electricity Distribution Licence holder.
De-Load	The condition in which a Genset has reduced or is not delivering electrical power to the System to which it is Synchronised .
Δf	Deviation from Target Frequency
Demand	The demand of MW and Mvar of electricity (i.e. both Active and Reactive Power), unless otherwise stated.
Demand Aggregation	A process where one or more Demand Facilities or Closed Distribution Systems can be controlled by a Demand Response Provider either as a single facility or Closed Distribution System for the purposes of offering one or more Demand Response Services .

Demand Capacity	Has the meaning as set out in the BSC .
Demand Control	Any or all of the following methods of achieving a Demand reduction: <ul style="list-style-type: none"> (a) Customer voltage reduction initiated by Network Operators (other than following an instruction from The Company); (b) Customer Demand reduction by Disconnection initiated by Network Operators (other than following an instruction from The Company); (c) Demand reduction instructed by The Company; (d) automatic low Frequency Demand Disconnection; (e) emergency manual Demand Disconnection.
Demand Control Notification Level	The level above which a Network Operator has to notify The Company of its proposed or achieved use of Demand Control which is 12 MW in England and Wales and 5 MW in Scotland.
Demand Facility	A facility which consumes electrical energy and is connected at one or more Grid Supply Points to the National Electricity Transmission System or connection points to a Network Operator's System . A Network Operator's System and/or auxiliary supplies of a Power Generating Module do not constitute a Demand Facility .
Demand Facility Owner	A person who owns or operates one or more Demand Units within a Demand Facility . A Demand Facility Owner who owns or operates a Demand Facility which is directly connected to the Transmission System shall be treated as a Non Embedded Customer .
Demand Response Active Power Control	Demand within a Demand Facility or Closed Distribution System that is available for modulation by NGET or Network Operator or Relevant Transmission Licensee , which results in an Active Power modification.
Demand Response Provider	A party (other than NGET) who owns, operates, controls or manages Main Plant and Apparatus (excluding storage equipment) which was first connected to the Total System on or after 18 August 2019 and who had placed Purchase Contracts for its Main Plant and Apparatus on or after 7 September 2018 or is the subject of a Substantial Modification on or after 18 August 2019 and has an agreement with NGET to provide a Demand Response Service(s) . The party may be one or more Customers , a Network Operator or Non-Embedded Customer or EU Code User contracting bilaterally with NGET for the provision of services, or may be a third party providing Demand Aggregation from many individual Customers .
Demand Response Reactive Power Control	A Demand Response Service derived from Reactive Power or Reactive Power compensation devices in a Demand Facility or Closed Distribution System that are available for modulation by NGET or Network Operator or Relevant Transmission Licensee .
Demand Response Transmission Constrain Management	A Demand Response Service derived from Demand within a Demand Facility or Closed Distribution System that is available for modulation by NGET or Network Operator or Relevant Transmission Licensee to manage transmission constraints within the System .

Demand Response Service	<p>A Demand Response Service includes one or more of the following services:</p> <ul style="list-style-type: none"> (a) Demand Response Active Power Control; (b) Demand Response Reactive Power Control; (c) Demand Response Transmission Constraint Management; (d) Demand Response System Frequency Control; (e) Demand Response Very Fast Active Power Control. <p>The above Demand Response Services are not exclusive and do not preclude Demand Response Providers from negotiating other services for demand response capability with NGET. Where such services are negotiated they would still be treated as a Demand Response Service.</p>
Demand Response Services Code (DRSC)	That portion of the Grid Code which is identified as the Demand Response Services Code being applicable to Demand Response Providers .
Demand Response System Frequency Control	A Demand Response Service derived from a Demand within one or more Demand Facilities or Closed Distribution Systems that is available for the reduction or increase in response to Frequency fluctuations, made by an autonomous response from those Demand Facilities or Closed Distribution Systems to diminish these fluctuations.
Demand Response Unit Document (DRUD)	A document, issued either by the Non Embedded Customer , Demand Facility Owner or the CDSO to NGET or the Network Operator (as the case may be) for Demand Units with demand response and providing a Demand Response Service which confirms the compliance of the Demand Unit with the technical requirements set out in the Grid Code and provides the necessary data and statements, including a statement of compliance.
Demand Response Very Fast Active Power Control	A Demand Response Service derived from a Demand within a Demand Facility or Closed Distribution System that can be modulated very fast in response to a Frequency deviation, which results in a very fast Active Power modification.
Demand Unit	An indivisible set of installations containing equipment which can be actively controlled at one or more sites by a Demand Response Provider , Demand Facility Owner , CDSO or by a Non Embedded Customer , either individually or commonly as part of Demand Aggregation through a third party who has agreed to provide Demand Response Services .
Designed Minimum Operating Level	The output (in whole MW) below which a Genset or a DC Converter at a DC Converter Station (in any of its operating configurations) has no High Frequency Response capability.
De-Synchronise	<ul style="list-style-type: none"> (a) The act of taking a Power Generating Module (including a DC Connected Power Park Module), Generating Unit, Power Park Module, HVDC System or DC Converter off a System to which it has been Synchronised, by opening any connecting circuit breaker; or (b) The act of ceasing to consume electricity at an importing BM Unit; and the term "De-Synchronising" shall be construed accordingly.
De-synchronised Island(s)	Has the meaning set out in OC9.5.1(a)
Detailed Planning Data	Detailed additional data which The Company requires under the PC in support of Standard Planning Data , comprising DPD I and DPD II

Detailed Planning Data Category I or DPD I	The Detailed Planning Data categorised as such in the DRC and EDRC , and submitted in accordance with PC.4.4.2 or PC.4.4.4 as applicable.
Detailed Planning Data Category II or DPD II	The Detailed Planning Data categorised as such in the DRC and EDRC , and submitted in accordance with PC.4.4.2 or PC.4.4.4 as applicable.
Discrimination	The quality where a relay or protective system is enabled to pick out and cause to be disconnected only the faulty Apparatus .
Disconnection	The physical separation of Users (or Customers) from the National Electricity Transmission System or a User System as the case may be.
Disputes Resolution Procedure	The procedure described in the CUSC relating to disputes resolution.
Distribution Code	The distribution code required to be drawn up by each Electricity Distribution Licence holder and approved by the Authority , as from time to time revised with the approval of the Authority .
Droop	The ratio of the per unit steady state change in speed, or in Frequency to the per unit steady state change in power output. Whilst not mandatory, it is often common practice to express Droop in percentage terms.
Dynamic Parameters	Those parameters listed in Appendix 1 to BC1 under the heading BM Unit Data – Dynamic Parameters .
E&W Offshore Transmission System	An Offshore Transmission System with an Interface Point in England and Wales.
E&W Offshore Transmission Licensee	A person who owns or operates an E&W Offshore Transmission System pursuant to a Transmission Licence .
E&W Transmission System	Collectively The Company's Transmission System and any E&W Offshore Transmission Systems .
E&W User	A User in England and Wales or any Offshore User who owns or operates Plant and/or Apparatus connected (or which will at the OTSUA Transfer Time be connected) to an E&W Offshore Transmission System .
Earth Fault Factor	At a selected location of a three-phase System (generally the point of installation of equipment) and for a given System configuration, the ratio of the highest root mean square phase-to-earth power Frequency voltage on a sound phase during a fault to earth (affecting one or more phases at any point) to the root mean square phase-to-earth power Frequency voltage which would be obtained at the selected location without the fault.

Earthing	<p>A way of providing a connection between conductors and earth by an Earthing Device which is either:</p> <p>(a) Immobilised and Locked in the earthing position. Where the Earthing Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be, where reasonably practicable, given to the authorised site representative of the Requesting Safety Co-ordinator and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or</p> <p>(b) maintained and/or secured in position by such other method which must be in accordance with the Local Safety Instructions of The Company or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be.</p>
Earthing Device	A means of providing a connection between a conductor and earth being of adequate strength and capability.
Elected Panel Members	<p>Shall mean the following Panel Members elected in accordance with GR4.2(a):</p> <p>(a) the representative of the Suppliers;</p> <p>(b) the representative of the Onshore Transmission Licensees;</p> <p>(c) the representative of the Offshore Transmission Licensees; and</p> <p>(d) the representatives of the Generators</p>
Electrical Standard	A standard listed in the Annex to the General Conditions .
Electricity Council	That body set up under the Electricity Act, 1957.
Electricity Distribution Licence	The licence granted pursuant to Section 6(1) (c) of the Act .
Electricity Regulation	As defined in the Transmission Licence .
Electricity Supply Industry Arbitration Association	The unincorporated members' club of that name formed inter alia to promote the efficient and economic operation of the procedure for the resolution of disputes within the electricity supply industry by means of arbitration or otherwise in accordance with its arbitration rules.
Electricity Supply Licence	The licence granted pursuant to Section 6(1) (d) of the Act .
Electromagnetic Compatibility Level	Has the meaning set out in Engineering Recommendation G5/4 .
Embedded	Having a direct connection to a User System or the System of any other User to which Customers and/or Power Stations are connected, such connection being either a direct connection or a connection via a busbar of another User or of a Transmission Licensee (but with no other connection to the National Electricity Transmission System).
Embedded Development	Has the meaning set out in PC.4.4.3(a)

Embedded Development Agreement	An agreement entered into between a Network Operator and an Embedded Person , identifying the relevant site of connection to the Network Operator's System and setting out other site specific details in relation to that use of the Network Operator's System .
Embedded Person	The party responsible for a Medium Power Station not subject to a Bilateral Agreement or DC Converter Station not subject to a Bilateral Agreement or HVDC System not subject to a Bilateral Agreement connected to or proposed to be connected to a Network Operator's System .
Emergency Deenergisation Instruction	an Emergency Instruction issued by The Company to De-Synchronise a Power Generating Module (including a DC Connected Power Park Module), Generating Unit , Power Park Module , HVDC System or DC Converter in circumstances specified in the CUSC .
Emergency Instruction	An instruction issued by The Company in emergency circumstances, pursuant to BC2.9, to the Control Point of a User . In the case of such instructions applicable to a BM Unit , it may require an action or response which is outside the Dynamic Parameters , QPN or Other Relevant Data , and may include an instruction to trip a Genset .
EMR Administrative Parties	Has the meaning given to "administrative parties" in The Electricity Capacity Regulations 2014 and each CfD Counterparty and CfD Settlement Services Provider .
EMR Documents	The Energy Act 2013, The Electricity Capacity Regulations 2014, the Capacity Market Rules , The Contracts for Difference (Allocation) Regulations 2014, The Contracts for Difference (Definition of Eligible Generator) Regulations 2014, The Contracts for Difference (Electricity Supplier Obligations) Regulations 2014, The Electricity Market Reform (General) Regulations 2014, the AF Rules and any other regulations or instruments made under Chapter 2 (contracts for difference), Chapter 3 (capacity market) or Chapter 4 (investment contracts) of Part 2 of the Energy Act 2013 which are in force from time to time.
EMR Functions	Has the meaning given to "EMR functions" in Chapter 5 of Part 2 of the Energy Act 2013.
Engineering Recommendations	The documents referred to as such and issued by the Energy Networks Association or the former Electricity Council.
Energisation Operational Notification or EON	A notification (in respect of Plant and Apparatus (including OTSUA) which is directly connected to the National Electricity Transmission System) from The Company to a User confirming that the User can in accordance with the Bilateral Agreement and/or Construction Agreement , energise such User's Plant and Apparatus (including OTSUA) specified in such notification.

Equipment Certificate	<p>A document issued by an Authorised Certifier for equipment used by a Power Generating Module, Demand Unit, Network Operators System, Non Embedded Customers System, Demand Facility or HVDC System. The Equipment Certificate defines the scope of its validity at a national or other level at which a specific value is selected from the range allowed at a European level. For the purpose of replacing specific parts of the compliance process, the Equipment Certificate may include models or equivalent information that have been verified against actual test results.</p>
Estimated Registered Data	<p>Those items of Standard Planning Data and Detailed Planning Data which either upon connection will become Registered Data, or which for the purposes of the Plant and/or Apparatus concerned as at the date of submission are Registered Data, but in each case which for the seven succeeding Financial Years will be an estimate of what is expected.</p>

<p>EU Code User</p>	<p>A User who is any of the following:-</p> <ul style="list-style-type: none"> (a) A Generator in respect of a Power Generating Module (excluding a DC Connected Power Park Module) or OTSDUA (in respect of an AC Offshore Transmission System) whose Main Plant and Apparatus is connected to the System on or after 27 April 2019 and who concluded Purchase Contracts for its Main Plant and Apparatus on or after 17 May 2018 (b) A Generator in respect of any Type C or Type D Power Generating Module which is the subject of a Substantial Modification which is effective on or after 27 April 2019. (c) A Generator in respect of any DC Connected Power Park Module whose Main Plant and Apparatus is connected to the System on or after 8 September 2019 and who had concluded Purchase Contracts for its Main Plant and Apparatus on or after 28 September 2018. (d) A Generator in respect of any DC Connected Power Park Module which is the subject of a Substantial Modification which is effective on or after 8 September 2019. (e) An HVDC System Owner or OTSDUA (in respect of a DC Offshore Transmission System including a Transmission DC Converter) whose Main Plant and Apparatus is connected to the System on or after 8 September 2019 and who had concluded Purchase Contracts for its Main Plant and Apparatus on or after 28 September 2018. (f) An HVDC System Owner or OTSDUA (in respect of a DC Offshore Transmission System including a Transmission DC Converter) whose HVDC System or DC Offshore Transmission System including a Transmission DC Converter is the subject of a Substantial Modification on or after 8 September 2019. (g) A User which the Authority has determined should be considered as an EU Code User. (h) A Network Operator whose entire distribution System was first connected to the National Electricity Transmission System on or after 18 August 2019 and who had placed Purchase Contracts for its Main Plant and Apparatus in respect of its entire distribution System on or after 7 September 2018. For the avoidance of doubt, a Network Operator will be an EU Code User if its entire distribution System is connected to the National Electricity Transmission System at EU Grid Supply Points only. (i) A Non Embedded Customer whose Main Plant and Apparatus at each EU Grid Supply Point was first connected to the National Electricity Transmission System on or after 18 August 2019 and who had placed Purchase Contracts for its Main Plant and Apparatus at each EU Grid Supply Point on or after 7 September 2018 or is the subject of a Substantial Modification on or after 18 August 2019.
<p>EU Generator</p>	<p>A Generator or OTSDUA who is also an EU Code User.</p>

EU Grid Supply Point	<p>A Grid Supply Point where either:-</p> <ul style="list-style-type: none"> (i) (a) the Network Operator or Non Embedded Customer had placed Purchase Contracts for all of its Plant and Apparatus at that Grid Supply Point on or after 7 September 2018, and (b) All of the Network Operator's or Non Embedded Customer's Plant and Apparatus at that Grid Supply Point was first connected to the Transmission System on or after 18 August 2019; or (ii) the Network Operator's or Non Embedded Customer's Plant and Apparatus at a Grid Supply Point is the subject of a Substantial Modification which is effective on or after 18 August 2019.
EU Transparency Availability Data	Such data as Customers and Generators are required to provide under Articles 7.1(a) and 7.1(b) and Articles 15.1(a), 15.1(b), 15.1(c), 15.1(d) of European Commission Regulation (EU) No. 543/2013 respectively (known as the Transparency Regulation), and which also forms part of DRC Schedule 6 (Users' Outage Data).
European Compliance Processes or ECP	That portion of the Grid Code which is identified as the European Compliance Processes .
European Connection Conditions or ECC	That portion of the Grid Code which is identified as the European Connection Conditions being applicable to EU Code Users .
European Regulation (EU) 2016/631	Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a Network Code on Requirements of Generators
European Regulation (EU) 2016/1388	Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection
European Regulation (EU) 2016/1447	Commission Regulation (EU) 2016/1447 of 26 August 2016 establishing a network code on requirements for Grid Connection of High Voltage Direct Current Systems and Direct Current-connected Power Park Modules
European Regulation (EU) 2017/1485	Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation
European Regulation (EU) 2017/2195	Commission Regulation (EU) 2017/2195 of 17 December 2017 establishing a guideline on electricity balancing
European Specification	A common technical specification, a British Standard implementing a European standard or a European technical approval. The terms "common technical specification", "European standard" and "European technical approval" shall have the meanings respectively ascribed to them in the Regulations .
Event	An unscheduled or unplanned (although it may be anticipated) occurrence on, or relating to, a System (including Embedded Power Stations) including, without limiting that general description, faults, incidents and breakdowns and adverse weather conditions being experienced.

Exciter	The source of the electrical power providing the field current of a synchronous machine.
Excitation System	The equipment providing the field current of a machine, including all regulating and control elements, as well as field discharge or suppression equipment and protective devices.
Excitation System No-Load Negative Ceiling Voltage	The minimum value of direct voltage that the Excitation System is able to provide from its terminals when it is not loaded, which may be zero or a negative value.
Excitation System Nominal Response	Shall have the meaning ascribed to that term in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992]. The time interval applicable is the first half-second of excitation system voltage response.
Excitation System On-Load Positive Ceiling Voltage	Shall have the meaning ascribed to the term 'Excitation system on load ceiling voltage' in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].
Excitation System No-Load Positive Ceiling Voltage	Shall have the meaning ascribed to the term 'Excitation system no load ceiling voltage' in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].
Exemptable	Has the meaning set out in the CUSC .
Existing AGR Plant	The following nuclear advanced gas cooled reactor plant (which was commissioned and connected to the Total System at the Transfer Date):- <ul style="list-style-type: none"> (a) Dungeness B (b) Hinkley Point B (c) Heysham 1 (d) Heysham 2 (e) Hartlepool (f) Hunterston B (g) Torness
Existing AGR Plant Flexibility Limit	In respect of each Genset within each Existing AGR Plant which has a safety case enabling it to so operate, 8 (or such lower number which when added to the number of instances of reduction of output as instructed by The Company in relation to operation in Frequency Sensitive Mode totals 8) instances of flexibility in any calendar year (or such lower or greater number as may be agreed by the Nuclear Installations Inspectorate and notified to The Company) for the purpose of assisting in the period of low System NRAPM and/or low Localised NRAPM provided that in relation to each Generating Unit each change in output shall not be required to be to a level where the output of the reactor is less than 80% of the reactor thermal power limit (as notified to The Company and which corresponds to the limit of reactor thermal power as contained in the "Operating Rules" or "Identified Operating Instructions" forming part of the safety case agreed with the Nuclear Installations Inspectorate).

Existing Gas Cooled Reactor Plant	Both Existing Magnox Reactor Plant and Existing AGR Plant .
Existing Magnox Reactor Plant	The following nuclear gas cooled reactor plant (which was commissioned and connected to the Total System at the Transfer Date):- <ul style="list-style-type: none"> (a) Calder Hall (b) Chapelcross (c) Dungeness A (d) Hinkley Point A (e) Oldbury-on-Severn (f) Bradwell (g) Sizewell A (h) Wylfa
Export and Import Limits	Those parameters listed in Appendix 1 to BC1 under the heading BM Unit Data – Export and Import Limits .
External Interconnection	Apparatus for the transmission of electricity to or from the National Electricity Transmission System or a User System into or out of an External System . For the avoidance of doubt, a single External Interconnection may comprise several circuits operating in parallel.
External Interconnection Circuit	Plant or Apparatus which comprises a circuit and which operates in parallel with another circuit and which forms part of the External Interconnection .
Externally Interconnected System Operator or EISO	A person who operates an External System which is connected to the National Electricity Transmission System or a User System by an External Interconnection .
External System	In relation to an Externally Interconnected System Operator means the transmission or distribution system which it owns or operates which is located outside the National Electricity Transmission System Operator Area any Apparatus or Plant which connects that system to the External Interconnection and which is owned or operated by such Externally Interconnected System Operator .
Fast Fault Current	A current delivered by a Power Park Module or HVDC System during and after a voltage deviation caused by an electrical fault within the System with the aim of identifying a fault by network Protection systems at the initial stage of the fault, supporting System voltage retention at a later stage of the fault and System voltage restoration after fault clearance.
Fault Current Interruption Time	The time interval from fault inception until the end of the break time of the circuit breaker (as declared by the manufacturers).
Fault Ride Through	The capability of Power Generating Modules (including DC Connected Power Park Modules) and HVDC Systems to be able to be able to remain connected to the System and operate through periods of low voltage at the Grid Entry Point or User System Entry Point caused by secured faults
Fast Start	A start by a Genset with a Fast Start Capability .

Fast Start Capability	The ability of a Genset to be Synchronised and Loaded up to full Load within 5 minutes.
Fast Track Criteria	A proposed Grid Code Modification Proposal that, if implemented, (a) would meet the Self-Governance Criteria ; and (b) is properly a housekeeping modification required as a result of some error or factual change, including but not limited to: (i) updating names or addresses listed in the Grid Code ; (ii) correcting any minor typographical errors; (iii) correcting formatting and consistency errors, such as paragraph numbering; or (iv) updating out of date references to other documents or paragraphs
Final Generation Outage Programme	An outage programme as agreed by The Company with each Generator and each Interconnector Owner at various stages through the Operational Planning Phase and Programming Phase which does not commit the parties to abide by it, but which at various stages will be used as the basis on which National Electricity Transmission System outages will be planned.
Final Operational Notification or FON	A notification from The Company to a Generator or DC Converter Station owner or HVDC System Owner or Network Operator or Non-Embedded Customer confirming that the User has demonstrated compliance: (a) with the Grid Code, (or where they apply, that relevant derogations have been granted), and (b) where applicable, with Appendices F1 to F5 of the Bilateral Agreement , in each case in respect of the Plant and Apparatus specified in such notification.
Final Physical Notification Data	Has the meaning set out in the BSC .
Final Report	A report prepared by the Test Proposer at the conclusion of a System Test for submission to The Company (if it did not propose the System Test) and other members of the Test Panel .
Financial Year	Bears the meaning given in Condition A1 (Definitions and Interpretation) of The Company's Transmission Licence .
Fixed Proposed Implementation Date	The proposed date(s) for the implementation of a Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification such date to be a specific date by reference to an assumed date by which a direction from the Authority approving the Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification is required in order for the Grid Code Modification Proposal or any Workgroup Alternative Grid Code Modification , if it were approved, to be implemented by the proposed date.

Flicker Severity (Long Term)	A value derived from 12 successive measurements of Flicker Severity (Short Term) (over a two hour period) and a calculation of the cube root of the mean sum of the cubes of 12 individual measurements, as further set out in Engineering Recommendation P28 as current at the Transfer Date .
Flicker Severity (Short Term)	A measure of the visual severity of flicker derived from the time series output of a flickermeter over a 10 minute period and as such provides an indication of the risk of Customer complaints.
Forecast Data	Those items of Standard Planning Data and Detailed Planning Data which will always be forecast.
Frequency	The number of alternating current cycles per second (expressed in Hertz) at which a System is running.
Governor Deadband	An interval used intentionally to make the frequency control unresponsive In the case of mechanical governor systems the Governor Deadband is the same as Frequency Response Insensitivity
Governor Insensitivity	The inherent feature of the control system specified as the minimum magnitude of change in the frequency or input signal that results in a change of output power or output signal
GSP Group	Has the meaning as set out in the BSC
Frequency Sensitive AGR Unit	Each Generating Unit in an Existing AGR Plant for which the Generator has notified The Company that it has a safety case agreed with the Nuclear Installations Inspectorate enabling it to operate in Frequency Sensitive Mode , to the extent that such unit is within its Frequency Sensitive AGR Unit Limit . Each such Generating Unit shall be treated as if it were operating in accordance with BC3.5.1 provided that it is complying with its Frequency Sensitive AGR Unit Limit .
Frequency Sensitive AGR Unit Limit	In respect of each Frequency Sensitive AGR Unit , 8 (or such lower number which when added to the number of instances of flexibility for the purposes of assisting in a period of low System or Localised NRAPM totals 8) instances of reduction of output in any calendar year as instructed by The Company in relation to operation in Frequency Sensitive Mode (or such greater number as may be agreed between The Company and the Generator), for the purpose of assisting with Frequency control, provided the level of operation of each Frequency Sensitive AGR Unit in Frequency Sensitive Mode shall not be outside that agreed by the Nuclear Installations Inspectorate in the relevant safety case.
Frequency Sensitive Mode	A Genset , or Type C Power Generating Module or Type D Power Generating Module or DC Connected Power Park Module or HVDC System operating mode which will result in Active Power output changing, in response to a change in System Frequency , in a direction which assists in the recovery to Target Frequency , by operating so as to provide Primary Response and/or Secondary Response and/or High Frequency Response .
Fuel Security Code	The document of that title designated as such by the Secretary of State , as from time to time amended.
Gas Turbine Unit	A Generating Unit driven by a gas turbine (for instance by an aero-engine).

Gas Zone Diagram	A single line diagram showing boundaries of, and interfaces between, gas-insulated HV Apparatus modules which comprise part, or the whole, of a substation at a Connection Site (or in the case of OTSDUW Plant and Apparatus, Transmission Interface Site), together with the associated stop valves and gas monitors required for the safe operation of the National Electricity Transmission System or the User System , as the case may be.
Gate Closure	Has the meaning set out in the BSC .
GB Code User	<p>A User in respect of:-</p> <ul style="list-style-type: none"> (a) A Generator or OTSDUA whose Main Plant and Apparatus is connected to the System before 27 April 2019, or who had concluded Purchase Contracts for its Main Plant and Apparatus before 17 May 2018, or whose Plant and Apparatus is not the subject of a Substantial Modification which is effective on or after 27 April 2019; or (b) A DC Converter Station owner whose Main Plant and Apparatus is connected to the System before 8 September 2019, or who had concluded Purchase Contracts for its Main Plant and Apparatus before 28 September 2018, or whose Plant and Apparatus is not the subject of a Substantial Modification which is effective on or after 8 September 2019; or (c) A Non Embedded Customer whose Main Plant and Apparatus was connected to the National Electricity Transmission System at a GB Grid Supply Point before 18 August 2019 or who had placed Purchase Contracts for its Main Plant and Apparatus before 7 September 2018 or that Non Embedded Customer is not the subject of a Substantial Modification which is effective on or after 18 August 2019.2018;or (d) A Network Operator whose entire distribution System was connected to the National Electricity Transmission System at one or more GB Grid Supply Points before 18 August 2019 or who had placed Purchase Contracts for its Main Plant and Apparatus in respect of its entire distribution System before 7 September 2018 or its entire distribution System is not the subject of a Substantial Modification which is effective on or after 18 August 2019. For the avoidance of doubt, a Network Operator would still be classed as a GB Code User where its entire distribution System was connected to the National Electricity Transmission System at one or more GB Grid Supply Points, even where that entire distribution System may have one or more EU Grid Supply Points but still comprises of GB Grid Supply Points.
GB Generator	A Generator , or OTSDUA , who is also a GB Code User .
GB Grid Supply Point	A Grid Supply Point which is not an EU Grid Supply Point .

GB Synchronous Area	The AC power System in Great Britain which connects User's, Transmission Licensee's and The Company whose AC Plant and Apparatus is considered to operate in synchronism with each other at each Connection Point or User System Entry Point and at the same System Frequency .
GCDF	Means the Grid Code Development Forum.
General Conditions or GC	That portion of the Grid Code which is identified as the General Conditions .
Generating Plant Demand Margin	The difference between Output Usable and forecast Demand .
Generating Unit	An Onshore Generating Unit and/or an Offshore Generating Unit which could also be part of a Power Generating Module .
Generating Unit Data	The Physical Notification, Export and Import Limits and Other Relevant Data only in respect of each Generating Unit (which could be part of a Power Generating Module): <ul style="list-style-type: none"> (a) which forms part of the BM Unit which represents that Cascade Hydro Scheme; (b) at an Embedded Exemptable Large Power Station, where the relevant Bilateral Agreement specifies that compliance with BC1 and/or BC2 is required: <ul style="list-style-type: none"> (i) to each Generating Unit, or (ii) to each Power Park Module where the Power Station comprises Power Park Modules
Generation Capacity	Has the meaning set out in the BSC .
Generation Planning Parameters	Those parameters listed in Appendix 2 of OC2 .
Generator	A person who generates electricity under licence or exemption under the Act acting in its capacity as a generator in Great Britain or Offshore . The term Generator includes a EU Generator and a GB Generator .
Generator Performance Chart	A diagram which shows the MW and Mvar capability limits within which a Generating Unit will be expected to operate under steady state conditions.
Genset	A Power Generating Module (including a DC Connected Power Park Module), Generating Unit, Power Park Module or CCGT Module at a Large Power Station or any Power Generating Module (including a DC Connected Power Park Module), Generating Unit, Power Park Module or CCGT Module which is directly connected to the National Electricity Transmission System .
Good Industry Practice	The exercise of that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances.
Governance Rules or GR	That portion of the Grid Code which is identified as the Governance Rules .

Great Britain or GB	The landmass of England and Wales and Scotland, including internal waters.
Grid Code Fast Track Proposals	A proposal to modify the Grid Code which is raised pursuant to GR.26 and has not yet been approved or rejected by the Grid Code Review Panel .
Grid Code Modification Fast Track Report	A report prepared pursuant to GR.26
Grid Code Modification Register	Has the meaning given in GR.13.1.
Grid Code Modification Report	Has the meaning given in GR.22.1.
Grid Code Modification Procedures	The procedures for the modification of the Grid Code (including the implementation of Approved Modifications) as set out in the Governance Rules .
Grid Code Modification Proposal	A proposal to modify the Grid Code which is not yet rejected pursuant to GR.15.5 or GR.15.6 and has not yet been implemented.
Grid Code Modification Self- Governance Report	Has the meaning given in GR.24.5
Grid Code Objectives	Means the objectives referred to in Paragraph 1b of Standard Condition C14 of The Company's Transmission Licence .
Grid Code Review Panel or Panel	The panel with the functions set out in GR.1.2.
Grid Code Review Panel Recommendation Vote	The vote of Panel Members undertaken by the Panel Chairman in accordance with Paragraph GR.22.4 as to whether in their view they believe each proposed Grid Code Modification Proposal , or Workgroup Alternative Grid Code Modification would better facilitate achievement of the Grid Code Objective(s) and so should be made.
Grid Code Review Panel Self-Governance Vote	The vote of Panel Members undertaken by the Panel Chairman in accordance with GR.24.9 as to whether they believe each proposed Grid Code Modification Proposal, as compared with the then existing provisions of the Grid Code and any Workgroup Alternative Grid Code Modification set out in the Grid Code Modification Self- Governance Report , would better facilitate achievement of the Grid Code Objective(s) .
Grid Code Self-Governance Proposals	Grid Code Modification Proposals which satisfy the Self Governance Criteria .
Grid Entry Point	An Onshore Grid Entry Point or an Offshore Grid Entry Point .
Grid Supply Point	A point of supply from the National Electricity Transmission System to Network Operators or Non-Embedded Customers which could be a GB Grid Supply Point or an EU Grid Supply Point .

Group	Those National Electricity Transmission System sub-stations bounded solely by the faulted circuit(s) and the overloaded circuit(s) excluding any third party connections between the Group and the rest of the National Electricity Transmission System , the faulted circuit(s) being a Secured Event .
Headroom	The Power Available (in MW) less the actual Active Power exported from the Power Park Module (in MW).
High Frequency Response	An automatic reduction in Active Power output in response to an increase in System Frequency above the Target Frequency (or such other level of Frequency as may have been agreed in an Ancillary Services Agreement). This reduction in Active Power output must be in accordance with the provisions of the relevant Ancillary Services Agreement which will provide that it will be released increasingly with time over the period 0 to 10 seconds from the time of the Frequency increase on the basis set out in the Ancillary Services Agreement and fully achieved within 10 seconds of the time of the start of the Frequency increase and it must be sustained at no lesser reduction thereafter. The interpretation of the High Frequency Response to a + 0.5 Hz frequency change is shown diagrammatically in Figure CC.A.3.3.
High Voltage or HV	For E&W Transmission Systems , a voltage exceeding 650 volts. For Scottish Transmission Systems , a voltage exceeding 1000 volts.
Houseload Operation	Operation which ensures that a Power Station is able to continue to supply its in-house load in the event of System faults resulting in Power-Generating Modules being disconnected from the System and tripped onto their auxiliary supplies
HV Connections	Apparatus connected at the same voltage as that of the National Electricity Transmission System , including Users' circuits, the higher voltage windings of Users' transformers and associated connection Apparatus .
HVDC Converter	Any EU Code User Apparatus used to convert alternating current electricity to direct current electricity, or vice versa. An HVDC Converter is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, reactors, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion. In a bipolar arrangement, an HVDC Converter represents the bipolar configuration.
HVDC Converter Station	Part of an HVDC System which consists of one or more HVDC Converters installed in a single location together with buildings, reactors, filters reactive power devices, control, monitoring, protective, measuring and auxiliary equipment.
HVDC Equipment	Collectively means an HVDC System and a DC Connected Power Park Module and a Remote End HVDC Converter Station .
HVDC Interface Point	A point at which HVDC Plant and Apparatus is connected to an AC System at which technical specifications affecting the performance of the Plant and Apparatus can be prescribed.
HVDC System	An electrical power system which transfers energy in the form of high voltage direct current between two or more alternating current (AC) buses and comprises at least two HVDC Converter Stations with DC Transmission lines or cables between the HVDC Converter Stations .
HVDC System Owner	A party who owns and is responsible for an HVDC System . For the avoidance of doubt a DC Connected Power Park Module owner would be treated as a Generator .

HP Turbine Power Fraction	Ratio of steady state mechanical power delivered by the HP turbine to the total steady state mechanical power delivered by the total steam turbine at Registered Capacity or Maximum Capacity .
IEC	International Electrotechnical Commission.
IEC Standard	A standard approved by the International Electrotechnical Commission.
Implementation Date	Is the date and time for implementation of an Approved Modification as specified in accordance with Paragraph GR.25.3.
Implementing Safety Co-ordinator	The Safety Co-ordinator implementing Safety Precautions .
Import Usable	That portion of Registered Import Capacity which is expected to be available and which is not unavailable due to a Planned Outage .
Incident Centre	A centre established by The Company or a User as the focal point in The Company or in that User , as the case may be, for the communication and dissemination of information between the senior management representatives of The Company , or of that User , as the case may be, and the relevant other parties during a Joint System Incident in order to avoid overloading The Company's , or that User's , as the case may be, existing operational/control arrangements.
Independent Back-Up Protection	A Back-Up Protection system which utilises a discrete relay, different current transformers and an alternate operating principle to the Main Protection systems(s) such that it can operate autonomously in the event of a failure of the Main Protection .
Independent Main Protection	A Main Protection system which utilises a physically discrete relay and different current transformers to any other Main Protection .
Indicated Constraint Boundary Margin	The difference between a constraint boundary transfer limit and the difference between the sum of BM Unit Maximum Export Limits and the forecast of local Demand within the constraint boundary.
Indicated Imbalance	The difference between the sum of Physical Notifications for BM Units comprising Generating Units or CCGT Modules or Power Generating Modules and the forecast of Demand for the whole or any part of the System .
Indicated Margin	The difference between the sum of BM Unit Maximum Export Limits submitted and the forecast of Demand for the whole or any part of the System
Installation Document	A simple structured document containing information about a Type A Power Generating Module or a Demand Unit , with demand response connected below 1000 V, and confirming its compliance with the relevant requirements
Instructor Facilities	A device or system which gives certain Transmission Control Centre instructions with an audible or visible alarm, and incorporates the means to return message acknowledgements to the Transmission Control Centre

Integral Equipment Test or IET	A test on equipment, associated with Plant and/or Apparatus , which takes place when that Plant and/or Apparatus forms part of a Synchronised System and which, in the reasonable judgement of the person wishing to perform the test, may cause an Operational Effect .
Intellectual Property" or "IPRs	Patents, trade marks, service marks, rights in designs, trade names, copyrights and topography rights (whether or not any of the same are registered and including applications for registration of any of the same) and rights under licences and consents in relation to any of the same and all rights or forms of protection of a similar nature or having equivalent or similar effect to any of the same which may subsist anywhere in the world.
Interconnection Agreement	An agreement made between The Company and an Externally Interconnected System Operator and/or an Interconnector User and/or other relevant persons for the External Interconnection relating to an External Interconnection and/or an agreement under which an Interconnector User can use an External Interconnection .
Interconnector Export Capacity	In relation to an External Interconnection means the (daily or weekly) forecast value (in MW) at the time of the (daily or weekly) peak demand, of the maximum level at which the External Interconnection can export to the Grid Entry Point .
Interconnector Import Capacity	In relation to an External Interconnection means the (daily or weekly) forecast value (in MW) at the time of the (daily or weekly) peak demand of the maximum level at which the External Interconnection can import from the Grid Entry Point .
Interconnector Owner	Has the meaning given to the term in the Connection and Use of System Code .
Interconnector User	Has the meaning set out in the BSC .
Interface Agreement	Has the meaning set out in the CUSC .
Interface Point	As the context admits or requires either; (a) the electrical point of connection between an Offshore Transmission System and an Onshore Transmission System , or (b) the electrical point of connection between an Offshore Transmission System and a Network Operator's User System .
Interface Point Capacity	The maximum amount of Active Power transferable at the Interface Point as declared by a User under the OTSDUW Arrangements expressed in whole MW.
Interface Point Target Voltage/Power factor	The nominal target voltage/power factor at an Interface Point which a Network Operator requires The Company to achieve by operation of the relevant Offshore Transmission System .

<p>Interim Operational Notification or ION</p>	<p>A notification from The Company to a Generator or DC Converter Station owner or HVDC System Operator or Network Operator or Non Embedded Customer acknowledging that the User has demonstrated compliance, except for the Unresolved Issues;</p> <p>(a) with the Grid Code, and</p> <p>(b) where applicable, with Appendices F1 to F5 of the Bilateral Agreement,</p> <p>in each case in respect of the Plant and Apparatus (including OTSUA) specified in such notification and provided that in the case of the OTSDUW Arrangements such notification shall be provided to a Generator in two parts dealing with the OTSUA and Generator's Plant and Apparatus (called respectively "Interim Operational Notification Part A" or "ION A" and "Interim Operational Notification Part B" or "ION B") as provided for in the CP.</p>
<p>Intermittent Power Source</p>	<p>The primary source of power for a Generating Unit or Power Generating Module that can not be considered as controllable, e.g. wind, wave or solar.</p>
<p>Intertripping</p>	<p>(a) The tripping of circuit-breaker(s) by commands initiated from Protection at a remote location independent of the state of the local Protection; or</p> <p>(b) Operational Intertripping.</p>
<p>Intertrip Apparatus</p>	<p>Apparatus which performs Intertripping.</p>
<p>IP Turbine Power Fraction</p>	<p>Ratio of steady state mechanical power delivered by the IP turbine to the total steady state mechanical power delivered by the total steam turbine at Registered Capacity or Maximum Capacity.</p>
<p>Isolating Device</p>	<p>A device for achieving Isolation.</p>

Isolation	<p>The disconnection of HV Apparatus (as defined in OC8A.1.6.2 and OC8B.1.7.2) from the remainder of the System in which that HV Apparatus is situated by either of the following:</p> <p>(a) an Isolating Device maintained in an isolating position. The isolating position must either be:</p> <ul style="list-style-type: none"> (i) maintained by immobilising and Locking the Isolating Device in the isolating position and affixing a Caution Notice to it. Where the Isolating Device is Locked with a Safety Key, the Safety Key must be secured in a Key Safe and the Key Safe Key must be, where reasonably practicable, given to the authorised site representative of the Requesting Safety Co-Ordinator and is to be retained in safe custody. Where not reasonably practicable the Key Safe Key must be retained by the authorised site representative of the Implementing Safety Co-ordinator in safe custody; or (ii) maintained and/or secured by such other method which must be in accordance with the Local Safety Instructions of The Company or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be; or <p>(b) an adequate physical separation which must be in accordance with and maintained by the method set out in the Local Safety Instructions of The Company or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be.</p>
Joint BM Unit Data	<p>Has the meaning set out in the BSC.</p>
Joint System Incident	<p>An Event wherever occurring (other than on an Embedded Medium Power Station or an Embedded Small Power Station) which, in the opinion of The Company or a User, has or may have a serious and/or widespread effect, in the case of an Event on a User(s) System(s) (other than on an Embedded Medium Power Station or Embedded Small Power Station), on the National Electricity Transmission System, and in the case of an Event on the National Electricity Transmission System, on a User(s) System(s) (other than on an Embedded Medium Power Station or Embedded Small Power Station).</p>
Key Safe	<p>A device for the secure retention of keys.</p>
Key Safe Key	<p>A key unique at a Location capable of operating a lock, other than a control lock, on a Key Safe.</p>

<p>Large Power Station</p>	<p>A Power Station which is</p> <p>(a) directly connected to:</p> <ul style="list-style-type: none"> (i) The Company's Transmission System where such Power Station has a Registered Capacity of 100MW or more; or (ii) SPT's Transmission System where such Power Station has a Registered Capacity of 30MW or more; or (iii) SHETL's Transmission System where such Power Station has a Registered Capacity of 10MW or more; or (iv) an Offshore Transmission System where such Power Station has a Registered Capacity of 10MW or more; <p>or,</p> <p>(b) Embedded within a User System (or part thereof) where such User System (or part thereof) is connected under normal operating conditions to:</p> <ul style="list-style-type: none"> (i) The Company's Transmission System and such Power Station has a Registered Capacity of 100MW or more; or (ii) SPT's Transmission System and such Power Station has a Registered Capacity of 30MW or more; or (iii) SHETL's Transmission System and such Power Station has a Registered Capacity of 10MW or more; <p>or,</p> <p>(c) Embedded within a User System (or part thereof) where the User System (or part thereof) is not connected to the National Electricity Transmission System, although such Power Station is in:</p> <ul style="list-style-type: none"> (i) The Company's Transmission Area where such Power Station has a Registered Capacity of 100MW or more; or (ii) SPT's Transmission Area where such Power Station has a Registered Capacity of 30MW or more; or (iii) SHETL's Transmission Area where such Power Station has a Registered Capacity of 10MW or more; <p>For the avoidance of doubt a Large Power Station could comprise of Type A, Type B, Type C or Type D Power Generating Modules.</p>
<p>Legal Challenge</p>	<p>Where permitted by law a judicial review in respect of the Authority's decision to approve or not to approve a Grid Code Modification Proposal.</p>
<p>Licence</p>	<p>Any licence granted to The Company or a Relevant Transmission Licensee or a User, under Section 6 of the Act.</p>
<p>Licence Standards</p>	<p>Those standards set out or referred to in Condition C17 of The Company's Transmission Licence and/or Condition D3 and/or Condition E16 of a Relevant Transmission Licensee's Transmission Licence.</p>

Limited Frequency Sensitive Mode	A mode whereby the operation of the Genset or Power Generating Module (or DC Converter at a DC Converter Station or HVDC Systems exporting Active Power to the Total System) is Frequency insensitive except when the System Frequency exceeds 50.4Hz, from which point Limited High Frequency Response must be provided. For Power Generating Modules (including DC Connected Power Park Modules) and HVDC Systems , operation in Limited Frequency Sensitive Mode would require Limited Frequency Sensitive Mode – Overfrequency (LFSM-O) capability and Limited Frequency Sensitive Mode – Underfrequency (LFSM-U) capability.
Limited Frequency Sensitive Mode – Overfrequency or LFSM-O	A Power Generating Module (including a DC Connected Power Park Module) or HVDC System operating mode which will result in Active Power output reduction in response to a change in System Frequency above a certain value.
Limited Frequency Sensitive Mode – Underfrequency or LFSM-U	A Power Generating Module (including a DC Connected Power Park Module) or HVDC System operating mode which will result in Active Power output increase in response to a change in System Frequency below a certain value.
Limited High Frequency Response	A response of a Genset (or DC Converter at a DC Converter Station exporting Active Power to the Total System) to an increase in System Frequency above 50.4Hz leading to a reduction in Active Power in accordance with the provisions of BC3.7.2.1
Limited Operational Notification or LON	A notification from The Company to a Generator or DC Converter Station owner or HVDC System Owner or Network Operator or Non-Embedded Customer stating that the User’s Plant and/or Apparatus specified in such notification may be, or is, unable to comply: <p>(a) with the provisions of the Grid Code specified in the notice, and</p> <p>(b) where applicable, with Appendices F1 to F5 of the Bilateral Agreement ,</p> and specifying the Unresolved Issues .
Load	The Active, Reactive or Apparent Power , as the context requires, generated, transmitted or distributed.
Loaded	Supplying electrical power to the System .
Load Factor	The ratio of the actual output of a Generating Unit or Power Generating Module to the possible maximum output of that Generating Unit or Power Generating Module .
Load Management Block	A block of Demand controlled by a Supplier or other party through the means of radio teleswitching or by some other means.
Local Joint Restoration Plan	A plan produced under OC9.4.7.12 detailing the agreed method and procedure by which a Genset at a Black Start Station (possibly with other Gensets at that Black Start Station) will energise part of the Total System and meet complementary blocks of local Demand so as to form a Power Island . <p>In Scotland, the plan may also: cover more than one Black Start Station; include Gensets other than those at a Black Start Station and cover the creation of one or more Power Islands.</p>

Local Safety Instructions	For safety co-ordination in England and Wales, instructions on each User Site and Transmission Site , approved by The Company's or User's relevant manager, setting down the methods of achieving the objectives of The Company's or the User's Safety Rules , as the case may be, to ensure the safety of personnel carrying out work or testing on Plant and/or Apparatus on which his Safety Rules apply and, in the case of a User , any other document(s) on a User Site which contains rules with regard to maintaining or securing the isolating position of an Isolating Device , or maintaining a physical separation or maintaining or securing the position of an Earthing Device .
Local Switching Procedure	A procedure produced under OC7.6 detailing the agreed arrangements in respect of carrying out of Operational Switching at Connection Sites and parts of the National Electricity Transmission System adjacent to those Connection Sites .
Localised Negative Reserve Active Power Margin or Localised NRAPM	That margin of Active Power sufficient to allow transfers to and from a System Constraint Group (as the case may be) to be contained within such reasonable limit as The Company may determine.
Location	Any place at which Safety Precautions are to be applied.
Locked	A condition of HV Apparatus that cannot be altered without the operation of a locking device.
Locking	The application of a locking device which enables HV Apparatus to be Locked .
Low Frequency Relay	Has the same meaning as Under Frequency Relay .
Low Voltage or LV	For E&W Transmission Systems a voltage not exceeding 250 volts. For Scottish Transmission Systems , a voltage exceeding 50 volts but not exceeding 1000 volts.
LV Side of the Offshore Platform	Unless otherwise specified in the Bilateral Agreement , the busbar on the Offshore Platform (typically 33kV) at which the relevant Offshore Grid Entry Point is located.
Main Plant and Apparatus	<p>In respect of a Power Station (including Power Stations comprising of DC Connected Power Park Modules) is one or more of the principal items of Plant or Apparatus required to convert the primary source of energy into electricity.</p> <p>In respect of HVDC Systems or DC Converters or Transmission DC Converters is one of the principal items of Plant or Apparatus used to convert high voltage direct current to high voltage alternating current or vice versa.</p> <p>In respect of a Network Operator's equipment or a Non-Embedded Customer's equipment, is one of the principal items of Plant or Apparatus required to facilitate the import or export of Active Power or Reactive Power to or from a Network Operator's or Non Embedded Customer's System.</p>

Main Protection	A Protection system which has priority above other Protection in initiating either a fault clearance or an action to terminate an abnormal condition in a power system.
Manufacturer's Data & Performance Report	A report submitted by a manufacturer to The Company relating to a specific version of a Power Park Unit demonstrating the performance characteristics of such Power Park Unit in respect of which The Company has evaluated its relevance for the purposes of the Compliance Processes .
Manufacturer's Test Certificates	A certificate prepared by a manufacturer which demonstrates that its Power Generating Module has undergone appropriate tests and conforms to the performance requirements expected by The Company in satisfying its compliance requirements and thereby satisfies the appropriate requirements of the Grid Code and Bilateral Agreement .
Market Operation Data Interface System (MODIS)	A computer system operated by The Company and made available for use by Customers connected to or using the National Electricity Transmission System for the purpose of submitting EU Transparency Availability Data to The Company .
Market Suspension Threshold	Has the meaning given to the term 'Market Suspension Threshold' in Section G of the BSC .
Material Effect	An effect causing The Company or a Relevant Transmission Licensee to effect any works or to alter the manner of operation of Transmission Plant and/or Transmission Apparatus at the Connection Site (which term shall, in this definition and in the definition of " Modification " only, have the meaning ascribed thereto in the CUSC) or the site of connection or a User to effect any works or to alter the manner of operation of its Plant and/or Apparatus at the Connection Site or the site of connection which in either case involves that party in expenditure of more than £10,000.
Materially Affected Party	Any person or class of persons designated by the Authority as such.
Maximum Export Capability	The maximum continuous Active Power that a Network Operator or Non Embedded Customer can export to the Transmission System at the Grid Supply Point , as specified in the Bilateral Agreement .
Maximum Export Capacity	The maximum continuous Apparent Power expressed in MVA and maximum continuous Active Power expressed in MW which can flow from an Offshore Transmission System connected to a Network Operator's User System , to that User System .
Maximum Capacity or P_{max}	The maximum continuous Active Power which a Power Generating Module can produce, less any demand associated solely with facilitating the operation of that Power Generating Module and not fed into the System .
Maximum Generation Service or MGS	A service utilised by The Company in accordance with the CUSC and the Balancing Principles Statement in operating the Total System .
Maximum Generation Service Agreement	An agreement between a User and The Company for the payment by The Company to that User in respect of the provision by such User of a Maximum Generation Service .

Maximum HVDC Active Power Transmission Capacity (PHmax)	The maximum continuous Active Power which an HVDC System can exchange with the network at each Grid Entry Point or User System Entry Point as specified in the Bilateral Agreement or as agreed between The Company and the HVDC System Owner .
Maximum Import Capability	The maximum continuous Active Power that a Network Operator or Non Embedded Customer can import from the Transmission System at the Grid Supply Point , as specified in the Bilateral Agreement .
Maximum Import Capacity	The maximum continuous Apparent Power expressed in MVA and maximum continuous Active Power expressed in MW which can flow to an Offshore Transmission System connected to a Network Operator's User System , from that User System .
Medium Power Station	<p>A Power Station which is</p> <p>(a) directly connected to The Company's Transmission System where such Power Station has a Registered Capacity of 50MW or more but less than 100MW;</p> <p>or,</p> <p>(b) Embedded within a User System (or part thereof) where such User System (or part thereof) is connected under normal operating conditions to The Company's Transmission System and such Power Station has a Registered Capacity of 50MW or more but less than 100MW;</p> <p>or,</p> <p>(c) Embedded within a User System (or part thereof) where the User System (or part thereof) is not connected to the National Electricity Transmission System, although such Power Station is in The Company's Transmission Area and such Power Station has a Registered Capacity of 50MW or more but less than 100MW.</p> <p>For the avoidance of doubt a Medium Power Station could comprise of Type A, Type B, Type C or Type D Power Generating Modules.</p>
Medium Voltage or MV	For E&W Transmission Systems a voltage exceeding 250 volts but not exceeding 650 volts.
Mills	Milling plant which supplies pulverised fuel to the boiler of a coal fired Power Station .
Minimum Generation	The minimum output (in whole MW) which a Genset can generate or DC Converter at a DC Converter Station can import or export to the Total System under stable operating conditions, as registered with The Company under the PC (and amended pursuant to the PC). For the avoidance of doubt, the output may go below this level as a result of operation in accordance with BC3.7.
Minimum Active Power Transmission Capacity (PHmin)	The minimum continuous Active Power which an HVDC System can exchange with the System at each Grid Entry Point or User System Entry Point as specified in the Bilateral Agreement or as agreed between The Company and the HVDC System Owner

Minimum Import Capacity	The minimum input (in whole MW) into a DC Converter at a DC Converter Station or HVDC System at an HVDC Converter (in any of its operating configurations) at the Onshore Grid Entry Point (or in the case of an Embedded DC Converter or an Embedded HVDC Converter at the User System Entry Point) at which a DC Converter or HVDC Converter can operate in a stable manner, as registered with The Company under the PC (and amended pursuant to the PC).
Minimum Regulating Level	The minimum Active Power , as specified in the Bilateral Agreement or as agreed between The Company and the Generator , down to which the Power Generating Module can control Active Power ;
Minimum Stable Operating Level	The minimum Active Power , as specified in the Bilateral Agreement or as agreed between The Company and the Generator , at which the Power Generating Module can be operated stably for an unlimited time.
Modification	Any actual or proposed replacement, renovation, modification, alteration or construction by or on behalf of a User or The Company to either that User's Plant or Apparatus or Transmission Plant or Apparatus , as the case may be, or the manner of its operation which has or may have a Material Effect on The Company or a User , as the case may be, at a particular Connection Site .
Mothballed DC Connected Power Park Module	A DC Connected Power Park Module that has previously generated which the Generator plans not to use to generate for the remainder of the current Financial Year but which could be returned to service.
Mothballed DC Converter at a DC Converter Station	A DC Converter at a DC Converter Station that has previously imported or exported power which the DC Converter Station owner plans not to use to import or export power for the remainder of the current Financial Year but which could be returned to service.
Mothballed HVDC System	An HVDC System that has previously imported or exported power which the HVDC System Owner plans not to use to import or export power for the remainder of the current Financial Year but which could be returned to service.
Mothballed HVDC Converter	An HVDC Converter which is part of an HVDC System that has previously imported or exported power which the HVDC System Owner plans not to use to import or export power for the remainder of the current Financial Year but which could be returned to service.
Mothballed Generating Unit	A Generating Unit that has previously generated which the Generator plans not to use to generate for the remainder of the current Financial Year but which could be returned to service. For the avoidance of doubt a Mothballed Generating Unit could be part of a Power Generating Module .
Mothballed Power Generating Module	A Power Generating Module that has previously generated which the Generator plans not to use to generate for the remainder of the current Financial Year but which could be returned to service.
Mothballed Power Park Module	A Power Park Module that has previously generated which the Generator plans not to use to generate for the remainder of the current Financial Year but which could be returned to service.

Multiple Point of Connection	A double (or more) Point of Connection , being two (or more) Points of Connection interconnected to each other through the User's System .
MSID	Has the meaning a set out in the BSC , covers Metering System Identifier
National Demand	The amount of electricity supplied from the Grid Supply Points plus:- <ul style="list-style-type: none"> • that supplied by Embedded Large Power Stations, and • National Electricity Transmission System Losses, minus:- <ul style="list-style-type: none"> • the Demand taken by Station Transformers and Pumped Storage Units' and, for the purposes of this definition, does not include:- <ul style="list-style-type: none"> • any exports from the National Electricity Transmission System across External Interconnections.
National Electricity Transmission System	The Onshore Transmission System and, where owned by Offshore Transmission Licensees , Offshore Transmission Systems .
National Electricity Transmission System Demand	The amount of electricity supplied from the Grid Supply Points plus:- <ul style="list-style-type: none"> • that supplied by Embedded Large Power Stations, and • exports from the National Electricity Transmission System across External Interconnections, and • National Electricity Transmission System Losses, and, for the purposes of this definition, includes:- <ul style="list-style-type: none"> • the Demand taken by Station Transformers and Pumped Storage Units.
National Electricity Transmission System Losses	The losses of electricity incurred on the National Electricity Transmission System .
National Electricity Transmission System Operator Area	Has the meaning set out in Schedule 1 of The Company's Transmission Licence .
National Electricity Transmission System Study Network Data File	A computer file produced by The Company which in The Company's view provides an appropriate representation of the National Electricity Transmission System for a specific point in time. The computer file will contain information and data on Demand on the National Electricity Transmission System and on Large Power Stations including Genset power output consistent with Output Usable and The Company's view of prevailing system conditions.

National Electricity Transmission System Warning	<p>A warning issued by The Company to Users (or to certain Users only) in accordance with OC7.4.8.2, which provides information relating to System conditions or Events and is intended to :</p> <ul style="list-style-type: none"> (a) alert Users to possible or actual Plant shortage, System problems and/or Demand reductions; (b) inform of the applicable period; (c) indicate intended consequences for Users; and (d) enable specified Users to be in a state of readiness to receive instructions from The Company.
National Electricity Transmission System Warning - Demand Control Imminent	<p>A warning issued by The Company, in accordance with OC7.4.8.7, which is intended to provide short term notice, where possible, to those Users who are likely to receive Demand reduction instructions from The Company within 30 minutes.</p>
National Electricity Transmission System Warning - High Risk of Demand Reduction	<p>A warning issued by The Company, in accordance with OC7.4.8.6, which is intended to alert recipients that there is a high risk of Demand reduction being implemented and which may normally result from an Electricity Margin Notice.</p>
National Electricity Transmission System Warning - Electricity Margin Notice	<p>A warning issued by The Company, in accordance with OC7.4.8.5, which is intended to invite a response from and to alert recipients to a decreased System Margin.</p>
National Electricity Transmission System Warning - Risk of System Disturbance	<p>A warning issued by The Company, in accordance with OC7.4.8.8, which is intended to alert Users of the risk of widespread and serious System disturbance which may affect Users.</p>
Network Data	<p>The data to be provided by The Company to Users in accordance with the PC, as listed in Part 3 of the Appendix to the PC.</p>
Network Operator	<p>A person with a User System directly connected to the National Electricity Transmission System to which Customers and/or Power Stations (not forming part of the User System) are connected, acting in its capacity as an operator of the User System, but shall not include a person acting in the capacity of an Externally Interconnected System Operator or a Generator in respect of OTSUA.</p>
No-Load Field Voltage	<p>Shall have the meaning ascribed to that term in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].</p>
No System Connection	<p>As defined in OC8A.1.6.2 and OC8B.1.7.2</p>
Notification of User's Intention to Operate	<p>A notification from a Network Operator or Non-Embedded Customer to NGET informing NGET of the date upon which any Network Operator's or Non-Embedded Customer's Plant and Apparatus at an EU Grid Supply Point will be ready to be connected to the Transmission System.</p>

Notification of User's Intention to Synchronise	A notification from a Generator or DC Converter Station owner or HVDC System Owner to The Company informing The Company of the date upon which any OTSUA , a Generating Unit(s) , CCGT Module(s) , Power Park Module(s) , Power Generating Module(s) (including a DC Connected Power Park Module(s)), HVDC System or DC Converter(s) will be ready to be Synchronised to the Total System .
Non-Dynamic Frequency Response Service	A Demand Response Service in which the Demand is controlled through discrete switching rather than through continuous load changes in response to System Frequency changes.
Non-Embedded Customer	A Customer in Great Britain , except for a Network Operator acting in its capacity as such, receiving electricity direct from the Onshore Transmission System irrespective of from whom it is supplied.
Non-Synchronous Generating Unit	An Onshore Non-Synchronous Generating Unit or Offshore Non-Synchronous Generating Unit which could form part of a Power Generating Module .
Normal CCGT Module	A CCGT Module other than a Range CCGT Module .
Novel Unit	A tidal, wave, wind, geothermal, or any similar, Generating Unit .
OC9 De-synchronised Island Procedure	Has the meaning set out in OC9.5.4.
Offshore	Means wholly or partly in Offshore Waters , and when used in conjunction with another term and not defined means that the associated term is to be read accordingly.
Offshore DC Converter	Any User Apparatus located Offshore used to convert alternating current electricity to direct current electricity, or vice versa. An Offshore DC Converter is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion.
Offshore HVDC Converter	Any User Apparatus located Offshore used to convert alternating current electricity to direct current electricity, or vice versa. An Offshore HVDC Converter is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion.
Offshore Development Information Statement	A statement prepared by The Company in accordance with Special Condition C4 of The Company's Transmission Licence .
Offshore Generating Unit	Unless otherwise provided in the Grid Code, any Apparatus located Offshore which produces electricity, including, an Offshore Synchronous Generating Unit and Offshore Non-Synchronous Generating Unit which could also be part of a Power Generating Module ..

Offshore Grid Entry Point	<p>In the case of:-</p> <ul style="list-style-type: none"> (a) an Offshore Generating Unit or an Offshore Synchronous Power Generating Module or an Offshore DC Converter or an Offshore HVDC Converter, as the case may be, which is directly connected to an Offshore Transmission System, the point at which it connects to that Offshore Transmission System, or; (b) an Offshore Power Park Module which is directly connected to an Offshore Transmission System, the point where one Power Park String (registered by itself as a Power Park Module) or the collection of points where a number of Offshore Power Park Strings (registered as a single Power Park Module) connects to that Offshore Transmission System, or; (c) an External Interconnection which is directly connected to an Offshore Transmission System, the point at which it connects to that Offshore Transmission System.
Offshore Non-Synchronous Generating Unit	<p>An Offshore Generating Unit that is not an Offshore Synchronous Generating Unit including for the avoidance of doubt a Power Park Unit located Offshore.</p>
Offshore Platform	<p>A single structure comprising of Plant and Apparatus located Offshore which includes one or more Offshore Grid Entry Points.</p>
Offshore Power Park Module	<p>A collection of one or more Offshore Power Park Strings (registered as a Power Park Module under the PC). There is no limit to the number of Power Park Strings within the Power Park Module, so long as they either:</p> <ul style="list-style-type: none"> (a) connect to the same busbar which cannot be electrically split; or (b) connect to a collection of directly electrically connected busbars of the same nominal voltage and are configured in accordance with the operating arrangements set out in the relevant Bilateral Agreement.
Offshore Power Park String	<p>A collection of Offshore Generating Units or Power Park Units that are powered by an Intermittent Power Source, joined together by cables forming part of a User System with a single point of connection to an Offshore Transmission System. The connection to an Offshore Transmission System may include a DC Converter or HVDC Converter.</p>
Offshore Synchronous Generating Unit	<p>An Offshore Generating Unit which could be part of an Offshore Synchronous Power Generating Module in which, under all steady state conditions, the rotor rotates at a mechanical speed equal to the electrical frequency of the National Electricity Transmission System divided by the number of pole pairs of the Generating Unit.</p>
Offshore Synchronous Power Generating Module	<p>A Synchronous Power Generating Module located Offshore.</p>
Offshore Tender Process	<p>The process followed by the Authority to make, in prescribed cases, a determination on a competitive basis of the person to whom an offshore transmission licence is to be granted.</p>

Offshore Transmission Distribution Connection Agreement	An agreement entered into by The Company and a Network Operator in respect of the connection to and use of a Network Operator's User System by an Offshore Transmission System .
Offshore Transmission Licensee	Such person in relation to whose Transmission Licence the standard conditions in Section E (offshore transmission owner standard conditions) of such Transmission Licence have been given effect, or any person in that prospective role who has acceded to the STC .
Offshore Transmission System	A system consisting (wholly or mainly) of high voltage electric lines and used for the transmission of electricity from one Power Station to a sub-station or to another Power Station or between sub-stations, and includes any Plant and Apparatus (including OTSUA) and meters in connection with the transmission of electricity but does not include any Remote Transmission Assets . An Offshore Transmission System extends from the Interface Point , or the Offshore Grid Entry Point(s) and may include Plant and Apparatus located Onshore and Offshore and, where the context permits, references to the Offshore Transmission System includes OTSUA .
Offshore Transmission System Development User Works or OTSDUW	In relation to a particular User where the OTSDUW Arrangements apply, means those activities and/or works for the design, planning, consenting and/or construction and installation of the Offshore Transmission System to be undertaken by the User as identified in Part 2 of Appendix I of the relevant Construction Agreement .
Offshore Transmission System User Assets or OTSUA	OTSDUW Plant and Apparatus constructed and/or installed by a User under the OTSDUW Arrangements which form an Offshore Transmission System that once transferred to a Relevant Transmission Licensee under an Offshore Tender Process will become part of the National Electricity Transmission System .
Offshore Waters	Has the meaning given to "offshore waters" in Section 90(9) of the Energy Act 2004.
Offshore Works Assumptions	In relation to a particular User means those assumptions set out in Appendix P of the relevant Construction Agreement as amended from time to time.
Onshore	Means within Great Britain , and when used in conjunction with another term and not defined means that the associated term is to be read accordingly.
Onshore DC Converter	Any User Apparatus located Onshore with a Completion Date after 1 st April 2005 used to convert alternating current electricity to direct current electricity, or vice versa. An Onshore DC Converter is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion. In a bipolar arrangement, an Onshore DC Converter represents the bipolar configuration.
Onshore Generating Unit	Unless otherwise provided in the Grid Code, any Apparatus located Onshore which produces electricity, including, an Onshore Synchronous Generating Unit and Onshore Non-Synchronous Generating Unit which could also be part of a Power Generating Module .

Onshore Grid Entry Point	A point at which a Onshore Generating Unit or a CCGT Module or a CCGT Unit or an Onshore Power Generating Module or a Onshore DC Converter or an Onshore HVDC Converter or a Onshore Power Park Module or an External Interconnection , as the case may be, which is directly connected to the Onshore Transmission System connects to the Onshore Transmission System .
Onshore HVDC Converter	Any User Apparatus located Onshore used to convert alternating current electricity to direct current electricity, or vice versa. An Onshore HVDC Converter is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion. In a bipolar arrangement, an Onshore HVDC Converter represents the bipolar configuration.
Onshore Non-Synchronous Generating Unit	A Generating Unit located Onshore that is not a Synchronous Generating Unit including for the avoidance of doubt a Power Park Unit located Onshore .
Onshore Power Park Module	A collection of Non-Synchronous Generating Units (registered as a Power Park Module under the PC) that are powered by an Intermittent Power Source or connected through power electronic conversion technology, joined together by a System with a single electrical point of connection directly to the Onshore Transmission System (or User System if Embedded) with no intermediate Offshore Transmission System connections. The connection to the Onshore Transmission System (or User System if Embedded) may include a DC Converter or HVDC Converter .
Onshore Synchronous Generating Unit	An Onshore Generating Unit (which could also be part of an Onshore Power Generating Module) including, for the avoidance of doubt, a CCGT Unit in which, under all steady state conditions, the rotor rotates at a mechanical speed equal to the electrical frequency of the National Electricity Transmission System divided by the number of pole pairs of the Generating Unit .
Onshore Synchronous Power Generating Module	A Synchronous Power Generating Module located Onshore .
Onshore Transmission Licensee	The Company, SPT, or SHETL.
Onshore Transmission System	The system consisting (wholly or mainly) of high voltage electric lines owned or operated by Onshore Transmission Licensees and used for the transmission of electricity from one Power Station to a substation or to another Power Station or between substations or to or from Offshore Transmission Systems or to or from any External Interconnection , and includes any Plant and Apparatus and meters owned or operated by any Onshore Transmission Licensee in connection with the transmission of electricity but does not include any Remote Transmission Assets .
On-Site Generator Site	A site which is determined by the BSC Panel to be a Trading Unit under the BSC by reason of having fulfilled the Class 1 or Class 2 requirements as such terms are used in the BSC .
Operating Code or OC	That portion of the Grid Code which is identified as the Operating Code .

Operating Margin	Contingency Reserve plus Operating Reserve.
Operating Reserve	The additional output from Large Power Stations or the reduction in Demand , which must be realisable in real-time operation to respond in order to contribute to containing and correcting any System Frequency fall to an acceptable level in the event of a loss of generation or a loss of import from an External Interconnection or mismatch between generation and Demand .
Operation	A scheduled or planned action relating to the operation of a System (including an Embedded Power Station).
Operational Data	Data required under the Operating Codes and/or Balancing Codes .
Operational Day	The period from 0500 hours on one day to 0500 on the following day.
Operation Diagrams	Diagrams which are a schematic representation of the HV Apparatus and the connections to all external circuits at a Connection Site (and in the case of OTSDUW, Transmission Interface Site), incorporating its numbering, nomenclature and labelling.
Operational Effect	Any effect on the operation of the relevant other System which causes the National Electricity Transmission System or the System of the other User or Users , as the case may be, to operate (or be at a materially increased risk of operating) differently to the way in which they would or may have operated in the absence of that effect.
Operational Intertripping	The automatic tripping of circuit-breakers to prevent abnormal system conditions occurring, such as over voltage, overload, System instability, etc. after the tripping of other circuit-breakers following power System fault(s) which includes System to Generating Unit, System to CCGT Module, System to Power Park Module, System to DC Converter, System to Power Generating Module, System to HVDC Converter and System to Demand intertripping schemes.
Operational Notifications	Any Energisation Operational Notification, Interim Operational Notification, Final Operational Notification or Limited Operational Notification issued from The Company to a User .
Operational Planning	Planning through various timescales the matching of generation output with forecast National Electricity Transmission System Demand together with a reserve of generation to provide a margin, taking into account outages of certain Generating Units or Power Generating Modules , of parts of the National Electricity Transmission System and of parts of User Systems to which Power Stations and/or Customers are connected, carried out to achieve, so far as possible, the standards of security set out in The Company's Transmission Licence , each Relevant Transmission Licensee's Transmission Licence or Electricity Distribution Licence , as the case may be.
Operational Planning Margin	An operational planning margin set by The Company .
Operational Planning Phase	The period from 8 weeks to the end of the 5 th year ahead of real time operation.

Operational Procedures	Management instructions and procedures, both in support of the Safety Rules and for the local and remote operation of Plant and Apparatus , issued in connection with the actual operation of Plant and/or Apparatus at or from a Connection Site .
Operational Switching	Operation of Plant and/or Apparatus to the instruction of the relevant Control Engineer . For the avoidance of doubt, the operation of Transmission Plant and/or Apparatus forming part of the National Electricity Transmission System in England and Wales, will be to the instruction of The Company and in Scotland and Offshore will be to the instruction of the Relevant Transmission Licensee .
Other Relevant Data	The data listed in BC1.4.2(f) under the heading Other Relevant Data .
OTSDUW Arrangements	The arrangements whereby certain aspects of the design, consenting, construction, installation and/or commissioning of transmission assets are capable of being undertaken by a User prior to the transfer of those assets to a Relevant Transmission Licensee under an Offshore Tender Process .
OTSDUW Data and Information	The data and information to be provided by Users undertaking OTSDUW , to The Company in accordance with Appendix F of the Planning Code .
OTSDUW DC Converter	A Transmission DC Converter designed and/or constructed and/or installed by a User under the OTSDUW Arrangements and/or operated by the User until the OTSUA Transfer Time .
OTSDUW Development and Data Timetable	The timetable for both the delivery of OTSDUW Data and Information and OTSDUW Network Data and Information as referred to in Appendix F of the Planning Code and the development of the scope of the OTSDUW .
OTSDUW Network Data and Information	The data and information to be provided by The Company to Users undertaking OTSDUW in accordance with Appendix F of the Planning Code .
OTSDUW Plant and Apparatus	Plant and Apparatus , including any OTSDUW DC Converter , designed by the User under the OTSDUW Arrangements .
OTSUA Transfer Time	The time and date at which the OTSUA are transferred to a Relevant Transmission Licensee .
Out of Synchronism	The condition where a System or Generating Unit or Power Generating Module cannot meet the requirements to enable it to be Synchronised .

Output Usable or OU	<p>The (daily or weekly) forecast value (in MW), at the time of the (daily or weekly) peak demand, of the maximum level at which the Genset can export to the Grid Entry Point, or in the case of Embedded Power Stations, to the User System Entry Point. In addition, for a Genset powered by an Intermittent Power Source the forecast value is based upon the Intermittent Power Source being at a level which would enable the Genset to generate at Registered Capacity.</p> <p>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.</p>
Over-excitation Limiter	Shall have the meaning ascribed to that term in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].
Panel Chairman	A person appointed as such in accordance with GR.4.1.
Panel Member	Any of the persons identified as such in GR.4.
Panel Members' Recommendation	The recommendation in accordance with the " Grid Code Review Panel Recommendation Vote "
Panel Secretary	A person appointed as such in accordance with GR.3.1.2(d).
Part 1 System Ancillary Services	Ancillary Services which are required for System reasons and which must be provided by Users in accordance with the Connection Conditions . An exhaustive list of Part 1 System Ancillary Services is included in that part of CC.8.1 headed Part 1.
Part 2 System Ancillary Services	Ancillary Services which are required for System reasons and which must be provided by a User if the User has agreed to provide them under a Bilateral Agreement . A non-exhaustive list of Part 2 System Ancillary Services is included in that part of CC.8.1 headed Part 2.
Part Load	The condition of a Genset , or Cascade Hydro Scheme which is Loaded but is not running at its Maximum Export Limit.
Permit for Work for proximity work	<p>In respect of E&W Transmission Systems, a document issued by the Relevant E&W Transmission Licensee or an E&W User in accordance with its respective Safety Rules to enable work to be carried out in accordance with OC8A.8 and which provides for Safety Precautions to be applied and maintained. An example format of a Relevant E&W Transmission Licensee's permit for work is attached as Appendix E to OC8A.</p> <p>In respect of Scottish Transmission Systems, a document issued by a Relevant Scottish Transmission Licensee or a Scottish User in accordance with its respective Safety Rules to enable work to be carried out in accordance with OC8B.8 and which provides for Safety Precautions to be applied and maintained. Example formats of Relevant Scottish Transmission Licensees' permits for work are attached as Appendix E to OC8B.</p>

Partial Shutdown	The same as a Total Shutdown except that all generation has ceased in a separate part of the Total System and there is no electricity supply from External Interconnections or other parts of the Total System to that part of the Total System and, therefore, that part of the Total System is shutdown, with the result that it is not possible for that part of the Total System to begin to function again without The Company's directions relating to a Black Start .
Pending Grid Code Modification Proposal	A Grid Code Modification Proposal in respect of which, at the relevant time, the Authority has not yet made a decision as to whether to direct such Grid Code Modification Proposal to be made pursuant to the Transmission Licence (whether or not a Grid Code Modification Report has been submitted in respect of such Grid Code Modification Proposal) or, in the case of a Grid Code Self Governance Proposals , in respect of which the Grid Code Review Panel has not yet voted whether or not to approve.
Phase (Voltage) Unbalance	The ratio (in percent) between the rms values of the negative sequence component and the positive sequence component of the voltage.
Physical Notification	Data that describes the BM Participant's best estimate of the expected input or output of Active Power of a BM Unit and/or (where relevant) Generating Unit , the accuracy of the Physical Notification being commensurate with Good Industry Practice .
Planning Code or PC	That portion of the Grid Code which is identified as the Planning Code .
Planned Maintenance Outage	An outage of The Company's electronic data communication facilities as provided for in CC.6.5.8 and The Company's associated computer facilities of which normally at least 5 days notice is given, but in any event of which at least twelve hours notice has been given by The Company to the User and which is anticipated to last no longer than 2 hours. The length of such an outage may in exceptional circumstances be extended where at least 24 hours notice has been given by The Company to the User . It is anticipated that normally any planned outage would only last around one hour.
Planned Outage	An outage of a Large Power Station or of part of the National Electricity Transmission System , or of part of a User System , coordinated by The Company under OC2 .
Plant	Fixed and movable items used in the generation and/or supply and/or transmission of electricity, other than Apparatus .
Point of Common Coupling	That point on the National Electricity Transmission System electrically nearest to the User installation at which either Demands or Loads are, or may be, connected.
Point of Connection	An electrical point of connection between the National Electricity Transmission System and a User's System .
Point of Isolation	The point on Apparatus (as defined in OC8A.1.6.2 and OC8B.1.7.2) at which Isolation is achieved.
Post-Control Phase	The period following real time operation.

Power Available	A signal prepared in accordance with good industry practice, representing the instantaneous sum of the potential Active Power available from each individual Power Park Unit within the Power Park Module calculated using any applicable combination of meteorological (including wind speed), electrical or mechanical data measured at each Power Park Unit at a specified time. Power Available shall be a value between 0MW and Registered Capacity or Maximum Capacity which is the sum of the potential Active Power available of each Power Park Unit within the Power Park Module . A turbine that is not generating will be considered as not available. For the avoidance of doubt, the Power Available signal would be the Active Power output that a Power Park Module could reasonably be expected to export at the Grid Entry Point or User System Entry Point taking all the above criteria into account including Power Park Unit constraints such as optimisation modes but would exclude a reduction in the Active Power export of the Power Park Module instructed by The Company (for example) for the purposes selecting a Power Park Module to operate in Frequency Sensitive Mode or when an Emergency Instruction has been issued.
Power Factor	The ratio of Active Power to Apparent Power .
Power-Generating Module	Either a Synchronous Power-Generating Module or a Power Park Module owned or operated by an EU Generator .
Power-Generating Module Document (PGMD)	A document provided by the Generator to The Company for a Type B or Type C Power Generating Module which confirms that the Power Generating Module's compliance with the technical criteria set out in the Grid Code has been demonstrated and provides the necessary data and statements, including a statement of compliance.
Power Generating Module Performance Chart	A diagram showing the Real Power (MW) and Reactive Power (MVAR) capability limits within which a Synchronous Power Generating Module or Power Park Module at its Grid Entry Point or User System Entry Point will be expected to operate under steady state conditions.
Power Island	Gensets at an isolated Power Station , together with complementary local Demand . In Scotland a Power Island may include more than one Power Station .
Power Park Module	Any Onshore Power Park Module or Offshore Power Park Module .
Power Park Module Availability Matrix	The matrix described in Appendix 1 to BC1 under the heading Power Park Module Availability Matrix .
Power Park Module Planning Matrix	A matrix in the form set out in Appendix 4 of OC2 showing the combination of Power Park Units within a Power Park Module which would be expected to be running under normal conditions.
Power Park Unit	A Generating Unit within a Power Park Module .
Power Station	An installation comprising one or more Generating Units or Power Park Modules or Power Generating Modules (even where sited separately) owned and/or controlled by the same Generator , which may reasonably be considered as being managed as one Power Station .

Power System Stabiliser or PSS	Equipment controlling the Exciter output via the voltage regulator in such a way that power oscillations of the synchronous machines are dampened. Input variables may be speed, frequency or power (or a combination of these).
Preface	The preface to the Grid Code (which does not form part of the Grid Code and therefore is not binding).
Preliminary Notice	A notice in writing, sent by The Company both to all Users identified by it under OC12.4.2.1 and to the Test Proposer , notifying them of a proposed System Test .
Preliminary Project Planning Data	Data relating to a proposed User Development at the time the User applies for a CUSC Contract but before an offer is made and accepted.
Primary Response	The automatic increase in Active Power output of a Genset or, as the case may be, the decrease in Active Power Demand in response to a System Frequency fall. This increase in Active Power output or, as the case may be, the decrease in Active Power Demand must be in accordance with the provisions of the relevant Ancillary Services Agreement which will provide that it will be released increasingly with time over the period 0 to 10 seconds from the time of the start of the Frequency fall on the basis set out in the Ancillary Services Agreement and fully available by the latter, and sustainable for at least a further 20 seconds. The interpretation of the Primary Response to a – 0.5 Hz frequency change is shown diagrammatically in Figure CC.A.3.2 and Figure ECC.A.3.2
Private Network	A network which connects to a Network Operator's System and that network belongs to a User who is not classified as a Generator , Network Operator or Non Embedded Customer .
Programming Phase	The period between the Operational Planning Phase and the Control Phase . It starts at the 8 weeks ahead stage and finishes at 17:00 on the day ahead of real time.
Proposal Notice	A notice submitted to The Company by a User which would like to undertake a System Test .
Proposal Report	A report submitted by the Test Panel which contains: <ul style="list-style-type: none"> (a) proposals for carrying out a System Test (including the manner in which the System Test is to be monitored); (b) an allocation of costs (including un-anticipated costs) between the affected parties (the general principle being that the Test Proposer will bear the costs); and (c) such other matters as the Test Panel considers appropriate. <p>The report may include requirements for indemnities to be given in respect of claims and losses arising from a System Test.</p>
Proposed Implementation Date	The proposed date(s) for the implementation of a Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification such date(s) to be either (i) described by reference to a specified period after a direction from the Authority approving the Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification or (ii) a Fixed Proposed Implementation Date .

Protection	The provisions for detecting abnormal conditions on a System and initiating fault clearance or actuating signals or indications.
Protection Apparatus	A group of one or more Protection relays and/or logic elements designated to perform a specified Protection function.
Pump Storage	A a hydro unit in which water can be raised by means of pumps and stored to be used for the generation of electrical energy;
Pumped Storage Generator	A Generator which owns and/or operates any Pumped Storage Plant .
Pumped Storage Plant	The Dinorwig, Ffestiniog, Cruachan and Foyers Power Stations .
Pumped Storage Unit	A Generating Unit within a Pumped Storage Plant .
Purchase Contracts	A final and binding contract for the purchase of the Main Plant and Apparatus .
Q/Pmax	<p>The ratio of Reactive Power to the Maximum Capacity. The relationship between Power Factor and Q/Pmax is given by the formula:-</p> $\text{Power Factor} = \text{Cos} \left[\arctan \left[\frac{Q}{P_{max}} \right] \right]$ <p>For example, a Power Park Module with a Q/P value of +0.33 would equate to a Power Factor of $\text{Cos}(\arctan 0.33) = 0.95$ Power Factor lag.</p>
Quiescent Physical Notification or QPN	Data that describes the MW levels to be deducted from the Physical Notification of a BM Unit to determine a resultant operating level to which the Dynamic Parameters associated with that BM Unit apply, and the associated times for such MW levels. The MW level of the QPN must always be set to zero.
Range CCGT Module	A CCGT Module where there is a physical connection by way of a steam or hot gas main between that CCGT Module and another CCGT Module or other CCGT Modules , which connection contributes (if open) to efficient modular operation, and which physical connection can be varied by the operator.
Rated Field Voltage	Shall have the meaning ascribed to that term in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].
Rated MW	<p>The “rating-plate” MW output of a Power Generating Module, Generating Unit, Power Park Module, HVDC Converter or DC Converter, being:</p> <ul style="list-style-type: none"> (a) that output up to which the Generating Unit was designed to operate (Calculated as specified in British Standard BS EN 60034 – 1: 1995); or (b) the nominal rating for the MW output of a Power Park Module or Power Generating Module being the maximum continuous electric output power which the Power Park Module or Power Generating Module was designed to achieve under normal operating conditions; or (c) the nominal rating for the MW import capacity and export capacity (if at a DC Converter Station or HVDC Converter Station) of a DC Converter or HVDC Converter.

Reactive Despatch Instruction	Has the meaning set out in the CUSC .
Reactive Despatch Network Restriction	A restriction placed upon an Embedded Power Generating Module, Embedded Generating Unit, Embedded Power Park Module or DC Converter at an Embedded DC Converter Station or HVDC Converter at an Embedded HVDC Converter Station by the Network Operator that prevents the Generator or DC Converter Station owner or HVDC System Owner in question (as applicable) from complying with any Reactive Despatch Instruction with respect to that Power Generating Module, Generating Unit, Power Park Module or DC Converter at a DC Converter Station or HVDC Converter at a HVDC Converter Station , whether to provide Mvars over the range referred to in CC 6.3.2, ECC.6.3.2 or otherwise.
Reactive Energy	The integral with respect to time of the Reactive Power .
Reactive Power	The product of voltage and current and the sine of the phase angle between them measured in units of voltamperes reactive and standard multiples thereof, ie: 1000 VAr = 1 kVAr 1000 kVAr = 1 Mvar
Record of Inter-System Safety Precautions or RISSP	A written record of inter-system Safety Precautions to be compiled in accordance with the provisions of OC8 .

<p>Registered Capacity</p>	<p>(a) In the case of a Generating Unit other than that forming part of a CCGT Module or Power Park Module or Power Generating Module, the normal full load capacity of a Generating Unit as declared by the Generator, less the MW consumed by the Generating Unit through the Generating Unit's Unit Transformer when producing the same (the resultant figure being expressed in whole MW, or in MW to one decimal place).</p> <p>(b) In the case of a CCGT Module or Power Park Module owned or operated by a GB Generator, the normal full load capacity of the CCGT Module or Power Park Module (as the case may be) as declared by the GB Generator, being the Active Power declared by the GB Generator as being deliverable by the CCGT Module or Power Park Module at the Grid Entry Point (or in the case of an Embedded CCGT Module or Power Park Module, at the User System Entry Point), expressed in whole MW, or in MW to one decimal place. For the avoidance of doubt Maximum Capacity would apply to Power Generating Modules which form part of a Large, Medium or Small Power Stations.</p> <p>(c) In the case of a Power Station, the maximum amount of Active Power deliverable by the Power Station at the Grid Entry Point (or in the case of an Embedded Power Station at the User System Entry Point), as declared by the Generator, expressed in whole MW, or in MW to one decimal place. The maximum Active Power deliverable is the maximum amount deliverable simultaneously by the Power Generating Modules and/or Generating Units and/or CCGT Modules and/or Power Park Modules less the MW consumed by the Power Generating Modules and/or Generating Units and/or CCGT Modules in producing that Active Power and forming part of a Power Station.</p> <p>(d) In the case of a DC Converter at a DC Converter Station or HVDC Converter at an HVDC Converter Station, the normal full load amount of Active Power transferable from a DC Converter or HVDC Converter at the Onshore Grid Entry Point (or in the case of an Embedded DC Converter Station or an Embedded HVDC Converter Station at the User System Entry Point), as declared by the DC Converter Station owner or HVDC System Owner, expressed in whole MW, or in MW to one decimal place.</p> <p>(e) In the case of a DC Converter Station or HVDC Converter Station, the maximum amount of Active Power transferable from a DC Converter Station or HVDC Converter Station at the Onshore Grid Entry Point (or in the case of an Embedded DC Converter Station or Embedded HVDC Converter Station at the User System Entry Point), as declared by the DC Converter Station owner or HVDC System Owner, expressed in whole MW, or in MW to one decimal place.</p>
<p>Registered Data</p>	<p>Those items of Standard Planning Data and Detailed Planning Data which upon connection become fixed (subject to any subsequent changes).</p>

Registered Import Capability	<p>In the case of a DC Converter Station or HVDC Converter Station containing DC Converters or HVDC Converters connected to an External System, the maximum amount of Active Power transferable into a DC Converter Station or HVDC Converter Station at the Onshore Grid Entry Point (or in the case of an Embedded DC Converter Station or Embedded HVDC Converter Station at the User System Entry Point), as declared by the DC Converter Station owner or HVDC System Owner, expressed in whole MW.</p> <p>In the case of a DC Converter or HVDC Converter connected to an External System and in a DC Converter Station or HVDC Converter Station, the normal full load amount of Active Power transferable into a DC Converter or HVDC Converter at the Onshore Grid Entry Point (or in the case of an Embedded DC Converter Station or Embedded HVDC Converter Station at the User System Entry Point), as declared by the DC Converter owner or HVDC System Owner, expressed in whole MW.</p>
Regulations	The Utilities Contracts Regulations 1996, as amended from time to time.
Reheater Time Constant	Determined at Registered Capacity , the reheater time constant will be construed in accordance with the principles of the IEEE Committee Report "Dynamic Models for Steam and Hydro Turbines in Power System Studies" published in 1973 which apply to such phrase.
Rejected Grid Code Modification Proposal	A Grid Code Modification Proposal in respect of which the Authority has decided not to direct The Company to modify the Grid Code pursuant to the Transmission Licence in the manner set out herein or, in the case of a Grid Code Self Governance Proposals , in respect of which the Grid Code Review Panel has voted not to approve.
Related Person	means, in relation to an individual, any member of his immediate family, his employer (and any former employer of his within the previous 12 months), any partner with whom he is in partnership, and any company or Affiliate of a company in which he or any member of his immediate family controls more than 20% of the voting rights in respect of the shares of the company;
Relevant E&W Transmission Licensee	As the context requires The Company and/or an E&W Offshore Transmission Licensee .
Relevant Party	Has the meaning given in GR15.10(a).
Relevant Scottish Transmission Licensee	As the context requires SPT and/or SHETL and/or a Scottish Offshore Transmission Licensee .
Relevant Transmission Licensee	Means SP Transmission Ltd (SPT) in its Transmission Area or Scottish Hydro-Electric Transmission Ltd (SHETL) in its Transmission Area or any Offshore Transmission Licensee in its Transmission Area .
Relevant Unit	As defined in the STC , Schedule 3.
Remote End HVDC Converter Station	An HVDC Converter Station which forms part of an HVDC System and is not directly connected to the AC part of the GB Synchronous Area .

Remote Transmission Assets	Any Plant and Apparatus or meters owned by The Company which: (a) are Embedded in a User System and which are not directly connected by Plant and/or Apparatus owned by The Company to a sub-station owned by The Company ; and (b) are by agreement between The Company and such User operated under the direction and control of such User .
Requesting Safety Co-ordinator	The Safety Co-ordinator requesting Safety Precautions .
Responsible Engineer/ Operator	A person nominated by a User to be responsible for System control.
Responsible Manager	A manager who has been duly authorised by a User or The Company to sign Site Responsibility Schedules on behalf of that User or The Company , as the case may be. For Connection Sites in Scotland and Offshore a manager who has been duly authorised by the Relevant Transmission Licensee to sign Site Responsibility Schedules on behalf of that Relevant Transmission Licensee .
Re-synchronisation	The bringing of parts of the System which have become Out of Synchronism with any other System back into Synchronism , and like terms shall be construed accordingly.
RR Acceptance	The results of the TERRE auction for each BM Participant
Restricted	Applies to a TERRE Bid which has been marked so that it will be passed to the TERRE Central Platform but will not be used in the auction
RR Instruction	Replacement Reserve Instruction – used for instructing BM Participants after the results of the TERRE auction. An RR Instruction has the same format as a Bid-Offer Acceptance but has type field indicating it is for TERRE
Safety Co-ordinator	A person or persons nominated by a Relevant E&W Transmission Licensee and each E&W User in relation to Connection Points (or in the case of OTSUA operational prior to the OTSUA Transfer Time, Transmission Interface Points) on an E&W Transmission System and/or by the Relevant Scottish Transmission Licensee and each Scottish User in relation to Connection Points (or in the case of OTSUA operational prior to the OTSUA Transfer Time, Transmission Interface Points) on a Scottish Transmission System to be responsible for the co-ordination of Safety Precautions at each Connection Point (or in the case of OTSUA operational prior to the OTSUA Transfer Time, Transmission Interface Points) when work (which includes testing) is to be carried out on a System which necessitates the provision of Safety Precautions on HV Apparatus (as defined in OC8A.1.6.2 and OC8B.1.7.2), pursuant to OC8 .
Safety From The System	That condition which safeguards persons when work is to be carried out on or near a System from the dangers which are inherent in the System .
Safety Key	A key unique at the Location capable of operating a lock which will cause an Isolating Device and/or Earthing Device to be Locked .

Safety Log	A chronological record of messages relating to safety co-ordination sent and received by each Safety Co-ordinator under OC8 .
Safety Precautions	Isolation and/or Earthing .
Safety Rules	The rules of The Company (in England and Wales) and the Relevant Transmission Licensee (in Scotland or Offshore) or a User that seek to ensure that persons working on Plant and/or Apparatus to which the rules apply are safeguarded from hazards arising from the System .
Scottish Offshore Transmission System	An Offshore Transmission System with an Interface Point in Scotland.
Scottish Offshore Transmission Licensee	A person who owns or operates a Scottish Offshore Transmission System pursuant to a Transmission Licence .
Scottish Transmission System	Collectively SPT's Transmission System and SHETL's Transmission System and any Scottish Offshore Transmission Systems .
Scottish User	A User in Scotland or any Offshore User who owns or operates Plant and/or Apparatus connected (or which will at the OTSUA Transfer Time be connected) to a Scottish Offshore Transmission System
Secondary BM Unit	Has the same meaning set out in the BSC
Secondary Response	The automatic increase in Active Power output of a Genset or, as the case may be, the decrease in Active Power Demand in response to a System Frequency fall. This increase in Active Power output or, as the case may be, the decrease in Active Power Demand must be in accordance with the provisions of the relevant Ancillary Services Agreement which will provide that it will be fully available by 30 seconds from the time of the start of the Frequency fall and be sustainable for at least a further 30 minutes. The interpretation of the Secondary Response to a -0.5 Hz frequency change is shown diagrammatically in Figure CC.A.3.2 or Figure ECC.A.3.2.
Secretary of State	Has the same meaning as in the Act .
Secured Event	Has the meaning set out in the Security and Quality of Supply Standard .
Security and Quality of Supply Standard (SQSS)	The version of the document entitled 'Security and Quality of Supply Standard' established pursuant to the Transmission Licence in force at the time of entering into the relevant Bilateral Agreement .

Self-Governance Criteria	<p>A proposed Modification that, if implemented,</p> <p>(a) is unlikely to have a material effect on:</p> <ul style="list-style-type: none"> (i) existing or future electricity consumers; and (ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution or supply of electricity; and (iii) the operation of the National Electricity Transmission System; and (iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and (v) the Grid Code's governance procedures or the Grid Code's modification procedures, and <p>(b) is unlikely to discriminate between different classes of Users.</p>
Self-Governance Modifications	A Grid Code Modification Proposal that does not fall within the scope of a Significant Code Review and that meets the Self-Governance Criteria or which the Authority directs is to be treated as such any direction under GR.24.4.
Self-Governance Statement	<p>The statement made by the Grid Code Review Panel and submitted to the Authority:</p> <p>(a) confirming that, in its opinion, the Self-Governance Criteria are met and the proposed Grid Code Modification Proposal is suitable for the Self-Governance route; and</p> <p>(b) providing a detailed explanation of the Grid Code Review Panel's reasons for that opinion</p>
Setpoint Voltage	The value of voltage at the Grid Entry Point , or User System Entry Point if Embedded , on the automatic control system steady state operating characteristic, as a percentage of the nominal voltage, at which the transfer of Reactive Power between a Power Park Module , DC Converter , HVDC Converter or Non-Synchronous Generating Unit and the Transmission System , or Network Operator's system if Embedded , is zero.
Settlement Period	A period of 30 minutes ending on the hour and half-hour in each hour during a day.
Seven Year Statement	A statement, prepared by The Company in accordance with the terms of The Company's Transmission Licence , showing for each of the seven succeeding Financial Years , the opportunities available for connecting to and using the National Electricity Transmission System and indicating those parts of the National Electricity Transmission System most suited to new connections and transport of further quantities of electricity.
SF₆ Gas Zone	A segregated zone surrounding electrical conductors within a casing containing SF ₆ gas.
SHETL	Scottish Hydro-Electric Transmission Limited

Shutdown	The condition of a Generating Unit where the generator rotor is at rest or on barring.
Significant Code Review	Means the period commencing on the start date of a Significant Code Review as stated in the notice issued by the Authority , and ending in the circumstances described in GR.16.6 or GR.16.7, as appropriate.
Significant Code Review Phase	Means the period commencing on the start date of a Significant Code Review as stated in the notice issued by the Authority , and ending in the circumstances described in GR.16.6 or GR.16.7, as appropriate.
Significant Incident	An Event which either: <ul style="list-style-type: none"> (a) was notified by a User to The Company under OC7, and which The Company considers has had or may have had a significant effect on the National Electricity Transmission System, and The Company requires the User to report that Event in writing in accordance with OC10 and notifies the User accordingly; or (b) was notified by The Company to a User under OC7, and which that User considers has had or may have had a significant effect on that User's System, and that User requires The Company to report that Event in writing in accordance with the provisions of OC10 and notifies The Company accordingly.
Simultaneous Tap Change	A tap change implemented on the generator step-up transformers of Synchronised Gensets , effected by Generators in response to an instruction from The Company issued simultaneously to the relevant Power Stations . The instruction, preceded by advance notice, must be effected as soon as possible, and in any event within one minute of receipt from The Company of the instruction.
Single Line Diagram	A schematic representation of a three-phase network in which the three phases are represented by single lines. The diagram shall include (but not necessarily be limited to) busbars, overhead lines, underground cables, power transformers and reactive compensation equipment. It shall also show where Large Power Stations are connected, and the points at which Demand is supplied.
Single Point of Connection	A single Point of Connection , with no interconnection through the User's System to another Point of Connection .
Site Common Drawings	Drawings prepared for each Connection Site (and in the case of OTSDUW, Transmission Interface Site) which incorporate Connection Site (and in the case of OTSDUW, Transmission Interface Site) layout drawings, electrical layout drawings, common protection/ control drawings and common services drawings.
Site Responsibility Schedule	A schedule containing the information and prepared on the basis of the provisions set out in Appendix 1 of the CC and Appendix E1 of the ECC .
Slope	The ratio of the steady state change in voltage, as a percentage of the nominal voltage, to the steady state change in Reactive Power output, in per unit of Reactive Power capability. For the avoidance of doubt, the value indicates the percentage voltage reduction that will result in a 1 per unit increase in Reactive Power generation.
Small Participant	Has the meaning given in the CUSC .

<p>Small Power Station</p>	<p>A Power Station which is</p> <p>(a) directly connected to:</p> <ul style="list-style-type: none"> (i) The Company's Transmission System where such Power Station has a Registered Capacity of less than 50MW; or (ii) SPT's Transmission System where such Power Station has a Registered Capacity of less than 30MW; or (iii) SHETL's Transmission System where such a Power Station has a Registered Capacity of less than 10 MW; or (iv) an Offshore Transmission System where such Power Station has a Registered Capacity of less than 10MW; <p>or,</p> <p>(b) Embedded within a User System (or part thereof) where such User System (or part thereof) is connected under normal operating conditions to:</p> <ul style="list-style-type: none"> (i) The Company's Transmission System and such Power Station has a Registered Capacity of less than 50MW; or (ii) SPT's Transmission System and such Power Station has a Registered Capacity of less than 30MW; or (iii) SHETL's Transmission System and such Power Station has a Registered Capacity of less than 10MW; <p>or,</p> <p>(c) Embedded within a User System (or part thereof) where the User System (or part thereof) is not connected to the National Electricity Transmission System, although such Power Station is in:</p> <ul style="list-style-type: none"> (i) The Company's Transmission Area and such Power Station has a Registered Capacity of less than 50MW; or (ii) SPT's Transmission Area and such Power Station has a Registered Capacity of less than 30MW; or (iii) SHETL's Transmission Area and such Power Station has a Registered Capacity of less than 10MW; <p>For the avoidance of doubt a Small Power Station could comprise of Type A, Type B, Type C or Type D Power Generating Modules.</p>
<p>Speeder Motor Setting Range</p>	<p>The minimum and maximum no-load speeds (expressed as a percentage of rated speed) to which the turbine is capable of being controlled, by the speeder motor or equivalent, when the Generating Unit terminals are on open circuit.</p>
<p>SPT</p>	<p>SP Transmission Limited</p>
<p>Standard Contract Terms</p>	<p>The standard terms and conditions applicable to Ancillary Services provided by Demand Response Providers and published on the Website from time to time.</p>
<p>Standard Modifications</p>	<p>A Grid Code Modification Proposal that does not fall within the scope of a Significant Code Review subject to any direction by the Authority pursuant to GR.16.3 and GR.16.4, nor meets the Self-Governance Criteria subject to any direction by the Authority pursuant to GR.24.4 and in accordance with any direction under GR.24.2.</p>

Standard Planning Data	The general data required by The Company under the PC . It is generally also the data which The Company requires from a new User in an application for a CUSC Contract , as reflected in the PC .
Start Time	The time named as such in an instruction issued by The Company pursuant to the BC .
Start-Up	The action of bringing a Generating Unit from Shutdown to Synchronous Speed .
Statement of Readiness	Has the meaning set out in the Bilateral Agreement and/or Construction Agreement .
Station Board	A switchboard through which electrical power is supplied to the Auxiliaries of a Power Station , and which is supplied by a Station Transformer . It may be interconnected with a Unit Board .
Station Transformer	A transformer supplying electrical power to the Auxiliaries of (a) a Power Station , which is not directly connected to the Generating Unit terminals (typical voltage ratios being 132/11kV or 275/11kV), or (b) a DC Converter Station or HVDC Converter Station .
STC Committee	The committee established under the STC .
Steam Unit	A Generating Unit whose prime mover converts the heat-energy in steam to mechanical energy.
Subtransmission System	The part of a User's System which operates at a single transformation below the voltage of the relevant Transmission System .
Substantial Modification	A Modification in relation to modernisation or replacement of the User's Main Plant and Apparatus which impacts its technical capabilities, which, following notification by the relevant User to NGET , results in substantial amendment to the Bilateral Agreement .
Supergrid Voltage	Any voltage greater than 200kV.
Supplier	(a) A person supplying electricity under an Electricity Supply Licence ; or (b) A person supplying electricity under exemption under the Act ; in each case acting in its capacity as a supplier of electricity to Customers in Great Britain .

Surplus	<p>A MW figure relating to a System Zone equal to the total Output Usable in the System Zone:</p> <p>(a) minus the forecast of Active Power Demand in the System Zone, and</p> <p>(b) minus the export limit in the case of an export limited System Zone, or plus the import limit in the case of an import limited System Zone, and</p> <p>(c) (only in the case of a System Zone comprising the National Electricity Transmission System) minus the Operational Planning Margin.</p> <p>For the avoidance of doubt, a Surplus of more than zero in an export limited System Zone indicates an excess of generation in that System Zone; and a Surplus of less than zero in an import limited System Zone indicates insufficient generation in that System Zone.</p>
Synchronised	<p>(a) The condition where an incoming Power Generating Module, Generating Unit or Power Park Module or DC Converter or HVDC Converter or System is connected to the busbars of another System so that the Frequencies and phase relationships of that Power Generating Module, Generating Unit, Power Park Module, DC Converter, HVDC Converter or System, as the case may be, and the System to which it is connected are identical, like terms shall be construed accordingly e.g. “Synchronism”.</p> <p>(b) The condition where an importing BM Unit is consuming electricity.</p>
Synchronising Generation	The amount of MW (in whole MW) produced at the moment of synchronising.
Synchronising Group	A group of two or more Gensets) which require a minimum time interval between their Synchronising or De-Synchronising times.
Synchronous Area	An area covered by synchronously interconnected Transmission Licensees , such as the Synchronous Areas of Continental Europe, Great Britain, Ireland-Northern Ireland and Nordic and the power systems of Lithuania, Latvia and Estonia, together referred to as ‘Baltic’ which are part of a wider Synchronous Area ;
Synchronous Compensation	The operation of rotating synchronous Apparatus for the specific purpose of either the generation or absorption of Reactive Power .
Synchronous Generating Unit	Any Onshore Synchronous Generating Unit or Offshore Synchronous Generating Unit .
Synchronous Generating Unit Performance Chart	A diagram showing the Real Power (MW) and Reactive Power (MVA _r) capability limits within which a Synchronous Generating Unit at its stator terminals (which is part of a Synchronous Power Generating Module) will be expected to operate under steady state conditions.

Synchronous Power-Generating Module	An indivisible set of installations which can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of network voltage are in a constant ratio and thus in synchronism. For the avoidance of doubt a Synchronous Power Generating Module could comprise of one or more Synchronous Generating Units
Synchronous Power Generating Module Matrix	The matrix described in Appendix 1 to BC1 under the heading Synchronous Power Generating Module Matrix .
Synchronous Power Generating Module Planning Matrix	A matrix in the form set out in Appendix 5 of OC2 showing the combination of Synchronous Generating Units within a Synchronous Power Generating Module which would be running in relation to any given MW output.
Synchronous Power Generating Unit	Has the same meaning as a Synchronous Generating Unit and would be considered to be part of a Power Generating Module .
Synchronous Speed	That speed required by a Generating Unit to enable it to be Synchronised to a System .
System	Any User System and/or the National Electricity Transmission System , as the case may be.
System Ancillary Services	Collectively Part 1 System Ancillary Services and Part 2 System Ancillary Services .
System Constraint	A limitation on the use of a System due to lack of transmission capacity or other System conditions.
System Constrained Capacity	That portion of Registered Capacity or Registered Import Capacity not available due to a System Constraint .
System Constraint Group	A part of the National Electricity Transmission System which, because of System Constraints , is subject to limits of Active Power which can flow into or out of (as the case may be) that part.
System Fault Dependability Index or Dp	A measure of the ability of Protection to initiate successful tripping of circuit-breakers which are associated with a faulty item of Apparatus . It is calculated using the formula: $Dp = 1 - F_1/A$ Where: A = Total number of System faults F ₁ = Number of System faults where there was a failure to trip a circuit-breaker.
System Margin	The margin in any period between (a) the sum of Maximum Export Limits and (b) forecast Demand and the Operating Margin , for that period.
System Negative Reserve Active Power Margin or System NRAPM	That margin of Active Power sufficient to allow the largest loss of Load at any time.

System Operator - Transmission Owner Code or STC	Has the meaning set out in The Company's Transmission Licence
System Telephony	An alternative method by which a User's Responsible Engineer/Operator and The Company's Control Engineer(s) speak to one and another for the purposes of control of the Total System in both normal operating conditions and where practicable, emergency operating conditions.
System Tests	Tests which involve simulating conditions, or the controlled application of irregular, unusual or extreme conditions, on the Total System , or any part of the Total System , but which do not include commissioning or recommissioning tests or any other tests of a minor nature.
System to Demand Intertrip Scheme	An intertrip scheme which disconnects Demand when a System fault has arisen to prevent abnormal conditions occurring on the System .
System to Generator Operational Intertripping	A Balancing Service involving the initiation by a System to Generator Operational Intertripping Scheme of automatic tripping of the User's circuit breaker(s), or Relevant Transmission Licensee's circuit breaker(s) where agreed by The Company , the User and the Relevant Transmission Licensee , resulting in the tripping of BM Unit(s) or (where relevant) Generating Unit(s) comprised in a BM Unit to prevent abnormal system conditions occurring, such as over voltage, overload, System instability, etc, after the tripping of other circuit-breakers following power System fault(s).
System to Generator Operational Intertripping Scheme	A System to Generating Unit or System to CCGT Module or System to Power Park Module or System to Power Generating Module Intertripping Scheme forming a condition of connection and specified in Appendix F3 of the relevant Bilateral Agreement , being either a Category 1 Intertripping Scheme , Category 2 Intertripping Scheme , Category 3 Intertripping Scheme or Category 4 Intertripping Scheme .
System Zone	A region of the National Electricity Transmission System within a described boundary or the whole of the National Electricity Transmission System , as further provided for in OC2.2.4, and the term "Zonal" will be construed accordingly.
Target Frequency	That Frequency determined by The Company , in its reasonable opinion, as the desired operating Frequency of the Total System . This will normally be 50.00Hz plus or minus 0.05Hz, except in exceptional circumstances as determined by The Company , in its reasonable opinion when this may be 49.90 or 50.10Hz. An example of exceptional circumstances may be difficulties caused in operating the System during disputes affecting fuel supplies.
Technical Specification	In relation to Plant and/or Apparatus , (a) the relevant European Specification ; or (b) if there is no relevant European Specification , other relevant standards which are in common use in the European Community.

TERRE	Trans European Replacement Reserves Exchange – a market covering the procurement of replacement reserves across Europe as described European Regulation (EU) 2017/2195 (EBGL) and European Regulation (EU) 2017/1485
TERRE Activation Period	A period of time lasting 15 minutes and starting at either 0, 15, 30 or 45 minutes past the hour (e.g. 10:00 to 10:15). There are 4 TERRE Activation Periods in one TERRE Auction Period
TERRE Auction Period	A period of time lasting one hour and starting and ending on the hour (e.g. from 10:00 to 11:00). Hence there are 24 TERRE Auction Periods in a day
TERRE Bid	A submission by a BM Participant covering the price and MW deviation offered into the TERRE auction (please note – in the Balancing Mechanism the term bid has a different meaning – in this case a bid can be an upward or downward MW change)
TERRE Central Platform	IT system which implements the TERRE auction
TERRE Gate Closure	60 minutes before the start of the TERRE Auction period (note still ongoing discussions if this may become 55 minutes)
TERRE Instruction Guide	Details specific rules for creating an RR Instruction from an RR Acceptance
TERRE Data Validation and Consistency Rules	A document produced by the central TERRE project detailing the correct format of submissions for TERRE
Test Co-ordinator	A person who co-ordinates System Tests .
Test Panel	A panel, whose composition is detailed in OC12 , which is responsible, inter alia, for considering a proposed System Test , and submitting a Proposal Report and a Test Programme .
Test Programme	A programme submitted by the Test Panel to The Company , the Test Proposer , and each User identified by The Company under OC12.4.2.1, which states the switching sequence and proposed timings of the switching sequence, a list of those staff involved in carrying out the System Test (including those responsible for the site safety) and such other matters as the Test Panel deems appropriate.
Test Proposer	The person who submits a Proposal Notice .
The Company	National Grid Electricity Transmission plc (NO: 2366977) whose registered office is at 1-3 Strand, London, WC2N 5EH.
The Company Control Engineer	The nominated person employed by The Company to direct the operation of the National Electricity Transmission System or such person as nominated by The Company .
The Company Operational Strategy	The Company's operational procedures which form the guidelines for operation of the National Electricity Transmission System .

Total Shutdown	The situation existing when all generation has ceased and there is no electricity supply from External Interconnections and, therefore, the Total System has shutdown with the result that it is not possible for the Total System to begin to function again without The Company's directions relating to a Black Start .
Total System	The National Electricity Transmission System and all User Systems in the National Electricity Transmission System Operator Area .
Trading Point	A commercial and, where so specified in the Grid Code, an operational interface between a User and The Company , which a User has notified to The Company .
Transfer Date	Such date as may be appointed by the Secretary of State by order under section 65 of the Act .
Transmission	Means, when used in conjunction with another term relating to equipment or a site, whether defined or not, that the associated term is to be read as being part of or directly associated with the National Electricity Transmission System , and not of or with the User System .
Transmission Area	Has the meaning set out in the Transmission Licence of a Transmission Licensee .
Transmission Connected Demand Facilities	A Demand Facility which has a Grid Supply Point to the National Electricity Transmission System
Transmission DC Converter	Any Transmission Licensee Apparatus (or OTSUA that will become Transmission Licensee Apparatus at the OTSUA Transfer Time) used to convert alternating current electricity to direct current electricity, or vice versa. A Transmission Network DC Converter (which could include an HVDC System owned by an Offshore Transmission Licensee or Generator in respect of OTSUA) is a standalone operative configuration at a single site comprising one or more converter bridges, together with one or more converter transformers, converter control equipment, essential protective and switching devices and auxiliaries, if any, used for conversion.
Transmission Entry Capacity	Has the meaning set out in the CUSC .
Transmission Interface Circuit	In The Company's Transmission Area , a Transmission circuit which connects a System operating at a voltage above 132kV to a System operating at a voltage of 132kV or below In SHETL's Transmission Area and SPT's Transmission Area , a Transmission circuit which connects a System operating at a voltage of 132kV or above to a System operating at a voltage below 132kV.
Transmission Interface Point	means the electrical point of connection between the Offshore Transmission System and an Onshore Transmission System .
Transmission Interface Site	the site at which the Transmission Interface Point is located.
Transmission Licence	A licence granted under Section 6(1)(b) of the Act .

Transmission Licensee	Any Onshore Transmission Licensee or Offshore Transmission Licensee
Transmission Site	In England and Wales, means a site owned (or occupied pursuant to a lease, licence or other agreement) by The Company in which there is a Connection Point . For the avoidance of doubt, a site owned by a User but occupied by The Company as aforesaid, is a Transmission Site . In Scotland and Offshore , means a site owned (or occupied pursuant to a lease, licence or other agreement) by a Relevant Transmission Licensee in which there is a Connection Point . For the avoidance of doubt, a site owned by a User but occupied by the Relevant Transmission Licensee as aforesaid, is a Transmission Site .
Transmission System	Has the same meaning as the term "licensee's transmission system" in the Transmission Licence of a Transmission Licensee .
Turbine Time Constant	Determined at Registered Capacity , the turbine time constant will be construed in accordance with the principles of the IEEE Committee Report "Dynamic Models for Steam and Hydro Turbines in Power System Studies" published in 1973 which apply to such phrase.
Type A Power Generating Module	A Power-Generating Module with a Grid Entry Point or User System Entry Point below 110 kV and a Maximum Capacity of 0.8 kW or greater but less than 1MW;
Type B Power Generating Module	A Power-Generating Module with a Grid Entry Point or User System Entry Point below 110 kV and a Maximum Capacity of 1MW or greater but less than 10MW;
Type C Power Generating Module	A Power-Generating Module with a Grid Entry Point or User System Entry Point below 110 kV and a Maximum Capacity of 10MW or greater but less than 50MW;
Type D Power Generating Module	A Power-generating Module : with a Grid Entry Point or User System Entry Point at, or greater than, 110 kV; or with a Grid Entry Point or User System Entry Point below 110 kV and with Maximum Capacity of 50MW or greater
Unbalanced Load	The situation where the Load on each phase is not equal.
Under-excitation Limiter	Shall have the meaning ascribed to that term in IEC 34-16-1:1991 [equivalent to British Standard BS4999 Section 116.1 : 1992].
Under Frequency Relay	An electrical measuring relay intended to operate when its characteristic quantity (Frequency) reaches the relay settings by decrease in Frequency .
Unit Board	A switchboard through which electrical power is supplied to the Auxiliaries of a Generating Unit and which is supplied by a Unit Transformer . It may be interconnected with a Station Board .
Unit Transformer	A transformer directly connected to a Generating Unit's terminals, and which supplies power to the Auxiliaries of a Generating Unit . Typical voltage ratios are 23/11kV and 15/6.6Kv.
Unit Load Controller Response Time Constant	The time constant, expressed in units of seconds, of the power output increase which occurs in the Secondary Response timescale in response to a step change in System Frequency .

Unresolved Issues	Any relevant Grid Code provisions or Bilateral Agreement requirements identified by The Company with which the relevant User has not demonstrated compliance to The Company's reasonable satisfaction at the date of issue of the Preliminary Operational Notification and/or Interim Operational Notification and/or Limited Operational Notification and which are detailed in such Preliminary Operational Notification and/or Interim Operational Notification and/or Limited Operational Notification .
Urgent Modification	A Grid Code Modification Proposal treated or to be treated as an Urgent Modification in accordance with GR.23.
User	A term utilised in various sections of the Grid Code to refer to the persons using the National Electricity Transmission System , as more particularly identified in each section of the Grid Code concerned. In the Preface and the General Conditions the term means any person to whom the Grid Code applies. The term User includes an EU Code User and a GB Code User .
User Data File Structure	The file structure given at DRC 18 which will be specified by The Company which a Generator or DC Converter Station owner or HVDC System Owner must use for the purposes of CP to submit DRC data Schedules and information demonstrating compliance with the Grid Code and, where applicable, with the CUSC Contract(s) , unless otherwise agreed by The Company .
User Development	In the PC means either User's Plant and/or Apparatus to be connected to the National Electricity Transmission System , or a Modification relating to a User's Plant and/or Apparatus already connected to the National Electricity Transmission System , or a proposed new connection or Modification to the connection within the User System .
User Self Certification of Compliance	A certificate, in the form attached at CP.A.2.(1) or ECP.A.2.(1) completed by a Generator or DC Converter Station owner or HVDC System Owner to which the Compliance Statement is attached which confirms that such Plant and Apparatus complies with the relevant Grid Code provisions and where appropriate, with the CUSC Contract(s) , as identified in the Compliance Statement and, if appropriate, identifies any Unresolved Issues and/or any exceptions to such compliance and details the derogation(s) granted in respect of such exceptions.
User Site	In England and Wales, a site owned (or occupied pursuant to a lease, licence or other agreement) by a User in which there is a Connection Point . For the avoidance of doubt, a site owned by The Company but occupied by a User as aforesaid, is a User Site . In Scotland and Offshore , a site owned (or occupied pursuant to a lease, licence or other agreement) by a User in which there is a Connection Point . For the avoidance of doubt, a site owned by a Relevant Transmission Licensee but occupied by a User as aforesaid, is a User Site .

User System	<p>Any system owned or operated by a User comprising:-</p> <p>(a) Power Generating Modules or Generating Units; and/or</p> <p>(b) Systems consisting (wholly or mainly) of electric lines used for the distribution of electricity from Grid Supply Points or Generating Units or Power Generating Modules or other entry points to the point of delivery to Customers, or other Users;</p> <p>and Plant and/or Apparatus (including prior to the OTSUA Transfer Time, any OTSUA) connecting:-</p> <p>(c) The system as described above; or</p> <p>(d) Non-Embedded Customers equipment;</p> <p>to the National Electricity Transmission System or to the relevant other User System, as the case may be.</p> <p>The User System includes any Remote Transmission Assets operated by such User or other person and any Plant and/or Apparatus and meters owned or operated by the User or other person in connection with the distribution of electricity but does not include any part of the National Electricity Transmission System.</p>
User System Entry Point	<p>A point at which a Power Generating Module, Generating Unit, a CCGT Module or a CCGT Unit or a Power Park Module or a DC Converter or an HVDC Converter, as the case may be, which is Embedded connects to the User System.</p>
Water Time Constant	<p>Bears the meaning ascribed to the term "Water inertia time" in IEC308.</p>
Website	<p>The site established by The Company on the World-Wide Web for the exchange of information among Users and other interested persons in accordance with such restrictions on access as may be determined from time to time by The Company.</p>
Weekly ACS Conditions	<p>Means that particular combination of weather elements that gives rise to a level of peak Demand within a week, taken to commence on a Monday and end on a Sunday, which has a particular chance of being exceeded as a result of weather variation alone. This particular chance is determined such that the combined probabilities of Demand in all weeks of the year exceeding the annual peak Demand under Annual ACS Conditions is 50%, and in the week of maximum risk the weekly peak Demand under Weekly ACS Conditions is equal to the annual peak Demand under Annual ACS Conditions.</p>
WG Consultation Alternative Request	<p>Any request from an Authorised Electricity Operator; the Citizens Advice or the Citizens Advice Scotland, The Company or a Materially Affected Party for a Workgroup Alternative Grid Code Modification to be developed by the Workgroup expressed as such and which contains the information referred to at GR.20.13. For the avoidance of doubt any WG Consultation Alternative Request does not constitute either a Grid Code Modification Proposal or a Workgroup Alternative Grid Code Modification</p>
Workgroup	<p>a Workgroup established by the Grid Code Review Panel pursuant to GR.20.1;</p>

Workgroup Consultation	as defined in GR.20.10, and any further consultation which may be directed by the Grid Code Review Panel pursuant to GR.20.17;
Workgroup Alternative Grid Code Modification	an alternative modification to the Grid Code Modification Proposal developed by the Workgroup under the Workgroup terms of reference (either as a result of a Workgroup Consultation or otherwise) and which is believed by a majority of the members of the Workgroup or by the chairman of the Workgroup to better facilitate the Grid Code Objectives than the Grid Code Modification Proposal or the current version of the Grid Code ;
Zonal System Security Requirements	That generation required, within the boundary circuits defining the System Zone , which when added to the secured transfer capability of the boundary circuits exactly matches the Demand within the System Zone .

A number of the terms listed above are defined in other documents, such as the **Balancing and Settlement Code** and the **Transmission Licence**. Appendix 1 sets out the current definitions from the other documents of those terms so used in the Grid Code and defined in other documents for ease of reference, but does not form part of the Grid Code.

GD.2 Construction of References

GD.2.1 In the Grid Code:

- (i) a table of contents, a Preface, a Revision section, headings, and the Appendix to this **Glossary and Definitions** are inserted for convenience only and shall be ignored in construing the Grid Code;
- (ii) unless the context otherwise requires, all references to a particular paragraph, sub-paragraph, Appendix or Schedule shall be a reference to that paragraph, sub-paragraph Appendix or Schedule in or to that part of the Grid Code in which the reference is made;
- (iii) unless the context otherwise requires, the singular shall include the plural and vice versa, references to any gender shall include all other genders and references to persons shall include any individual, body corporate, corporation, joint venture, trust, unincorporated association, organisation, firm or partnership and any other entity, in each case whether or not having a separate legal personality;
- (iv) references to the words "include" or "including" are to be construed without limitation to the generality of the preceding words;
- (v) unless there is something in the subject matter or the context which is inconsistent therewith, any reference to an Act of Parliament or any Section of or Schedule to, or other provision of an Act of Parliament shall be construed at the particular time, as including a reference to any modification, extension or re-enactment thereof then in force and to all instruments, orders and regulations then in force and made under or deriving validity from the relevant Act of Parliament;
- (vi) where the **Glossary and Definitions** refers to any word or term which is more particularly defined in a part of the Grid Code, the definition in that part of the Grid Code will prevail (unless otherwise stated) over the definition in the **Glossary & Definitions** in the event of any inconsistency;
- (vii) a cross-reference to another document or part of the Grid Code shall not of itself impose any additional or further or co-existent obligation or confer any additional or further or co-existent right in the part of the text where such cross-reference is contained;
- (viii) nothing in the Grid Code is intended to or shall derogate from **The Company's** statutory or licence obligations;
- (ix) a "holding company" means, in relation to any person, a holding company of such person within the meaning of section 736, 736A and 736B of the Companies Act 1985 as substituted by section 144 of the Companies Act 1989 and, if that latter section is not in force at the **Transfer Date**, as if such latter section were in force at such date;

- (x) a "subsidiary" means, in relation to any person, a subsidiary of such person within the meaning of section 736, 736A and 736B of the Companies Act 1985 as substituted by section 144 of the Companies Act 1989 and, if that latter section is not in force at the **Transfer Date**, as if such latter section were in force at such date;
- (xi) references to time are to London time; and
- (xii) (a) Save where (b) below applies, where there is a reference to an item of data being expressed in a whole number of MW, fractions of a MW below 0.5 shall be rounded down to the nearest whole MW and fractions of a MW of 0.5 and above shall be rounded up to the nearest whole MW;

(b) In the case of the definition of **Registered Capacity** or **Maximum Capacity**, fractions of a MW below 0.05 shall be rounded down to one decimal place and fractions of a MW of 0.05 and above shall be rounded up to one decimal place.
- (xiii) For the purposes of the Grid Code, physical quantities such as current or voltage are not defined terms as their meaning will vary depending upon the context of the obligation. For example, voltage could mean positive phase sequence root mean square voltage, instantaneous voltage, phase to phase voltage, phase to earth voltage. The same issue equally applies to current, and therefore the terms current and voltage should remain undefined with the meaning depending upon the context of the application. European Regulation (EU) 2016/631 defines requirements of current and voltage but they have not been adopted as part of EU implementation for the reasons outlined above.

< END OF GLOSSARY & DEFINITIONS >

OPERATING CODE NO. 1
(OC1)

DEMAND FORECASTS

CONTENTS

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

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- OC1.1 INTRODUCTION
- OC1.1.1 **Operating Code No.1 ("OC1")** is concerned with **Demand** forecasting for operational purposes. In order to match generation output with **Demand** for electricity it is necessary to undertake **Demand** forecasting. It is also necessary to undertake **Demand** forecasting of **Reactive Power**.
- OC1.1.2 In the **Operational Planning Phase**, **Demand** forecasting shall be conducted by **The Company** taking account of **Demand** forecasts furnished by **Network Operators**, who shall provide **The Company** with information in the form set out in this **OC1**. The data supplied under the **PC** is also taken into account.
- OC1.1.3 In the **Programming Phase** and **Control Phase**, **The Company** will conduct its own **Demand** forecasting taking into account information to be furnished by **Suppliers** and **Network Operators** and the other factors referred to in OC1.6.1.
- OC1.1.4 In this **OC1**, the point of connection of the **External Interconnection** to the **National Electricity Transmission System** shall be considered as a **Grid Supply Point**. **Reactive Power Demand** includes the series **Reactive** losses of the **User's System** but excludes any network susceptance and any **Reactive** compensation on the **User's System**. **The Company** will obtain the lumped network susceptance and details of **Reactive** compensation from the requirements to submit data under the **PC**.
- OC1.1.5 Data relating to **Demand Control** should include details relating to MW.
- OC1.1.6 **OC1** deals with the provision of data on **Demand Control** in the **Operational Planning Phase**, the **Programming Phase** and the **Post-Control Phase**, whereas **OC6** (amongst other things) deals with the provision of data on **Demand Control** following the **Programming Phase** and in the **Control Phase**.
- OC1.1.7 In this **OC1**, 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.
- OC1.1.8 References in **OC1** to data being supplied on a half hourly basis refer to it being supplied for each period of 30 minutes ending on the hour and half-hour in each hour.
- OC1.2 OBJECTIVE
- The objectives of **OC1** are to:
- OC1.2.1 enable the provision of data to **The Company** by **Users** in the **Programming Phase**, **Control Phase** and **Post-Control Phase**; and
- OC1.2.2 provide for the factors to be taken into account by **The Company** when **Demand** forecasting in the **Programming Phase** and **Control Phase**.
- OC1.3 SCOPE
- OC1** applies to **The Company** and to **Users** which in this **OC1** means:
- (a) **Network Operators**, and
- (b) **Suppliers**.
- OC1.4 DATA REQUIRED BY THE COMPANY IN THE OPERATIONAL PLANNING PHASE
- OC1.4.1 (a) Each **User**, as specified in (b) below, shall provide **The Company** with the data requested in OC1.4.2 below.
- (b) The data will need to be supplied by each **Network Operator** directly connected to the **National Electricity Transmission System** in relation to **Demand Control** and in relation each **Generator** with respect to the output of **Embedded Medium Power Stations** within its **System**.
- OC1.4.2 (a) Data

By calendar week 28 each year each **Network Operator** will provide to **The Company** in writing the forecast information listed in (c) below for the current **Financial Year** and each of the succeeding five **Financial Years**.

(b) Data Providers

In circumstances when the busbar arrangement at a **Grid Supply Point** is expected to be operated in separate sections, separate sets of forecast information for each section will be provided to **The Company**.

(c) Embedded Medium Power Station Output and Demand Control

For the specified time of the annual peak half hour **National Electricity Transmission System Demand**, as specified by **The Company** under PC.A.5.2.2, the output of **Embedded Medium Power Stations** and forecasts of **Demand** to be relieved by **Demand Control** on a **Grid Supply Point** basis giving details of the amount and duration of the **Demand Control**.

OC1.5 DATA REQUIRED BY THE COMPANY IN THE PROGRAMMING PHASE, CONTROL PHASE AND POST-CONTROL PHASE

OC1.5.1 Programming Phase

For the period of 2 to 8 weeks ahead the following will be supplied to **The Company** in writing by 1000 hours each Monday:

(a) Demand Control

Each **Network Operator** will supply MW profiles of the amount and duration of their proposed use of **Demand Control** which may result in a **Demand** change equal to or greater than the **Demand Control Notification Level** (averaged over any half hour on any **Grid Supply Point**) on a half hourly and **Grid Supply Point** basis;

(b) Medium Power Station Operation

Each **Network Operator** will, if reasonably required by **The Company**, supply MW schedules for the operation of **Embedded Medium Power Stations** within its **System** on a half hourly and **Grid Supply Point** basis.

OC1.5.2 For the period 2 to 12 days ahead the following will be supplied to **The Company** in writing by 1200 hours each Wednesday:

(a) Demand Control

Each **Network Operator** will supply MW profiles of the amount and duration of their proposed use of **Demand Control** which may result in a **Demand** change equal to or greater than the **Demand Control Notification Level** (averaged over any half hour on any **Grid Supply Point**) on a half hourly and **Grid Supply Point** basis;

(b) Medium Power Station Operation

Each **Network Operator** will, if reasonably required by **The Company**, supply MW schedules for the operation of **Embedded Medium Power Stations** within its **System** on a half hourly and **Grid Supply Point** basis.

OC1.5.3 Medium Power Station Output

Each **Network Operator** will, if reasonably required by **The Company**, supply **The Company** with MW schedules for the operation of **Embedded Medium Power Stations** within its **System** on a half hourly and **Grid Supply Point** basis in writing by 1000 hours each day (or such other time specified by **The Company** from time to time) for the next day (except that it will be for the next 3 days on Fridays and 2 days on Saturdays and may be longer (as specified by **The Company** at least one week in advance) to cover holiday periods);

OC1.5.4 Other Codes

Under **OC6** each **Network Operator** will notify **The Company** of their proposed use of **Demand Control** (which may result in a **Demand** change equal to or greater than the **Demand Control Notification Level**), and under **BC1**, each **Supplier** will notify **The Company** of their proposed use of **Customer Demand Management** (which may result in a **Demand** change equal to or greater than the **Customer Demand Management Notification Level**) in this timescale.

OC1.5.5 Control Phase

OC1.5.5.1 Demand Control

Under **OC6**, each **Network Operator** will notify **The Company** of any **Demand Control** proposed by itself which may result in a **Demand** change equal to or greater than the **Demand Control Notification Level** averaged over any half hour on any **Grid Supply Point** which is planned after 1000 hours, and of any changes to the planned **Demand Control** notified to **The Company** prior to 1000 hours as soon as possible after the formulation of the new plans;

OC1.5.5.2 Customer Demand Management

- (a) Each **Supplier** will notify **The Company** of any **Customer Demand Management** proposed by itself which may result in a **Demand** change equal to or greater than the **Customer Demand Management Notification Level** averaged over any half hour on any **Grid Supply Point** which is planned to occur at any time in the **Control Phase** and of any changes to the planned **Customer Demand Management** already notified to **The Company** as soon as possible after the formulation of the new plans.
- (b) The following information is required on a **Grid Supply Point** and half-hourly basis:
 - (i) the proposed date, time and duration of implementation of **Customer Demand Management**; and
 - (ii) the proposed reduction in **Demand** by use of **Customer Demand Management**.

OC1.5.5.3 Load Management Blocks

In Scotland, by 11:00 each day, each **Supplier** who controls a **Load Management Block** of **Demand** with a capacity of 5MW or more shall submit to **The Company** a schedule of its proposed switching times and profiles in respect of each block for the next day.

OC1.5.6 Post-Control Phase

The following will be supplied to **The Company** in writing by 0600 hours each day in respect of **Active Power** data and by 1000 hours each day in respect of **Reactive Power** data:

(a) Demand Control

Each **Network Operator** will supply MW profiles for the previous calendar day of the amount and duration of **Demand** reduction achieved by itself from the use of **Demand Control** equal to or greater than the **Demand Control Notification Level** (averaged over any half hour on any **Grid Supply Point**), on a half hourly and **Grid Supply Point** basis.

(b) Customer Demand Management

Each **Supplier** will supply MW profiles of the amount and duration of **Demand** reduction achieved by itself from the use of **Customer Demand Management** equal to or greater than the **Customer Demand Management Notification Level** (averaged over any half hour on any **Grid Supply Point**) on a half hourly and **Grid Supply Point** basis during the previous calendar day.

OC1.6 THE COMPANY FORECASTS

OC1.6.1 The following factors will be taken into account by **The Company** when conducting **National Electricity Transmission System Demand** forecasting in the **Programming Phase** and **Control Phase**:

- (a) Historic **Demand** data (this includes **National Electricity Transmission System Losses**).
- (b) Weather forecasts and the current and historic weather conditions.
- (c) The incidence of major events or activities which are known to **The Company** in advance.
- (d) Anticipated interconnection flows across **External Interconnections**.
- (e) **Demand Control** equal to or greater than the **Demand Control Notification Level** (averaged over any half hour at any **Grid Supply Point**) proposed to be exercised by **Network Operators** and of which **The Company** has been informed.
- (f) **Customer Demand Management** equal to or greater than the **Customer Demand Management Notification Level** (averaged over any half hour at any **Grid Supply point**) proposed to be exercised by **Suppliers** and of which **The Company** has been informed.
- (g) Other information supplied by **Users**.
- (h) Anticipated **Pumped Storage Unit** demand.
- (i) the sensitivity of **Demand** to anticipated market prices for electricity.
- (j) **BM Unit Data** submitted by **BM Participants** to **The Company** in accordance with the provisions of **BC1** and **BC2**.
- (k) **Demand** taken by **Station Transformers**

OC1.6.2 Taking into account the factors specified in OC1.6.1 **The Company** uses **Demand** forecast methodology to produce forecasts of **National Electricity Transmission System Demand**. A written record of the use of the methodology must be kept by **The Company** for a period of at least 12 months.

OC1.6.3 The methodology will be based upon factors (a), (b) and (c) above to produce, by statistical means, unbiased forecasts of **National Demand**. **National Electricity Transmission System Demand** will be calculated from these forecasts but will also take into account factors (d), (e), (f), (g), (h), (i) and (j) above. No other factors are taken into account by **The Company**, and it will base its **National Electricity Transmission System Demand** forecasts on those factors only.

< END OF OPERATING CODE NO. 1 >

OPERATING CODE NO. 2

(OC2)

OPERATIONAL PLANNING AND DATA PROVISION

CONTENTS

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

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OC2.1 INTRODUCTION

OC2.1.1 **Operating Code No. 2 ("OC2")** is concerned with:

- (a) the co-ordination of the release of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** and **Power Park Modules**, **External Interconnections**, the **National Electricity Transmission System** and **Network Operators' Systems** for construction, repair and maintenance;
- (b) provision by **The Company** of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones**;
- (c) the provision by **Generators** of **Generation Planning Parameters** for **Gensets**, including **Synchronous Power Generating Module Planning Matrices**, **CCGT Module Planning Matrices** and **Power Park Module Planning Matrices**, to **The Company** for planning purposes only; and
- (d) the agreement for release of **Existing Gas Cooled Reactor Plant** for outages in certain circumstances.

OC2.1.2 (a) **Operational Planning** involves planning, through various timescales, the matching of generation output with forecast **National Electricity Transmission System Demand** together with a reserve of generation to provide a margin, 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**, 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 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** 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 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**.

OC2.1.3 In this **OC2** for the purpose of **Generator** and **Interconnector Owner** outage co-ordination 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** are to calendar weeks as defined in ISO 8601.

OC2.1.4 References in **OC2** to a **Generator's** and **Interconnector Owner's** "best estimate" shall be that **Generator's** or **Interconnector Owner'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 day, 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 output or demand is small.

OC2.2

OBJECTIVE

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**), **Synchronous 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**.
- (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**.

OC2.2.2

The objective of **OC2** is also to enable the provision by **The Company** of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones**.

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.

OC2.2.4

The boundaries of the **System Zones** will be determined by **The Company** from time to time taking into account the disposition of **Generators' Power Stations** and **Interconnector Owners' External Interconnections** within the **System Zones**. The location of the boundaries will be made available to all **Users**. Any **User** may request that **The Company** reviews any of the **System Zonal** boundaries if that **User** considers that the current boundaries are not appropriate, giving the reasons for their concerns. On receipt of such a request **The Company** will review the boundaries if, in **The Company's** reasonable opinion, such a review is justified.

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) **Non-Embedded Customers**; and
- (d) **HVDC System Owners** and **DC Converter Station** owners; and
- (e) **Interconnector Owners** in respect of their **External Interconnections**.

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 (a)

OC2.4.1.2.1 (e)

OC2.4.1.2.1 (j)

OC2.4.1.2.2 (a)

OC2.4.1.2.2 (i)

OC2.4.1.3.2 (a)

OC2.4.1.3.2 (b)

OC2.4.1.3.3

OC2.4.2.1 (a)

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

OC2.4.1.1 Under **OC2** the interaction between **The Company** and **Users** will be as follows:

- (a) Each **Generator**, and each **Interconnector Owner** and **The Company** In respect of outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules** and **External Interconnection Circuits** and in respect of outages of other **Plant** and/or **Apparatus** directly connected to the **National Electricity Transmission System**;
- (b) **The Company** and each **Generator** and each **Interconnector Owner** in respect of **National Electricity Transmission System** outages relevant to each **Generator** (other than in respect of **Embedded Small Power Stations** or **Embedded Medium Power Stations**) and **Interconnector Owner**;
- (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) **The Company** and each **Network Operator** and each **Non-Embedded Customer** in respect of **National Electricity Transmission System** outages relevant to the particular **Network Operator** or **Non-Embedded Customers**;
- (e) Each **Network Operator** and each **Non-Embedded Customer** and **The Company** in respect of **User System** outages relevant to **The Company**; and
in respect of **Network Operators** only, outages of the **Network Operator's User System** that may impact upon an **Offshore Transmission System** connected to that **Network Operator's User System**.

OC2.4.1.2 Planning of **Power Generating Modules**, **Synchronous Generating Unit** And **External Interconnection** and **Power Park Module** Outages

OC2.4.1.2.1 Operational Planning Phase - Planning for Calendar Years 3 to 5 inclusive – Weekly Resolution

In each calendar year:

- (a) By the end of week 2

Each **Generator** and each **Interconnector Owner** will provide **The Company** in writing with:

- (i) a provisional **Power Generating Module** (including **DC Connected Power Park Module**) and **Synchronous Generating Unit** and **Power Park Module** outage programme (covering all non-**Embedded Power Stations** and **Embedded Large Power Stations**) for Year 3 to Year 5 (inclusive) specifying the **Power Generating Module** (including **DC Connected Power Park Modules**) and/or **Synchronous Generating Unit** and/or **Power Park Module** and **External Interconnection Circuits** and MW concerned, duration of proposed outages, the preferred date for each outage and where there is a possibility of flexibility, the earliest start date and latest finishing date; and
- (ii) a best estimate weekly **Output Usable** forecast of all its **Gensets** and **External Interconnections** for Year 3 to Year 5.

(b) Between the end of week 2 and the end of week 12

The Company will be:

- (i) calculating total winter peak generating capacity assumed to be available to the **Total System**;
- (ii) calculating the total winter peak generating capacity expected from **Large Power Stations**, taking into account **Demand** forecasts and details of proposed use of **Demand Control** received under **OC1**, and an operational planning margin set by **The Company** (the "**Operational Planning Margin**");
- (iii) calculating the weekly peak generating capacity expected from **Large Power Stations** taking into account demand forecasts and details of proposed use of **Demand Control** received under **OC1**, and the **Operational Planning Margin** and **Zonal System Security Requirements**. The total weekly peak MW needed to be available is the "weekly total MW required".

The calculation under (iii) 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**.

During this period, **The Company** may, as appropriate, contact each **Generator** and each **Interconnector Owner** who has supplied information to seek clarification on points.

(c) By the end of week 12

The Company will:

- (i) having taken into account the information notified to it by **Generators** and **Interconnector Owners** and taking into account:
 - (1) **National Electricity Transmission System** constraints and outages,
 - (2) **Network Operator System** constraints and outages, known to **The Company**, and
 - (3) the **Output Usable** required, in its view, to meet weekly total MW requirements,

provide each **Generator** and each **Interconnector Owner** in writing with any suggested amendments to the provisional outage programme supplied by the **Generator** and **Interconnector Owner** which **The Company** believes necessary, and will advise **Generators** with **Large Power Stations** of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones** and potential export limitations, on a weekly basis, which would occur without such amendments;

- (ii) provide each **Network Operator** in writing with potential outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **External Interconnection Circuits** and/or **Power Park Modules** which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** provided that, in such circumstances **The Company** has notified the **Generator** concerned at least 48 hours beforehand of its intention to do so (including identifying the **Power Generating Modules** (including **DC Connected Power Park Modules**) **Synchronous Generating Unit** and/or **Power Park Module** concerned).
- (d) By the end of week 14
 - (i) Where a **Generator** or **Interconnector Owner** or a **Network Operator** is unhappy with the suggested amendments to its provisional outage programme (in the case of a **Generator** or **Interconnector Owner**) 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** or an **Interconnector Owner** or **Network Operator** will then discuss the problem and seek to resolve it.
 - (ii) The possible resolution of the problem may require **The Company** or a **User** to contact other **Generators** and **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 be determined at the time.
- (e) By the end of week 25

Each **Generator** will provide **The Company** in writing with an updated provisional **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit** and **Power Park Module** outage programme covering both **Embedded** and non-**Embedded Large Power Stations** together with the best estimate weekly **Output Usable** forecasts for each **Genset**, in all cases for Year 3 to Year 5 (inclusive). The updated provisional **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit** and **Power Park Module** outage programme will contain the MW concerned, duration of proposed outages, the preferred date for each outage and, where applicable, earliest start date and latest finishing date, together with an update of the **Output Usable** estimate supplied under (a)(ii) above.

Each **Interconnector Owner** will provide **The Company** in writing with an updated provisional **External Interconnection Circuit** outage programme together with best estimate weekly **Output Usable** forecast for each **External Interconnection**, in all cases for Year 3 to Year 5 (inclusive). The updated provisional **External Interconnection Circuit** outage programme will contain the MW concerned, duration of proposed outages, the preferred date for each outage and, where applicable, earliest start date and latest finishing date, together with an update of the **Output Usable** estimate supplied under (a)(ii) above.

- (f) Between the end of week 25 and the end of week 28

The Company will be considering the updated provisional **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit**, **Power Park Module** and **External Interconnection Circuit** outage programmes, together with the best estimate weekly **Output Usable** forecasts supplied to it by **Generators** and **Interconnector Owners** under (e) and their **Registered Capacity** or **Maximum Capacity** (as applicable) and will be analysing **Operational Planning Margins** for the period.

- (g) By the end of week 28

The Company will:

- (i) provide each **Generator** and each **Interconnector Owner** in writing with details of any suggested revisions considered by **The Company** as being necessary to the updated provisional **Power Generating Module** (including **DC Connected Power Park Modules**) **Synchronous Generating Unit**, **Power Park Module** and **External Interconnection Circuit** outage programmes supplied to **The Company** under (e) and will advise **Generators** with **Large Power Stations** and **Interconnector Owners** of the **Surpluses** for the **National Electricity Transmission System** and **System Zones** and potential export limitations on a weekly basis which would occur without such revisions; and
 - (ii) provide each **Network Operator** in writing with the update of potential outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **External Interconnection Circuits** and/or **Power Park Modules** which, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System**.
- (h) By the end of week 31

Where a **Generator**, **Interconnector Owner** or a **Network Operator** is unhappy with the revisions suggested to the updated provisional **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit**, **Power Park Module** and **External Interconnector Circuit** outage programme (in the case of a **Generator**) or such update of potential outages (in the case of an **Interconnector Owner** or **Network Operator**) under (g) it may contact **The Company** to explain its concerns and the provisions set out in (d) above will apply to that process.

- (i) By the end of week 42

The Company will:

- (1) provide each **Generator** and each **Interconnector Owner** in writing with details of suggested revisions considered by **The Company** as being necessary to the updated provisional **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit**, **Power Park Module** and **External Interconnection Circuit** outage programmes supplied to **The Company** and will advise **Generators** with **Large Power Stations** and **Interconnector Owners** of the **Surpluses** for the **National Electricity Transmission System** and **System Zones** and potential export limitations, on a weekly basis which would occur without such revisions;
- (2) provide each **Network Operator** in writing with the update of potential outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** and/or **Power Park Modules** which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** provided that, in such circumstances **The Company** has notified the **Generator** or, as appropriate, the **Interconnector Owner** concerned at least 48 hours beforehand of its intention to do so (including identifying the **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** and/or **Power Park Modules** concerned).

- (j) By the end of week 45

The Company will seek to agree a **Final Generation Outage Programme** for Year 3 to Year 5. If agreement cannot be reached on all aspects, **The Company** and each **Generator** and each **Interconnector Owner** will record their agreement on as many aspects as have been agreed and **The Company** will advise each **Generator** with **Large Power Stations**, **Interconnector Owner** and each **Network Operator**, of the **Surpluses** for the **National Electricity Transmission System** and **System Zones** on a weekly basis which would occur in relation to those aspects not agreed. It is accepted that agreement of the **Final Generation Outage Programme** is not a commitment on **Generators**, **Interconnector Owners** or **The Company** to abide by it, but **The Company** will be planning the **National Electricity Transmission System** outage programme on the basis of the **Final Generation Outage Programme** and if in the event the **Generator's** or the **Interconnector Owner's** outages differ from those contained in the **Final Generation Outage Programme**, or in any way conflict with the **National Electricity Transmission System** outage programme, **The Company** need not alter the **National Electricity Transmission System** outage programme.

OC2.4.1.2.2 Operational Planning Phase - Planning for Calendar Year 1 and Calendar Year 2 – Weekly Resolution

The basis for **Operational Planning** for Year 1 and Year 2 will be the **Final Generation Outage Programmes** agreed for Years 2 and 3:

In each calendar year:

- (a) By the end of week 10

Each **Generator** and each **Interconnector Owner** will provide **The Company** in writing with its previously agreed **Final Generation Outage Programme** updated and best estimate weekly **Output Usable** forecasts for each **Genset** and for each **External Interconnection Circuit** for weeks 1-52 of Years 1 and 2.

- (b) Between the end of week 10 and the end of week 12

The Company will be considering the updated proposed **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit**, **Power Park Module** and **External Interconnection Circuit** outage programme together with the estimate of **Output Usable** supplied by **Generators** and **Interconnector Owners** under (a) and will be analysing **Operational Planning Margins** for the period. Taking these into account together with **National Electricity Transmission System** constraints and outages and **Network Operator User System** constraints and outages known to **The Company**, **The Company** will assess whether the estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** are sufficient to meet forecast **National Electricity Transmission System Demand** plus the **Operational Planning Margin**.

- (c) By the end of week 12

The Company will:

- (i) notify each **Generator** and each **Interconnector Owner** in writing whether the **Output Usable** estimates are adequate for weeks 1-52 of Years 1 and 2, together with suggested changes to its **Final Generation Outage Programme** where necessary and will advise each **Generator** with **Large Power Stations** and each **Interconnector Owner** of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones** and potential export limitations, on a weekly resolution which would occur without such changes;
- (ii) provide each **Network Operator** in writing with weekly **Output Usable** estimates of **Generators** and **Interconnector Owners** for weeks 1-52 of Years 1 and 2, and updated details of potential outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules** and/or **External Interconnection Circuits** which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** provided that, in such circumstances, **The Company** has notified the **Generator** or, as appropriate, the **Interconnector Owner** concerned at least 48 hours beforehand of its intention to do so (including identifying the affected **Gensets** or **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** or **Power Park Modules** and/or **External Interconnection Circuits**, as appropriate).

- (d) By the end of week 14

Where a **Generator**, **Interconnector Owner** or a **Network Operator** is unhappy with any suggested changes to its **Final Generation Outage Programme** (in the case of a **Generator**) or such update of potential outages (in the case of an **Interconnector Owner** or **Network Operator**), equivalent provisions to those set out in OC2.4.1.2.1(d) will apply.

- (e) By the end of week 34

Each **Generator** and each **Interconnector Owner** will provide **The Company** in writing with revised best estimate weekly **Output Usable** forecasts for each **Genset** or **External Interconnection**, as appropriate, for weeks 1-52 of Years 1 and 2.

- (f) Between the end of week 34 and the end of week 39

The Company will be analysing the revised estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** under (e) and will be analysing **Operational Planning Margins** for the period. Taking these into account together with **National Electricity Transmission System** constraints and outages and **Network Operator User System** constraints and outages known to **The Company**, **The Company** will assess whether the estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** are sufficient to meet forecast **National Electricity Transmission System Demand** plus the **Operational Planning Margin**.

(g) By the end of week 39

The Company will:

- (i) notify each **Generator** and each **Interconnector Owner** in writing whether it accepts the **Output Usable** estimates for weeks 1-52 of Years 1 and 2, and of any suggested changes to its **Final Generation Outage Programme** where necessary and will advise **Generators** with **Large Power Stations** and **Interconnector Owners** of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones** and potential export limitations on a weekly basis which would occur without such changes;
- (ii) provide each **Network Operator** in writing with **Output Usable** estimates of **Generators** and **Interconnector Owners** for weeks 1-52 of Years 1 and 2, and updated details of potential outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules** and/or **External Interconnection Circuits** which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** provided that, in such circumstances, **The Company** has notified the **Generator** or, as appropriate, **Interconnector Owner** concerned at least 48 hours beforehand of its intention to do so (including identifying the affected **Gensets** or **Power Generating Modules** (including **DC Connected Power Park Modules**) or **Synchronous Generating Units** or **Power Park Modules** and/or **External Interconnection** as appropriate).

(h) By the end of week 46

Where a **Generator**, an **Interconnector Owner** or a **Network Operator**, is unhappy with any suggested changes to its **Final Generation Outage Programme** (in the case of a **Generator**) or such update of potential outages (in the case of an **Interconnector Owner** or **Network Operator**), equivalent provisions to those set out in OC2.4.1.2.1(d) will apply.

(i) By the end of week 48

The Company will seek to agree the revised **Final Generation Outage Programme** for Year 1 and Year 2. If agreement cannot be reached on all aspects, **The Company** and each **Interconnector Owner** and each **Generator** will record their agreement on as many aspects as have been agreed and **The Company** will advise each **Generator** with **Large Power Stations**, **Interconnector Owner** and each **Network Operator**, of **Generating Plant Demand Margins** for national and zonal groups, on a weekly basis, which would occur in relation to those aspects not agreed. It is accepted that agreement of the **Final Generation Outage Programme** is not a commitment on **Generators**, **Interconnector Owners** or **The Company** to abide by it, but **The Company** will be planning the **National Electricity Transmission System** outage programme on the basis of the **Final Generation Outage Programme** and if, in the event, a **Generator's** and/or **Interconnector Owner's** outages differ from those contained in the **Final Generation Outage Programme**, or in any way conflict with the **National Electricity Transmission System** outage programme, **The Company** need not alter the **National Electricity Transmission System** outage programme.

OC2.4.1.2.3 Planning for Calendar Year 0 – Weekly Resolution

The basis for **Operational Planning** for Year 0 will be the revised **Final Generation Outage Programme** agreed for Year 1:

In each week:

(a) By 1600 hours each Wednesday – Weekly Resolution

Each **Generator** and each **Interconnector Owner** will provide **The Company** in writing with an update of the **Final Generation Outage Programme** and a best estimate weekly **Output Usable** forecast for each of its **Gensets** or its **External Interconnection Circuits**, as appropriate, from the 2nd week ahead to the 52nd week ahead.

- (b) Between 1600 hours Wednesday and 1600 hours Friday

The Company will be analysing the revised estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** under (a) and will be analysing **Operational Planning Margins** for the period. Taking into account **National Electricity Transmission System** constraints and outages and **Network Operator User System** constraints and outages known to **The Company**, **The Company** will assess whether the estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** are sufficient to meet forecast **National Electricity Transmission System Demand** plus the **Operational Planning Margin**.

- (c) By 1600 hours each Friday

The Company will:

- (i) notify each **Generator** with **Large Power Stations**, **Interconnector Owner** and **Network Operator**, in writing if it considers the **Output Usable** forecasts will give **Surpluses** and potential export limitations both for the **National Electricity Transmission System** and **System Zones** from the 2nd week ahead to the 52nd week ahead;
- (ii) provide each **Network Operator**, in writing with weekly **Output Usable** estimates of **Gensets** and **External Interconnection** from the 2nd week ahead to the 52nd week ahead and updated outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules** and/or **External Interconnection Circuits** which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** and in such circumstances, **The Company** shall notify the **Generator** and **Interconnector Owner** concerned within 48 hours of so providing (including identifying the affected **Gensets** or **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units** and/or **Power Park Modules** and/or **External Interconnection Circuits**, as appropriate), from the 2nd week ahead to the 52nd week ahead.

OC2.4.1.2.4 Programming Phase – 2-49 Days Ahead – Daily Resolution

- (a) By 1200 hours each Friday

The Company will notify in writing each **Generator** with **Large Power Stations**, **Interconnector Owner** and **Network Operator** if it considers the **Output Usable** forecasts will give MW shortfalls both nationally and for constrained groups for the period 2-7 weeks ahead.

- (b) By 1100 hours each Business Day

Each **Generator** and each **Interconnector Owner** shall provide **The Company** in writing with the best estimate of daily **Output Usable** for each **Genset** or each **External Interconnection Circuit** as appropriate for the period from and including day 2 ahead to day 14 ahead, including the forecast return to service date for any such **Power Generating Modules** (including **DC Connected Power Park Modules**), **Generating Unit**, **Power Park Module** or **External Interconnection** subject to **Planned Outage** or breakdown.

- (c) By 1100 hours each Wednesday

For the period 2 to 49 days ahead, every Wednesday by 11:00 hours, each **Generator** and each **Interconnector Owner** shall provide **The Company** in writing best estimate daily **Output Usable** forecasts for each **Genset** or **External Interconnection**, and changes (start and finish dates) to **Planned Outage** or to the return to service times of each **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Unit**, **Power Park Module** and/or **External Interconnection Circuit** which is subject to breakdown.

(d) Between 1100 hours and 1600 hours each Business Day

The Company will be analysing the revised estimates of **Output Usable** supplied by **Generators** and **Interconnector Owners** under (b) and will be analysing **Operational Planning Margins** for the period 2-14 days ahead. Taking into account **National Electricity Transmission System** constraints and outages and **Network Operator User System** constraints and outages known to **The Company**, **The Company** will assess whether the estimates of **Output Usable** are sufficient to meet forecast **National Electricity Transmission System Demand** plus the **Operational Planning Margin**.

(e) By 1600 hours each Business Day

(i) **The Company** will notify in writing each **Generator** with **Large Power Stations**, each **Interconnector Owner** and each **Network Operator**, of the **Surpluses** both for the **National Electricity Transmission System** and **System Zones** and potential export limitations, for the period from and including day 2 ahead to day 14 ahead which it considers the **Output Usable** forecasts will give. The time of 1600 hours can only be met in respect of any **Generator**, **Interconnector Owner** or **Network Operator** if all the information from all **Generators** and **Interconnector Owners** was made available to **The Company** by 1100 hours and if a suitable electronic data transmission facility is in place between **The Company** and the **Generator**, or the **Interconnector Owner** or the **Network Operator**, as the case may be, and if it is fully operational. In the event that any of these conditions is not met, or if it is necessary to revert to a manual system for analysing the information supplied and otherwise to be considered, **The Company** reserve the right to extend the timescale for issue of the information required under this sub-paragraph to each, or the relevant, **Generator**, **Interconnector Owner** and/or **Network Operator** (as the case may be) provided that such information will in any event be issued by 1800 hours.

(ii) **The Company** will provide each **Network Operator**, where it has an effect on that **User**, in writing with **Output Usable** estimates of **Gensets** and **External Interconnections** from and including day 2 ahead to day 14 ahead and updated outages of **Power Generating Modules** (including **DC Connected Power Park Modules**), **Synchronous Generating Units**, **Power Park Modules** and/or **External Interconnection Circuits** which are either in its **User System** or which may, in the reasonable opinion of **The Company** and the **Network Operator**, affect the integrity of that **Network Operator's User System** and in such circumstances, **The Company** shall notify the **Generator** and **Interconnector Owner** concerned within 48 hours of so providing (including identifying the affected **Gensets** or **Power Generating Modules** (including **DC Connected Power Park Modules**) or **Synchronous Generating Units** or **Power Park Modules** and/or **External Interconnection Circuits**, as appropriate), for the period from and including day 2 ahead to day 14 ahead.

OC2.4.1.3 Planning of National Electricity Transmission System Outages

OC2.4.1.3.1 Operational Planning Phase - Planning for Financial Years 2 to 5 inclusive ahead

The Company shall plan **National Electricity Transmission System** outages required in Years 2 to 5 inclusive required as a result of construction or refurbishment works. This contrasts with the 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 be planning the **National Electricity Transmission System** outage programme on the basis of the previous year's **Final Generation Outage Programme** and if in the event a **Generator's**, an **Interconnector Owner's** or **Network Operator's** outages differ from those contained in the **Final Generation Outage Programme**, or in the case of **Network Operators**, those known to **The Company**, or in any way conflict with the **National Electricity Transmission System** outage programme, **The Company** need not alter the **National Electricity Transmission System** outage programme.

OC2.4.1.3.2 In each calendar year:

(a) By the end of week 8

Each **Network Operator** will notify **The Company** in writing of details of 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**).

Each **Network Operator** will notify **The Company** in writing of details of proposed outages in Years 2-5 ahead in its **User System** which 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 utilise or plans to utilise during such outages.

(b) By the end of week 13

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**, at each **Grid Entry Point**.

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) By the end of week 30

Where **The Company** or a **Network Operator** is unhappy with the proposed outages notified to it under (a), (b) or (c) above, as the case may be, equivalent provisions to those set out in OC2.4.1.2.1 (d) will apply.

(e) By the end of week 34

The Company will draw up a draft **National Electricity Transmission System** outage plan covering the period Years 2 to 5 ahead and **The Company** will notify each **Generator**, **Interconnector Owner** and **Network Operator** in writing 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**), **Interconnector Owner** or **Network Operator**. **The Company** will also indicate where a need may exist to issue other operational instructions or notifications (including but not limited to the requirement for the arming of an **Operational Intertripping** scheme) or **Emergency Instructions** to **Users** in accordance with **BC2** to allow the security of the **National Electricity Transmission System** to be maintained within the **Licence Standards**.

OC2.4.1.3.3 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 OC2.4.1.3.2 above and shall in addition take into account outages required as a result of maintenance work.

In each calendar year:

- (a) By the end of week 13

Generators and **Non-Embedded Customers** will inform **The Company** in writing of proposed outages for Year 1 of **Generator** owned **Apparatus** 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, at each **Grid Supply Point**.

- (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, affect the performance of its **User System** or the **Non-Embedded Customer Apparatus** at the **Grid Supply Point**.

- (c) By the end of week 32

Each **Network Operator** will notify **The Company** in writing with details of 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**).

Each **Network Operator** will notify **The Company** in writing of details of proposed outages in Year 1 in its **User System** which 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 utilise or plans to utilise during such outages.

Each **Network Operator** will also notify **The Company** in writing of any revisions to **Interface Point Target Voltage/Power Factor** data submitted pursuant to PC.A.2.5.4.2.

- (d) Between the end of week 32 and the end of week 34

The Company will draw up a revised **National Electricity Transmission System** outage plan (which for the avoidance of doubt includes **Transmission Apparatus** at the **Connection Points**).

- (e) By the end of week 34

The Company will notify each **Generator**, **Interconnector Owner**, and **Network Operator**, in writing, of those aspects of the **National Electricity Transmission System** outage programme which may, in **The 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**), **Interconnector Owner**, or **Network Operator** including in particular proposed start dates and end dates of relevant **National Electricity Transmission System** outages.

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 (c) 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.

(f) By the end of week 36

Where a **Generator**, **Interconnector Owner** or **Network Operator** is unhappy with the proposed aspects notified to it under (e) above, equivalent provisions to those set out in OC2.4.1.2.1 (d) will apply.

(g) Between the end of week 34 and 49

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

(h) By the end of week 49

(i) **The Company** will complete the final **National Electricity Transmission System** outage plan for Year 1. The plan for Year 1 becomes the final plan for Year 0 when by expiry of time Year 1 becomes Year 0.

(ii) **The Company** will notify each **Generator**, each **Interconnector Owner** and each **Network Operator** in writing 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**), **Interconnector Owner** or **Network Operator** including in particular proposed start dates and end dates of relevant **National Electricity Transmission System** outages. **The Company** will also indicate where a need may exist to issue other operational instructions or notifications (including but not limited to the requirement for the arming of an **Operational Intertripping** scheme) or **Emergency Instructions to Users** in accordance with **BC2** to allow the 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.

(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** a copy of the final **National Electricity Transmission System** outage plan for that year. OC2.4.1.3.4 contains provisions whereby updates of the final **National Electricity Transmission System** outage plan are provided. The plan and the updates will be provided in writing. It should be noted that the final **National Electricity Transmission System** outage plan for Year 1 and the updates will not give a complete understanding of how the **National Electricity Transmission System** will operate in real time, where the **National Electricity Transmission System** 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 conditions which will actually arise in real time.

(i) Information Release Or Exchange

This paragraph (i) contains alternative requirements on **The Company**, paragraph (z) being an alternative to a combination of paragraphs (x) and (y). Paragraph (z) will only apply in relation to a particular **User** if **The Company** and that **User** agree that it should apply, in which case paragraphs (x) and (y) will not apply. In the absence of any relevant agreement between **The Company** and the **User**, **The Company** will only be required to comply with paragraphs (x) and (y).

Information Release To Each Network Operator And Non-Embedded Customer

Between the end of Week 34 and 49 **The Company** will upon written request:

(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

(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**; or

System Data Exchange

(z) as part of a process to facilitate understanding of the operation of the **Total System**,

- (1) **The Company** will make available to each **Network Operator**, the **National Electricity Transmission System Study Network Data Files** covering Year 1 which are of relevance to that **User's System**;
- (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 take a copy of the **National Electricity Transmission System Study Network Data Files** once during that period. The **User** may, having taken that copy, refer to the copy as often as it wishes. Such access will be in a manner agreed by **The Company** and may be subject to separate agreements governing the manner of access. In the absence of agreement, the copy of the **National Electricity Transmission System Study Network Data Files** will be given to the **User** on a disc, or in hard copy, as determined by **The Company**;
- (3) the data contained in the **National Electricity Transmission System Study Network Data Files** represents **The Company's** view of operating conditions although the actual conditions may be different;
- (4) **The Company** will notify each **Network Operator**, as soon as reasonably practicable after it has updated the **National Electricity Transmission System Study Network Data Files** covering Year 1 that it has done so, when this update falls before the next annual update under this OC2.4.1.3.3(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 System 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;
- (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.

OC2.4.1.3.4 Operational Planning Phase - Planning In Financial Year 0 Down To The Programming Phase (And In The Case Of Load Transfer Capability, Also During The Programming Phase)

- (a) The **National Electricity Transmission System** outage plan for Year 1 issued under OC2.4.1.3.3 shall become the plan for Year 0 when by expiry of time Year 1 becomes Year 0.
- (b) Each **Generator** or **Interconnector Owner** or **Network Operator** or **Non-Embedded Customer** may at any time during Year 0 request **The Company** in writing for changes to the outages requested by them under OC2.4.1.3.3. 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**, **Network Operator** or **Non-Embedded Customer** 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 requested is possible and notifies the relevant **User** accordingly, **The Company** will provide to each **Network Operator**, each **Interconnector Owner**, and each **Generator** 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.

- (c) 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:

- (i) 12MW or more (averaged over any half hour) for England and Wales
- (ii) 10MW or more (averaged over any half hour) for Scotland

between Grid Supply Points.

During Year 0 (including the **Programming Phase**) each **Network Operator** shall notify **The Company** of any revisions to the information provided pursuant to OC2.4.1.3.3 (c) for **Interface Points** as soon as reasonably practicable after the **Network Operator** becomes aware of the need to make such revisions.

- (d) When necessary during Year 0, **The Company** will notify each **Generator**, each **Interconnector Owner** and **Network Operator** and each **Non-Embedded Customer**, in writing of those aspects of the **National Electricity Transmission System** outage programme in the period from the 8th week ahead to the 52nd week ahead, which may, in **The 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**) **Interconnector Owner** or **Network Operator** or **Non-Embedded Customer** including in particular proposed start dates and end dates of relevant **National Electricity Transmission System** outages.

The Company will also notify changes to information supplied by **The Company** pursuant to OC2.4.1.3.3(i)(x) and (y) except where in relation to a **User** information was supplied pursuant to OC2.4.1.3.3(i)(z). In that case:-

- (i) **The Company** will, by way of update of the information supplied by it pursuant to OC2.4.1.3.3(i)(z), make available at the first time in Year 0 that it updates the **National Electricity Transmission System 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), the **National Electricity Transmission System Study Network Data Files** covering Year 0 which are of relevance to that **User's System**.
- (ii) **The Company** will notify each relevant **Network Operator**, as soon as reasonably practicable after it has updated the **National Electricity Transmission System 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 Study Network Data Files** covering the balance of Year 0 which remains given the passage of time, and which are of relevance to that **User's System**.
- (iii) The provisions of OC2.4.1.3.3(i)(z)(2), (3) and (5) shall apply to the provision of data under this part of OC2.4.1.3.4(d) as if set out in full.

The Company will also indicate where a need may exist to issue other operational instructions or notifications (including but not limited to the requirement for the arming of an **Operational Intertripping** scheme) or **Emergency Instructions** to **Users** in accordance with **BC2** to allow the security of the **National Electricity Transmission System** to be maintained within the **Licence Standards**.

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

OC2.4.1.3.5 Programming Phase

(a) By 1600 hours each Thursday

- (i) **The Company** shall continue to update a preliminary **National Electricity Transmission System** outage programme for the eighth week ahead, a provisional **National Electricity Transmission System** outage programme for the next week ahead and a final day ahead **National Electricity Transmission System** outage programme for the following day.
- (ii) **The Company** will notify each **Generator, Interconnector Owner** and **Network Operator** and each **Non-Embedded Customer**, in writing of those aspects of the preliminary **National Electricity Transmission System** 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**) or **Interconnector Owner** or **Network Operator** and each **Non-Embedded Customer** including in particular proposed start dates and end dates of relevant **National Electricity Transmission System** outages.

The Company will also notify changes to information supplied by **The Company** pursuant to OC2.4.1.3.3(i)(x) and (y) except where in relation to a **User** information was supplied pursuant to OC2.4.1.3.3(i)(z). In that case:

- (1) **The Company** will, by way of update of the information supplied by it pursuant to OC2.4.1.3.3(i)(z), make available the **National Electricity Transmission System Study Network Data Files** for the next week ahead and
- (2) **The Company** will notify each relevant **Network Operator**, as soon as reasonably practicable after it has updated the **National Electricity Transmission System Study Network Data Files** covering the next week ahead that it has done so, and
- (3) The provisions of OC2.4.1.3.3(i)(z)(2), (3) and (5) shall apply to the provision of data under this part of OC2.4.1.3.5(a)(ii) as if set out in full.

The Company may make available the **National Electricity Transmission System Study Network Data Files** for the next week ahead where **The Company** and a particular **User** agree, and in such case the provisions of OC2.4.1.3.3(i)(x) and (y) and the provisions of OC2.4.1.3.4(d) and OC2.4.1.3.5(a) which relate to OC2.4.1.3.3(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.

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 security of the **National Electricity Transmission System** to be maintained within the **Licence Standards**.

(b) By 1000 hours each Friday

Generators, Interconnector Owners and **Network Operators** will discuss with **The Company** and confirm in writing to **The Company**, acceptance or otherwise of the requirements detailed under OC2.4.1.3.5.

Network Operators shall confirm for the following week:

- (i) the details of any outages of its **User System** that will restrict the **Maximum Export Capacity** and/or **Maximum Import Capacity** at any **Interface Points** within its **User System** for the following week; and
- (ii) any changes to the previously declared values of the **Interface Point Target Voltage/Power Factor**.

- (c) By 1600 hours each Friday
- (i) **The Company** shall finalise the preliminary **National Electricity Transmission System** 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) **The Company** shall finalise the provisional **National Electricity Transmission System** outage programme for the next week ahead.
 - (iii) **The Company** shall finalise the **National Electricity Transmission System** outage programme for the weekend through to the next normal working day.
 - (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**) to the relevant **Generators** and **Network Operators** and **Non-Embedded Customers**.
 - (v) Where a **Generator** with nuclear **Large Power Stations** which may be operationally affected by the preliminary **National Electricity Transmission System** outage programme referred to in (i) above (acting as a reasonable operator) is concerned on 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.
- (d) By 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 **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**).

OC2.4.2 DATA REQUIREMENTS

OC2.4.2.1 When a **Statement of Readiness** under the **Bilateral Agreement** and/or **Construction Agreement** is submitted, and thereafter in calendar week 24 in each calendar year,

- (a) each **Generator** shall (subject to OC2.4.2.1(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**)
- submit to **The Company** in writing the **Generation Planning Parameters** and the **Generator Performance Charts** as required.
- (b) Each shall meet the requirements of CC.6.3.2 and shall reasonably reflect the true operating characteristics of the **Genset**.

- (c) They 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) They shall be in the format indicated in Appendix 1 for these charts and as set out in Appendix 2 for the **Generation Planning Parameters**.
- (e) Any changes to the **Generator Performance Chart** or **Generation Planning Parameters** should be notified to **The Company** promptly.
- (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. 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.
- (g) **The Generator Performance Chart** must be as described 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 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**).
 - (v) 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.
- (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) The **Generation Planning Parameters** supplied under OC2.4.2.1 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**).

- (j) 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 writing 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.

Any changes must be notified to **The Company** promptly. **Generators** should note that amendments to the composition of the **CCGT Module** or **Synchronous Power Generating Module** at **Large Power Stations** may only 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 Generating Module Planning Matrix** must be immediately submitted to **The Company** in accordance with this OC2.4.2.1(b).

The **CCGT Module Planning Matrix** or **Synchronous Power Generating Module Planning Matrix** will be used by **The Company** for operational planning purposes only and not in connection with the operation of the **Balancing Mechanism**.

- (k) Each **Generator** shall in respect of each of its **Cascade Hydro Schemes** also submit the **Generation Planning Parameters** detailed at OC2.A.2.6 to OC2.A.2.10 for each **Cascade Hydro Scheme**. Such parameters need not also be submitted for the individual **Gensets** within such **Cascade Hydro Scheme**.

- (l) Each **Generator** shall in respect of each of its **Power Park Modules** at **Large Power Stations** submit to **The Company** in writing a **Power Park Module Planning Matrix**. It shall be prepared on a best estimate basis relating to how it is anticipated the **Power Park Module** will be running and which shall reasonably reflect the operating characteristics of the **Power Park Module** and the **BM Unit** of which it forms part. 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 number of each type of **Power Park Unit** in the **Power Park Module** typically expected to be available to generate and the **BM Unit** of which it forms part, in the format indicated in Appendix 4. The **Power Park Module Planning Matrix** shall be accompanied by a graph showing the variation in MW output with **Intermittent Power Source** (e.g. MW vs wind speed) for the **Power Park Module**. The graph shall indicate the typical value of the **Intermittent Power Source** for the **Power Park Module**.

Any changes must be notified to **The Company** promptly. **Generators** 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 used by **The Company** for operational planning purposes only and not in connection with the operation of the **Balancing Mechanism**.

- (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 or a 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.

OC2.4.2.2 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).

OC2.4.2.3 Under European Commission Regulation No. 543/2013, **Users** are required to submit certain data for publication on the Central European Transparency Platform managed by the European Network of Transmission System Operators for Electricity (ENTSO-E). **The Company** is required to facilitate the collection, verification and processing of data from **Users** for onward transmission to the Central European Transparency Platform.

Each **Generator** and each **Non-Embedded Customer** connected to or using the **National Electricity Transmission System** shall provide **The Company** with such information as required by and set out in **DRC** Schedule 6 (**Users' Outage Data EU Transparency Availability Data**) in the timescales detailed therein.

OC2.4.3 NEGATIVE RESERVE ACTIVE POWER MARGINS

OC2.4.3.1 In each calendar year, by the end of week 39 **The Company** will, taking into account the **Final Generation Outage Programme** and forecast of **Output Usable** supplied by each **Generator** and by each **Interconnector Owner**, issue a notice in writing to:-

- (a) all **Generators** with **Large Power Stations** and to all **Interconnector Owners** listing any period in which there is likely to be an unsatisfactory **System NRAPM**; and
- (b) all **Generators** with **Large Power Stations** and to all **Interconnector Owners** which may, in **The Company 's** reasonable opinion be affected, listing any period in which there is likely to be an unsatisfactory **Localised NRAPM**, together with the identity of the relevant **System Constraint Group** or **Groups**,

within the next calendar year, together with the margin. **The Company** and each **Generator** and each **Interconnector Owner** will take these into account in seeking to co-ordinate outages for that period.

OC2.4.3.2 (a) By 0900 hours each Business Day

Each **Generator** shall provide **The Company** in writing with a best estimate of **Genset** inflexibility on a daily basis for the period 2 to 14 days ahead (inclusive).

(b) By 1600 hours each Wednesday

Each **Generator** shall provide **The Company** in writing with a best estimate of **Genset** inflexibility on a weekly basis for the period 2 to 7 weeks ahead (inclusive).

(c) Between 1600 hours each Wednesday and 1200 hours each Friday

(i) If **The Company**, taking into account the estimates supplied by **Generators** under (b) above, and forecast **Demand** for the period, foresees that:

- (1) the level of the **System NRAPM** for any period within the period 2 to 7 weeks ahead (inclusive) is too low, it will issue a notice in writing to all **Generators**, **Interconnector Owners**, and **Network Operators** listing any periods and levels of **System NRAPM** within that period; and/or

- (2) having also taken into account the appropriate limit on transfers to and from a **System Constraint Group**, the level of **Localised NRAPM** for any period within the period 2 to 7 weeks ahead (inclusive) is too low for a particular **System Constraint Group**, it will issue a notice in writing to all **Generators**, **Interconnector Owners**, and **Network Operators** which may, in **The Company 's** reasonable opinion be affected by that **Localised NRAPM**, listing any periods and levels of **Localised NRAPM** within that period. A separate notice will be given in respect of each affected **System Constraint Group**.

Outages Adjustments

- (ii) **The Company** will then contact **Generators** in respect of their **Large Power Stations** and **Interconnector Owners** to discuss outages as set out in the following paragraphs of this OC2.4.3.2.
- (iii) **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 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:
- (1) whether any change is possible to the estimate of **Genset** inflexibility given under (b) above; and
 - (2) whether **Genset** or **External Interconnection** outages can be taken to coincide with the periods of low **System NRAPM** or **Localised NRAPM** (as the case may be).

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.

- (iv) If agreement is reached with a **Generator** or an **Interconnector Owner** (which unlike the remainder of **OC2** will constitute a binding agreement), then such **Generator** or **Interconnector Owner** will take such outage, as agreed with **The Company**, and **The Company** will issue a revised notice in writing to the **Generators**, **Interconnector Owners**, and **Network Operators** to which it sent notices under (i) above, reflecting the changes brought about to the periods and levels of **System NRAPM** and/or **Localised NRAPM** by the agreements with **Generators** or **Interconnector Owners**.
- (d) By 1600 hours each day
- (i) If **The Company**, taking into account the estimates supplied under (a) above, and forecast **Demand** for the period, foresees that:
- (1) the level of **System NRAPM** for any period within the period of 2 to 14 days ahead (inclusive) is too low, it will issue a notice in writing to all **Generators**, **Interconnector Owners**, and **Network Operators** listing the periods and levels of **System NRAPM** within those periods; and/or
 - (2) having also taken into account the appropriate limit on transfers to and from a **System Constraint Group**, the level of **Localised NRAPM** for any period within the period of 2 to 14 days ahead (inclusive) is too low for a particular **System Constraint Group**, it will issue a notice in writing to all **Generators**, **Interconnector Owners**, and **Network Operators** which may, in **The Company's** reasonable opinion be affected by that **Localised NRAPM**, listing any periods and levels of **Localised NRAPM** within that period. A separate notice will be given in respect of each affected **System Constraint Group**.

- (ii) **The Company** will contact all **Generators** in respect of their **Large Power Stations** (or in the case of **Localised NRAPM**, all **Generators** which may, in **The Company's** reasonable opinion be affected, in respect of their relevant **Large Power Stations**) to discuss whether any change is possible to the estimate of **Genset** inflexibility given under (a) above and to consider **Large Power Station** outages to coincide with the periods of low **System NRAPM** and/or **Localised NRAPM** (as the case may be).

In the case of **External Interconnections**, **The Company** may contact **Interconnector Owners** to discuss outages during the periods of low **System NRAPM** and/or **Localised NRAPM** (as the case may be).

- (e) If on the day prior to a **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, 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** for such period. In determining which **Genset** to so instruct, **BC2** provides that **The Company** will not (other than as referred to below) consider in such determination (and accordingly shall not instruct to **De-Synchronise**) any **Genset** within an **Existing Gas Cooled Reactor Plant**. **BC2** further provides that:-

- (i) **The Company** is permitted to instruct to **De-Synchronise** any **Gensets** within an **Existing AGR Plant** if those **Gensets** within an **Existing AGR Plant** have 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**.
- (ii) **The Company** will only instruct to **De-Synchronise** any **Gensets** within an **Existing Magnox Reactor Plant** or within an **Existing AGR Plant** (other than under (i) above) 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 Module**, 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 proviso applies 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.

OC2.4.4 FREQUENCY SENSITIVE OPERATION

By 1600 hours each Wednesday

- OC2.4.4.1 Using such information as **The Company** shall consider relevant including, if appropriate, forecast **Demand**, any estimates provided by **Generators** of **Genset** 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** (other than those **Gensets** within **Existing Gas Cooled Reactor Plant** which are 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.
- OC2.4.4.2 **BC3.5.3** explains that **The Company** permits **Existing Gas Cooled Reactor Plant** other than **Frequency Sensitive AGR Units** to operate in a **Limited Frequency Sensitive Mode** at all times.

OC2.4.4.3 If **The Company** foresees that there will be an insufficiency in **Gensets** operating in a **Frequency Sensitive Mode**, it will contact **Generators** in order to seek to agree (as soon as reasonably practicable) that all or some of the **Gensets** (the MW amount being determined by **The Company** but the **Gensets** involved being determined by the **Generator**) will take outages to coincide with such period as **The Company** shall specify to enable replacement by other **Gensets** which can operate in a **Frequency Sensitive Mode**. If agreement is reached (which unlike the remainder of **OC2** will constitute a binding agreement) then such **Generator** will take such outage as agreed with **The Company**. If agreement is not reached, then the provisions of BC2.9.5 may apply.

OC2.4.5 If in **The Company 's** reasonable opinion it is necessary for both the procedure set out in OC2.4.3 (relating to **System NRAPM** and **Localised NRAPM**) and in OC2.4.4 (relating to operation in **Frequency Sensitive Mode**) to be followed in any given situation, the procedure set out in OC2.4.3 will be followed first, and then the procedure set out in OC2.4.4. For the avoidance of doubt, nothing in this paragraph shall prevent either procedure from being followed separately and independently of the other.

OC2.4.6 OPERATING MARGIN DATA REQUIREMENTS

OC2.4.6.1 Modifications to relay settings

'Relay settings' in this OC2.4.6.1 refers to the settings of **Low Frequency Relays** in respect of **Gensets** that are available for start from standby by **Low Frequency Relay** initiation with **Fast Start Capability** agreed pursuant to the **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**

OC2.4.6.2 Operating Margins

By 1600 hours each Wednesday

No later than 1600 hours on a Wednesday, **The Company** will provide an indication of the level of **Operating Reserve** 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.

This **Operating Margin** indication will also note the possible level of **Operating Reserve** (if any) which may be provided by **Interconnector Users** in the week beginning with the **Operational Day** commencing during the subsequent Monday.

This **Operating Margin** 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.

OC2.4.7

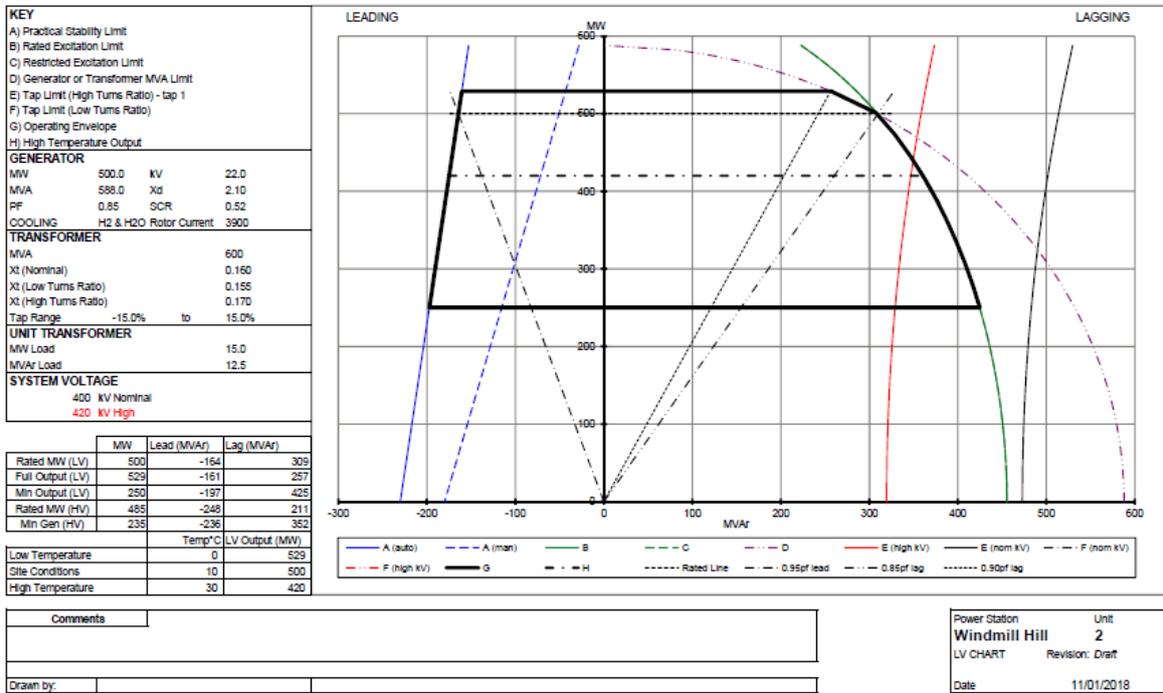
In the event that:

- 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
- 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** of that **Generating Unit** and/or **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** 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** 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.2.4.7(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.2.4.7(d) above;

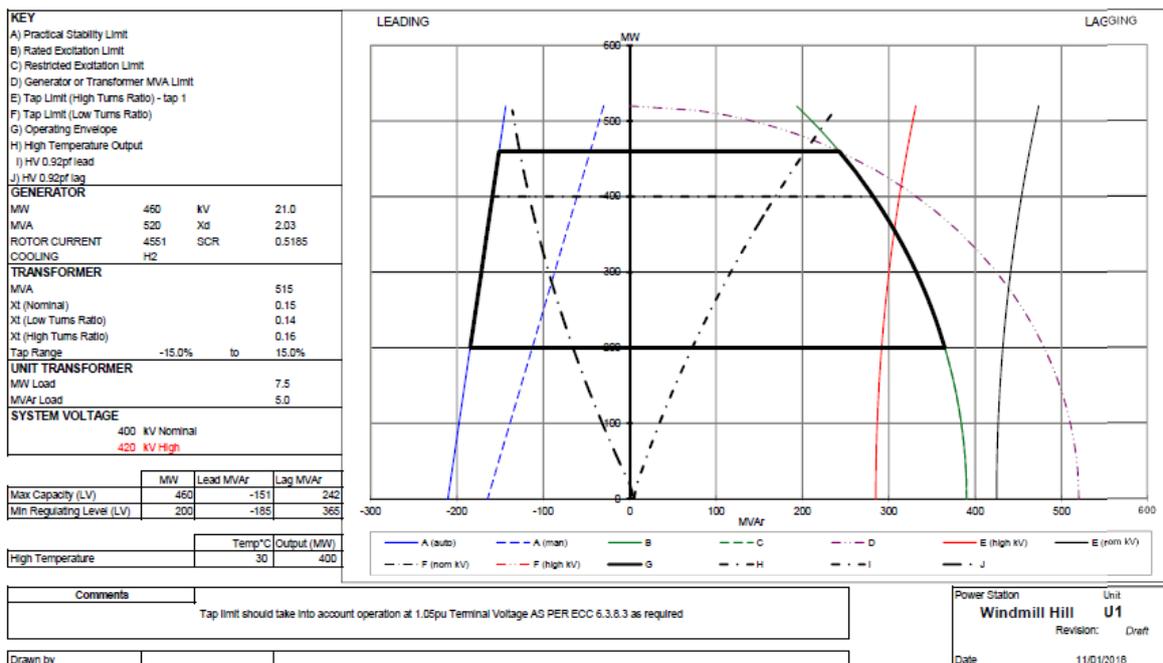
such **Non-Embedded Customer** or **Generator** shall provide **The Company** with the **EU Transparency Availability Data** in accordance with **DRC** Schedule 6 (Users' Outage Data) using **MODIS** and, with reference to points OC2.4.7(a) to (f), EU Transparency Regulation articles 7.1(a), 7.1(b), 15.1(a), 15.1(b), 15.1(c) and 15.1(d) respectively.

APPENDIX 1 - PERFORMANCE CHART EXAMPLES

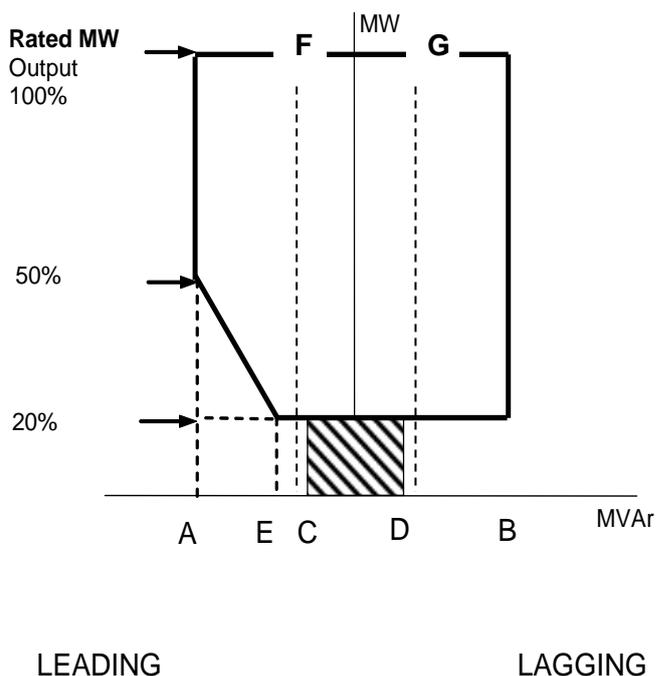
GENERATOR PERFORMANCE CHART



Synchronous Generating Unit Performance Chart within a Synchronous Power Generating Module



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.

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) The synchronising interval between **Gensets** in a **Synchronising Group** assuming all **Gensets** have been **Shutdown** for 48 hours;
- (b) The **Synchronising Group** within the **Power Station** to which each **Genset** 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 **Genset** 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 **Genset** 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 Usable** with up to two intervening break points assuming the **Genset** 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 Usable** to **De-Synchronising** with breakpoints at up to two intermediate load levels.

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

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

OC2.A.2.9 Minimum Zero time (MZT)

The minimum interval between **De-Synchronising** and **Synchronising** a **Genset**.

OC2.A.2.10 Not used.

OC2.A.2.11 Gas Turbine Units loading parameters

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

APPENDIX 3 - CCGT MODULE PLANNING MATRIX

CCGT Module Planning Matrix Example Form

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

APPENDIX 4 - 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**.

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	150	150	150				100		
MW									
0MW to 150MW	/								
151MW to 250MW	/						/		
251MW to 300MW	/	/							
301MW to 400MW	/	/					/		
401MW to 450MW	/	/	/						
451MW to 550MW	/	/	/				/		

< END OF OPERATING CODE NO. 2 >

OPERATING CODE NO. 6
(OC6)

DEMAND CONTROL

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

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OC6.1 INTRODUCTION

OC6.1.1 **Operating Code No.6 ("OC6")** is concerned with the provisions to be made by **Network Operators**, and in relation to **Non-Embedded Customers** by **The Company**, to permit the reduction of **Demand** in the event of insufficient **Active Power** generation being available to meet **Demand**, or in the event of breakdown or operating problems (such as in respect of **System Frequency**, **System** voltage levels or **System** thermal overloads) on any part of the **National Electricity Transmission System**.

OC6.1.2 **OC6** deals with the following:

- (a) **Customer** voltage reduction initiated by **Network Operators** (other than following the instruction of **The Company**);
- (b) **Customer Demand** reduction by **Disconnection** initiated by **Network Operators** (other than following the instruction of **The Company**);
- (c) **Demand** reduction instructed by **The Company**;
- (d) automatic low frequency **Demand Disconnection**; and
- (e) emergency manual **Demand Disconnection**.

The term "**Demand Control**" is used to describe any or all of these methods of achieving a **Demand** reduction.

OC6.1.3 The procedure set out in **OC6** includes a system of warnings to give advance notice of **Demand Control** that may be required by **The Company** under this **OC6**.

OC6.1.4 Data relating to **Demand Control** should include details relating to MW

OC6.1.5 The Electricity Supply Emergency Code as reviewed and published from time to time by the appropriate government department for energy emergencies provides that in certain circumstances consumers are given a certain degree of "protection" when rota disconnections are implemented pursuant to a direction under the Energy Act 1976. No such protection can be given in relation to **Demand Control** under the **Grid Code**.

To invoke the Electricity Supply Emergency Code the Secretary of State will issue direction(s) to all **Network Operators** affected, exercising emergency powers under the Electricity Act 1989 or by virtue of an Order in Council under the Energy Act 1976. Following the issuance of such direction, **The Company** will act to coordinate the implementation of an agreed schedule of rota disconnections across all affected **Network Operators'** licence area(s) and to disseminate any information as necessary throughout the period of the emergency in accordance with the instructions **The Company** receives from the Secretary of State or those authorised on his behalf for this purpose.

OC6.1.6 Connections between **Large Power Stations** and the **National Electricity Transmission System** and between such **Power Stations** and a **User System** will not, as far as possible, be disconnected by **The Company** pursuant to the provisions of **OC6** insofar as that would interrupt supplies

- (a) for the purposes of operation of the **Power Station** (including **Start-Up** and shutting down);
- (b) for the purposes of keeping the **Power Station** in a state such that it could be Started-up when it is off-**Load** for ordinary operational reasons; or
- (c) for the purposes of compliance with the requirements of a Nuclear Site Licence.

Demand Control pursuant to this **OC6** therefore applies subject to this exception.

OC6.2 OBJECTIVE

OC6.2.1 The overall objective of **OC6** is to require the provision of facilities to enable **The Company** to achieve reduction in **Demand** that will either avoid or relieve operating problems on the **National Electricity Transmission System**, in whole or in part, and thereby to enable **The Company** to instruct **Demand Control** in a manner that does not unduly discriminate against, or unduly prefer, any one or any group of **Suppliers** or **Network Operators** or **Non-Embedded Customers**. It is also to ensure that **The Company** is notified of any **Demand Control** utilised by **Users** other than following an instruction from **The Company**.

OC6.2.2 For certain **Grid Supply Points** in Scotland it is recognised that it may not be possible to meet the requirements in OC6.4.5(b), OC6.5.3(b) (in respect of **Demand Disconnection** only), OC6.5.6 (ii), OC6.6.2 (c) and OC6.7.2 (b). In these circumstances **The Company** and the relevant **Network Operator(s)** will agree equivalent requirements covering a number of **Grid Supply Points**. If **The Company** and the relevant **Network Operator** fail to agree equivalent requirements covering a number of **Grid Supply Points**, then the relevant **Network Operator** will apply the provisions of OC6.4.5(b), OC6.5.3(b) (in respect of **Demand Disconnection** only), OC6.5.6(ii), OC6.6.2(c) and OC6.7.2(b) as evenly as reasonably practicable over the relevant **Network Operator's** entire **System**.

OC6.3 SCOPE

OC6.3.1 **OC6** applies to **The Company** and to **Users** which in **OC6** means:

- (a) **Generators**; and
- (b) **Network Operators**.

It also applies to **The Company** in relation to **Non-Embedded Customers**.

OC6.3.2 Explanation

OC6.3.2.1 (a) Although OC6 does not apply to **Suppliers**, the implementation of **Demand Control** may affect their Customers.

(b) In all situations envisaged in **OC6**, **Demand Control** is exercisable:

- (i) by reference to a **Network Operator's System**; or
- (ii) by **The Company** in relation to **Non-Embedded Customers**.

(c) **Demand Control** in all situations relates to the physical organisation of the **Total System**, and not to any contractual arrangements that may exist.

OC6.3.2.2 (a) Accordingly, **Demand Control** will be exercisable with reference to, for example, five per cent (or such other figure as may be utilised under OC6.5) tranches of **Demand** by a **Network Operator**.

(b) For a **Supplier**, whose **Customers** may be spread throughout a number of **User Systems** (and the **National Electricity Transmission System**), to split its **Customers** into five per cent (or such other figure as may be utilised under OC6.5) tranches of **Demand** would not result in **Demand Control** being implemented effectively on the **Total System**.

(c) Where **Demand Control** is needed in a particular area, **The Company** would not know which **Supplier** to contact and (even if it were to) the resulting **Demand Control** implemented, because of the diversity of contracts, may well not produce the required result.

OC6.3.2.3 (a) **Suppliers** should note, however, that, although implementation of **Demand Control** in respect of their **Customers** is not exercisable by them, their **Customers** may be affected by **Demand Control**.

- (b) This will be implemented by **Network Operators** where the **Customers** are within **User Systems** directly connected to the **National Electricity Transmission System** and by **The Company** where they are **Non-Embedded Customers**.
- (c) The contractual arrangements relating to **Customers** being supplied by **Suppliers** will, accordingly, need to reflect this.
- (d) The existence of a commercial arrangement for the provision of **Customer Demand Management** or **Commercial Ancillary Services** does not relieve a **Network Operator** from the **Demand Control** provisions of OC6.5, OC6.6 and OC6.7, which may be exercised from time to time.

OC6.4 PROCEDURE FOR THE NOTIFICATION OF DEMAND CONTROL INITIATED BY NETWORK OPERATORS (OTHER THAN FOLLOWING THE INSTRUCTION OF THE COMPANY)

OC6.4.1 Pursuant to the provisions of **OC1**, in respect of the time periods prior to 1100 hours each day, each **Network Operator** will notify **The Company** of all **Customer** voltage reductions and/or restorations and **Demand Disconnection** or reconnection, on a **Grid Supply Point** and half-hourly basis, which will or may, either alone or when aggregated with any other **Demand Control** planned by that **Network Operator**, result in a **Demand** change equal to or greater than the **Demand Control Notification Level** averaged over any half hour on any **Grid Supply Point**, which is planned to be instructed by the **Network Operator** other than following an instruction from **The Company** relating to **Demand** reduction.

OC6.4.2 Under **OC6**, each **Network Operator** will notify **The Company** in writing by 1100 hours each day (or such other time specified by **The Company** from time to time) for the next day (except that it will be for the next 3 days on Fridays and 2 days on Saturdays and may be longer (as specified by **The Company** at least one week in advance) to cover holiday periods) of **Customer** voltage reduction or **Demand Disconnection** which will or may result in a **Demand** change equal to or greater than the **Demand Control Notification Level** averaged over any half hour on any **Grid Supply Point**, (or which when aggregated with any other **Demand Control** planned by that **Network Operator** is equal to or greater than the **Demand Control Notification Level**), planned to take place during the next **Operational Day**.

OC6.4.3 When the **Customer** voltage reduction or **Demand Disconnection** which may result in a **Demand** change equal to or greater than the **Demand Control Notification Level** averaged over any half hour on any **Grid Supply Point** (or which when aggregated with any other **Demand Control** planned or implemented by that **Network Operator** is equal to or greater than the **Demand Control Notification Level**) is planned after 1100 hours, each **Network Operator** must notify **The Company** as soon as possible after the decision to implement has been made. If the **Customer** voltage reduction or **Demand Disconnection** is implemented immediately after the decision to implement is made, each **Network Operator** must notify **The Company** within five minutes of implementation.

OC6.4.4 Where, after **The Company** has been notified, whether pursuant to **OC1**, OC6.4.2 or OC6.4.3, the planned **Customer** voltage reduction or **Demand Disconnection** is changed, the **Network Operator** will notify **The Company** as soon as possible of the new plans, or if the **Customer** voltage reduction or **Demand Disconnection** implemented is different to that notified, the **Network Operator** will notify **The Company** of what took place within five minutes of implementation.

OC6.4.5 Any notification under OC6.4.2, OC6.4.3 or OC6.4.4 will contain the following information on a **Grid Supply Point** and half hourly basis:

- (a) the proposed (in the case of prior notification) and actual (in the case of subsequent notification) date, time and duration of implementation of the **Customer** voltage reduction or **Demand Disconnection**; and
- (b) the proposed reduction in **Demand** by use of the **Customer** voltage reduction or **Demand Disconnection**.

OC6.4.6 Pursuant to the provisions of OC1.5.6, each **Network Operator** will supply to **The Company** details of the amount of **Demand** reduction actually achieved by use of the **Customer** voltage reduction or **Demand Disconnection**.

OC6.5 PROCEDURE FOR THE IMPLEMENTATION OF DEMAND CONTROL ON THE INSTRUCTIONS OF THE COMPANY

OC6.5.1 A **National Electricity Transmission System Warning - High Risk of Demand Reduction** will, where possible, be issued by **The Company**, as more particularly set out in OC6.5.4, OC7.4.8 and BC1.5.4 when **The Company** anticipates that it will or may instruct a **Network Operator** to implement **Demand** reduction. It will, as provided in OC6.5.10 and OC7.4.8.2, also be issued to **Non-Embedded Customers**.

OC6.5.2 Where **The Company** expects to instruct **Demand** reduction within the following 30 minutes, **The Company** will where possible, issue a **National Electricity Transmission System Warning - Demand Control Imminent** in accordance with OC7.4.8.2(c) and OC7.4.8.6.

OC6.5.3 (a) Whether a **National Electricity Transmission System Warning - High Risk of Demand Reduction** or **National Electricity Transmission System Warning - Demand Control Imminent** has been issued or not:

(i) provided the instruction relates to not more than 20 per cent of its total **Demand** (measured at the time the **Demand** reduction is required); and

(ii) if the instruction relates to less than 20 per cent of its total **Demand**, is in

- two voltage reduction stages of between 2 and 4 percent, each of which can be expected to deliver around 1.5 percent **Demand** reduction; and
- up to three **Demand Disconnection** stages, each of which can reasonably be expected to deliver between four and six percent **Demand** reduction,

each **Network Operator** will abide by the instructions of **The Company**, which should specify whether a voltage reduction or **Demand Disconnection** stage is required; or

(iii) if the instruction relates to less than 20 per cent of its total **Demand**, is in four **Demand Disconnection** stages each of which can reasonably be expected to deliver between four and six per cent **Demand** reduction,

each **Network Operator** will abide by the instructions of **The Company** with regard to **Demand** reduction under OC6.5 without delay.

(b) The **Demand** reduction must be achieved within the **Network Operator's System** as far as possible uniformly across all **Grid Supply Points** (unless otherwise specified in the **National Electricity Transmission System Warning - High Risk of Demand Reduction**) either by **Customer** voltage reduction or by **Demand Disconnection**.

(c) **Demand Control** initiated by voltage reduction shall be initiated as soon as possible but in any event no longer than two minutes from the instruction being received from **The Company**, and completed within 10 minutes of the instruction being received from **The Company**.

(d) **Demand Control** initiated by **Demand Disconnection** shall be initiated as soon as possible but in any event no longer than two minutes from the instruction being received from **The Company**, and completed within five minutes of the instruction being received from **The Company**.

(e) Each **Network Operator** must notify **The Company** in writing by calendar week 24 each year, for the succeeding **Financial Year** onwards, whether **Demand Control** is to be implemented either:

i) by a combination of voltage reduction and **Demand Disconnection**; or

ii) **Demand Disconnection** alone;

together with the magnitude of the voltage reduction stages (where applicable) and for **Demand Disconnection** stages, the demand reduction anticipated. Thereafter, any

changes must be notified in writing to **The Company** at least 10 **Business Days** prior to the change coming into effect.

- OC6.5.4
- (a) Where **The Company** wishes to instruct a **Demand** reduction of more than 20 per cent of a **Network Operator's Demand** (measured at the time the **Demand** reduction is required), it shall, if it is able, issue a **National Electricity Transmission System Warning - High Risk of Demand Reduction** to the **Network Operator** by 1600 hours on the previous day. The warning will state the percentage level of **Demand** reduction that **The Company** may want to instruct (measured at the time the **Demand** reduction is required).
 - (b) The **National Electricity Transmission System Warning - High Risk of Demand Reduction** will specify the percentage of **Demand** reduction that **The Company** may require in integral multiples of the percentage levels notified by **Users** under OC6.5.3(c) up to (and including) 20 per cent and of five per cent above 20 per cent and will not relate to more than 40 per cent of **Demand** (measured at the time the **Demand** reduction is required) of the **Demand** on the **User System** of a **Network Operator**.
 - (c) If **The Company** has issued the **National Electricity Transmission System Warning - High Risk of Demand Reduction** by 1600 hours on the previous day, on receipt of it the relevant **Network Operator** shall make available the percentage reduction in **Demand** specified for use within the period of the **National Electricity Transmission System Warning**.
 - (d) If **The Company** has not issued the **National Electricity Transmission System Warning - High Risk of Demand Reduction** by 1600 hours the previous day, but after that time, the **Network Operator** shall make available as much of the required **Demand** reduction as it is able, for use within the period of the **National Electricity Transmission System Warning**.

- OC6.5.5
- (a) If **The Company** has given a **National Electricity Transmission System Warning - High Risk of Demand Reduction** to a **Network Operator**, and has issued it by 1600 hours on the previous day, it can instruct the **Network Operator** to reduce its **Demand** by the percentage specified in the **National Electricity Transmission System Warning**.
 - (b) **The Company** accepts that if it has not issued the **National Electricity Transmission System Warning - High Risk of Demand Reduction** by 1600 hours on the previous day or if it has issued it by 1600 hours on the previous day, but it requires a further percentage of **Demand** reduction (which may be in excess of 40 per cent of the total **Demand** on the **User System** of the **Network Operator** (measured at the time the **Demand** reduction is required) from that set out in the **National Electricity Transmission System Warning**, it can only receive an amount that can be made available at that time by the **Network Operator**.
 - (c) Other than with regard to the proviso, the provisions of OC6.5.3 shall apply to those instructions.

- OC6.5.6
- Once a **Demand** reduction has been applied by a **Network Operator** at the instruction of **The Company**, the **Network Operator** may interchange the **Customers** to whom the **Demand** reduction has been applied provided that,
- (i) the percentage of **Demand** reduction at all times within the **Network Operator's System** does not change; and
 - (ii) at all times it is achieved within the **Network Operator's System** as far as possible uniformly across all **Grid Supply Points** (unless otherwise specified in the **National Electricity Transmission System Warning - High Risk of Demand Reduction** if one has been issued),

until **The Company** instructs that **Network Operator** in accordance with **OC6**.

- OC6.5.7 Each **Network Operator** will abide by the instructions of **The Company** with regard to the restoration of **Demand** under OC6.5 without delay. It shall not restore **Demand** until it has received such instruction. The restoration of **Demand** must be achieved as soon as possible and the process of restoration must begin within 2 minutes of the instruction being given by **The Company**.
- OC6.5.8 In circumstances of protracted shortage of generation or where a statutory instruction has been given (eg. a fuel security period) and when a reduction in **Demand** is envisaged by **The Company** to be prolonged, **The Company** will notify the **Network Operator** of the expected duration.
- OC6.5.9 The **Network Operator** will notify **The Company** in writing that it has complied with **The Company 's** instruction under OC6.5, within five minutes of so doing, together with an estimation of the **Demand** reduction or restoration achieved, as the case may be.
- OC6.5.10 **The Company** may itself implement **Demand** reduction and subsequent restoration on **Non-Embedded Customers** as part of a **Demand Control** requirement and it will organise the **National Electricity Transmission System** so that it will be able to reduce **Demand** by **Disconnection** of, or **Customer** voltage reduction to, all or any **Non-Embedded Customers**. Equivalent provisions to those in OC6.5.4 shall apply to issuing a **National Electricity Transmission System Warning - High Risk of Demand Reduction to Non-Embedded Customers**, as envisaged in OC7.4.8.
- OC6.5.11 Pursuant to the provisions of OC1.5.6, the **Network Operator** will supply to **The Company** details of the amount of **Demand** reduction or restoration actually achieved.

OC6.6 AUTOMATIC LOW FREQUENCY DEMAND DISCONNECTION

OC6.6.1 Each **Network Operator** will make arrangements that will enable automatic low **Frequency Disconnection** of at least:

- (i) 60 per cent of its total **Demand** (based on **Annual ACS Conditions**) at the time of forecast **National Electricity Transmission System** peak **Demand** where such **Network Operator's System** is connected to the **National Electricity Transmission System** in **The Company's Transmission Area**
- (ii) 40 per cent of its total **Demand** (based on **Annual ACS Conditions**) at the time of forecast **National Electricity Transmission System** peak where such **Network Operator's System** is connected to the **National Electricity Transmission System** in either **SPT's** or **SHETL's Transmission Area**

in order to seek to limit the consequences of a major loss of generation or an **Event** on the **Total System** which leaves part of the **Total System** with a generation deficit. Where a **Network Operator's System** is connected to the **National Electricity Transmission System** in more than one **Transmission Area**, the figure above for the **Transmission Area** in which the majority of the **Network Operator's Demand** is connected shall apply.

- OC6.6.2
- (a) The **Demand** of each **Network Operator** which is subject to automatic low **Frequency Disconnection** will be split into discrete MW blocks.
 - (b) The number, size (% **Demand**) and the associated low **Frequency** settings of these blocks, will be as specified in Table CC.A.5.5.1a. **The Company** will keep the settings under review.
 - (c) The distribution of the blocks will be such as to give a reasonably uniform **Disconnection** within the **Network Operator's System**, as the case may be, across all **Grid Supply Points**.
 - (d) Each **Network Operator** will notify **The Company** in writing by calendar week 24 each year of the details of the automatic low **Frequency Disconnection** on its **User System**. The information provided should identify, for each **Grid Supply Point** at the date and time of the annual peak of the **National Electricity Transmission System Demand** at **Annual ACS Conditions** (as notified pursuant to OC1.4.2), the frequency settings at which **Demand Disconnection** will be initiated and amount of **Demand** disconnected at each such setting.

OC6.6.3 Where conditions are such that, following automatic low **Frequency Demand Disconnection**, and the subsequent **Frequency** recovery, it is not possible to restore a large proportion of the total **Demand** so disconnected within a reasonable period of time, **The Company** may instruct a **Network Operator** to implement additional **Demand Disconnection** manually, and restore an equivalent amount of the **Demand** that had been disconnected automatically. The purpose of such action is to ensure that a subsequent fall in **Frequency** will again be contained by the operation of automatic low **Frequency Demand Disconnection**.

OC6.6.4 Once an automatic low **Frequency Demand Disconnection** has taken place, the **Network Operator** on whose **User System** it has occurred, will not reconnect until **The Company** instructs that **Network Operator** to do so in accordance with **OC6**.

OC6.6.5 Once the **Frequency** has recovered, each **Network Operator** will abide by the instructions of **The Company** with regard to reconnection under OC6.6 without delay. Reconnection must be achieved as soon as possible and the process of reconnection must begin within 2 minutes of the instruction being given by **The Company**.

- OC6.6.6
- (a) **Non-Embedded Customers** (including a **Pumped Storage Generator**) must provide automatic low **Frequency** disconnection, which will be split into discrete blocks.
 - (b) The number and size of blocks and the associated low **Frequency** settings will be as specified by **The Company** by week 24 each calendar year following discussion with the **Non-Embedded Customers** (including a **Pumped Storage Generator**) in accordance with the relevant **Bilateral Agreement**.

- OC6.6.7 (a) In addition, **Generators** may wish to disconnect **Power Generating Modules** and/or **Generating Units** from the **System**, either manually or automatically, should they be subject to **Frequency** levels which could result in **Power Generating Module** and/or **Generating Unit** damage.
- (b) This **Disconnection** facility on such a **Power Generating Module** and/or **Generating Unit** directly connected to the **National Electricity Transmission System**, will be agreed with **The Company** in accordance with the **Bilateral Agreement**.
- (c) Any **Embedded Power Stations** will need to agree this **Disconnection** facility with the relevant **User** to whose **System** that **Power Station** is connected, which will then need to notify **The Company** of this.
- OC6.6.8 The **Network Operator** or **Non-Embedded Customer**, as the case may be, will notify **The Company** with an estimation of the **Demand** reduction which has occurred under automatic low **Frequency Demand Disconnection** and similarly notify the restoration, as the case may be, in each case within five minutes of the **Disconnection** or restoration.
- OC6.6.9 Pursuant to the provisions of OC1.5.6 the **Network Operator** and **Non-Embedded Customer** will supply to **The Company** details of the amount of **Demand** reduction or restoration actually achieved.
- OC6.6.10 (a) In the case of a **User**, it is not necessary for it to provide automatic low **Frequency** disconnection under OC6.6 only to the extent that it is providing, at the time it would be so needed, low **Frequency** disconnection at a higher level of **Frequency** as an **Ancillary Service**, namely if the amount provided as an **Ancillary Service** is less than that required under OC6.6 then the **User** must provide the balance required under OC6.6 at the time it is so needed.
- (b) The provisions of OC7.4.8 relating to the use of **Demand Control** should be borne in mind by **Users**.
- OC6.7 EMERGENCY MANUAL DISCONNECTION
- OC6.7.1 Each **Network Operator** will make arrangements that will enable it, following an instruction from **The Company**, to disconnect **Customers** on its **User System** under emergency conditions irrespective of **Frequency** within 30 minutes. It must be possible to apply the **Demand Disconnections** to individual or specific groups of **Grid Supply Points**, as determined by **The Company**.
- OC6.7.2 (a) Each **Network Operator** shall provide **The Company** in writing by week 24 in each calendar year, in respect of the next following year beginning week 24, on a **Grid Supply Point** basis, with the following information (which is set out in a tabular format in the Appendix):
- (i) its total peak **Demand** (based on **Annual ACS Conditions**); and
- (ii) the percentage value of the total peak **Demand** that can be disconnected (and must include that which can also be reduced by voltage reduction, where applicable) within timescales of 5/10/15/20/25/30 minutes.
- (b) The information should include, in relation to the first 5 minutes, as a minimum, the 20% of **Demand** that must be reduced on instruction under OC6.5.
- OC6.7.3 Each **Network Operator** will abide by the instructions of **The Company** with regard to **Disconnection** under OC6.7 without delay, and the **Disconnection** must be achieved as soon as possible after the instruction being given by **The Company**, and in any case, within the timescale registered in OC6.7. The instruction may relate to an individual **Grid Supply Point** and/or groups of **Grid Supply Points**.
- OC6.7.4 **The Company** will notify a **Network Operator** who has been instructed under OC6.7, of what has happened on the **National Electricity Transmission System** to necessitate the instruction, in accordance with the provisions of **OC7** and, if relevant, **OC10**.

- OC6.7.5 Once a **Disconnection** has been applied by a **Network Operator** at the instruction of **The Company**, that **Network Operator** will not reconnect until **The Company** instructs it to do so in accordance with **OC6**.
- OC6.7.6 Each **Network Operator** will abide by the instructions of **The Company** with regard to reconnection under OC6.7 without delay, and shall not reconnect until it has received such instruction and reconnection must be achieved as soon as possible and the process of reconnection must begin within 2 minutes of the instruction being given by **The Company**.
- OC6.7.7 **The Company** may itself disconnect manually and reconnect **Non-Embedded Customers** as part of a **Demand Control** requirement under emergency conditions.
- OC6.7.8 If **The Company** determines that emergency manual **Disconnection** referred to in OC6.7 is inadequate, **The Company** may disconnect **Network Operators** and/or **Non-Embedded Customers** at **Grid Supply Points**, to preserve the security of the **National Electricity Transmission System**.
- OC6.7.9 Pursuant to the provisions of OC1.5.6 the **Network Operator** will supply to **The Company** details of the amount of **Demand** reduction or restoration actually achieved.
- OC6.8 OPERATION OF THE BALANCING MECHANISM DURING DEMAND CONTROL
- Demand Control** will constitute an **Emergency Instruction** in accordance with BC2.9 and it may be necessary to depart from normal **Balancing Mechanism** operation in accordance with BC2 in issuing **Bid-Offer Acceptances**. **The Company** will inform affected **BM Participants** in accordance with the provisions of **OC7**.

APPENDIX 1 - EMERGENCY MANUAL DEMAND REDUCTION/DISCONNECTION SUMMARY SHEET

(As set out in OC6.7)

NETWORK OPERATOR: _____ [YEAR] PEAK: _____

GRID SUPPLY POINT (Name)	PEAK MW	% OF GROUP DEMAND DISCONNECTION (AND/OR REDUCTION IN THE CASE OF THE FIRST 5 MINUTES) (CUMULATIVE)						REMARKS
		TIME (MINS)						
		5	10	15	20	25	30	

Notes:

1. Data to be provided annually by week 24 to cover the following year.

< END OF OPERATING CODE NO. 6 >

OPERATING CODE NO. 7
(OC7)

OPERATIONAL LIAISON

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OC7.1 INTRODUCTION

OC7.1.1 **Operating Code No. 7 ("OC7")** sets out the requirements for the exchange of information in relation to **Operations** and/or **Events** on the **Total System** which have had (or may have had) or will have (or may have) an **Operational Effect**:

- (a) on the **National Electricity Transmission System** in the case of an **Operation** and/or **Event** occurring on the **System** of a **User** or **Users**; and
- (b) on the **System** of a **User** or **Users** in the case of an **Operation** and/or **Event** occurring on the **National Electricity Transmission System**.

It also describes the types of **National Electricity Transmission System Warning** which may be issued by **The Company**.

OC7.1.2 The requirement to notify in **OC7** relates generally to notifying of what is expected to happen or what has happened and not the reasons why. However, as **OC7** provides, when an **Event** or **Operation** has occurred on the **National Electricity Transmission System** which itself has been caused by (or exacerbated by) an **Operation** or **Event** on a **User's System**, **The Company** in reporting the **Event** or **Operation** on the **National Electricity Transmission System** to another **User** can pass on what it has been told by the first **User** in relation to the **Operation** or **Event** on the first **User's System**.

OC7.1.3 Where an **Event** or **Operation** on the **National Electricity Transmission System** falls to be reported by **The Company** to an **Externally Interconnected System Operator** under an **Interconnection Agreement**, **OC7** provides that in the situation where that **Event** or **Operation** has been caused by (or exacerbated by) an **Operation** or **Event** on a **User's System**, **The Company** can pass on what it has been told by the **User** in relation to the **Operation** or **Event** on that **User's System**.

OC7.1.4 **OC7** also deals with **Integral Equipment Tests**.

OC7.1.5 To reconfigure the **National Electricity Transmission System**, **The Company** may reasonably require the assistance of a **User** to reconfigure parts of the **User System**. To reconfigure its **User System** a **User** may reasonably require the reasonable assistance of **The Company** to direct the reconfiguration of parts of the **National Electricity Transmission System**.

OC7.1.6 **OC7.6** sets down the arrangements for the exchange of information required when configuring **Connection Sites** (or in the case of **OTSUA** operational prior to the **OTSUA Transfer Time**, **Transmission Interface Sites**) and parts of the **National Electricity Transmission System** adjacent to those **Connection Sites** (or **Transmission Interface Sites**) in Scotland and **Offshore**. It also covers the setting up of a **Local Switching Procedure**. **The Company** shall procure that **Relevant Transmission Licensees** shall comply with section **OC7.6** and any relevant **Local Switching Procedure** where and to the extent that such matters apply to them.

OC7.2 OBJECTIVE

The objectives of **OC7** are:

OC7.2.1 To provide for the exchange of information so that the implications of an **Operation** and/or **Event** can be considered, possible risks arising from it can be assessed and appropriate action taken by the relevant party in order to maintain the integrity of the **Total System**. **OC7** does not seek to deal with any actions arising from the exchange of information, but merely with that exchange.

OC7.2.2 To provide for types of **National Electricity Transmission System Warnings** which may be issued by **The Company**.

OC7.2.3 To provide the framework for the information flow and discussion between **The Company** and certain **Users** in relation to **Integral Equipment Tests**.

OC7.2.4 To provide the procedure to be followed in respect of **Operational Switching** in Scotland and **Offshore**.

OC7.3 SCOPE

OC7.3.1 **OC7** applies to **The Company** and to **Users**, which in **OC7** means:

- (a) **Generators** (other than those which only have **Embedded Small Power Stations** or **Embedded Medium Power Stations**) and including **Generators** undertaking **OTSDUW**;
- (b) **Network Operators**;
- (c) **Non-Embedded Customers**;
- (d) **Suppliers** (for the purposes of **National Electricity Transmission System Warnings**);
- (e) **Externally Interconnected System Operators** (for the purposes of **National Electricity Transmission System Warnings**); and
- (f) **DC Converter Station** owners and **HVDC System Owners**.

The procedure for operational liaison by **The Company** with **Externally Interconnected System Operators** is set out in the **Interconnection Agreement** with each **Externally Interconnected System Operator**.

In Scotland and **Offshore** OC7.6 also applies to **Relevant Transmission Licensees**.

OC7.4 PROCEDURE

OC7.4.1 The term "**Operation**" means a scheduled or planned action relating to the operation of a **System** (including an **Embedded Power Station**).

OC7.4.2 The term "**Event**" means an unscheduled or unplanned (although it may be anticipated) occurrence on, or relating to, a **System** (including an **Embedded Power Station**) including, without limiting that general description, faults, incidents and breakdowns and adverse weather conditions being experienced.

OC7.4.3 The term "**Operational Effect**" means any effect on the operation of the relevant other **System** which causes the **National Electricity Transmission System** or the **Systems** of the other **User** or **Users**, as the case may be, to operate (or be at a materially increased risk of operating) differently to the way in which they would or may have normally operated in the absence of that effect.

OC7.4.4 References in this **OC7** to a **System** of a **User** or **User's System** shall not include **Embedded Small Power Stations** or **Embedded Medium Power Stations**, unless otherwise stated.

OC7.4.5 Requirement To Notify Operations

OC7.4.5.1 Operation On The National Electricity Transmission System

In the case of an **Operation** on the **National Electricity Transmission System**, which will have (or may have) an **Operational Effect** on the **System(s)** of a **User** or **Users**, **The Company** will notify the **User** or **Users** whose **System(s)** will, or may, in the reasonable opinion of **The Company**, be affected, in accordance with **OC7**.

OC7.4.5.2 Operation On a User's System

In the case of an **Operation** on the **System** of a **User** which will have (or may have) an **Operational Effect** on the **National Electricity Transmission System** (including an equivalent to an **Operation** on the equivalent of a **System** of a **User** or other person connected to that **User's System** which, via that **User System**, will or may have an **Operational Effect** on the **National Electricity Transmission System**), the **User** will notify **The Company** in accordance with **OC7**. Following notification by the **User**, **The Company** will notify any other **User** or **Users** on whose **System(s)** the **Operation** will have, or may have, in the reasonable opinion of **The Company**, an **Operational Effect**, in accordance with **OC7** and will notify any **Externally Interconnected System Operator** on whose **System** the **Operation** will have, or may have, in the reasonable opinion of **The Company**, an **Operational Effect**, if it is required to do so by the relevant **Interconnection Agreement**.

OC7.4.5.3 Examples Of Situations Where Notification By **The Company** Or a **User** may be Required

Whilst in no way limiting the general requirement to notify in advance set out in OC7.4.5.1 and OC7.4.5.2, the following are examples of situations where notification in accordance with OC7.4.5 will be required if they will, or may, have an **Operational Effect**:

- (a) the implementation of a planned outage of **Plant** and/or **Apparatus** which has been arranged pursuant to **OC2**;
- (b) the operation (other than, in the case of a **User**, at the instruction of **The Company**) of any circuit breaker or isolator/disconnector or any sequence or combination of the two; or
- (c) voltage control.

OC7.4.5.4 Operations Caused By Another Operation Or By An Event

An **Operation** may be caused by another **Operation** or an **Event** on another's **System** (including an **Embedded Power Station**) (or by the equivalent of an **Event** or **Operation** on the **System** of an **Externally Interconnected System Operator** or **Interconnector User**) and in that situation the information to be notified is different to that where the **Operation** arose independently of any other **Operation** or **Event**, as more particularly provided in OC7.4.5.6.

OC7.4.5.5 Form

A notification and any response to any questions asked under OC7.4.5, of an **Operation** which has arisen independently of any other **Operation** or of an **Event**, shall be of sufficient detail to describe the **Operation** (although it need not state the cause) and to enable the recipient of the notification reasonably to consider and assess the implications and risks arising (provided that, in the case of an **Operation** on a **User's System** which **The Company** is notifying to other **Users** under OC7.4.5.2, **The Company** will only pass on what it has been told by the **User** which has notified it) and will include the name of the individual reporting the **Operation** on behalf of **The Company** or the **User**, as the case may be. The recipient may ask questions to clarify the notification and the giver of the notification will, insofar as it is able, answer any questions raised, provided that, in the case of an **Operation** on a **User's System** which **The Company** is notifying to other **Users** under OC7.4.5.2, in answering any question, **The Company** will not pass on anything further than that which it has been told by the **User** which has notified it. **The Company** may pass on the information contained in the notification as provided in OC7.4.5.6.

- OC7.4.5.6 (a) A notification by **The Company** of an **Operation** under OC7.4.5.1 which has been caused by another **Operation** (the "first **Operation**") or by an **Event** on a **User's System**, will describe the **Operation** and will contain the information which **The Company** has been given in relation to the first **Operation** or that **Event** by the **User**. The notification and any response to any questions asked (other than in relation to the information which **The Company** is merely passing on from a **User**) will be of sufficient detail to enable the recipient of the notification reasonably to consider and assess the implications and risks arising from the **Operation** on the **National Electricity Transmission System** and will include the name of the individual reporting the **Operation** on behalf of **The Company**. The recipient may ask questions to clarify the notification and **The Company** will, insofar as it is able, answer any questions raised, provided that in relation to the information which **The Company** is merely passing on from a **User**, in answering any question **The Company** will not pass on anything further than that which it has been told by the **User** which has notified it.
- (b) Where a **User** is reporting an **Operation** or an **Event** which itself has been caused by an incident or scheduled or planned action affecting (but not on) its **System**, the notification to **The Company** will contain the information which the **User** has been given by the person connected to its **System** in relation to that incident or scheduled or planned action (which the **User** must require, contractually or otherwise, the person connected to its **System** to give to it) and **The Company** may pass on the information contained in the notification as provided in this OC7.4.5.6.
- OC7.4.5.7 Where an **Operation** on the **National Electricity Transmission System** falls to be reported by **The Company** under an **Interconnection Agreement** and the **Operation** has been caused by another **Operation** (the "first **Operation**") or by an **Event** on a **User's System**, **The Company** will include in that report the information which **The Company** has been given in relation to the first **Operation** or that **Event** by the **User** (including any information relating to an incident or scheduled or planned action, as provided in OC7.4.5.6).
- OC7.4.5.8 (a) A notification to a **User** by **The Company** of an **Operation** under OC7.4.5.1 which has been caused by the equivalent of an **Operation** or of an **Event** on the equivalent of a **System** of an **Externally Interconnected System Operator** or **Interconnector User**, will describe the **Operation** on the **National Electricity Transmission System** and will contain the information which **The Company** has been given, in relation to the equivalent of an **Operation** or of an **Event** on the equivalent of a **System** of an **Externally Interconnected System Operator** or **Interconnector User**, by that **Externally Interconnected System Operator** or **Interconnector User**.
- (b) The notification and any response to any question asked (other than in relation to the information which **The Company** is merely passing on from that **Externally Interconnected System Operator** or **Interconnector User**) will be of sufficient detail to enable the recipient of the notification reasonably to consider and assess the implications and risks arising from the **Operation** on the **National Electricity Transmission System** and will include the name of the individual reporting the **Operation** on behalf of **The Company**. The recipient may ask questions to clarify the notification and **The Company** will, insofar as it is able, answer any questions raised, provided that, in relation to the information which **The Company** is merely passing on from an **Externally Interconnected System Operator** or **Interconnector User**, in answering any question **The Company** will not pass on anything further than that which it has been told by the **Externally Interconnected System Operator** or **Interconnector User** which has notified it.

- OC7.4.5.9 (a) A **Network Operator** may pass on the information contained in a notification to it from **The Company** under OC7.4.5.1, to a **Generator** with a **Power Generating Module** (including a **DC Connected Power Park Module**), **Generating Unit** or a **Power Park Module** connected to its **System**, or to a **DC Converter Station** owner with a **DC Converter** or to a **HVDC System Owner** with a **HVDC System** connected to its **System**, or to the operator of another **User System** connected to its **System** (which, for the avoidance of doubt, could be another **Network Operator**), in connection with reporting the equivalent of an **Operation** under the **Distribution Code** (or the contract pursuant to which that **Power Generating Module** (including a **DC Connecting Power Generating Module**), and/or **Generating Unit** and/or **Power Park Module** or other **User System**, or to a **DC Converter Station** or to an **HVDC System** is connected to the **System** of that **Network Operator**) (if the **Operation** on the **National Electricity Transmission System** caused it).
- (b) A **Generator** may pass on the information contained in a notification to it from **The Company** under OC7.4.5.1, to another **Generator** with a **Power Generating Module** (including a **DC Connected Power Park Module**) and/or a **Generating Unit** or a **Power Park Module** connected to its **System**, or to the operator of a **User System** connected to its **System** (which, for the avoidance of doubt, could be a **Network Operator**), if it is required (by a contract pursuant to which that **Power Generating Module** (including a **DC Connected Power Park Module**) and/or **Generating Unit** and/or that **Power Park Module** or that **User System** is connected to its **System**) to do so in connection with the equivalent of an **Operation** on its **System** (if the **Operation** on the **National Electricity Transmission System** caused it).
- OC7.4.5.10 (a) Other than as provided in OC7.4.5.9, a **Network Operator** or a **Generator** may not pass on any information contained in a notification to it from **The Company** under OC7.4.5.1 (and an operator of a **User System** or **Generator** receiving information which was contained in a notification to a **Generator** or a **Network Operator**, as the case may be, from **The Company** under OC7.4.5.1, as envisaged in OC7.4.5.9 may not pass on this information) to any other person, but may inform persons connected to its **System** (or in the case of a **Generator** which is also a **Supplier**, inform persons to which it supplies electricity which may be affected) that there has been an incident on the **Total System**, the general nature of the incident (but not the cause of the incident) and (if known and if power supplies have been affected) an estimated time of return to service.
- (b) In the case of a **Generator** which has an **Affiliate** which is a **Supplier**, the **Generator** may inform it that there has been an incident on the **Total System**, the general nature of the incident (but not the cause of the incident) and (if known and if power supplies have been affected in a particular area) an estimated time of return to service in that area, and that **Supplier** may pass this on to persons to which it supplies electricity which may be affected).
- (c) Each **Network Operator** and **Generator** shall use its reasonable endeavours to procure that any **Generator** or operator of a **User System** receiving information which was contained in a notification to a **Generator** or **Network Operator**, as the case may be, from **The Company** under OC7.4.5.1, which is not bound by the **Grid Code**, does not pass on any information other than as provided above.
- OC7.4.5.11 The notification will, if either party requests, be recorded by the sender and dictated to the recipient, who shall record and repeat each phrase as it is received and on completion of the dictation shall repeat back the notification in full to the sender who shall confirm that it has been accurately recorded.
- OC7.4.5.12 Timing
A notification under OC7.4.5 will be given as far in advance as possible and in any event shall be given in sufficient time as will reasonably allow the recipient to consider and assess the implications and risks arising.
- OC7.4.6 Requirements To Notify Events
- OC7.4.6.1 Events On The National Electricity Transmission System

In the case of an **Event** on the **National Electricity Transmission System** which has had (or may have had) an **Operational Effect** on the **System(s)** of a **User** or **Users**, **The Company** will notify the **User** or **Users** whose **System(s)** have been, or may have been, in the reasonable opinion of **The Company**, affected, in accordance with **OC7**.

OC7.4.6.2 Events On A User's System

In the case of an **Event** on the **System** of a **User** which has had (or may have had) an **Operational Effect** on the **National Electricity Transmission System**, the **User** will notify **The Company** in accordance with **OC7**.

OC7.4.6.3 Events Caused By Another Event Or By An Operation

An **Event** may be caused (or exacerbated by) another **Event** or by an **Operation** on another's **System** (including on an **Embedded Power Station**) (or by the equivalent of an **Event** or **Operation** on the equivalent of a **System** of an **Externally Interconnected System Operator** or **Interconnector User**) and in that situation the information to be notified is different to that where the **Event** arose independently of any other **Event** or **Operation**, as more particularly provided in OC7.4.6.7.

OC7.4.6.4 **The Company** or a **User**, as the case may be, may enquire of the other whether an **Event** has occurred on the other's **System**. If it has, and the party on whose **System** the **Event** has occurred is of the opinion that it may have had an **Operational Effect** on the **System** of the party making the enquiry, it shall notify the enquirer in accordance with **OC7**.

OC7.4.6.5 Examples Of Situations Where Notification By The Company or a User may be Required

Whilst in no way limiting the general requirement to notify set out in OC7.4.6.1, OC7.4.6.2 and OC7.4.6.3, the following are examples of situations where notification in accordance with OC7.4.6 will be required if they have an **Operational Effect**:

- (a) where **Plant** and/or **Apparatus** is being operated in excess of its capability or may present a hazard to personnel;
- (b) the activation of any alarm or indication of any abnormal operating condition;
- (c) adverse weather conditions being experienced;
- (d) breakdown of, or faults on, or temporary changes in the capabilities of, **Plant** and/or **Apparatus**;
- (e) breakdown of, or faults on, control, communication and metering equipment; or
- (f) increased risk of inadvertent protection operation.

Form

OC7.4.6.6 A notification and any response to any questions asked under OC7.4.6.1 and OC7.4.6.2 of an **Event** which has arisen independently of any other **Event** or of an **Operation**, will describe the **Event**, although it need not state the cause of the **Event**, and, subject to that, will be of sufficient detail to enable the recipient of the notification reasonably to consider and assess the implications and risks arising and will include the name of the individual reporting the **Event** on behalf of **The Company** or the **User**, as the case may be. The recipient may ask questions to clarify the notification and the giver of the notification will, insofar as it is able (although it need not state the cause of the **Event**) answer any questions raised. **The Company** may pass on the information contained in the notification as provided in OC7.4.6.7.

- OC7.4.6.7
- (a) A notification (and any response to any questions asked under OC7.4.6.1) by **The Company** of (or relating to) an **Event** under OC7.4.6.1 which has been caused by (or exacerbated by) another **Event** (the "first **Event**") or by an **Operation** on a **User's System** will describe the **Event** and will contain the information which **The Company** has been given in relation to the first **Event** or that **Operation** by the **User** (but otherwise need not state the cause of the **Event**). The notification and any response to any questions asked (other than in relation to the information which **The Company** is merely passing on from a **User**) will be of sufficient detail to enable the recipient of the notification reasonably to consider and assess the implications and risks arising from the **Event** on the **National Electricity Transmission System** and will include the name of the individual reporting the **Event** on behalf of **The Company**. The recipient may ask questions to clarify the notification and **The Company** will, insofar as it is able, answer any questions raised, provided that in relation to the information which **The Company** is merely passing on from a **User**, in answering any question **The Company** will not pass on anything further than that which it has been told by the **User** which has notified it.
 - (b) Where a **User** is reporting an **Event** or an **Operation** which itself has been caused by (or exacerbated by) an incident or scheduled or planned action affecting (but not on) its **System** the notification to **The Company** will contain the information which the **User** has been given by the person connected to its **System** in relation to that incident or scheduled or planned action (which the **User** must require, contractually or otherwise, the person connected to its **System** to give to it) and **The Company** may pass on the information contained in the notification as provided in this OC7.4.6.7.
- OC7.4.6.8
- Where an **Event** on the **National Electricity Transmission System** falls to be reported by **The Company** under an **Interconnection Agreement** and the **Event** has been caused by (or exacerbated by) another **Event** (the "first **Event**") or by an **Operation** on a **User's System**, **The Company** will include in that report the information which **The Company** has been given in relation to the first **Event** or that **Operation** by the **User** (including any information relating to an incident or scheduled or planned action on that **User's System**, as provided in OC7.4.6.7).
- OC7.4.6.9
- (a) A notification to a **User** (and any response to any questions asked under OC7.4.6.1) by **The Company** of (or relating to) an **Event** under OC7.4.6.1 which has been caused by (or exacerbated by) the equivalent of an **Event** or of an **Operation** on the equivalent of a **System** of an **Externally Interconnected System Operator** or **Interconnector User**, will describe the **Event** on the **National Electricity Transmission System** and will contain the information which **The Company** has been given, in relation to the equivalent of an **Event** or of an **Operation** on the equivalent of a **System** of an **Externally Interconnected System Operator** or **Interconnector User**, by that **Externally Interconnected System Operator** or **Interconnector User** (but otherwise need not state the cause of the **Event**).
 - (b) The notification and any response to any questions asked (other than in relation to the information which **The Company** is merely passing on from that **Externally Interconnected System Operator** or **Interconnector User**) will be of sufficient detail to enable the recipient of the notification reasonably to consider and assess the implications and risks arising from the **Event** on the **National Electricity Transmission System** and will include the name of the individual reporting the **Event** on behalf of **The Company**. The recipient may ask questions to clarify the notification and **The Company** will, insofar as it is able (although it need not state the cause of the **Event**) answer any questions raised, provided that, in relation to the information which **The Company** is merely passing on from an **Externally Interconnected System Operator** or **Interconnector User**, in answering any question **The Company** will not pass on anything further than that which it has been told by the **Externally Interconnected System Operator** or **Interconnector User** which has notified it.

- OC7.4.6.10 (a) A **Network Operator** may pass on the information contained in a notification to it from **The Company** under OC7.4.6.1, to a **Generator** with a **Power Generating Module** (including a **DC Connected Power Park Module**) and/or **Generating Unit** and/or a **Power Park Module** connected to its **System** or to a **DC Converter Station** owner with a **DC Converter** or to an **HVDC System Owner** with an **HVDC System** connected to its **System** or to the operator of another **User System** connected to its **System** (which, for the avoidance of doubt, could be a **Network Operator**), in connection with reporting the equivalent of an **Event** under the **Distribution Code** (or the contract pursuant to which that **Power Generating Module** and/or **Generating Unit** and/or **Power Park Module** or **DC Converter** or **HVDC System** or other **User System** is connected to the **System** of that **Network Operator**) (if the **Event** on the **National Electricity Transmission System** caused or exacerbated it).
- (b) A **Generator** may pass on the information contained in a notification to it from **The Company** under OC7.4.6.1, to another **Generator** with a **Power Generating Module** and/or **Generating Unit** and/or a **Power Park Module** connected to its **System** or to the operator of a **User System** connected to its **System** (which, for the avoidance of doubt, could be a **Network Operator**), if it is required (by a contract pursuant to which that **Power Generating Module** (including a **DC Connected Power Park Module**) and/or **Generating Unit** and/or that **Power Park Module** or that **User System** is connected to its **System**) to do so in connection with the equivalent of an **Event** on its **System** (if the **Event** on the **National Electricity Transmission System** caused or exacerbated it).
- OC7.4.6.11 (a) Other than as provided in OC7.4.6.10, a **Network Operator** or a **Generator**, may not pass on any information contained in a notification to it from **The Company** under OC7.4.6.1 (and an operator of a **User System** or **Generator** receiving information which was contained in a notification to a **Generator** or a **Network Operator**, as the case may be, from **The Company** under OC7.4.6.1, as envisaged in OC7.4.6.10 may not pass on this information) to any other person, but may inform persons connected to its **System** (or in the case of a **Generator** which is also a **Supplier**, inform persons to which it supplies electricity which may be affected) that there has been an incident on the **Total System**, the general nature of the incident (but not the cause of the incident) and (if known and if power supplies have been affected) an estimated time of return to service.
- (b) In the case of a **Generator** which has an **Affiliate** which is a **Supplier**, the **Generator** may inform it that there has been an incident on the **Total System**, the general nature of the incident (but not the cause of the incident) and (if known and if power supplies have been affected in a particular area) an estimated time of return to service in that area, and that **Supplier** may pass this on to persons to which it supplies electricity which may be affected).
- (c) Each **Network Operator** and **Generator** shall use its reasonable endeavours to procure that any **Generator** or operator of a **User System** receiving information which was contained in a notification to a **Generator** or **Network Operator**, as the case may be, from **The Company** under OC7.4.6.1, which is not bound by the **Grid Code**, does not pass on any information other than as provided above.
- OC7.4.6.12 When an **Event** relating to a **Power Generating Module** and/or **Generating Unit** and/or a **Power Park Module** or a **DC Converter** or an **HVDC System** (or **OTSUA** operational prior to the **OTSUA Transfer Time**), has been reported to **The Company** by a **Generator** or **DC Converter Station** owner or **HVDC System Owner** under OC7.4.6 and it is necessary in order for the **Generator** or **DC Converter Station** owner or **HVDC System Owner** to assess the implications of the **Event** on its **System** more accurately, the **Generator** or **DC Converter Station** owner or **HVDC System Owner** may ask **The Company** for details of the fault levels from the **National Electricity Transmission System** to that **Power Generating Module** and/or **Generating Unit** and/or **Power Park Module** or **DC Converter** or **HVDC System** (or **OTSUA** operational prior to the **OTSUA Transfer Time**) at the time of the **Event**, and **The Company** will, as soon as reasonably practicable, give the **Generator** or **DC Converter Station** owner or **HVDC System Owner** that information provided that **The Company** has that information.

OC7.4.6.13 Except in an emergency situation the notification of an **Event** will, if either party requests, be recorded by the sender and dictated to the recipient, who shall record and repeat each phrase as it is received and on completion of the dictation shall repeat the notification in full to the sender who shall confirm that it has been accurately recorded.

Timing

OC7.4.6.14 A notification under OC7.4.6 shall be given as soon as possible after the occurrence of the **Event**, or time that the **Event** is known of or anticipated by the giver of the notification under **OC7**, and in any event within 15 minutes of such time.

OC7.4.7 Significant Incidents

OC7.4.7.1 Where a **User** notifies **The Company** of an **Event** under **OC7** which **The Company** considers has had or may have had a significant effect on the **National Electricity Transmission System**, **The Company** will require the **User** to report that **Event** in writing in accordance with the provisions of **OC10** and will notify that **User** accordingly.

OC7.4.7.2 Where **The Company** notifies a **User** of an **Event** under **OC7** which the **User** considers has had or may have had a significant effect on that **User's System**, that **User** will require **The Company** to report that **Event** in writing in accordance with the provisions of **OC10** and will notify **The Company** accordingly.

OC7.4.7.3 **Events** which **The Company** requires a **User** to report in writing pursuant to OC7.4.7.1, and **Events** which a **User** requires **The Company** to report in writing pursuant to OC7.4.7.2, are known as "**Significant Incidents**".

OC7.4.7.4 Without limiting the general description set out in OC7.4.7.1 and OC7.4.7.2, a **Significant Incident** will include **Events** having an **Operational Effect** which result in, or may result in, the following:

- (a) operation of **Plant** and/or **Apparatus** either manually or automatically;
- (b) voltage outside statutory limits;
- (c) **Frequency** outside statutory limits; or
- (d) **System** instability.

OC 7.4.8 National Electricity Transmission System Warnings

OC7.4.8.1 Role Of National Electricity Transmission System Warnings

National Electricity Transmission System Warnings as described below provide information relating to **System** conditions or **Events** and are intended to:

- (i) alert **Users** to possible or actual **Plant** shortage, **System** problems and/or **Demand** reductions;
- (ii) inform of the applicable period;
- (iii) indicate intended consequences for **Users**; and
- (iv) enable specified **Users** to be in a state of readiness to react properly to instructions received from **The Company**.

A table of **National Electricity Transmission System Warnings**, set out in the Appendix to **OC7**, summarises the warnings and their usage. In the case of a conflict between the table and the provisions of the written text of **OC7**, the written text will prevail.

OC7.4.8.2 Recipients Of National Electricity Transmission System Warnings

- (a) Where **National Electricity Transmission System Warnings**, (except those relating to **Demand Control Imminent**), are applicable to **System** conditions or **Events** which have widespread effect, **The Company** will notify all **Users** under **OC7**.

- (b) Where in **The Company's** judgement **System** conditions or **Events** may only have a limited effect, the **National Electricity Transmission System Warning** will only be issued to those **Users** who are or may in **The Company's** judgement be affected.
- (c) Where a **National Electricity Transmission System Warning - Demand Control Imminent** is issued it will only be sent to those **Users** who are likely to receive **Demand Control** instructions from **The Company**.

OC7.4.8.3 Preparatory Action

- (a) Where possible, and if required, recipients of the warnings should take such preparatory action as they deem necessary taking into account the information contained in the **National Electricity Transmission System Warning**. All warnings will be of a form determined by **The Company** and will remain in force from the stated time of commencement until the cancellation, amendment or re-issue, as the case may be, is notified by **The Company**.
- (b) Where a **National Electricity Transmission System Warning** has been issued to a **Network Operator** and is current, **Demand Control** should not (subject as provided below) be employed unless instructed by **The Company**. If **Demand Control** is, however, necessary to preserve the integrity of the **Network Operator's System**, then the impact upon the integrity of the **Total System** should be considered by the **Network Operator** and where practicable discussed with **The Company** prior to its implementation.

Where a **National Electricity Transmission System Warning** has been issued to a **Supplier**, further **Customer Demand Management** (in addition to that previously notified under **OC1 - Demand Forecasts**) must only be implemented following notification to **The Company**.

- (c) **National Electricity Transmission System Warnings** will be issued by such data transmission facilities as have been agreed between **The Company** and **Users**. In the case of **Generators** with **Gensets** this will normally be at their **Trading Points** (if they have notified **The Company** that they have a **Trading Point**).
- (d) **Users** may at times be informed by telephone of **National Electricity Transmission System Warnings** and in these circumstances confirmation will be sent to those **Users** so notified by such data transmission facilities as have been agreed between **The Company** and **Users**, as soon as possible.

OC7.4.8.4 Types Of National Electricity Transmission System Warnings

National Electricity Transmission System Warnings consist of the following types:-

- (i) **National Electricity Transmission System Warning - Electricity Margin Notice**
- (ii) **National Electricity Transmission System Warning - High Risk of Demand Reduction**
- (iii) **National Electricity Transmission System Warning - Demand Control Imminent**
- (iv) **National Electricity Transmission System Warning - Risk of System Disturbance**

OC7.4.8.5 National Electricity Transmission System Warning - Electricity Margin Notice

A **National Electricity Transmission System Warning - Electricity Margin Notice** may be issued to **Users** in accordance with OC7.4.8.2, at times when there is a reduced **System Margin**, as determined under BC1.5.4. It will contain the following information:

- (i) the period for which the warning is applicable; and
- (ii) the availability shortfall in MW; and
- (iii) intended consequences for **Users**, including notification that **Maximum Generation Service** may be instructed.

OC 7.4.8.6 National Electricity Transmission System Warning - High Risk of Demand Reduction

- (a) A **National Electricity Transmission System Warning - High Risk of Demand Reduction** may be issued to **Users** in accordance with OC7.4.8.2 at times when there is a reduced **System Margin**, as determined under BC1.5.4 and in **The Company's** judgement there is increased risk of **Demand** reduction being implemented under OC6.5.1. It will contain the following information in addition to the required information in a **National Electricity Transmission System Warning - Electricity Margin Notice**:
 - (i) the possible percentage level of **Demand** reduction required; and
 - (ii) Specify those **Network Operators** and **Non Embedded Customers** who may subsequently receive instructions under OC6.5.1.
- (b) A **National Electricity Transmission System Warning - High Risk of Demand Reduction** may also be issued by **The Company** to those **Network Operators** and **Non Embedded Customers** who may subsequently receive instructions under OC6.5.1 relating to a **Demand** reduction in circumstances not related to **System Margin** (for example **Demand** reduction required to manage **System** overloading).

The **National Electricity Transmission System Warning - High Risk of Demand Reduction** will specify the period during which **Demand** reduction may be required and the part of the **Total System** to which it applies and any other matters specified in OC6.5.

OC7.4.8.6.1 Protracted Periods Of Generation Shortage

- (a) Whenever **The Company** anticipates that a protracted period of generation shortage may exist a **National Electricity Transmission System Warning - Electricity Margin Notice** or **High Risk of Demand Reduction** may be issued, to give as much notice as possible to those **Network Operators** and **Non Embedded Customers** who may subsequently receive instructions under OC6.5.
- (b) A **National Electricity Transmission System Warning - High Risk of Demand Reduction** will in these instances include an estimate of the percentage of **Demand** reduction that may be required and the anticipated duration of the **Demand** reduction. It may also include information relating to estimates of any further percentage of **Demand** reduction that may be required.
- (c) The issue of the **National Electricity Transmission System Warning - Electricity Margin Notice** or **High Risk of Demand Reduction** is intended to enable recipients to plan ahead on the various aspects of **Demand** reduction.

OC7.4.8.7 National Electricity Transmission System Warning - Demand Control Imminent

- (a) A **National Electricity Transmission System Warning - Demand Control Imminent**, relating to a **Demand** reduction under OC6.5, will be issued by **The Company** to **Users** in accordance with OC7.4.8.2. It will specify those **Network Operators** who may subsequently receive instructions under OC6.5.
- (b) A **National Electricity Transmission System Warning - Demand Control Imminent**, need not be preceded by any other **National Electricity Transmission System Warning** and will be issued when a **Demand** reduction is expected within the following 30 minutes, but will not cease to have effect after 30 minutes from its issue. However, **The Company** will either reissue the **National Electricity Transmission System Warning - Demand Control Imminent** or cancel the **National Electricity Transmission System Warning - Demand Control Imminent** no later than 2 hours from first issue, or from re-issue, as the case may be.

OC7.4.8.8 National Electricity Transmission System Warning - Risk of System Disturbance

- (a) A **National Electricity Transmission System Warning - Risk of System Disturbance** will be issued by **The Company** to **Users** who may be affected when **The Company** knows there is a risk of widespread and serious disturbance to the whole or part of, the **National Electricity Transmission System**;
- (b) The **National Electricity Transmission System Warning - Risk of System Disturbance** will contain such information as **The Company** deems appropriate;
- (c) for the duration of the **National Electricity Transmission System Warning - Risk of System Disturbance**, each **User** in receipt of the **National Electricity Transmission System Warning - Risk of System Disturbance** shall take the necessary steps to warn its operational staff and to maintain its **Plant** and/or **Apparatus** in the condition in which it is best able to withstand the anticipated disturbance;
- (d) During the period that the **National Electricity Transmission System Warning - Risk of System Disturbance** is in effect, **The Company** may issue **Emergency Instructions** in accordance with **BC2** and it may be necessary to depart from normal **Balancing Mechanism** operation in accordance with **BC2** in issuing **Bid-Offer Acceptances**.

OC7.4.8.9 Cancellation of National Electricity Transmission System Warning

- (a) **The Company** will give notification of a **Cancellation of National Electricity Transmission System Warning** to all **Users** issued with the **National Electricity Transmission System Warning** when in **The Company's** judgement **System** conditions have returned to normal.
- (b) A **Cancellation of National Electricity Transmission System Warning** will identify the type of **National Electricity Transmission System Warning** being cancelled and the period for which it was issued. The **Cancellation of National Electricity Transmission System Warning** will also identify any **National Electricity Transmission System Warnings** that are still in force.

OC7.4.8.10 General Management of National Electricity Transmission System Warnings

- (a) **National Electricity Transmission System Warnings** remain in force for the period specified unless superseded or cancelled by **The Company**.
- (b) A **National Electricity Transmission System Warning** issued for a particular period may be superseded by further related warnings. This will include **National Electricity Transmission System Warning - Electricity Margin Notice** being superseded by **National Electricity Transmission System Warning - High Risk of Demand Reduction** and vice-versa.
- (c) In circumstances where it is necessary for the period of a **National Electricity Transmission System Warning** to be changed:
 - (i) the period applicable may be extended by the issue of a **National Electricity Transmission System Warning** with a period which follows on from the original period, or
 - (ii) revised or updated **National Electricity Transmission System Warnings** will be issued where there is an overlap with the period specified in an existing **National Electricity Transmission System Warning**, but only if the revised period also includes the full period of the existing **National Electricity Transmission System Warning**.

In any other case the existing **National Electricity Transmission System Warning** will be cancelled and a new one issued.

- (d) A **National Electricity Transmission System Warning** is no longer applicable once the period has passed and to confirm this **The Company** will issue a **Cancellation of National Electricity Transmission System Warning**.

OC7.5 PROCEDURE IN RELATION TO INTEGRAL EQUIPMENT TESTS

OC7.5.1 This section of the **Grid Code** deals with **Integral Equipment Tests**. It is designed to provide a framework for the exchange of relevant information and for discussion between **The Company** and certain **Users** in relation to **Integral Equipment Tests**.

OC7.5.2 An **Integral Equipment Test** :

- (a) is carried out in accordance with the provisions of this OC7.5 at:
 - (i) a **User Site**,
 - (ii) a **Transmission Site**,
 - (iii) an **Embedded Large Power Station**, or,
 - (iv) an **Embedded DC Converter Station**; or
 - (v) an **Embedded HVDC System**
- (b) will normally be undertaken during commissioning or re-commissioning of **Plant** and/or **Apparatus**;
- (c) may, in the reasonable judgement of the person wishing to perform the test, cause, or have the potential to cause, an **Operational Effect** on a part or parts of the **Total System** but which with prior notice is unlikely to have a materially adverse effect on any part of the **Total System**; and
- (d) may form part of an agreed programme of work.

In the case of **OTSUA** operational prior to the **OTSUA Transfer Time**, a **User's Site** or **Transmission Site** shall, for the purposes of this **OC7**, include a site at which there is an **Interface Point** until the **OTSUA Transfer Time** and the provisions of this OC7.5 and references to **OTSUA** shall be construed and applied accordingly until the **OTSUA Transfer Time**.

OC7.5.3 A set of guidance notes is available from **The Company** on request, which provide further details on suggested procedures, information flows and responsibilities.

Notification Of An IET

OC7.5.4 In order to undertake an **Integral Equipment Test** (and subject to OC7.5.8 below), the **User** or **The Company**, as the case may be, (the proposer) must notify the other (the recipient) of a proposed **IET**. Reasonable advance notification must be given, taking into account the nature of the test and the circumstances which make the test necessary. This will allow recipients time to adequately assess the impact of the **IET** on their **System**.

OC7.5.5 The notification of the **IET** must normally include the following information:-

- (a) the proposed date and time of the **IET**;
- (b) the name of the individual and the organisation proposing the **IET**;
- (c) a proposed programme of testing; and
- (d) such further detail as the proposer reasonably believes the recipient needs in order to assess the effect the **IET** may have on relevant **Plant** and/or **Apparatus**.

OC7.5.6 In the case of an **IET** in connection with commissioning or re-commissioning, the test should be incorporated as part of any overall commissioning programme agreed between **The Company** and the **User**.

Response To Notification of an IET

OC7.5.7 The recipient of notification of an **IET** must respond within a reasonable timescale prior to the start time of the **IET** and will not unreasonably withhold or delay acceptance of the **IET** proposal.

- OC7.5.8
- (a) Where **The Company** receives notification of a proposed **IET** from a **User**, **The Company** will consult those other **Users** whom it reasonably believes may be affected by the proposed **IET** to seek their views. Information relating to the proposed **IET** may be passed on by **The Company** with the prior agreement of the proposer. However it is not necessary for **The Company** to obtain the agreement of any such **User** as **IETs** should not involve the application of irregular, unusual or extreme conditions. **The Company** may however consider any comments received when deciding whether or not to agree to an **IET**.
 - (b) In the case of an **Embedded Large Power Station** or **Embedded DC Converter Station**, or **Embedded HVDC System**, the **Generator** or **DC Converter Station** owner or **HVDC System Owner** as the case may be, must liaise with both **The Company** and the relevant **Network Operator**. **The Company** will not agree to an **IET** relating to such **Plant** until the **Generator** or **DC Converter Station** owner or **HVDC System Owner** has shown that it has the agreement of the relevant **Network Operator**.
 - (c) A **Network Operator** will liaise with **The Company** as necessary in those instances where it is aware of an **Embedded Small Power Station** or an **Embedded Medium Power Station** which intends to perform tests which in the reasonable judgement of the **Network Operator** may cause an **Operational Effect** on the **National Electricity Transmission System**.

OC7.5.9 The response from the recipient, following notification of an **IET** must be one of the following:

- (a) to accept the **IET** proposal;
- (b) to accept the **IET** proposal conditionally subject to minor modifications such as date and time;
- (c) not to agree the **IET**, but to suggest alterations to the detail and timing of the **IET** that are necessary to make the **IET** acceptable.

Final Confirmation Of an IET

OC7.5.10 The date and time of an **IET** will be confirmed between **The Company** and the **User**, together with any limitations and restrictions on operation of **Plant** and/or **Apparatus**.

OC7.5.11 The **IET** may subsequently be amended following discussion and agreement between **The Company** and the **User**.

Carrying Out an IET

OC7.5.12 **IETs** may only take place when agreement has been reached and must be carried out in accordance with the agreed programme of testing.

OC7.5.13 The implementation of an **IET** will be notified in accordance with OC7.4.5.

OC7.5.14 Where elements of the programme of testing change during the **IET**, there must be discussion between the appropriate parties to identify whether the **IET** should continue.

OC7.6 PROCEDURE IN RESPECT OF OPERATIONAL SWITCHING IN SCOTLAND AND OFFSHORE

OC7.6.1 This section OC7.6 of the **Grid Code** sets out the procedure to be followed for **Operational Switching** in Scotland and **Offshore**. Its provisions are supplementary to the provisions of the rest of this **OC7**.

It is designed to set down the arrangements for **The Company**, **Users** and the **Relevant Transmission Licensees** in respect of the **Operational Switching** of **Plant** and **Apparatus** at a **Connection Site** and parts of the **National Electricity Transmission System** adjacent to that **Connection Site**.

OC7.6.2 In general:

- (i) **The Company** is responsible for directing the configuration of the **National Electricity Transmission System**

- (ii) Each **Relevant Transmission Licensee** is responsible for the instruction and operation of its **Plant** and **Apparatus** on its **Transmission System**
- (iii) Each **User** is responsible for the configuration, instruction and operation of its **Plant** and **Apparatus**.

Definitive schedules of these responsibilities for each **Connection Site** are contained in the relevant **Site Responsibility Schedules**.

For the avoidance of doubt, where a **User** operates **Transmission Plant** and **Apparatus** on behalf of a **Relevant Transmission Licensee**, **The Company** cannot instruct the **User** to operate that **Plant** and **Apparatus**.

Planned Operational Switching

OC7.6.3 Following the notification of an **Operation** under OC7.4.5, **The Company** and the **User** shall discuss the **Operational Switching** required. **The Company** will then discuss and agree the details of the **Operational Switching** with the **Relevant Transmission Licensee**. The **Relevant Transmission Licensee** shall then make contact with the **User** to initiate the **Operational Switching**. For the avoidance of doubt, from the time that the **Relevant Transmission Licensee** makes contact with the **User**, the **Relevant Transmission Licensee** shall then become the primary point of operational contact with the **User** in relation to **OC7** for matters which would or could affect, or would or could be affected by the **Operational Switching**.

OC7.6.4 The **User** shall be advised by the **Relevant Transmission Licensee** on the completion of the **Operational Switching**, that **The Company** shall again become the primary point of operational contact for the **User** in relation to **OC7**.

OC7.6.5 During **Operational Switching**, either the **Relevant Transmission Licensee** or the **User** may need to unexpectedly terminate the **Operational Switching**. **The Company** may also need to terminate the **Operational Switching** during the **Operational Switching**. In the event of unexpected termination of the **Operational Switching**, **The Company** shall become the primary point of operational contact for the **User** in relation to **OC7**. Following the termination of the **Operational Switching**, it will not be permitted to restart that **Operational Switching** without the parties again following the process described in OC7.6.3.

Emergencies

OC7.6.6 For **Operations** and/or **Events** that present an immediate hazard to the safety of personnel, **Plant** or **Apparatus**, the **Relevant Transmission Licensee** may:

- (i) as permitted by the **STC**, carry out **Operational Switching** of **Plant** and **Apparatus** on its **Transmission System** without reference to **The Company** and the **User**, and
- (ii) request a **User** to carry out **Operational Switching** without the **User** first receiving notification from **The Company**.

In such emergency circumstances, communication between the **Relevant Transmission Licensee** and the **User** shall normally be by telephone and will include an exchange of names. The **User** shall use all reasonable endeavours to carry out **Operational Switching** on its **Plant** and **Apparatus** without delay. Following completion of the requested **Operational Switching**, the **Relevant Transmission Licensee** shall notify **The Company** of the **Operational Switching** which has taken place. In such emergency circumstances, the **User** may only refuse to carry out **Operational Switching** on safety grounds (relating to personnel or plant) and this must be notified to the **Relevant Transmission Licensee** immediately by telephone.

OC7.6.7 For **Operations** and/or **Events** that present an immediate hazard to the safety of personnel, **Plant** or **Apparatus**, and which require **Operational Switching** of **Plant** or **Apparatus** on a **Transmission System** in order to remove the hazard, the **User** should contact the **Relevant Transmission Licensee** directly to request **Operational Switching** of **Plant** or **Apparatus** on its **Transmission System**.

In such emergency circumstances, communication between the **Relevant Transmission Licensee** and the **User** shall normally be by telephone and will include an exchange of names. The **Relevant Transmission Licensee** shall use all reasonable endeavours to carry out **Operational Switching** on its **Plant** and **Apparatus** without delay. Following completion of the requested **Operational Switching**, the **User** shall notify **The Company** of the **Operational Switching** which has taken place. In such emergency circumstances, the **Relevant Transmission Licensee** may only refuse to carry out **Operational Switching** on safety grounds (relating to personnel or plant) and this must be notified to the **User** immediately by telephone.

Establishment Of A Local Switching Procedure

- (a) **The Company**, a **User** or a **Relevant Transmission Licensee** may reasonably require a **Local Switching Procedure** to be established.
- (b) Where the need for a **Local Switching Procedure** arises the following provisions shall apply:
- (i) **The Company**, **User(s)** and the **Relevant Transmission Licensee** will discuss and agree the detail of the **Local Switching Procedure** as soon as the requirement for a **Local Switching Procedure** is identified. **The Company** will notify the **Relevant Transmission Licensee** and the affected **User(s)** and will initiate these discussions.
 - (ii) Each **Local Switching Procedure** shall be in relation to either one or more **Connection Sites** (or in the case of **OTSUA** operational prior to the **OTSUA Transfer Time, Transmission Interface Sites**) and parts of the **National Electricity Transmission System** adjacent to the **Connection Site(s)** (or in the case of **OTSUA** operational prior to the **OTSUA Transfer Time, Transmission Interface Sites**)
 - (iii) A draft **Local Switching Procedure** shall be prepared by the **Relevant Transmission Licensee** to reflect the agreement reached and shall be sent to **The Company**.
 - (iv) When a **Local Switching Procedure** has been prepared, it shall be sent by **The Company** to the **Relevant Transmission Licensee** and **User(s)** for confirmation of its accuracy.
 - (v) The **Local Switching Procedure** shall then be signed on behalf of **The Company** and on behalf of each **User** and **Relevant Transmission Licensee** by way of written confirmation of its accuracy.
 - (vi) Once agreed under this OC7.6.8, the procedure will become a **Local Switching Procedure** under the **Grid Code**, and (subject to any change pursuant to this **OC7**) will apply between **The Company**, **Relevant Transmission Licensee** and the relevant **User(s)** as if it were part of the **Grid Code**.
 - (vii) Once signed, **The Company** will send a copy of the **Local Switching Procedure** to the **Relevant Transmission Licensee** and the **User(s)**.
 - (viii) An agreed **Local Switching Procedure** should be referenced by relevant **Site Responsibility Schedules**.
 - (ix) **The Company**, the **User(s)** and the **Relevant Transmission Licensee** must make the **Local Switching Procedure** readily available to the relevant operational staff.
 - (x) If the **Relevant Transmission Licensee** or the **User(s)** become aware that a change is needed to a **Local Switching Procedure**, they must inform **The Company** immediately. Where **The Company** has been informed of a need for a change, or **The Company** proposes a change, **The Company** shall notify both the affected **User** and the **Relevant Transmission Licensee** and will initiate discussions to agree a change to the **Local Switching Procedure**. The principles applying to the establishment of a new **Local Switching Procedure** shall then apply to the discussion and agreement of any changes.

APPENDIX 1 - NATIONAL ELECTRICITY TRANSMISSION SYSTEM WARNINGS TABLE

WARNING TYPE	GRID CODE	FORMAT	TO: FOR ACTION	TO: FOR INFORMATION	TIMESCALE	WARNING OF/OR CONSEQUENCE	RESPONSE FROM RECIPIENTS
NATIONAL ELECTRICITY TRANSMISSION WARNING – ELECTRICITY MARGIN NOTICE	OC7.4.8.5	Fax or other electronic means	Generators, Suppliers, Externally Interconnected System Operators, DC Converter Station owners and HVDC System Owners	Network Operators, Non-Embedded Customers	All timescales when at the time there is not a high risk of Demand reduction. Primarily 1200 hours onwards for a future period.	Insufficient generation available to meet forecast Demand plus Operating Margin. Notification that if not improved Demand reduction may be instructed. (Normal initial warning of insufficient System Margin)	Offers of increased availability from Generators or DC Converter Station owners. HVDC System Owners and Interconnector Users. Suppliers notify The Company of any additional Customer Demand Management that they will initiate.
NATIONAL ELECTRICITY TRANSMISSION SYSTEM WARNING – High risk of Demand Reduction	OC7.4.8.6	Fax or other electronic means	Generators, Suppliers, Network Operators, Non-Embedded Customers, Externally Interconnected System Operators, DC Converter Station Owners, HVDC System Owners		All timescales where there is a high risk of Demand Reduction. Primarily 1200 hours onwards for a future period	Insufficient generation available to meet forecast Demand plus Operating Margin and/or a high risk of Demand Reduction being instructed. (May be issued locally as demand reduction risk only for circuit overloads)	Offers of increased availability from Generators or DC Converter Station owners or HVDC System Owners and Interconnector Users. Suppliers notify The Company of any additional Customer Demand Management that they will initiate. Specified Network Operators and Non-Embedded Customers to prepare their Demand Reduction arrangements and take actions as necessary to enable compliance with The Company instructions that may follow. (Percentages of Demand Reduction above 20% may not be achieved if The Company has not issued the
NATIONAL ELECTRICITY TRANSMISSION SYSTEM WARNING – Demand Control Imminent	OC7.4.8.7	Fax/Teleph one or other electronic means	Specified Users only: (to whom an instruction is to be given) Network Operators, Non-Embedded Customers	None	Within 30 minutes of anticipated instruction	Possibility of Demand Reduction within 30 minutes	Network Operators specified to prepare to take action as necessary to enable them to comply with any subsequent The Company instruction for Demand reduction.
NATIONAL ELECTRICITY TRANSMISSION SYSTEM WARNING – Risk of System Disturbance	OC7.4.8.8	Fax/Teleph one or other electronic means	Generators, DC Converter Station owners, HVDC System Owners, Network Operators, Non-Embedded Customers, Externally Interconnected System Operators who may be affected.	Suppliers	Control room time scales	Risk of, widespread system disturbance to whole or part of the National Electricity Transmission System	Recipients take steps to warn operational staff and maintain plant or apparatus such that they are best able to withstand the disturbance.

^ END OF OPERATING CODE NO. 7 ^

OPERATING CODE NO. 8
(OC8)

SAFETY CO-ORDINATION

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OC8.1 INTRODUCTION

OC8.1.1 **OC8** specifies the standard procedures to be used for the co-ordination, establishment and maintenance of necessary **Safety Precautions** when work is to be carried out on or near the **National Electricity Transmission System** or the **System** of a **User** and when there is a need for **Safety Precautions** on **HV Apparatus** on the other **System** for this work to be carried out safely. **OC8** Appendix 1 applies when work is to be carried out on or near to **E&W Transmission Systems** or the **Systems** of **E&W Users** and **OC8** Appendix 2 applies when work is to be carried out on or near to **Scottish Transmission Systems** or the **Systems** of **Scottish Users**.

OC8.1.2 **OC8** also covers the co-ordination, establishment and maintenance of necessary safety precautions on the **Implementing Safety Co-ordinator's System** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or a **Transmission Licensee** as the case may be where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**.

OC8.2 OBJECTIVE

OC8.2.1 The objective of OC8 is to achieve:

- (i) **Safety From The System** when work on or near a **System** necessitates the provision of **Safety Precautions** on another **System** on **HV Apparatus** up to a **Connection Point**; and
- (ii) **Safety From The System** when work is to be carried out at a **User's Site** or a **Transmission Site** (as the case may be) on equipment of the **User** or a **Transmission Licensee** (as the case may be) where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**.

OC8.3 SCOPE

OC8.3.1 **OC8** applies to **The Company** and to **Users**, which in **OC8** means:

- (a) **Generators** (including where undertaking **OTSDUW**);
- (b) **Network Operators**; and
- (c) **Non-Embedded Customers**.

In Scotland and **Offshore OC8** also applies to **Relevant Transmission Licensees**.

The procedures for the establishment of safety co-ordination by **The Company** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8.4 PROCEDURE

OC8.4.1 Safety Co-Ordination In Respect Of The E&W Transmission Systems Or The Systems Of E&W Users

OC8.4.1.1 **OC8** Appendix 1, OC8A, applies when work is to be carried out on or near to the **E&W Transmission System** or the **Systems** of **E&W Users** or when **Safety Precautions** are required to be established on the **E&W Transmission System** or the **Systems** of **E&W Users** when work is to be carried out on or near to the **Scottish Transmission System** or the **Systems** of **Scottish Users**.

- OC8.4.2 Safety Co-Ordination In Respect Of The Scottish Transmission Systems Or The Systems Of Scottish Users
- OC8.4.2.1 **OC8** Appendix 2, OC8B, applies when work is to be carried out on or near to the **Scottish Transmission System** or the **Systems** of **Scottish Users** or when **Safety Precautions** are required to be established on the **Scottish Transmission System** or the **Systems** of **Scottish Users** when work is to be carried out on or near to the **E&W Transmission System** or the **Systems** of **E&W Users**.
- OC8.4.3 Safety Co-ordination Offshore
- OC8.4.3.1 For the purposes of **OC8** Appendix 1, OC8A, **OC8** Appendix 2 and OC8B, when work is to be carried out on or near to **Offshore Transmission Systems Safety Precautions** shall be established by the **Offshore Transmission Licensee** and the **Offshore User**.

< END OF OPERATING CODE NO. 8 >

OPERATING CODE NO. 8 APPENDIX 2 (OC8B)

SAFETY CO-ORDINATION IN RESPECT OF THE SCOTTISH TRANSMISSION SYSTEMS OR THE SYSTEMS OF SCOTTISH USERS

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OC8B.1 INTRODUCTION

OC8B.1.1 **OC8B** specifies the standard procedures to be used by **The Company**, the **Relevant Scottish Transmission Licensees** and **Scottish Users** for the co-ordination, establishment and maintenance of necessary **Safety Precautions** when work is to be carried out on or near the **Scottish Transmission System** or the **System** of a **Scottish User** and when there is a need for **Safety Precautions** on **HV Apparatus** on the other's **System** for this work to be carried out safely. **OC8B** applies to **Relevant Scottish Transmission Licensees** and **Scottish Users**. Where work is to be carried out on or near equipment on an **E&W Transmission System** or the **Systems** of **E&W Users**, but such work requires **Safety Precautions** to be established on a **Scottish Transmission System** or the **Systems** of **Scottish Users**, **OC8B** should be followed by the **Relevant Scottish Transmission Licensee** and **Scottish Users** to establish the required **Safety Precautions**.

OC8A specifies the procedures to be used by the **Relevant E&W Transmission Licensee** and **E&W Users**.

The Company shall procure that **Relevant Scottish Transmission Licensees** shall comply with **OC8B** where and to the extent that such section applies to them.

In this **OC8B** the term “work” includes testing, other than **System Tests** which are covered by **OC12**.

OC8B.1.2 **OC8B** also covers the co-ordination, establishment and maintenance of necessary safety precautions on the **Implementing Safety Co-ordinator’s System** when work is to be carried out at a **Scottish User’s Site** or a **Transmission Site** (as the case may be) on equipment of the **Scottish User** or the **Relevant Scottish Transmission Licensee** as the case may be where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator’s System**. In the case of **OTSUA**, a **Scottish User’s Site** or **Transmission Site** shall, for the purposes of this **OC8B**, include a site at which there is a **Transmission Interface Point** until the **OTSUA Transfer Time** and the provisions of this **OC8B** and references to **OTSUA** shall be construed and applied accordingly until the **OTSUA Transfer Time** at which time arrangements in respect of the **Transmission Interface Site** will have been put in place between the **Relevant Scottish Transmission Licensee** and the **Offshore Transmission Licensee**.

OC8B.1.3 **OC8B** does not apply to the situation where **Safety Precautions** need to be agreed solely between **Scottish Users**. **OC8B** does not apply to the situation where **Safety Precautions** need to be agreed solely between **Transmission Licensees**.

OC8B.1.4 **OC8B** does not seek to impose a particular set of **Safety Rules** on **Relevant Scottish Transmission Licensees** and **Scottish Users**. The **Safety Rules** to be adopted and used by the **Relevant Scottish Transmission Licensee** and each **Scottish User** shall be those chosen by each.

OC8B.1.5 **Site Responsibility Schedules** document the control responsibility for each item of **Plant** and **Apparatus** for each site.

OC8B.1.6 (a) The **Relevant Scottish Transmission Licensee** may agree alternative site-specific operational procedures with **Scottish Users** for the co-ordination, establishment and maintenance of **Safety Precautions** instead of the **Record of Inter-System Safety Precautions (“RISSP”)** procedure detailed in this **OC8B**. Such operational procedures shall satisfy the requirements of paragraphs OC8B.1.7, OC8B.2.1, OC8B.4.1, OC8B.4.2, OC8B.9, OC8B.10. These alternative site-specific operational procedures for the co-ordination, establishment and maintenance of **Safety Precautions** will be referenced in the relevant **Site Responsibility Schedule**.

- (b) The **Relevant Scottish Transmission Licensee** may agree with **Scottish Users** site-specific procedures for the application of **Safety Precautions** across the interface between the **Relevant Scottish Transmission Licensee** and **Scottish User** in addition to and consistent with either the **RISSP** procedure or the alternative site-specific operational procedures described in OC8B.1.6 (a). These site-specific procedures will be referenced in the relevant **Site Responsibility Schedule**.
- (c) The **Relevant Scottish Transmission Licensee** and the **Scottish User** shall comply with the procedures agreed pursuant to OC8B.1.6 (a) and OC8B.1.6 (b).

OC8B.1.7 Defined Terms

OC8B.1.7.1 **Scottish Users** should bear in mind that in **OC8** only, in order that **OC8** reads more easily with the terminology used in certain **Safety Rules**, the term "**HV Apparatus**" is defined more restrictively and is used accordingly in **OC8B**. **Scottish Users** should, therefore, exercise caution in relation to this term when reading and using **OC8B**.

OC8B.1.7.2 In **OC8** only the following terms shall have the following meanings:

- (1) "**HV Apparatus**" means **High Voltage** electrical circuits forming part of a **System**, on which **Safety From The System** may be required or on which **Safety Precautions** may be applied to allow work to be carried out on a **System**.
- (2) "**Isolation**" means the disconnection of **Apparatus** from the remainder of the **System** in which that **Apparatus** is situated by either of the following:
 - (a) an **Isolating Device** maintained in an isolating position. The isolating position must either be:
 - (i) maintained by immobilising and **Locking** the **Isolating Device** in the isolating position and affixing a **Caution Notice** to it. Where the **Isolating Device** is **Locked** with a **Safety Key**, the **Safety Key** must be secured in a **Key Safe** and the **Key Safe Key** must be given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable the **Key Safe Key** must be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or
 - (ii) maintained and/or secured by such other method which must be in accordance with the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User**, as the case may be; or
 - (b) an adequate physical separation which must be in accordance with, and maintained by, the method set out in the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User**, as the case may be, and, if it is a part of that method, a **Caution Notice** must be placed at the point of separation; or
 - (c) in the case where the relevant **HV Apparatus** of the **Implementing Safety Co-ordinator** is being either constructed or modified, an adequate physical separation as a result of a **No System Connection**.
- (3) "**No System Connection**" means an adequate physical separation (which must be in accordance with, and maintained by, the method set out in the **Safety Rules** of the **Implementing Safety Co-ordinator**) of the **Implementing Safety Co-ordinator's HV Apparatus** from the rest of the **Implementing Safety Co-ordinator's System** where such **HV Apparatus** has no installed means of being connected to, and will not for the duration of the **Safety Precaution** be connected to, a source of electrical energy or to any other part of the **Implementing Safety Co-ordinator's System**.
- (4) "**Earthing**" means a way of providing a connection between conductors and earth by an **Earthing Device** which is either:
 - (i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** is **Locked** with a **Safety Key**, the **Safety Key** must be secured in a **Key Safe** and the **Key Safe Key** must be given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable the **Key Safe Key** must be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or
 - (ii) maintained and/or secured in position by such other method which must be in accordance with the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User** as the case may be.

OC8B.1.7.3 For the purpose of the co-ordination of safety relating to **HV Apparatus** the term “**Safety Precautions**” means **Isolation** and/or **Earthing**.

OC8B.2 OBJECTIVE

OC8B.2.1 The objective of **OC8B** is to achieve:-

- (i) **Safety From The System** when work on or near a **System** necessitates the provision of **Safety Precautions** on another **System** on **HV Apparatus** up to a **Connection Point** (or, in the case of **OTSUA**, **Transmission Interface Point**); and
- (ii) **Safety From The System** when work is to be carried out at a **Scottish User’s Site** or a **Transmission Site** (as the case may be) on equipment of the **Scottish User** or the **Relevant Scottish Transmission Licensee** (as the case may be) where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator’s System**.

OC8B.2.2 A flow chart, set out in **OC8B** Appendix C, illustrates the process utilised in **OC8B** to achieve the objective set out in OC8B.2.1. In the case of a conflict between the flow chart and the provisions of the written text of **OC8B**, the written text will prevail.

OC8B.3 SCOPE

OC8B.3.1 **OC8B** applies to **The Company**, **Relevant Scottish Transmission Licensees** and to **Scottish Users**, which in **OC8** means:-

- (a) **Generators** (including where undertaking **OTSDUW**);
- (b) **Network Operators**; and
- (c) **Non-Embedded Customers**.

The procedures for the establishment of safety co-ordination by **The Company** in relation to **External Interconnections** are set out in **Interconnection Agreements** with relevant persons for the **External Interconnections**.

OC8B.4 PROCEDURE

OC8B.4.1 Approval Of Safety Rules

- OC8B.4.1.1 (a) In accordance with the timing requirements of its **Bilateral Agreement**, each **Scottish User** will supply to the **Relevant Scottish Transmission Licensee** a copy of its **Safety Rules** relating to its side of the **Connection Point** at each **Connection Site** or in the case of **OTSUA** a copy of its **Local Safety Instructions** relating to its side of the **Transmission Interface Point** at each **Transmission Interface Site**.
- (b) In accordance with the timing requirements of each **Bilateral Agreement** the **Relevant Scottish Transmission Licensee** will supply to each **Scottish User** a copy of its **Safety Rules** relating to the **Transmission** side of the **Connection Point** at each **Connection Site** or in the case of **OTSUA** a copy of its **Local Safety Instructions** relating to the **Transmission** side of the **Transmission Interface Point** at each **Transmission Interface Site**.
- (c) Prior to connection the **Relevant Scottish Transmission Licensee** and the **Scottish User** must have approved each other’s relevant **Safety Rules** in relation to **Isolation** and **Earthing**.

- OC8B.4.1.2 Either party may require that the **Isolation** and/or **Earthing** provisions in the other party's **Safety Rules** affecting the **Connection Site** (or, in the case of **OTSUA, Transmission Interface Site**) should be made more stringent in order that approval of the other party's **Safety Rules** can be given. Provided these requirements are not unreasonable, the other party will make such changes as soon as reasonably practicable. These changes may need to cover the application of **Isolation** and/or **Earthing** at a place remote from the **Connection Site** (or, in the case of **OTSUA, Transmission Interface Site**), depending upon the **System** layout. Approval may not be withheld because the party required to approve reasonably believes the provisions relating to **Isolation** and/or **Earthing** are too stringent.
- OC8B.4.1.3 If, following approval, a party wishes to change the provisions in its **Safety Rules** relating to **Isolation** and/or **Earthing**, it must inform the other party. If the change is to make the provisions more stringent, then the other party merely has to note the changes. If the change is to make the provisions less stringent, then the other party needs to approve the new provisions and the procedures referred to in OC8B.4.1.2 apply.
- OC8B.4.2 Safety Co-ordinators
- OC8B.4.2.1 For each **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**), the **Relevant Scottish Transmission Licensee** and each **Scottish User** will have nominated to be available, to a timescale agreed in the **Bilateral Agreement**, a person or persons ("**Safety Co-ordinator(s)**") to be responsible for the co-ordination of **Safety Precautions** when work is to be carried out on a **System** which necessitates the provision of **Safety Precautions** on **HV Apparatus** pursuant to **OC8B**. A **Safety Co-ordinator** may be responsible for the co-ordination of safety on **HV Apparatus** at more than one **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**).
- OC8B.4.2.2 Each **Safety Co-ordinator** shall be authorised by the **Relevant Scottish Transmission Licensee** or a **Scottish User**, as the case may be, as competent to carry out the functions set out in **OC8B** to achieve **Safety From The System**. Confirmation from the **Relevant Scottish Transmission Licensee** or a **Scottish User**, as the case may be, that its **Safety Co-ordinator(s)** as a group are so authorised is dealt with, for **Scottish Users**, in CC.5.2 and for **Relevant Scottish Transmission Licensees** in the **STC**. Only persons with such authorisation will carry out the provisions of **OC8B**. Each **User** shall, prior to being connected to the **National Electricity Transmission System**, give notice in writing to the **Relevant Scottish Transmission Licensee** of its **Safety Co-ordinator(s)** and will update the written notice yearly and whenever there is a change to the identity of its **Safety Co-ordinators** or to the **Connection Points** (or, in the case of **OTSUA, Transmission Interface Points**). The **Relevant Scottish Transmission Licensee** will, at the time of a **Scottish User** being connected to the **National Electricity Transmission System** give notice in writing to that **Scottish User** of the identity of its **Safety Co-ordinator(s)** and will update the written notice whenever there is a change to the **Connection Points** (or, in the case of **OTSUA, Transmission Interface Points**) or **Safety Co-ordinators**.
- OC8B.4.2.3 Contact between **Safety Co-ordinators** will be made via normal operational channels, and accordingly separate telephone numbers for **Safety Co-ordinators** need not be provided.
- OC8B.4.2.4 If work is to be carried out on a **System**, or on equipment of the **Relevant Scottish Transmission Licensee** or a **Scottish User** near to a **System**, as provided in this **OC8B**, which necessitates the provision of **Safety Precautions** on **HV Apparatus** in accordance with the provisions of **OC8B**, the **Requesting Safety Co-ordinator** who requires the **Safety Precautions** to be provided shall contact the relevant **Implementing Safety Co-ordinator** to co-ordinate the establishment of the **Safety Precautions**.
- OC8B.4.3 RISSP
- OC8B.4.3.1 **OC8B** sets out the procedures for utilising the **RISSP**, which will be used except where dealing with equipment in proximity to the other's **System** as provided in **OC8B.8**. Sections **OC8B.4** to **OC8B.7** inclusive should be read accordingly.

- OC8B.4.3.2 The **Relevant Transmission Licensee** will use the format of the **RISSP** forms set out in Appendix A and Appendix B to **OC8B**, or any other format which may be agreed between the **Relevant Scottish Transmission Licensee** and each **User**. That set out in **OC8B** Appendix A and designated as "RISSP-R", shall be used when the **Relevant Scottish Transmission Licensee** is the **Requesting Safety Co-ordinator**, and that in **OC8B** Appendix B and designated as "RISSP-I", shall be used when the **Relevant Transmission Licensee** is the **Implementing Safety Co-ordinator**. Proformas of RISSP-R and RISSP-I will be provided for use by **Relevant Scottish Transmission Licensees** staff.
- OC8B.4.3.3 **Scottish Users** may either adopt the format referred to in OC8B.4.3.2 or any other format which may be agreed between the **Relevant Scottish Transmission Licensee** and the **Scottish User** from time to time.
- OC8B.4.3.4 All references to RISSP-R and RISSP-I shall be taken as referring to the corresponding parts of the alternative forms or other tangible written or electronic records used by each **Scottish User** or **Relevant Scottish Transmission Licensee**.
- OC8B.4.3.5 RISSP-R will have an identifying number written or printed on it, comprising a prefix which identifies the location at which it is issued, and a unique (for each **Scottish User** or **Relevant Scottish Transmission Licensee**, as the case may be) serial number which both together uses up to eight characters (including letters and numbers) and the suffix "R".
- OC8B.4.3.6
- (a) In accordance with the timing requirements set out in the **Bilateral Agreement** each **Scottish User** shall apply in writing to **Relevant Scottish Transmission Licensee** for **Relevant Scottish Transmission Licensee's** approval of its proposed prefix.
 - (b) **Relevant Scottish Transmission Licensee** shall consider the proposed prefix to see if it is the same as (or confusingly similar to) a prefix used by **Relevant Scottish Transmission Licensee** or another **User** and shall, as soon as possible (and in any event within ten days), respond in writing to the **Scottish User** with its approval or disapproval.
 - (c) If **Relevant Scottish Transmission Licensee** disapproves, it shall explain in its response why it has disapproved and will suggest an alternative prefix.
 - (d) If **Relevant Scottish Transmission Licensee** has disapproved, then the **Scottish User** shall either notify the **Relevant Scottish Transmission Licensee** in writing of its acceptance of the suggested alternative prefix or it shall apply in writing to **Relevant Scottish Transmission Licensee** with revised proposals and the above procedure shall apply to that application.
- OC8B.5 **SAFETY PRECAUTIONS ON HV APPARATUS**
- OC8B.5.1 **Agreement Of Safety Precautions**
- OC8B.5.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the **Location** of the **Safety Precautions** to be established. This agreement will be recorded in the respective **Safety Logs**.
- OC8B.5.1.2 It is the responsibility of the **Implementing Safety Co-ordinator** to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved on the **HV Apparatus**, specified by the **Requesting Safety Co-ordinator** which is to be identified in Part 1.1 of the **RISSP**. Reference to another **System** in this OC8B.5.1.2 shall not include the **Requesting Safety Co-ordinator's System** which is dealt with in OC8B.5.1.3.

OC8B.5.1.3 When the **Implementing Safety Co-ordinator** is of the reasonable opinion that it is necessary for **Safety Precautions** on the **System** of the **Requesting Safety Co-ordinator**, other than on the **HV Apparatus** specified by the **Requesting Safety Co-ordinator**, which is to be identified in Part 1.1 of the **RISSP**, he shall contact the **Requesting Safety Co-ordinator** and the details shall be recorded in part 1.1 of the **RISSP** forms. In these circumstances it is the responsibility of the **Requesting Safety Co-ordinator** to establish and maintain such **Safety Precautions**.

OC8B.5.1.4 The location of the **Safety Precautions** should be indicated on each **Scottish User's** operational diagram and labelled as per the local instructions of each **Scottish User**.

OC8B.5.1.5 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** on which **Safety From The System** is to be achieved as indicated on the **Operation Diagram**.

OC8B.5.2 Implementation Of Isolation

OC8B.5.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.5.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation**.

OC8B.5.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**), for which the **Isolation** has been provided. The confirmation shall specify:

- (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as applicable) of each point of **Isolation**;
- (b) whether **Isolation** has been achieved by an **Isolating Device** in the isolating position, by an adequate physical separation or as a result of a **No System Connection**;
- (c) where an **Isolating Device** has been used whether the isolating position is either :
 - (i) maintained by immobilising and **Locking** the **Isolating Device** in the isolating position and affixing a **Caution Notice** to it. Where the **Isolating Device** has been **Locked** with a **Safety Key**, the confirmation shall specify that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable (including where **Earthing** has been requested in OC8B.5.1), the confirmation shall specify that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or
 - (ii) maintained and/or secured by such other method which must be in accordance with the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User**, as the case may be; and
- (d) where an adequate physical separation has been used that it will be in accordance with, and maintained by, the method set out in the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User**, as the case may be, and, if it is a part of that method, that a **Caution Notice** has been placed at the point of separation;
- (e) where a **No System Connection** has been used the physical position of the **No System Connection** shall be defined and shall not be varied for the duration of the **Safety Precaution** and the **Implementing Safety Co-ordinator's** relevant **HV Apparatus** will not, for the duration of the **Safety Precaution** be connected to a source of electrical energy or to any other part of the **Implementing Safety Co-ordinator's System**.

The confirmation of **Isolation** shall be recorded in the respective **Safety Logs**.

OC8B.5.2.3 Following the confirmation of **Isolation** being established by the **Implementing Safety Co-ordinator** and the necessary establishment of relevant **Isolation** on the **Requesting Safety Co-ordinators System**, the **Requesting Safety Co-ordinator** will then request the implementation of **Earthing** by the **Implementing Safety Co-ordinator**, if agreed in section OC8B.5.1. If the implementation of **Earthing** has been agreed, then the authorised site representative of the **Implementing Safety Co-ordinator** shall retain any **Key Safe Key** in safe custody until any **Safety Key** used for **Earthing** has been secured in the **Key Safe**.

OC8B.5.3 Implementation Of Earthing

OC8B.5.3.1 The **Implementing Safety Co-ordinator** shall then establish the agreed **Earthing**.

OC8B.5.3.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Earthing** has been established, and identify the **Requesting Safety Co-ordinator's HV Apparatus** up to the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**), for which the **Earthing** has been provided. The confirmation shall specify:

- (a) for each **Location**, the identity (by means of **HV Apparatus** name, nomenclature and numbering or position, as is applicable) of each point of **Earthing**; and
- (b) in respect of the **Earthing Device** used, whether it is:
 - (i) immobilised and **Locked** in the earthing position. Where the **Earthing Device** has been **Locked** with a **Safety Key**, that the **Safety Key** has been secured in a **Key Safe** and the **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator** where reasonably practicable and is to be retained in safe custody. Where not reasonably practicable, that the **Key Safe Key** will be retained by the authorised site representative of the **Implementing Safety Co-ordinator** in safe custody; or
 - (ii) maintained and/or secured in position by such other method which is in accordance with the **Safety Rules** of the **Relevant Scottish Transmission Licensee** or that **Scottish User**, as the case may be.

The confirmation of **Earthing** shall be recorded in the respective **Safety Logs**.

OC8B.5.3.3 The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.

OC8B.5.3.4 Certain designs of gas insulated switchgear three position isolator and earth switches specifically provide a combined **Isolation** and **Earthing** function within a single mechanism contained within a single integral unit. Where **Safety Precautions** are required across control boundaries and subject to the requirements of OC8B.5.1, it is permissible to earth before **Points of Isolation** have been established provided that all interconnected circuits are fully disconnected from live **HV Apparatus**.

OC8B.5.4 RISSP Issue Procedure

OC8B.5.4.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work on the **Requesting Safety Co-ordinator's System**, before any work commences they must be recorded by a **RISSP** being issued. The **RISSP** is applicable to **HV Apparatus** up to the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) identified in section 1.1 of the **RISSP-R** and **RISSP-I** forms.

- OC8B.5.4.2 Where **Safety Precautions** are being provided to enable work to be carried out on both sides of the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) a **RISSP** will need to be issued for each side of the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) with **Relevant Scottish Transmission Licensee** and the respective **User** each enacting the role of **Requesting Safety Co-ordinator**. This will result in a **RISSP-R** and a **RISSP-I** form being completed by each of the **Relevant Scottish Transmission Licensee** and the **Scottish User**, with each **Requesting Safety Co-ordinator** issuing a separate **RISSP** number.
- OC8B.5.4.3 Once the **Safety Precautions** have been established (in accordance with OC8B.5.2 and OC8B.5.3), the **Implementing Safety Co-ordinator** shall complete parts 1.1 and 1.2 of a **RISSP-I** form recording the details specified in OC8B.5.1.3, OC8B.5.2.2 and OC8B.5.3.2. Where **Earthing** has not been requested, Part 1.2(b) will be completed with the words “not applicable” or “N/A”. He shall then contact the **Requesting Safety Co-ordinator** to pass on these details.
- OC8B.5.4.4 The **Requesting Safety Co-ordinator** shall complete Parts 1.1 and 1.2 of the **RISSP-R**, making a precise copy of the details received. On completion, the **Requesting Safety Co-ordinator** shall read the entries made back to the sender and check that an accurate copy has been made.
- OC8B.5.4.5 The **Requesting Safety Co-ordinator** shall then issue the number of the **RISSP**, taken from the **RISSP-R**, to the **Implementing Safety Co-ordinator** who will ensure that the number, including the prefix and suffix (where applicable), is accurately recorded in the designated space on the **RISSP-I** form.
- OC8B.5.4.6 The **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** shall complete and sign Part 1.3 of the **RISSP-R** and **RISSP-I** respectively and then enter the time and date. When signed no alteration to the **RISSP** is permitted; the **RISSP** may only be cancelled.
- OC8B.5.4.7 The **Requesting Safety Co-ordinator** is then free to authorise work, but not testing, in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator’s System**. This is likely to involve the issue of safety documents or other relevant internal authorisations. Where testing is to be carried out, the procedure set out below in OC8B.6 shall be implemented.
- OC8B.5.5 RISSP Cancellation Procedure
- OC8B.5.5.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **RISSP**.
- OC8B.5.5.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **RISSP** identifying number, including the prefix and suffix (where applicable), and agree it is the **RISSP** to be cancelled.
- OC8B.5.5.3 The **Requesting Safety Co-ordinator** and the relevant **Implementing Safety Co-ordinator** shall then respectively complete Part 2.1 of their respective **RISSP-R** and **RISSP-I** forms and shall then exchange details. The details being exchanged shall include their respective names and time and date. On completion of the exchange of details the respective **RISSP** is cancelled. The removal of **Safety Precautions** is as set out in OC8B.5.5.4 and OC8B.5.5.5.
- OC8B.5.5.4 Neither **Safety Co-ordinator** shall instruct the removal of any **Isolation** forming part of the **Safety Precautions** as part of the returning of the **HV Apparatus** to service until it is confirmed to each by each other that every earth on each side of the **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**), within the points of isolation identified on the **RISSP**, has been removed or disconnected by the provision of additional **Points of Isolation**.

OC8B.5.5.5 Subject to the provisions in OC8B.5.5.4, the **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing. Where a **Key Safe Key** has been given to the authorised site representative of the **Requesting Safety Co-ordinator**, the **Key Safe Key** must be returned to the authorised site representative of the **Implementing Safety Co-ordinator**. The only situation in which any **Safety Precautions** may be removed without first cancelling the **RISSP** in accordance with OC8B.5.5 or OC8B.5.6 is when **Earthing** is removed in the situation envisaged in OC8B.6.2(b).

OC8B.5.6 RISSP Change Control

Nothing in this **OC8B** prevents **Relevant Scottish Transmission Licensee** and **Scottish Users** agreeing to a simultaneous cancellation and issue of a new **RISSP**, if both agree. It should be noted, however, that the effect of that under the relevant **Safety Rules** is not a matter with which the **Grid Code** deals.

OC8B.6 TESTING

OC8B.6.1 The carrying out of the test may affect **Safety Precautions** on **RISSPs** or work being carried out which does not require a **RISSP**. Testing can, for example, include the application of an independent test voltage. Accordingly, where the **Requesting Safety Co-ordinator** wishes to authorise the carrying out of such a test to which the procedures in OC8B.6 apply he may not do so and the test will not take place unless and until the steps in (a)-(c) below have been followed and confirmation of completion has been recorded in the respective **Safety Logs**:

- (a) confirmation must be obtained from the **Implementing Safety Co-ordinator** that:
 - (i) no person is working on, or testing, or has been authorised to work on, or test, any part of its **System** or another **System(s)** (other than the **System** of the **Requesting Safety Co-ordinator**) within the points of **Isolation** identified on the **RISSP** form relating to the test which is proposed to be undertaken, and
 - (ii) no person will be so authorised until the proposed test has been completed (or cancelled) and the **Requesting Safety Co-ordinator** has notified the **Implementing Safety Co-ordinator** of its completion (or cancellation);
- (b) any other current **RISSPs** which relate to the parts of the **System** in which the testing is to take place must have been cancelled in accordance with procedures set out in OC8B.5.5;
- (c) the **Implementing Safety Co-ordinator** must agree with the **Requesting Safety Co-ordinator** to permit the testing on that part of the **System** between the points of **Isolation** identified in the **RISSP** associated with the test and the points of **Isolation** on the **Requesting Safety Co-ordinator's System**.

- OC8B.6.2
- (a) The **Requesting Safety Co-ordinator** will inform the **Implementing Safety Co-ordinator** as soon as the test has been completed or cancelled and the confirmation shall be recorded in the respective **Safety Logs**.
 - (b) When the test gives rise to the removal of **Earthing** which it is not intended to re-apply, the relevant **RISSP** associated with the test shall be cancelled at the completion or cancellation of the test in accordance with the procedure set out in either OC8B.5.5 or OC8B.5.6. Where the **Earthing** is re-applied following the completion or cancellation of the test, there is no requirement to cancel the relevant **RISSP** associated with the test pursuant to this OC8B.6.2.

OC8B.7 EMERGENCY SITUATIONS

OC8B.7.1 There may be circumstances where **Safety Precautions** need to be established in relation to an unintended electrical connection or situations where there is an unintended risk of electrical connection between the **National Electricity Transmission System** and a **Scottish User's System**, for example resulting from an incident where one line becomes attached or unacceptably close to another.

OC8B.7.2 In those circumstances, if both the **Relevant Scottish Transmission Licensee** the **Scottish User** agree, the relevant provisions of OC8B.5 will apply as if the electrical connections or potential connections were, solely for the purposes of this OC8B, a **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**).

- OC8B.7.3 (a) The relevant **Safety Co-ordinator** shall be that for the electrically closest existing **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) to that **Scottish User's System** or such other local **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) as may be agreed between the **Relevant Scottish Transmission Licensee** and the **Scottish User**, with discussions taking place between the relevant local **Safety Co-ordinators**. The **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**) to be used shall be known in this OC8B.7.3 as the "relevant **Connection Point**" (or, in the case of **OTSUA**, relevant "**Transmission Interface Point**").
- (b) The **Safety Rules** shall be those which apply to the relevant **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**).
- (c) The prefix for the **RISSP** (where applicable) will be that which applies for the relevant **Connection Point** (or, in the case of **OTSUA, Transmission Interface Point**).

OC8B.8 SAFETY PRECAUTIONS RELATING TO WORKING ON EQUIPMENT NEAR TO THE HV SYSTEM

OC8B.8 applies to the situation where work is to be carried out at a **Scottish User's Site** or a **Transmission Site** (as the case may be) on equipment of the **Scottish User** or a **Relevant Scottish Transmission Licensee** as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System**. It does not apply to other situations to which **OC8B** applies. In this part of **OC8B**, a **Permit for Work for proximity work** is to be used, rather than the usual **RISSP** procedure, given the nature and effect of the work, all as further provided in the OC8B.8.

OC8B.8.1 Agreement Of Safety Precautions

OC8B.8.1.1 The **Requesting Safety Co-ordinator** who requires **Safety Precautions** on another **System(s)** when work is to be carried out at a **Scottish User's Site** or a **Transmission Site** (as the case may be) on equipment of the **Scottish User** or a **Relevant Scottish Transmission Licensee**, as the case may be, where the work or equipment is near to **HV Apparatus** on the **Implementing Safety Co-ordinator's System** will contact the relevant **Implementing Safety Co-ordinator(s)** to agree the Location of the **Safety Precautions** to be established, having as part of this process informed the **Implementing Safety Co-ordinator** of the equipment and the work to be undertaken. The respective **Safety Co-ordinators** will ensure that they discuss the request with their authorised site representative and that the respective authorised site representatives discuss the request at the **Connection Site** (or, in the case of **OTSUA, Transmission Interface Site**). This agreement will be recorded in the respective **Safety Logs**.

OC8B.8.1.2 It is the responsibility of the **Implementing Safety Co-ordinator**, working with his authorised site representative as appropriate, to ensure that adequate **Safety Precautions** are established and maintained, on his and/or another **System** connected to his **System**, to enable **Safety From The System** to be achieved for work to be carried out at a **Scottish User's Site** or a **Transmission Site** (as the case may be) on equipment and in relation to work which is to be identified in the relevant part of the **Permit for Work for proximity work** where the work or equipment is near to **HV Apparatus** of the **Implementing Safety Co-ordinator's System** specified by the **Requesting Safety Co-ordinator**. Reference to another **System** in this OC8B.8.1.2 shall not include the **Requesting Safety Co-ordinator's System**.

OC8B.8.1.3 In The Event Of Disagreement

In any case where the **Requesting Safety Co-ordinator** and the **Implementing Safety Co-ordinator** are unable to agree the **Location** of the **Isolation** and (if requested) **Earthing**, both shall be at the closest available points on the infeeds to the **HV Apparatus** near to which the work is to be carried out as indicated on the **Operation Diagram**.

- OC8B.8.2 Implementation Of Isolation And Earthing
- OC8B.8.2.1 Following the agreement of the **Safety Precautions** in accordance with OC8B.8.1 the **Implementing Safety Co-ordinator** shall then establish the agreed **Isolation** and (if required) **Earthing**.
- OC8B.8.2.2 The **Implementing Safety Co-ordinator** shall confirm to the **Requesting Safety Co-ordinator** that the agreed **Isolation** and (if required) **Earthing** has been established.
- OC8B.8.2.3 The **Implementing Safety Co-ordinator** shall ensure that the established **Safety Precautions** are maintained until requested to be removed by the relevant **Requesting Safety Co-ordinator**.
- OC8B.8.3 Permit For Work For Proximity Work Issue Procedure
- OC8B.8.3.1 Where **Safety Precautions** on another **System(s)** are being provided to enable work to be carried out at a **Scottish User's Site** or **Transmission Site** (as the case may be) on equipment where the work or equipment is in proximity to **HV Apparatus** of the **Implementing Safety Co-ordinator**, before any work commences they must be recorded by a **Permit for Work for proximity work** being issued. The **Permit for Work for proximity work** shall identify the **Implementing Safety Co-ordinator's HV Apparatus** in proximity to the required work
- OC8B.8.3.2 Once the **Safety Precautions** have been established (in accordance with OC8B.8.2), the **Implementing Safety Co-ordinator** shall agree to the issue of the **Permit for Work for proximity work** with the appropriately authorised site representative of the **Requesting Safety Co-ordinator's Site**. The **Implementing Safety Co-ordinator** will inform the **Requesting Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number.
- OC8B.8.3.3 The appropriately authorised site representative of the **Implementing Safety Co-ordinator** shall then issue the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Requesting Safety Co-ordinator**. The **Permit for Work for proximity work** will in the section dealing with the work to be carried out, be completed to identify that the work is near the **Implementing Safety Co-ordinator's HV Apparatus**. No further details of the **Requesting Safety Co-ordinator's** work will be recorded, as that is a matter for the **Requesting Safety Co-ordinator** in relation to his work.
- OC8B.8.3.4 The **Requesting Safety Co-ordinator** is then free to authorise work in accordance with the requirements of the relevant internal safety procedures which apply to the **Requesting Safety Co-ordinator's Site**. This is likely to involve the issue of safety documents or other relevant internal authorisations.
- OC8B.8.4 Permit For Work For Proximity Work Cancellation Procedure
- OC8B.8.4.1 When the **Requesting Safety Co-ordinator** decides that **Safety Precautions** are no longer required, he will contact the relevant **Implementing Safety Co-ordinator** to effect cancellation of the associated **Permit for Work for proximity work**.
- OC8B.8.4.2 The **Requesting Safety Co-ordinator** will inform the relevant **Implementing Safety Co-ordinator** of the **Permit for Work for proximity work** identifying number, and agree that the **Permit for Work for proximity work** can be cancelled. The cancellation is then effected by the appropriately authorised site representative of the **Requesting Safety Co-ordinator** returning the **Permit for Work for proximity work** to the appropriately authorised site representative of the **Implementing Safety Co-ordinator**.
- OC8B.8.4.3 The **Implementing Safety Co-ordinator** is then free to arrange the removal of the **Safety Precautions**, the procedure to achieve that being entirely an internal matter for the party the **Implementing Safety Co-ordinator** is representing.

OC8B.9 LOSS OF INTEGRITY OF SAFETY PRECAUTIONS

OC8B.9.1 In any instance when any **Safety Precautions** may be ineffective for any reason the relevant **Safety Co-ordinator** shall inform the other **Safety Co-ordinator(s)** without delay of that being the case and, if requested, of the reasons why.

OC8B.10 SAFETY LOG

OC8B.10.1 **Relevant Scottish Transmission Licensees** and **Scottish Users** shall maintain **Safety Logs** which shall be a chronological record of all messages relating to safety co-ordination under **OC8** sent and received by the **Safety Co-ordinator(s)**. The **Safety Logs** must be retained for a period of not less than six years.

APPENDIX A - RISSP-R

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-R) (Requesting Safety Co-ordinator's Record)

RISSP NUMBER _____

Part 1

1.1 CIRCUIT IDENTIFICATION

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Locations(s) at which Isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

(b) EARTHING

State the Locations(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

1.3 ISSUE

I have received confirmation from _____ (name of Implementing Safety Co-ordinator) at _____ (Location) that the Safety Precautions identified in paragraph 1.2 have been established and that instructions will not be issued at his Location for their removal until this RISSP is cancelled.

Signed (Requesting Safety Co-ordinator)

at (time) on (date)

PART 2

2.1 CANCELLATION

I have confirmed to _____ (name of the Implementing Safety Co-ordinator) at _____ (Location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

Signed (Requesting Safety Co-ordinator)

at (time) on (date).....

APPENDIX B - RISSP-I

RECORD OF INTER-SYSTEM SAFETY PRECAUTIONS (RISSP-I) (Implementing Safety Co-ordinator's Record)

RISSP NUMBER _____

PART 1

1.1 CIRCUIT IDENTIFICATION

Safety Precautions have been established by the Implementing Safety Co-ordinator to achieve Safety From The System on the following HV Apparatus:

1.2 SAFETY PRECAUTIONS ESTABLISHED

(a) ISOLATION

State the Location(s) at which isolation has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Isolation. For each point of Isolation state, the means by which the Isolation has been achieved, and whether, immobilised and Locked, Caution Notice affixed, other Safety Precautions applied, as appropriate.

(b) EARTHING

State the Location(s) at which Earthing has been established on the Implementing Safety Co-ordinator's System. For each Location, identify each point of Earthing. For each point of Earthing state, the means by which the Earthing has been achieved, and whether, immobilised and Locked, other Safety Precautions applied, as appropriate.

1.3 ISSUE

I confirmed to _____ (name of Requesting Safety Co-ordinator) at _____ (Location) that the Safety Precautions identified in paragraph 1.2 have been established and that instructions will not be issued at my Location for their removal until this RISSP is cancelled.

Signed (Implementing Safety Co-ordinator)
at (time) on (date)

PART 2

2.1 CANCELLATION

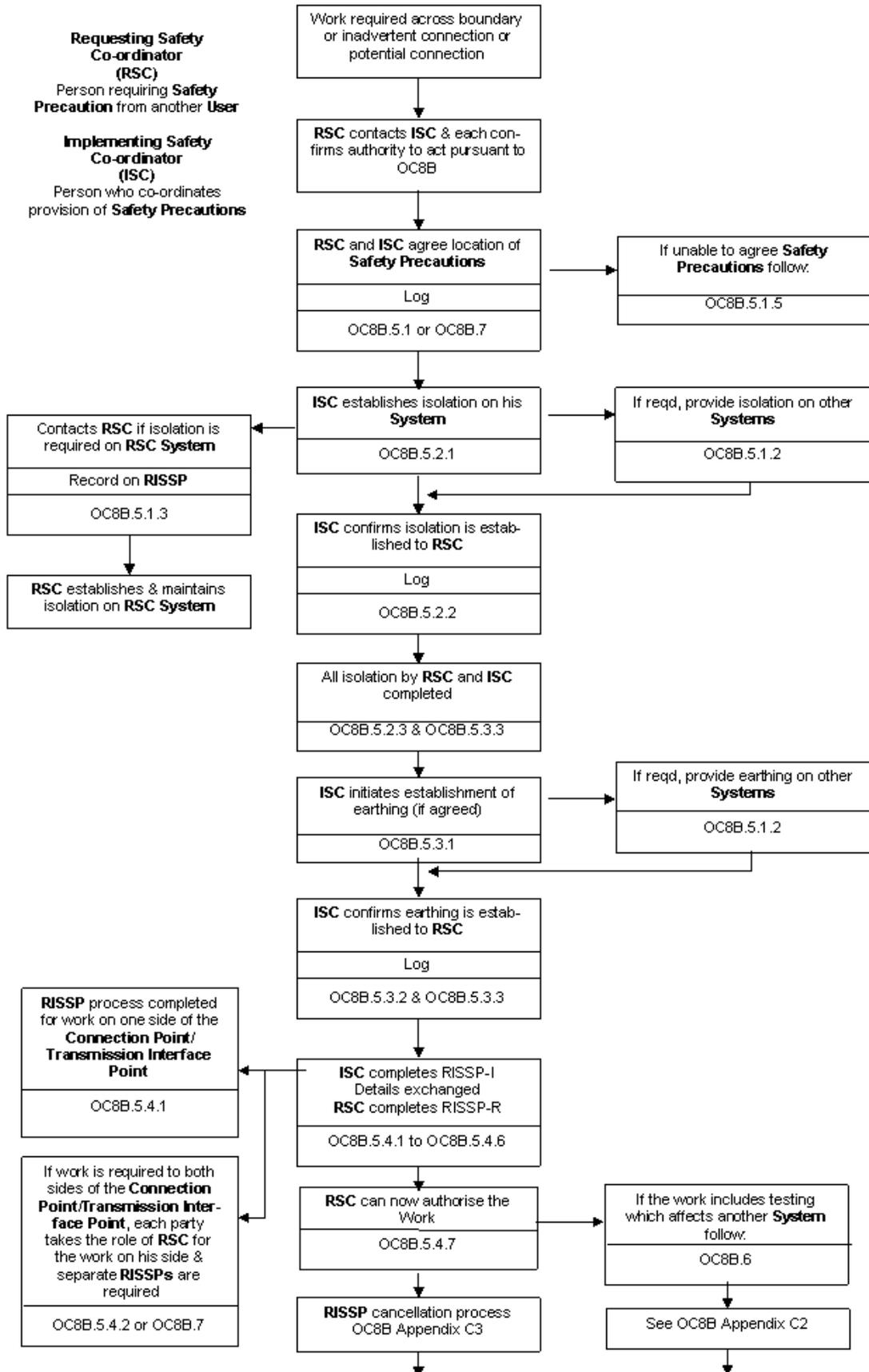
I have received confirmation from _____ (name of the Requesting Safety Co-ordinator) at _____ (Location) that the Safety Precautions set out in paragraph 1.2 are no longer required and accordingly the RISSP is cancelled.

Signed (Implementing Safety Co-ordinator)
at (time) on (date)

(Note: This form to be of a different colour from RISSP-R.)

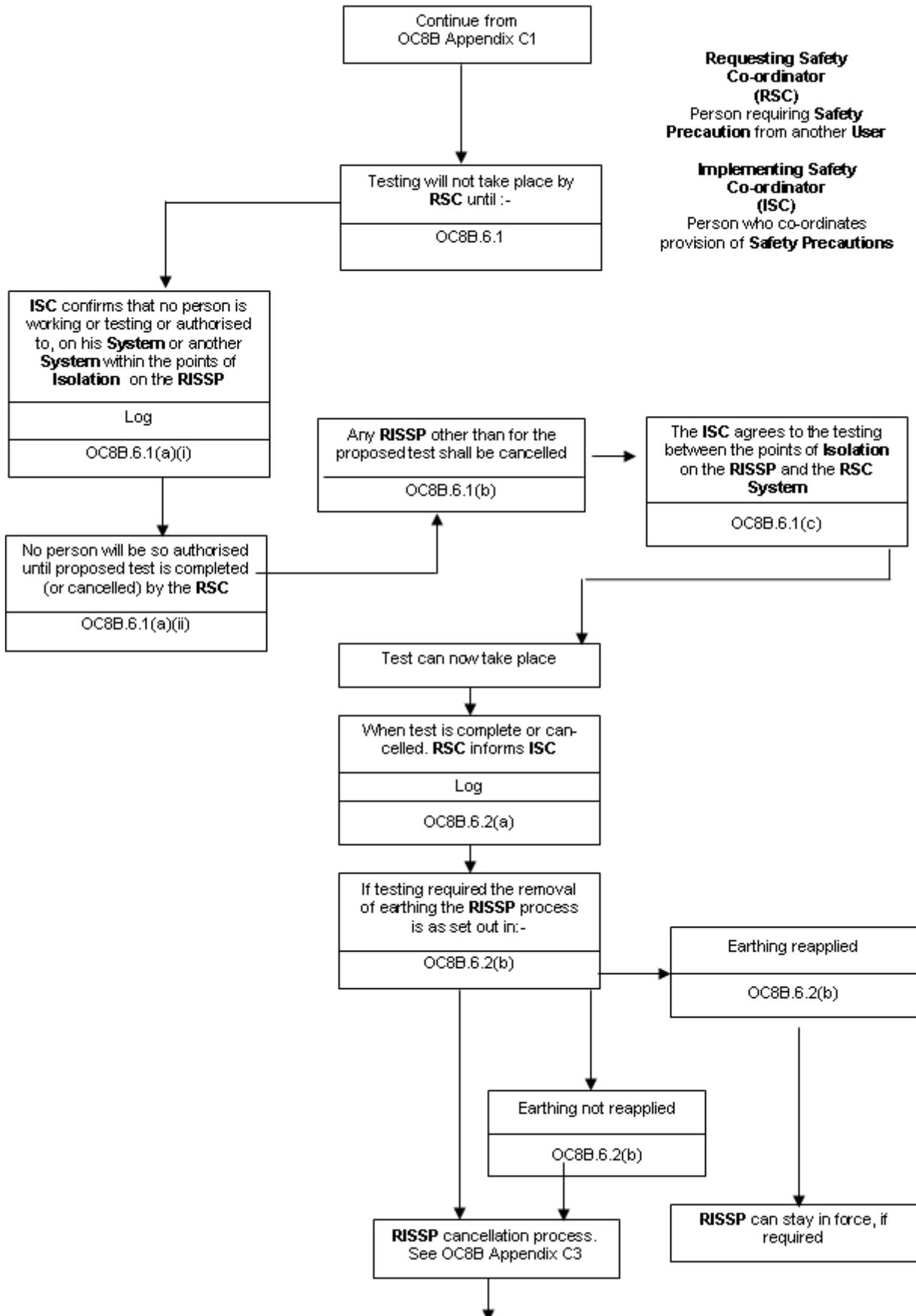
APPENDIX C - FLOWCHARTS

APPENDIX C1 - RISSP ISSUE PROCESS

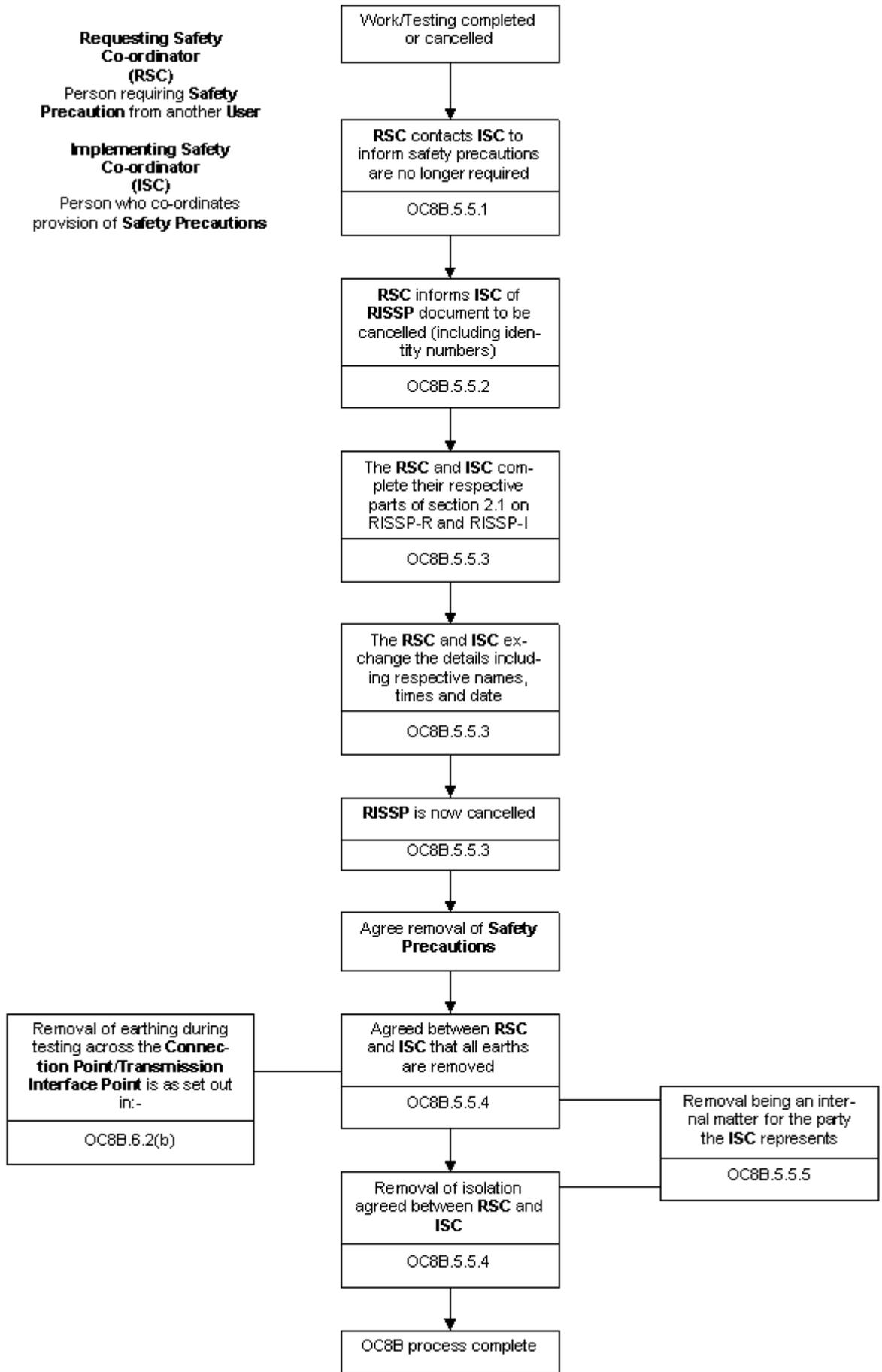


APPENDIX C2 - TESTING PROCESS

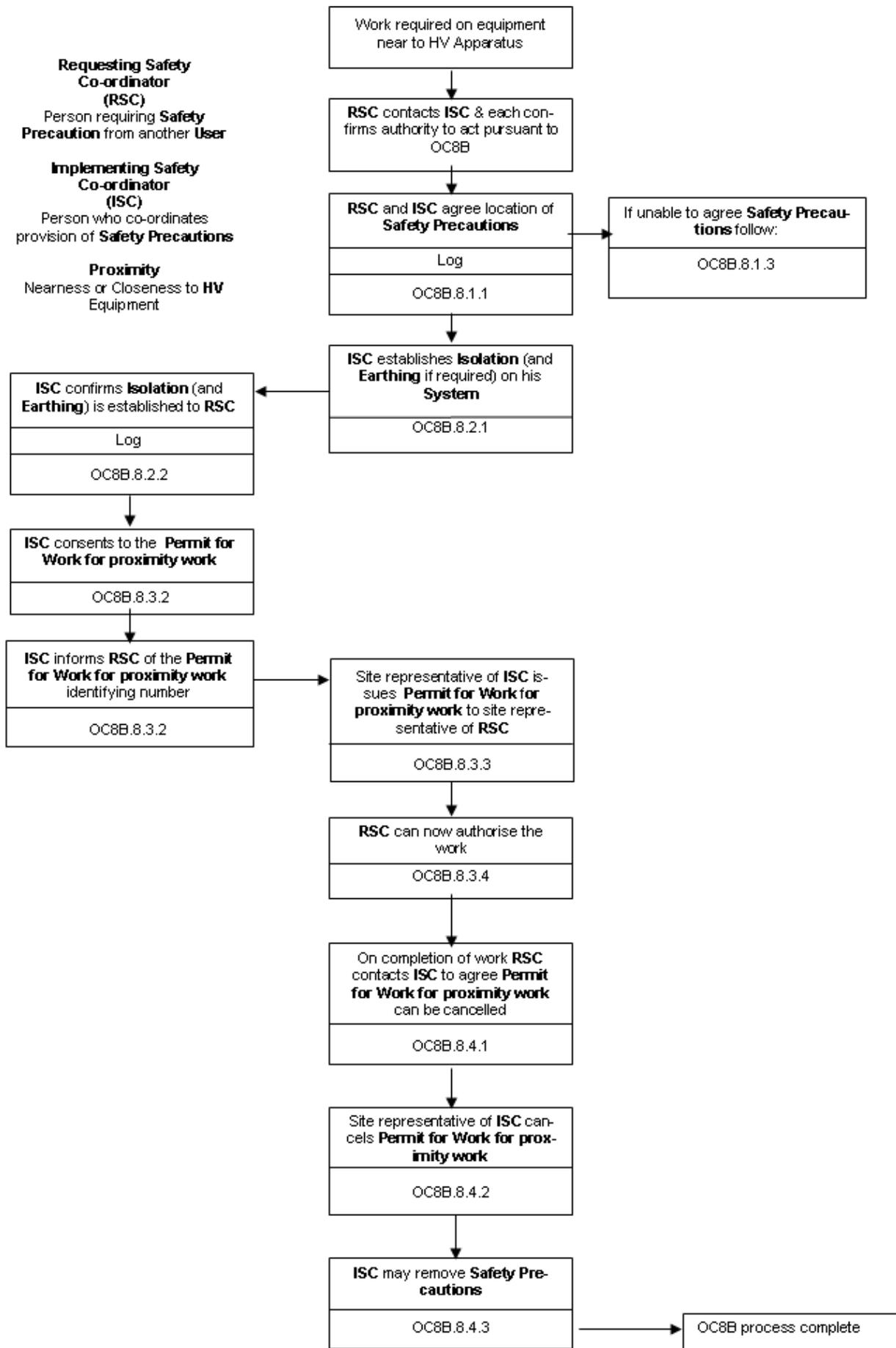
Where testing affects another Safety Co-ordinator's System



APPENDIX C3 - RISSP CANCELLATION PROCESS



APPENDIX C4 - PROCESS FOR WORKING NEAR TO SYSTEM EQUIPMENT



APPENDIX D - NOT USED

Not Used

APPENDIX E - FORM OF PERMIT TO WORK

Scottish & Southern Energy plc

PERMIT-TO-WORK

No.

1. ISSUE

To

The following High Voltage Apparatus has been made safe in accordance with the Operational Safety Rules for the work detailed on this Permit-to-Work to proceed:

.....
.....
.....

TREAT ALL OTHER APPARATUS AS LIVE

Circuit Main Earths are applied at:

.....
.....
.....

Other precautions (see Operational Safety Rules 3.2.1(b), 4.6.2(c) and 5.5.3), and any special instructions:

.....
.....
.....

The following work is to be carried out:

.....
.....
.....

Circuit Identification Issued: Colour No. of wristlets No. of step bolts

Name: (print): Signature: Time: Date:

2. RECEIPT

I accept responsibility for carrying out the work on the Apparatus detailed on this Permit-to-Work, applying additional earths as necessary. No attempt will be made by me, or by the persons under my charge, to work on any other Apparatus.

Name: (print): Signature: Time: Date:

Circuit Identification Equipment Checked as above (Initials):

3. CLEARANCE

All persons under my control have been withdrawn and warned that it is no longer safe to work on the Apparatus detailed on this Permit-to-Work.

All gear, tools and additional earths have/have not* been removed. The works is/is not* complete.

All circuit identification equipment issued as above has been returned

Name: (print): Signature: Time: Date:

* Delete where not applicable

4. CANCELLATION

This Permit-to-Work is cancelled.

Name: (print): Signature: Time: Date:

PERMIT FOR WORK

KEY SAFE

No.
No.

- 1. (i) LOCATION
- (ii) PLANT/APPARATUS IDENTIFICATION
- (iii) WORK TO BE DONE

- 2. (i) PRECAUTIONS TAKEN TO ACHIEVE SAFETY FROM THE SYSTEM: State points at which **Plant/Apparatus** has been Isolated and specify position(s) of **Earthing Devices** applied. State actions taken to avoid **Danger** by draining, venting, purging and containment or dissipation of stored energy.

Caution Notices have been affixed to all points of isolation

- (ii) FURTHER PRECAUTIONS TO BE TAKEN DURING THE COURSE OF WORK TO AVOID SYSTEM DERIVED HAZARDS

I have confirmed with the **Control Person(s)*** that precautions in Section 2(i) have been carried out and that the **Control Person(s)** will maintain these until this **Permit for Work** is cancelled. I certify that the precautions in Section 2(i) together with the precautions in Section 2(ii) are adequate to provide **Safety from the System** in respect of the work in Section 1.

This **Permit for Work** must only be transferred under the **Personal Supervision** of a **Senior Authorised Person***

Signed being a **Senior Authorised Person**. Time: Date:

3. ISSUE

- (i) **Key Safe Key** (No.)* (ii) **Earthing Schedule*** (iii) **Portable Drain Earths** (No. off)*
- (iv) **Selected Person's Report** (No.)* (v) **Circuit Identification Flags** (No. off)*
- (vi) **Circuit Identification Wristlets** (No. off)* and Colours/Symbols

Signed being the **Senior Authorised Person** responsible

for the issue of this **Permit for Work** Time: Date:

4. RECEIPT

I understand and accept my responsibilities under the ScottishPower Safety Rules as recipient of this **Permit for Work** and acknowledge receipt of the items in Section 3.

Signed Name (Block Letters)

being a **Competent Person** in the employ of Firm/Dept Time Date

TRANSFER RECORD

PART 1		PART 2	PART 3			
Person surrendering Document	Time Date	Senior Authorised Person receiving suspended Document *	†Person receiving reissued Document		Senior Authorised Person reissuing document	Time Date
			Signature	Name (Block Letters)		
		X				

†Signature of **Person** receiving re-issued Document in accordance with conditions detailed in Section 4.

5. CLEARANCE: I certify that all persons working under this **Permit for Work** have been withdrawn from, and warned not to work on, the **Plant/Apparatus** in Section 1. All gears, tools, **Drain Earths** and loose material have been removed and guards and access doors have been replaced, except for:

.....

Signedbeing the **Competent Person** responsible for
 clearing this **Permit for Work** Time Date

6. CANCELLATION: I certify that all items issued under Section 3 have been accounted for and the **Control Person(s)*** informed of the cancellation and of any restrictions on returning the **Plant/Apparatus** to service.

Signed being the **Senior Authorised Person** responsible for
 cancelling this **Permit for Work**. Time Date

*N/A if Not Applicable

< END OF OPERATING CODE NO. 8 APPENDIX 2 >

OPERATING CODE NO. 9

(OC9)

CONTINGENCY PLANNING

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OC9.1 INTRODUCTION

Operating Code No.9 ("OC9") covers the following:

OC9.1.1 Black Starts

The implementation of recovery procedures following a **Total Shutdown** or **Partial Shutdown**.

OC9.1.2 Re-Synchronisation Of Islands

The **Re-Synchronisation** of parts of the **Total System** which have become **Out of Synchronism** with each other irrespective of whether or not a **Total Shutdown** or **Partial Shutdown** has occurred.

OC9.1.3 Joint System Incident Procedure

The establishment of a communication route and arrangements between senior management representatives of **The Company** and **Users** involved in, or who may be involved in, an actual or potential serious or widespread disruption to the **Total System** or a part of the **Total System**, which requires, or may require, urgent managerial response, day or night, but which does not fall within the provisions of OC9.1.4.

OC9.1.4 It should be noted that under section 96 of the **Act** the **Secretary of State** may give directions to **The Company** and/or any **Generator** and/or any **Supplier**, for the purpose of "mitigating the effects of any civil emergency which may occur" (ie. for the purposes of planning for a civil emergency); a civil emergency is defined in the **Act** as "any natural disaster or other emergency which, in the opinion of the **Secretary of State**, is or may be likely to disrupt electricity supplies". Under the Energy Act 1976, the **Secretary of State** has powers to make orders and give directions controlling the production, supply, acquisition or use of electricity, where an Order in Council under section 3 is in force declaring that there is an actual or imminent emergency affecting electricity supplies. In the event that any such directions are given, or orders made under the **Energy Act 1976**, the provisions of the **Grid Code** will be suspended in so far as they are inconsistent with them.

OC9.1.5 **The Company** shall procure that **Relevant Scottish Transmission Licensees** shall comply with OC9.4 and OC9.5 and any relevant **Local Joint Restoration Plan** or **OC9 De-Synchronised Island Procedure** where and to the extent that such matters apply to them.

OC9.2 OBJECTIVE

The overall objectives of **OC9** are:

OC9.2.1 To achieve, as far as possible, restoration of the **Total System** and associated **Demand** in the shortest possible time, taking into account **Power Station** capabilities, including **Embedded Generating Units**, **External Interconnections** and the operational constraints of the **Total System**.

OC9.2.2 To achieve the **Re-Synchronisation** of parts of the **Total System** which have become **Out of Synchronism** with each other.

OC9.2.3 To ensure that communication routes and arrangements are available to enable senior management representatives of **The Company** and **Users**, who are authorised to make binding decisions on behalf of **The Company** or the relevant **User**, as the case may be, to communicate with each other in the situation described in OC9.1.3.

OC9.2.4 To describe the role that in respect of **Scottish Transmission Systems**, **Relevant Scottish Transmission Licensees** may have in the restoration processes as detailed in the relevant **OC9 De-Synchronised Island Procedures** and **Local Joint Restoration Plans**.

- OC9.2.5 To identify and address as far as possible the events and processes necessary to enable the restoration of the **Total System**, after a **Total Shutdown** or **Partial Shutdown**. This is likely to require the following key processes to be implemented, typically, but not necessarily, in the order given below:
- (i) Selectively implement **Local Joint Restoration Plans**
 - (ii) Expand **Power Islands** to supply **Power Stations**
 - (iii) Expand and merge **Power Islands** leading to **Total System** energisation
 - (iv) Selectively reconnect **Demand**
 - (v) Facilitate and co-ordinate returning the **Total System** back to normal operation
 - (vi) Resumption of the **Balancing Mechanism** if suspended in accordance with the provisions of the **BSC**.

OC9.3 SCOPE

OC9.3.1 **OC9** applies to **The Company** and to **Users**, which in **OC9** means:-

- (a) **Generators**;
- (b) **Network Operators**; and
- (c) **Non-Embedded Customers**.

OC9.3.2 The procedure for the establishment of emergency support/contingency planning between **The Company** and **Externally Interconnected System Operators** is set out in the **Interconnection Agreement** with each **Externally Interconnected System Operator**.

OC9.3.3 In respect of **Scottish Transmission Systems**, OC9.4 and OC9.5 also apply to **Relevant Scottish Transmission Licensees**.

OC9.4 BLACK START

Total Shutdown And Partial Shutdown

OC9.4.1 A "**Total Shutdown**" is the situation existing when all generation has ceased and there is no electricity supply from **External Interconnections**. Therefore, the **Total System** has shutdown with the result that it is not possible for the **Total System** to begin to function again without **The Company's** directions relating to a **Black Start**.

OC9.4.2 A "**Partial Shutdown**" is the same as a **Total Shutdown** except that all generation has ceased in a separate part of the **Total System** and there is no electricity supply from **External Interconnections** or other parts of the **Total System** to that part of the **Total System**. Therefore, that part of the **Total System** is shutdown with the result that it is not possible for that part of the **Total System** to begin to function again without **The Company's** directions relating to a **Black Start**.

OC9.4.3 During a **Total Shutdown** or **Partial Shutdown** and during the subsequent recovery, the **Licence Standards** may not apply and the **Total System** may be operated outside normal voltage and **Frequency** standards.

OC9.4.4 In a **Total Shutdown** and in a **Partial Shutdown** and during the subsequent recovery, it is likely to be necessary for **The Company** to issue **Emergency Instructions** in accordance with BC2.9.

OC9.4.5 Black Start Stations

OC9.4.5.1 Certain **Power Stations** ("**Black Start Stations**") are registered, pursuant to the **Bilateral Agreement** with a **User**, as having an ability for at least one of its **Gensets** to **Start-Up** from **Shutdown** and to energise a part of the **Total System**, or be **Synchronised** to the **System**, upon instruction from **The Company** within two hours, without an external electrical power supply ("**Black Start Capability**").

OC9.4.5.2 For each **Black Start Station**, a **Local Joint Restoration Plan** will be produced jointly by **The Company**, the relevant **Generator** and **Network Operator** in accordance with the provisions of OC9.4.7.12. The **Local Joint Restoration Plan** will detail the agreed method and procedure by which a **Genset** at a **Black Start Station** (possibly with other **Gensets** at that **Black Start Station**) will energise part of the **Total System** and meet complementary local **Demand** so as to form a **Power Island**.

OC9.4.5.3 In respect of **Scottish Transmission Systems**, a **Local Joint Restoration Plan** may cover more than one **Black Start Station** and may be produced with and include obligations on **Relevant Scottish Transmission Licensees, Generators** responsible for **Gensets** not at a **Black Start Station** and other **Users**.

OC9.4.6 **Black Start** Situation

In the event of a **Total Shutdown** or **Partial Shutdown**, **The Company** will, as soon as reasonably practical, inform **Users** (or, in the case of a **Partial Shutdown**, **Users** which in **The Company's** opinion need to be informed) and the **BSCCo** that a **Total Shutdown**, or, as the case may be, a **Partial Shutdown**, exists and that **The Company** intends to implement a **Black Start**. **The Company** shall (as soon as is practicable) determine, in its reasonable opinion, the time and date with effect from which the **Total Shutdown** or **Partial Shutdown** commenced and notify **BSCCo** of that time and date.

In the event of a **Total Shutdown** and following such notification, in accordance with the provisions of the **BSC**, the **BSCCo** will determine the **Settlement Period** with effect from which the **Balancing Mechanism** is suspended.

In the event of a **Partial Shutdown** and following such notification, the **Balancing Mechanism** will not be suspended until such time and date that the **Market Suspension Threshold** has been met, or deemed to have been met, in accordance with the provisions of the **BSC**. **The Company** shall carry out the monitoring activities required by paragraph G3.1 of the **BSC**.

Following determination by **The Company** pursuant to its obligations under the **BSC** that the **Market Suspension Threshold** has been met, or deemed to have been met, **The Company** shall (as soon as practicable) inform the **BSCCo** of that time and date at which the **Market Suspension Threshold** was met, or deemed to have been met, and the **BSCCo** will determine the **Settlement Period** in accordance with the provisions of the **BSC** with effect from which the **Balancing Mechanism** will be suspended.

Should **The Company** determine that the **Total System** is capable of returning to normal operation without meeting the **Market Suspension Threshold**, **The Company** will follow the procedure given in OC9.4.7.9.

The **Black Start** will conclude with effect from the time and date determined in accordance with OC9.4.7.10.

In respect of **Scottish Transmission Systems**, in exceptional circumstances, as specified in the **Local Joint Restoration Plan**, **SPT** or **SHETL**, may invoke such **Local Joint Restoration Plan** for its own **Transmission System** and **Scottish Offshore Transmission Systems** connected to it and operate within its provisions.

OC9.4.7 **Black Start**

OC9.4.7.1 The procedure necessary for a recovery from a **Total Shutdown** or **Partial Shutdown** is known as a "**Black Start**". The procedure for a **Partial Shutdown** is the same as that for a **Total Shutdown** except that it applies only to a part of the **Total System**. It should be remembered that a **Partial Shutdown** may affect parts of the **Total System** which are not themselves shutdown.

OC9.4.7.2 The complexities and uncertainties of recovery from a **Total Shutdown** or **Partial Shutdown** require that **OC9** is sufficiently flexible in order to accommodate the full range of **Genset** and **Total System** characteristics and operational possibilities, and this precludes the setting out in the **Grid Code** itself of concise chronological sequences. The overall strategy will, in general, include the overlapping phases of establishment of **Genset(s)** at an isolated **Power Station**, together with complementary local **Demand**, termed "**Power Islands**", step by step integration of these **Power Islands** into larger sub-systems which includes utilising the procedures in OC9.5 (**Re-Synchronisation of De-Synchronised Island**) and eventually re-establishment of the complete **Total System**.

The Company Instructions

OC9.4.7.3 The procedures for a **Black Start** will, therefore, be those specified by **The Company** at the time. These will normally recognise any applicable **Local Joint Restoration Plan**. **Users** shall abide by **The Company's** instructions during a **Black Start** situation, even if these conflict with the general overall strategy outlined in OC9.4.7.2 or any applicable **Local Joint Restoration Plan**. **The Company's** instructions may (although this list should not be regarded as exhaustive) be to a **Black Start Station** relating to the commencement of generation, to a **Network Operator** or **Non-Embedded Customer** relating to the restoration of **Demand**, and to a **Power Station** relating to preparation for commencement of generation when an external power supply is made available to it, and in each case may include the requirement to undertake switching.

In respect of **Scottish Transmission Systems SPT** and **SHETL** will act on **The Company's** behalf in accordance with its duties under the relevant **Local Joint Restoration Plan**. **Scottish Users** shall abide by **SPT's** or **SHETL's** instructions given in accordance with the **Local Joint Restoration Plan** during a **Black Start** situation.

OC9.4.7.4 (a) **Black Start following a Total Shutdown or where the Balancing Mechanism has been suspended following a Partial Shutdown**

During a **Black Start** situation where the **Balancing Mechanism** has been suspended, all instructions to **Power Stations** and to **Network Operators** will be deemed to be **Emergency Instructions** under BC2.9.2.2 (iii). All such **Emergency Instructions** will recognise any differing **Black Start** operational capabilities (however termed) set out in the relevant **Ancillary Services Agreement** in preference to the declared operational capability as registered pursuant to **BC1** (or as amended from time to time in accordance with the **BC**). For the purposes of these instructions the **Black Start** will be an emergency circumstance under BC2.9.

In Scotland, **Gensets** that are not at **Black Start Stations**, but which are part of a **Local Joint Restoration Plan**, may be instructed in accordance with the provisions of that **Local Joint Restoration Plan**.

(b) **Black Start following a Partial Shutdown where the Balancing Mechanism has not been suspended**

During a **Black Start** situation where the **Balancing Mechanism** has not been suspended, instructions in relation to **Black Start Stations** and to **Network Operators** which are part of an invoked **Local Joint Restoration Plan** will (unless **The Company** specifies otherwise) be deemed to be **Emergency Instructions under BC2.9.2.2 (iv)** and will recognise any differing **Black Start** operational capabilities (however termed) set out in the relevant **Ancillary Services Agreement** in preference to the declared operational capability as

registered pursuant to **BC1** (or as amended from time to time in accordance with the **BC**). For the purposes of these instructions the **Black Start** will be an emergency circumstance under BC2.9.

During a **Black Start** situation where the **Balancing Mechanism** has not been suspended, **The Company** may issue instructions to **Users** other than **Black Start Stations** and **Network Operators** which are part of an invoked **Local Joint Restoration Plan**. Such instructions would be **Emergency Instructions** pursuant to BC2.9.1.2(e)(i) subject to the requirements of BC2.9.2.2 being met.

In Scotland, **Gensets** that are not at **Black Start Stations**, but which are part of an invoked **Local Joint Restoration Plan**, may be instructed in accordance with the provisions of that **Local Joint Restoration Plan**.

(c) If during the **Demand** restoration process any **Genset** cannot, because of the **Demand** being experienced, keep within its safe operating parameters, the **Generator** shall, unless a **Local Joint Restoration Plan** is in operation, inform **The Company**. **The Company** will, where possible, either instruct **Demand** to be altered or will re-configure the **National Electricity Transmission System** or will instruct a **User** to re-configure its **System** in order to alleviate the problem being experienced by the **Generator**. If a **Local Joint Restoration Plan** is in operation, then the arrangements set out therein shall apply. However, **The Company** accepts that any decision to keep a **Genset** operating, if outside its safe operating parameters, is one for the **Generator** concerned alone and accepts that the **Generator** may change generation on that **Genset** if it believes it is necessary for safety reasons (whether relating to personnel or **Plant** and/or **Apparatus**). If such a change is made without prior notice, then the **Generator** shall inform **The Company** as soon as reasonably practical (unless a **Local Joint Restoration Plan** is in operation in which case the arrangements set out therein shall apply).

Embedded Power Stations

OC9.4.7.5 Without prejudice to the provisions of OC9.4.7.8, **Network Operators** with **Embedded Power Stations** will comply with any directions of **The Company** to restore **Demand** to be met by the **Embedded Power Stations**.

Local Joint Restoration Plan operation

OC9.4.7.6

- (a) The following provisions apply in relation to a **Local Joint Restoration Plan**. As set out in OC9.4.7.3, **The Company** may issue instructions which conflict with a **Local Joint Restoration Plan**. In such cases, these instructions will take precedence over the requirements of the **Local Joint Restoration Plan**. When issuing such instructions, **The Company** shall state whether or not it wishes the remainder of the **Local Joint Restoration Plan** to apply. If, notwithstanding that **The Company** has stated that it wishes the remainder of the **Local Joint Restoration Plan** to apply, the **Generator** or the relevant **Network Operator** consider that **The Company's** instructions mean that it is not possible to operate the **Local Joint Restoration Plan** as modified by those instructions, any of them may give notice to **The Company** and the other parties to the **Local Joint Restoration Plan** to this effect and **The Company** shall immediately consult with all parties to the **Local Joint Restoration Plan**. Unless all parties to the **Local Joint Restoration Plan** reach an agreement forthwith as to how the **Local Joint Restoration Plan** shall operate in those circumstances, operation in accordance with the **Local Joint Restoration Plan** will terminate.
- (b) Where **The Company**, as part of a **Black Start**, has given an instruction to a **Black Start Station** to initiate **Start-Up**, the relevant **Genset(s)** at the **Black Start Station** will **Start-Up** in accordance with the **Local Joint Restoration Plan**.
- (c) **The Company** will advise the relevant **Network Operator** of the requirement to switch its **User System** so as to segregate its **Demand** and to carry out such other actions as set out in the **Local Joint Restoration Plan**. The relevant **Network Operator** will then operate in accordance with the provisions of the **Local Joint Restoration Plan**.
- (d) **The Company** will ensure that switching carried out on the **National Electricity Transmission System** and other actions are as set out in the **Local Joint Restoration Plan**.
- (e) Following notification from the **Generator** that the **Black Start Station** is ready to accept load, **The Company** will instruct the **Black Start Station** to energise part of the **Total System**. The **Black Start Station** and the relevant **Network Operator** will then, in accordance with the requirements of the **Local Joint Restoration Plan**, establish communication and agree the output of the relevant **Genset(s)** and the connection of **Demand** so as to establish a **Power Island**. During this period, the **Generator** will be required to regulate the output of the relevant **Genset(s)** at its **Black Start Station** to the **Demand** prevailing in the **Power Island** in which it is situated, on the basis that it will (where practicable) seek to maintain the **Target Frequency**. The **Genset(s)** at the **Black Start Station** will (where practical) also seek to follow the requirements relating to **Reactive Power** (which may include the requirement to maintain a target voltage) set out in the **Local Joint Restoration Plan**.
- (f) Operation in accordance with the **Local Joint Restoration Plan** will be terminated by **The Company** (by notifying the relevant **Users**) prior to connecting the **Power Island** to other **Power Islands** (other than, in Scotland, as allowed for in the **Local Joint Restoration Plan**), or to the **User System** of another **Network Operator**, or to the synchronising of **Gensets** at other **Power Stations** (other than, in Scotland, those forming part of the **Local Joint Restoration Plan**). Operation in accordance with the **Local Joint Restoration Plan** will also terminate in the circumstances provided for in OC9.4.7.6(a) if an agreement is not reached or if **The Company** states that it does not wish the remainder of the **Local Joint Restoration Plan** to apply. **Users** will then comply with the **Bid-Offer Acceptances** or **Emergency Instructions** of **The Company**.
- (g) In Scotland, **Gensets** included in a **Local Joint Restoration Plan**, but not at a **Black Start Station**, will operate in accordance with the requirements of the **Local Joint Restoration Plan**.

Interconnection of Power Islands

OC9.4.7.7 **The Company** will instruct the relevant **Users** so as to interconnect **Power Islands** to achieve larger sub-systems, and subsequently the interconnection of these sub-systems to form an integrated system. This should eventually achieve the re-establishment of the **Total System** or that part of the **Total System** subject to the **Partial Shutdown**, as the case may be. The interconnection of **Power Islands** and sub-systems will utilise the provisions of all or part of OC9.5 (**Re-Synchronisation of De-synchronised Islands**) and in such a situation such provisions will be part of the **Black Start**.

OC9.4.7.8 As part of the **Black Start** strategy each **Network Operator** with either an **Embedded Black Start Station** which has established a **Power Island** within its **User System** or with any **Embedded Power Stations** within its **User System** which have become islanded, may in liaison with **The Company** sustain and expand these islands in accordance with the relevant provisions of OC9.5 which shall apply to this OC9.4 as if set out here. They will inform **The Company** of their actions and will not **Re-Synchronise** to the **National Electricity Transmission System** or any

User's System which is already **Synchronised** to the **National Electricity Transmission System** without **The Company**'s agreement.

Return the Total System Back to Normal Operation

OC9.4.7.9 **The Company** shall, as soon as reasonably practical, inform **Users** and the **BSCCo** when the **Total System** could return to normal operation. Any such determination by **The Company** does not mean that the provisions of Section G paragraph 3 (Black Start) of the **BSC** shall cease to apply.

In making the determination that the **Total System** could return to normal operation, **The Company**, would consider, amongst other things, the following areas:

- (a) the extent to which the **National Electricity Transmission System** is contiguous and energised;
- (b) the integrity and stability of the **National Electricity Transmission System** and its ability to operate in accordance with the **Licence Standards**;
- (c) the impact that returning to normal may have on transmission constraints and the corresponding ability to maximise the **Demand** connected; and
- (d) the volume of generation or **Demand** not connected to the **National Electricity Transmission System**; and
- (e) the functionality of normal communication systems (i.e. electronic data communication facilities, **Control Telephony**, etc).

In the event that the **Balancing Mechanism** has been suspended, it will not resume until the start of the **Settlement Period** determined by the **BSC Panel** in accordance with paragraph G3.1.2(d)(i) of the **BSC**.

For the avoidance of doubt, until resumption of the **Balancing Mechanism**, **The Company** is likely to continue to issue **Emergency Instructions** in accordance with BC2.9.

Users shall use reasonable endeavours to submit **Physical notifications** ten hours prior to the start of the **Settlement Period** determined by the **BSC Panel** in accordance with paragraph G3.1.2(d)(i) of the **BSC** and as notified by **The Company** to **Users**, in preparation for a return to normal operations.

In the event that the **Balancing Mechanism** has not been suspended and **The Company** has determined that the **Total System** has returned to normal operation, **The Company** shall inform **Users** and the **BSCCo** as soon as possible of the time and date at which (in **The Company's** determination) the **Total System** returned to normal operation.

Conclusion of Black Start

OC9.4.7.10 The provisions of this **OC9** shall cease to apply with effect from either:

- (a) Where the **Balancing Mechanism** was suspended, the start of the **Settlement Period** that the **Balancing Mechanism** resumed normal operation, as determined by the **BSC Panel** and notified by the **BSCCo** in accordance with the provisions of the **BSC**; or
- (b) Where the **Balancing Mechanism** was not suspended, the end of the **Settlement Period** determined and notified by the **BSCCo** (in accordance with the provisions of the **BSC**) and corresponding to the time and date that **The Company** determined that the **Total System** had returned to normal operation.

Externally Interconnected System Operators

OC9.4.7.11 During a **Black Start**, **The Company** will, pursuant to the **Interconnection Agreement** with **Externally Interconnected System Operators**, agree with **Externally Interconnected System Operators** when their transmission systems can be **Re-Synchronised** to the **Total System**, if they have become separated.

OC9.4.7.12 Local Joint Restoration Plan Establishment

- (a) In England and Wales, in relation to each **Black Start Station**, **The Company**, the **Network Operator** and the relevant **Generator** will discuss and agree a **Local Joint Restoration Plan**. Where at the date of the first inclusion of this OC9.4.7.12 into the **Grid Code** a local plan covering the procedures to be covered in a **Local Joint Restoration Plan** is in existence and agreed, **The Company** will discuss this with the **Network Operator** and the relevant **Generator** to agree whether it is consistent with the principles set out in this OC9.4. If it is agreed to be so consistent, then it shall become a **Local Joint Restoration Plan** under this **OC9** and the relevant provisions of OC9.4.7.12(b) shall apply. If it is not agreed to be so consistent, then the provisions of OC9.4.7.12(b) shall apply as if there is no **Local Joint Restoration Plan** in place.

In respect of **Scottish Transmission Systems** where a requirement for a **Local Joint Restoration Plan** is identified, **The Company**, the **Relevant Scottish Transmission Licensee(s)**, the **Network Operator** and **Black Start Station(s)** will discuss and agree a **Local Joint Restoration Plan**. In addition other **Users**, including other **Generators**, may be reasonably required by **The Company** to discuss and agree a **Local Joint Restoration Plan**.

- (b) In England and Wales, where the need for a **Local Joint Restoration Plan** arises when there is none in place, the following provisions shall apply:
 - (i) **The Company**, the **Network Operator** and the relevant **Generator** will discuss and agree the detail of the **Local Joint Restoration Plan** as soon as the requirement for a **Local Joint Restoration Plan** is identified by **The Company**. **The Company** will notify all affected **Users**, and will initiate these discussions.
 - (ii) Each **Local Joint Restoration Plan** will be in relation to a specific **Black Start Station**.
 - (iii) The **Local Joint Restoration Plan** will record which **Users** and which **User Sites** are covered by the **Local Joint Restoration Plan** and set out what is required from **The Company** and each **User** should a **Black Start** situation arise.

- (iv) Each **Local Joint Restoration Plan** shall be prepared by **The Company** to reflect the above discussions and agreement.
- (v) Each page of the **Local Joint Restoration Plan** shall bear a date of issue and the issue number.
- (vi) When a **Local Joint Restoration Plan** has been prepared, it shall be sent by **The Company** to the **Users** involved for confirmation of its accuracy.
- (vii) The **Local Joint Restoration Plan** shall then (if its accuracy has been confirmed) be signed on behalf of **The Company** and on behalf of each relevant **User** by way of written confirmation of its accuracy.
- (viii) Once agreed under this OC9.4.7.12, the procedure will become a **Local Joint Restoration Plan** under the **Grid Code** and (subject to any change pursuant to this OC9) will apply between **The Company** and the relevant **Users** as if it were part of the **Grid Code**.
- (ix) Once signed, a copy of the **Local Joint Restoration Plan** will be distributed by **The Company** to each **User** which is a party to it accompanied by a note indicating the date of implementation.
- (x) **The Company** and **Users** must make the **Local Joint Restoration Plan** readily available to the relevant operational staff.
- (xi) If **The Company**, or any **User** which is a party to a **Local Joint Restoration Plan**, becomes aware that a change is needed to that **Local Joint Restoration Plan**, it shall (in the case of **The Company**) initiate a discussion between **The Company** and the relevant **Users** to seek to agree the relevant change. If a **User** becomes so aware, it shall contact **The Company** who will then initiate such discussions. The principles applying to establishing a new **Local Joint Restoration Plan** under this OC9.4.7.12 shall apply to such discussions and to any consequent changes.
- (xii) **The Company**, the **Network Operator** and the relevant **Generator** will conduct regular joint exercises of the **Local Joint Restoration Plan** to which they are parties. The objectives of such exercises include:
 - To test the effectiveness of the **Local Joint Restoration Plan**;
 - To provide for joint training of the parties in respect of the **Local Joint Restoration Plan**;
 - To maintain the parties' awareness and familiarity of the **Local Joint Restoration Plan**;
 - To promote understanding of each parties' roles under a **Local Joint Restoration Plan**;
 - To identify any improvement areas which should be incorporated in to the **Local Joint Restoration Plan**.
 - The principles applying to the establishment of a new **Local Joint Restoration Plan** under this OC9.4.7.12 shall apply to any changes to the **Local Joint Restoration Plan**.

The Company will propose to the parties of a **Local Joint Restoration Plan** a date for the exercise to take place, to be agreed with the other parties. All the **Local Joint Restoration Plan** parties will jointly share the task of planning, preparing, participating in and facilitating the exercises, which will normally be in desktop format or as otherwise agreed. The precise timing of the exercise for each **Local Joint Restoration Plan** will be agreed by all parties, but will not be less than one every 8 years.

- (c) In respect of **Scottish Transmission Systems**, where the need for a **Local Joint Restoration Plan** arises, the following provisions shall apply:

- (i) **The Company**, the **Relevant Scottish Transmission Licensee(s)**, the **Network Operator** and the relevant **Generator** will discuss and agree the detail of the **Local Joint Restoration Plan** as soon as the requirement for a **Local Joint Restoration Plan** is identified by **The Company**. In addition other **Scottish Users**, including other **Generators**, may be reasonably required by **The Company** to discuss and agree details of the **Local Joint Restoration Plan** as soon as the requirement for a **Local Joint Restoration Plan** is identified by **The Company**. **The Company** will notify the **Relevant Scottish Transmission Licensee(s)** and all affected **Scottish Users**, and will initiate these discussions.
- (ii) Each **Local Joint Restoration Plan** may be in relation to either a specific **Black Start Station** or a number of **Black Start Stations**, and may include **Gensets** at **Power Stations** other than a **Black Start Station**.
- (iii) The **Local Joint Restoration Plan** will record which **Scottish Users** and which **Scottish User Sites** are covered by the **Local Joint Restoration Plan** and set out what is required from **The Company**, the **Relevant Scottish Transmission Licensee(s)** and each **Scottish User** should a **Black Start** situation arise.
- (iv) Each **Local Joint Restoration Plan** shall be prepared by **The Company** to reflect the above discussions and agreement.
- (v) Each page of the **Local Joint Restoration Plan** shall bear a date of issue and the issue number.
- (vi) When a **Local Joint Restoration Plan** has been prepared, it shall be sent by **The Company** to the **Relevant Scottish Transmission Licensee(s)** and **Scottish Users** involved for confirmation of its accuracy.
- (vii) The **Local Joint Restoration Plan** shall then (if its accuracy has been confirmed) be signed on behalf of **The Company** and on behalf of each relevant **Scottish User** and **Relevant Scottish Transmission Licensee(s)** by way of written confirmation of its accuracy.
- (viii) Once agreed under this OC9.4.7.12, the procedure will become a **Local Joint Restoration Plan** under the **Grid Code** and (subject to any change pursuant to this **OC9**) will apply between **The Company**, **Relevant Scottish Transmission Licensee(s)** and the relevant **Scottish Users** as if it were part of the **Grid Code**.
- (ix) Once signed, a copy of the **Local Joint Restoration Plan** will be distributed by **The Company** to the **Relevant Scottish Transmission Licensee(s)** and each **Scottish User** which is a party to it accompanied by a note indicating the date of implementation.
- (x) **The Company**, the **Relevant Scottish Transmission Licensee(s)** and **Scottish Users** must make the **Local Joint Restoration Plan** readily available to the relevant operational staff.
- (xi) If **The Company**, the **Relevant Scottish Transmission Licensee(s)** or any **Scottish User** which is a party to a **Local Joint Restoration Plan**, becomes aware that a change is needed to that **Local Joint Restoration Plan**, it shall (in the case of **The Company**) initiate a discussion between **The Company**, the **Relevant Scottish Transmission Licensee(s)** and the relevant **Scottish Users** to seek to agree the relevant change. If a **Scottish User** or a **Relevant Scottish Transmission Licensee** becomes so aware, it shall contact **The Company** who will then initiate such discussions. The principles applying to establishing a new **Local Joint Restoration Plan** under this OC9.4.7.12 shall apply to such discussions and to any consequent changes.

(xii) **The Company**, the **Relevant Scottish Transmission Licensee(s)**, the **Network Operator** and the relevant **Generator** will conduct regular joint exercises of the **Local Joint Restoration Plan** to which they are parties. The objectives of such exercises include:

- To test the effectiveness of the **Local Joint Restoration Plan**;
- To provide for joint training of the parties in respect of the **Local Joint Restoration Plan**;
- To maintain the parties' awareness and familiarity of the **Local Joint Restoration Plan**;
- To promote understanding of each parties' roles under a **Local Joint Restoration Plan**;
- To identify any improvement areas which should be incorporated in to the **Local Joint Restoration Plan**.
- The principles applying to the establishment of a new **Local Joint Restoration Plan** under this OC9.4.7.12 shall apply to any changes to the **Local Joint Restoration Plan**.

The Company will propose to the parties of a **Local Joint Restoration Plan** a date for the exercise to take place, to be agreed with the other parties. All the **Local Joint Restoration Plan** parties will jointly share the task of planning, preparing, participating in and facilitating the exercises, which will normally be in desktop format or as otherwise agreed. The precise timing of the exercise for each **Local Joint Restoration Plan** will be agreed by all parties, but will not be less than one every 8 years.

OC9.5

RE-SYNCHRONISATION OF DE-SYNCHRONISED ISLANDS

The provisions in this OC9.5 do not apply to the parts of the **Total System** that normally operate **Out of Synchronism** with the rest of the **National Electricity Transmission System**.

Further requirements, including the provision of information, applying to **Re-synchronisation of De-synchronised Islands** following any **Total Shutdown** or **Partial Shutdown** are detailed in OC9.5.6.

OC9.5.1

- (a) Where parts of the **Total System** are **Out of Synchronism** with each other (each such part being termed a "**De-Synchronised Island**"), but there is no **Total Shutdown** or **Partial Shutdown**, **The Company** will instruct **Users** to regulate generation or **Demand**, as the case may be, to enable the **De-Synchronised Islands** to be **Re-Synchronised** and **The Company** will inform those **Users** when **Re-Synchronisation** has taken place.
- (b) As part of that process, there may be a need to deal specifically with **Embedded** generation in those **De-Synchronised Islands**. This OC9.5 provides for how such **Embedded** generation should be dealt with. In Scotland, this OC9.5 also provides for how **Transmission** connected generation in **De-Synchronised Islands** should be dealt with.
- (c) In accordance with the provisions of the **BC**, **The Company** may decide that, to enable **Re-Synchronisation**, it will issue **Emergency Instructions** in accordance with BC2.9 and it may be necessary to depart from normal **Balancing Mechanism** operation in accordance with **BC2** in issuing **Bid-Offer Acceptances**.

- (d) The provisions of this OC9.5 shall also apply during a **Black Start** to the **Re-Synchronising** of parts of the **System** following a **Total** or **Partial Shutdown**, as indicated in OC9.4. In such cases, the provisions of the OC9.5 shall apply following completion and/or termination of the relevant **Local Joint Restoration Plan(s)** process as referred to in OC9.4.7.6(f).

OC9.5.2 Options

Generation in those **De-Synchronised Islands** may be dealt with in three different ways, more than one of which may be utilised in relation to any particular incident:-

OC9.5.2.1 Indirect Data

- (a) **The Company**, each **Generator** with **Synchronised** (or connected and available to generate although not **Synchronised**) **Genset(s)** in the **De-Synchronised Island** and the **Network Operator** whose **User System** forms all or part of the **De-Synchronised Island** shall exchange information as set out in this OC9.5.2.1 to enable **The Company** to issue a **Bid-Offer Acceptance** or an **Emergency Instruction** to that **Generator** in relation to its **Genset(s)** in the **De-Synchronised Island** until **Re-Synchronisation** takes place, on the basis that it will (where practicable) seek to maintain the **Target Frequency**.
- (b) The information to **The Company** from the **Generator** will cover its relevant operational parameters as outlined in the **BC** and from **The Company** to the **Generator** will cover data on **Demand** and changes in **Demand** in the **De-Synchronised Island**.
- (c) The information from the **Network Operator** to **The Company** will comprise data on **Demand** in the **De-Synchronised Island**, including data on any constraints within the **De-Synchronised Island**.
- (d) **The Company** will keep the **Network Operator** informed of the **Bid-Offer Acceptances** or **Emergency Instructions** it is issuing to **Embedded Genset(s)** within the **Network Operator's User System** forming part of the **De-Synchronised Island**.

OC9.5.2.2 Direct Data

- (a) **The Company** will issue an **Emergency Instruction** and/or a **Bid-Offer Acceptance**, to the **Generator** to "float" local **Demand** and maintain **Frequency** at **Target Frequency**. Under this, the **Generator** will be required to regulate the output of its **Genset(s)** at the **Power Station** in question to the **Demand** prevailing in the **De-Synchronised Island** in which it is situated, until **Re-Synchronisation** takes place, on the basis that it will (where practicable) seek to maintain the **Target Frequency**.
- (b) The **Network Operator** is required to be in contact with the **Generator** at the **Power Station** to supply data on **Demand** changes within the **De-Synchronised Island**.
- (c) If more than one **Genset** is **Synchronised** on the **De-Synchronised Island**, or is connected to the **De-Synchronised Island** and available to generate although not **Synchronised**, the **Network Operator** will need to liaise with **The Company** to agree which **Genset(s)** will be utilised to accommodate changes in **Demand** in the **De-Synchronised Island**. The **Network Operator** will then maintain contact with the relevant **Generator** (or **Generators**) in relation to that **Genset(s)**.
- (d) The **Generator** at the **Power Station** must contact the **Network Operator** if the level of **Demand** which it has been asked to meet as a result of the **Emergency Instruction** and/or **Bid-Offer Acceptance** to "float" and the detail on **Demand** passed on by the **Network Operator**, is likely to cause problems for safety reasons (whether relating to personnel or **Plant** and/or **Apparatus**) in the operation of its **Genset(s)**, in order that the **Network Operator** can alter the level of **Demand** which that **Generator** needs to meet. Any decision to operate outside any relevant parameters is one entirely for the **Generator**.

OC9.5.2.3 Control Features

- (a) A system may be established in relation to a part of the **National Electricity Transmission System** and a **Network Operator's User System**, if agreed between **The Company** and the **Network Operator** and any relevant **Generator(s)**, whereby upon a defined fault(s) occurring, manual or automatic control features will operate to protect the **National Electricity Transmission System** and relevant **Network Operator's User System** and **Genset(s)** and simplify the restoration of **Demand** in the **De-Synchronised Island**.
- (b) In agreeing the establishment of such a system of control features **The Company** will need to consider its impact on the operation of the **National Electricity Transmission System**.

OC9.5.2.4 Absence of Control Features System

If a system of control features under OC9.5.2.3 has not been agreed as part of an **OC9 De-Synchronised Island Procedure** under OC9.5.4 below, **The Company** may choose to utilise the procedures set out in OC9.5.2.1 or OC9.5.2.2, or may instruct the **Genset(s)** (or some of them) in the **De-Synchronised Island** to **De-Synchronise**.

OC9.5.3 Choice Of Option

In relation to each of the methods set out in OC9.5.2, where a **De-Synchronised Island** has come into existence and where an **OC9 De-Synchronised Island Procedure** under OC9.5.4 has been agreed, **The Company**, the **Network Operator** and relevant **Generator(s)** will operate in accordance with that **OC9 De-Synchronised Islands Procedure** unless **The Company** considers that the nature of the **De-Synchronised Island** situation is such that either:-

- (i) the **OC9 De-Synchronised Island Procedure** does not cover the situation; or
- (ii) the provisions of the **OC9 De-Synchronised Island Procedure** are not appropriate,

in which case **The Company** will instruct the relevant **Users** and the **Users** will comply with **The Company's** instructions (which in the case of **Generators** will relate to generation and in the case of **Network Operators** will relate to **Demand**).

OC9.5.4 Agreeing Procedures

In relation to each relevant part of the **Total System**, **The Company**, the **Network Operator** and the relevant **Generator** will discuss and may agree a local procedure (an "**OC9 De-Synchronised Island Procedure**").

OC9.5.4.1 Where there is no relevant local procedure in place at 12th May 1997, or in the case where the need for an **OC9 De-Synchronised Island Procedure** arises for the first time, the following provisions shall apply:

- (a) **The Company**, the **Network Operator(s)** and the relevant **Generator(s)** will discuss the need for, and the detail of, the **OC9 De-Synchronised Island Procedure**. As soon as the need for an **OC9 De-Synchronised Island Procedure** is identified by **The Company** or a **User**, and the party which identifies such a need will notify all affected **Users** (and **The Company**, if that party is a **User**), and **The Company** will initiate these discussions.
- (b) Each **OC9 De-Synchronised Island Procedure** will be in relation to a specific **Grid Supply Point**, but if there is more than one **Grid Supply Point** between **The Company** and the **Network Operator** then the **OC9 De-Synchronised Island Procedure** may cover all relevant **Grid Supply Points**. In Scotland, the **OC9 De-Synchronised Island Procedure** may also cover parts of the **National Electricity Transmission System** connected to the **User's System(s)** and **Power Stations** directly connected to the **National Electricity Transmission System** which are also likely to form part of the **Power Island**.
- (c) The **OC9 De-Synchronised Island Procedure** will:
 - (i) record which **Users** and which **User Sites** are covered by the **OC9 De-Synchronised Island Procedure**;
 - (ii) record which of the three methods set out in OC9.5 (or combination of the three) shall apply, with any conditions as to applicability being set out as well;
 - (iii) set out what is required from **The Company** and each **User** should a **De-Synchronised Island** arise;
 - (iv) set out what action should be taken if the **OC9 De-Synchronised Island Procedure** does not cover a particular set of circumstances and will reflect that in the absence of any specified action, the provisions of OC9.5.3 will apply;
 - (v) in respect of **Scottish Transmission Systems**, the **OC9 De-Synchronised Island Procedure** may be produced with and include obligations on the **Relevant Scottish Transmission Licensee(s)** ; and
 - (vi) in respect of **Scottish Transmission Systems**, where the **OC9 De-Synchronised Island Procedure** includes the establishment of a **De-synchronised Island**, describe the route for establishment of the **De-Synchronised Island**.
- (d) Each **OC9 De-Synchronised Island Procedure** shall be prepared by **The Company** to reflect the above discussions.
- (e) Each page of the **OC9 De-Synchronised Island Procedure** shall bear a date of issue and the issue number.
- (f) When an **OC9 De-Synchronised Island Procedure** is prepared, it shall be sent by **The Company** to the **Users** involved for confirmation of its accuracy.
- (g) The **OC9 De-Synchronised Island Procedure** shall then be signed on behalf of **The Company** and on behalf of each relevant **User** by way of written confirmation of its accuracy.

- (h) Once agreed under this OC9.5.4.1, the procedure will become an **OC9 De-Synchronised Island Procedure** under the **Grid Code** and (subject to any change pursuant to this OC9) will apply between **The Company**, **Relevant Transmission Licensee** and the relevant **Users** as if it were part of the **Grid Code**.
- (i) Once signed, a copy will be distributed by **The Company** to each **User** which is a party accompanied by a note indicating the issue number and the date of implementation.
- (j) **The Company** and **Users** must make the **OC9 De-Synchronised Island Procedure** readily available to the relevant operational staff.
- (k) If a new **User** connects to the **Total System** and needs to be included with an existing **OC9 De-Synchronised Island Procedure**, **The Company** will initiate a discussion with that **User** and the **Users** which are parties to the relevant **OC9 De-Synchronised Island Procedure**. The principles applying to a new **OC9 De-Synchronised Island Procedure** under this OC9.5.4.1 shall apply to such discussions and to any consequent changes.
- (l) If **The Company**, or any **User** which is a party to an **OC9 De-Synchronised Island Procedure**, becomes aware that a change is needed to that **OC9 De-Synchronised Island Procedure**, it shall (in the case of **The Company**) initiate a discussion between **The Company** and the relevant **Users** to seek to agree the relevant change. The principles applying to establishing a new **OC9 De-Synchronised Island Procedure** under this OC9.5.4.1 shall apply to such discussions and to any consequent changes. If a **User** becomes so aware, it shall contact **The Company** who will then initiate such discussions.
- (m) If in relation to any discussions, agreement cannot be reached between **The Company** and the relevant **Users**, **The Company** will operate the **System** on the basis that it will discuss which of the three methods set out in OC9.5.2.1 to OC9.5.2.3 would be most appropriate at the time, if practicable. The complexities and uncertainties of recovery from a **De-Synchronised Island** means that **The Company** will decide, having discussed the situation with the relevant **Users** and taking into account the fact that the three methods may not cover the situation or be appropriate, the approach which is to be followed. **The Company** will instruct the relevant **Users** and the **Users** will comply with **The Company 's** instructions as provided in OC9.5.3.

OC9.5.4.2 Where there is a relevant local procedure in place at 12th May 1997, the following provisions shall apply:

- (a) **The Company** and the **Network Operator** and the relevant **Generator(s)** will discuss the existing procedure to see whether it is consistent with the principles set out in this OC9.5.
- (b) If it is, then it shall become an **OC9 De-Synchronised Island Procedure** under this **OC9**, and the relevant provisions of OC9.5.4.1 shall apply.
- (c) If it is not, then the parties will discuss what changes are needed to ensure that it is consistent, and once agreed the procedure will become an **OC9 De-Synchronised Island Procedure** under this **OC9**, and the relevant provisions of OC9.5.4.1 shall apply.
- (d) If agreement cannot be reached between **The Company** and the relevant **Users** after a reasonable period of time, the existing procedure will cease to apply and **The Company** will operate the **System** on the basis that it will discuss which of the three methods set out in OC9.5.2.1 to OC9.5.2.3 would be most appropriate at the time, if practicable. The complexities and uncertainties of recovery from a **De-Synchronised Island** means that **The Company** will decide, having discussed the situation with the relevant **Users** and taking into account the fact that the three methods may not cover the situation or be appropriate, the approach which is to be followed. **The Company** will instruct the relevant **Users** and the **Users** will comply with **The Company 's** instructions as provided in OC9.5.3.

OC9.5.5 Where the **National Electricity Transmission System** is **Out of Synchronism** with the **Transmission System** of an **Externally Interconnected System Operator**, **The Company** will, pursuant to the **Interconnection Agreement** with that **Externally Interconnected System Operator**, agree with that **Externally Interconnected System Operator** when its **Transmission System** can be **Re-Synchronised** to the **National Electricity Transmission System**.

OC9.5.6 Further requirements regarding **Re-synchronisation** of **De-synchronised Islands** following any **Total Shutdown** or **Partial Shutdown**

Following any **Total Shutdown** or **Partial Shutdown**, **The Company** expects that it will be necessary to interconnect **Power Islands** utilising the provisions of OC9.5. The complexities and uncertainties of recovery from a **Total Shutdown** or **Partial Shutdown** requires the provisions of OC9.5 to be flexible, however, the strategies which **The Company** will, where practicable, be seeking to follow when **Re-synchronising De-synchronised Islands** following any **Total Shutdown** or **Partial Shutdown**, include the following:

- (a) the provision of supplies to appropriate **Power Stations** to facilitate their synchronisation as soon as practicable;
- (b) energisation of a skeletal **National Electricity Transmission System**;
- (c) the strategic restoration of **Demand** in co-ordination with relevant **Network Operators**.

As highlighted in OC9.4.3, during a **Total Shutdown** or **Partial Shutdown** and during the subsequent recovery, which includes any period during which the procedures in this OC9.5 apply, the **Licence Standards** may not apply and the **Total System** may be operated outside normal voltage and **Frequency** standards.

OC9.5.7 To manage effectively and co-ordinate the restoration strategies of the **Total System** (any **Re-Synchronisation** of **De-Synchronised Islands**) following any **Total Shutdown** or **Partial Shutdown**, requires **The Company** and relevant **Users** to undertake certain planning activities as set out below:

- (a) **The Company** and **Network Operators** shall review on a regular basis the processes by which each **Power Island** will be interconnected. This is likely to cover an exchange of information regarding the typical size, location and timing requirements for **Demand** to be reconnected and also include details (ability to change/disable) of the low frequency trip relay settings of the **Demand** identified.
- (b) Each **Generator** shall provide to **The Company** information to assist **The Company** in the formulation of the restoration strategies of **Power Island** expansion. This information shall be provided in accordance with PC.A.5.7.

OC9.6 JOINT SYSTEM INCIDENT PROCEDURE

OC9.6.1 A "**Joint System Incident**" is

- (a) an **Event**, wherever occurring (other than on an **Embedded Small Power Station** or **Embedded Medium Power Station**), which, in the opinion of **The Company** or a **User**, has or may have a serious and/or widespread effect.
- (b) In the case of an **Event** on a **User(s) System(s)** (other than on an **Embedded Small Power Station** or **Embedded Medium Power Station**), the effect must be on the **National Electricity Transmission System**, and in the case of an **Event** on the **National Electricity Transmission System**, the effect must be on a **User(s) System(s)** (other than on an **Embedded Small Power Station** or **Embedded Medium Power Station**).

Where an **Event** on a **User(s) System(s)** has or may have no effect on the **National Electricity Transmission System**, then such an **Event** does not fall within **OC9** and accordingly **OC9** shall not apply to it.

- OC9.6.2 (a) (i) Each **User** (other than **Generators** which only have **Embedded Small Power Stations** and/or **Embedded Medium Power Stations**) will provide in writing to **The Company**, and
- (ii) **The Company** will provide in writing to each **User** (other than **Generators** which only have **Embedded Small Power Stations** and/or **Embedded Medium Power Stations**), a telephone number or numbers at which, or through which, senior management representatives nominated for this purpose and who are fully authorised to make binding decisions on behalf of **The Company** or the relevant **User**, as the case may be, can be contacted day or night when there is a **Joint System Incident**.
- (b) The lists of telephone numbers will be provided in accordance with the timing requirements of the **Bilateral Agreement** and/or **Construction Agreement** with that **User**, prior to the time that a **User** connects to the **National Electricity Transmission System** and must be up-dated (in writing) as often as the information contained in them changes.
- OC9.6.3 Following notification of an **Event** under **OC7**, **The Company** or a **User**, as the case may be, will, if it considers necessary, telephone the **User** or **The Company**, as the case may be, on the telephone number referred to in OC9.6.2, to obtain such additional information as it requires.
- OC9.6.4 Following notification of an **Event** under **OC7**, and/or the receipt of any additional information requested pursuant to OC9.6.3, **The Company** or a **User**, as the case may be, will determine whether or not the **Event** is a **Joint System Incident**, and, if so, **The Company** and/or the **User** may set up an **Incident Centre** in order to avoid overloading the existing **The Company** or that **User's**, as the case may be, operational/control arrangements.
- OC9.6.5 Where **The Company** has determined that an **Event** is a **Joint System Incident**, **The Company** shall, as soon as possible, notify all relevant **Users** that a **Joint System Incident** has occurred and, if appropriate, that it has established an **Incident Centre** and the telephone number(s) of its **Incident Centre** if different from those already supplied pursuant to OC9.6.2.
- OC9.6.6 If a **User** establishes an **Incident Centre** it shall, as soon as possible, notify **The Company** that it has been established and the telephone number(s) of the **Incident Centre** if different from those already supplied pursuant to OC9.6.2.
- OC9.6.7 **The Company's Incident Centre** and/or the **User's Incident Centre** will not assume any responsibility for the operation of the **National Electricity Transmission System** or **User's System**, as the case may be, but will be the focal point in **The Company** or the **User**, as the case may be, for:
- (a) the communication and dissemination of information between **The Company** and the senior management representatives of **User(s)**; or
- (b) between the **User** and the senior management representatives of **The Company**, as the case may be,
- relating to the **Joint System Incident**. The term "**Incident Centre**" does not imply a specially built centre for dealing with **Joint System Incidents**, but is a communications focal point. During a **Joint System Incident**, the normal communication channels, for operational/control communication between **The Company** and **Users** will continue to be used.
- OC9.6.8 All communications between the senior management representatives of the relevant parties with regard to **The Company's** role in the **Joint System Incident** shall be made via **The Company's Incident Centre** if it has been established.
- OC9.6.9 All communications between the senior management representatives of **The Company** and a **User** with regard to that **User's** role in the **Joint System Incident** shall be made via that **User's Incident Centre** if it has been established.

- OC9.6.10 **The Company** will decide when conditions no longer justify the need to use its **Incident Centre** and will inform all relevant **Users** of this decision.
- OC9.6.11 Each **User** which has established an **Incident Centre** will decide when conditions no longer justify the need to use that **Incident Centre** and will inform **The Company** of this decision.

< END OF OPERATING CODE NO. 9 >

OPERATING CODE NO. 10
(OC10)

EVENT INFORMATION SUPPLY

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OC10.1 INTRODUCTION

OC10.1.1. **Operating Code No.10** ("OC10") sets out:

OC10.1.1.1 the requirements for the reporting in writing and, where appropriate, more fully, those **Significant Incidents** which were initially reported to **The Company** or a **User** orally under **OC7**; and

OC10.1.1.2 the mechanism for the joint investigation of a **Significant Incident** or a series of **Significant Incidents** if **The Company** and the relevant **Users** agree.

OC10.2 OBJECTIVE

The objective of **OC10** is to facilitate the provision of more detailed information, in writing, of **Significant Incidents** which were initially orally reported under **OC7** and to enable joint investigations to take place if **The Company** and the relevant **Users** agree.

OC10.3 SCOPE

OC10.3.1 **OC10** applies to **The Company** and to **Users**, which in **OC10** means:-

- (a) **Generators** (other than those which only have **Embedded Small Power Stations** and/or **Embedded Medium Power Stations**);
- (b) **Network Operators**;
- (c) **Non-Embedded Customers**;
- (d) **DC Converter Station** owners; and
- (e) **HVDC System Owners**.

The procedure for **Event** information supply between **The Company** and **Externally Interconnected System Operators** is set out in the **Interconnection Agreement** with each **Externally Interconnected System Operator**.

OC10.4 PROCEDURE

OC10.4.1 Reporting

OC10.4.1.1 Written Reporting Of Events By Users To The Company

In the case of an **Event** which was initially reported by a **User** to **The Company** orally and subsequently determined by **The Company** to be a **Significant Incident**, and accordingly notified by **The Company** to a **User** pursuant to **OC7**, the **User** will give a written report to **The Company**, in accordance with **OC10**. **The Company** will not pass on this report to other affected **Users** but may use the information contained therein in preparing a report under **OC10** to another **User** (or in a report which **The Company** is required to submit under an **Interconnection Agreement**) in relation to a **Significant Incident** (or its equivalent under an **Interconnection Agreement** or **STC**) on the **National Electricity Transmission System** which has been caused by (or exacerbated by) the **Significant Incident** on the **User's System**.

OC10.4.1.2 Written Reporting Of Events By The Company To Users

In the case of an **Event** which was initially reported by **The Company** to a **User** orally and subsequently determined by the **User** to be a **Significant Incident**, and accordingly notified by the **User** to **The Company** pursuant to **OC7**, **The Company** will give a written report to the **User**, in accordance with **OC10**. The **User** will not pass on the report to other affected **Users** but:

- (a) a **Network Operator** may use the information contained therein in preparing a written report to a **Generator** with a **Power Generating Module** and/or **Generating Unit** and/or a **Power Park Module** connected to its **System** or to a **DC Converter Station** owner with a **DC Converter** connected to its **System** or to an **HVDC System Owner** with a **HVDC System** connected to its **System** or to another operator of a **User System** connected to its **System** in connection with reporting the equivalent of a **Significant Incident** under the **Distribution Code** (or other contract pursuant to which that **Power Generating Module** and/or **Generating Unit** and/or that **Power Park Module** or that **DC Converter** or that **HVDC System** or **User System** is connected to its **System**) (if the **Significant Incident** on the **National Electricity Transmission System** caused or exacerbated it); and
- (b) a **Generator** may use the information contained therein in preparing a written report to another **Generator** with a **Power Generating Module**, **Generating Unit** or a **Power Park Module** connected to its **System** or to the operator of a **User System** connected to its **System** if it is required (by a contract pursuant to which that **Power Generating Module** and/or **Generating Unit** and/or a **Power Park Module** or that is connected to its **System**) to do so in connection with the equivalent of a **Significant Incident** on its **System** (if the **Significant Incident** on the **National Electricity Transmission System** caused or exacerbated it).

OC10.4.1.3 Form

A report under OC10.4.1 shall be sent to **The Company** or to a **User**, as the case may be, and will contain a confirmation of the oral notification given under **OC7** together with more details relating to the **Significant Incident** although it (and any response to any question asked) need not state the cause of the **Event** save to the extent permitted under OC7.4.6.7 and OC7.4.6.9, and such further information which has become known relating to the **Significant Incident** since the oral notification under **OC7**. The report should, as a minimum, contain those matters specified in the Appendix to **OC10**. The Appendix is not intended to be exhaustive. **The Company** or the **User**, as the case may be, may raise questions to clarify the notification and the giver of the notification will, in so far as it is able, answer any questions raised.

OC10.4.1.4 Timing

A full written report under OC10.4.1 must, if possible, be received by **The Company** or the **User**, as the case may be, within 2 hours of **The Company** or the **User**, as the case may be, receiving oral notification under **OC7**. If this is not possible, the **User** or **The Company**, as the case may be, shall, within this period, submit a preliminary report setting out, as a minimum, those matters specified in the Appendix to **OC10**. As soon as reasonably practical thereafter, the **User** or **The Company**, as the case may be, shall submit a full written report containing the information set out in OC10.4.1.3.

OC10.4.2 Joint Investigations

OC10.4.2.1 Where a **Significant Incident** (or series of **Significant Incidents**) has been declared and a report (or reports) under **OC10** submitted, **The Company** or a **User** which has either given or received a written report under **OC10** may request that a joint investigation of a **Significant Incident** should take place.

OC10.4.2.2 Where there has been a series of **Significant Incidents** (that is to say, where a **Significant Incident** has caused or exacerbated another **Significant Incident**) the party requesting a joint investigation or the recipient of such a request, may request that the joint investigation should include an investigation into that other **Significant Incident** (or **Significant Incidents**).

OC10.4.2.3 **The Company** or a **User** may also request that:

- (i) an **Externally Interconnected System Operator** and/or
- (ii) **Interconnector User** or

- (iii) (in the case of a **Network Operator**) a **Generator** with a **Power Generating Module** and/or a **Generating Unit** and/or a **Power Park Module** or a **DC Converter Station** owner with **DC Converter** connected to its **System** or an **HVDC System Owner** with a **HVDC System** connected to its **System** or another **User System** connected to its **System** or
- (iv) (in the case of a **Generator**) another **Generator** with a **Power Generating Module** and/or a **Generating Unit** and/or a **Power Park Module** connected to its **System** or a **User System** connected to its **System**.

be included in the joint investigation.

- OC10.4.2.4 A joint investigation will only take place if **The Company** and the **User** or **Users** involved agree to it (including agreement on the involvement of other parties referred to in OC10.4.2.3). The form and rules of, the procedure for, and all matters (including, if thought appropriate, provisions for costs and for a party to withdraw from the joint investigation once it has begun) relating to the joint investigation will be agreed at the time of a joint investigation and in the absence of agreement the joint investigation will not take place.
- OC10.4.2.5 Requests relating to a proposed joint investigation will be in writing.
- OC10.4.2.6 Any joint investigation under **OC10** is separate to any investigation under the **Disputes Resolution Procedure**.

APPENDIX 1 - MATTERS TO BE INCLUDED IN A WRITTEN REPORT

MATTERS, IF APPLICABLE TO THE SIGNIFICANT INCIDENT AND TO THE RELEVANT USER (OR THE COMPANY, AS THE CASE MAY BE) TO BE INCLUDED IN A WRITTEN REPORT GIVEN IN ACCORDANCE WITH OC10.4.1 AND OC10.4.2

1. Time and date of **Significant Incident**.
2. Location.
3. **Plant** and/or **Apparatus** directly involved (and not merely affected by the **Event**).
4. Description of **Significant Incident**.
5. **Demand** (in MW) and/or generation (in MW) interrupted and duration of interruption.
6. **Power Generating Module, Generating Unit, Power Park Module, HVDC System or DC Converter - Frequency** response (MW correction achieved subsequent to the **Significant Incident**).
7. **Power Generating Module, Generating Unit, Power Park Module, HVDC System or DC Converter - MVAR** performance (change in output subsequent to the **Significant Incident**).
8. Estimated time and date of return to service.

< END OF OPERATING CODE NO. 10 >

OPERATING CODE NO. 11
(OC11)

**NUMBERING AND NOMENCLATURE OF
HIGH VOLTAGE APPARATUS AT CERTAIN SITES**

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OC11.1 INTRODUCTION

OC11.1.1 **Operating Code No.11 ("OC11")** sets out the requirement that:

- (a) **Transmission HV Apparatus** on **Users' Sites**; and
- (b) **User HV Apparatus** on **Transmission Sites**; and
- (c) **OTSDUW HV Apparatus** on both **Users Sites** and the **Transmission Sites**;

shall have numbering and nomenclature in accordance with the system used from time to time by **The Company**.

OC11.1.2 The numbering and nomenclature (if required under the system of numbering and nomenclature used from time to time by **The Company**) of each item of **HV Apparatus** shall be included in the **Operation Diagram** prepared for each **Transmission Site** or **User Site**, as the case may be. Further provisions on **Operation Diagrams** are contained in the **Connection Conditions** and in each **Bilateral Agreement**.

OC11.1.3 In **OC11** the term "**HV Apparatus**" includes any **SF₆ Gas Zones** associated with any **HV Apparatus**.

OC11.1.4 In **OC11** the term "**OTSDUW HV Apparatus**" applies to any **HV Apparatus** installed by a **User** as **OTSDUW** until it is accepted on to the **National Electricity Transmission System** at which time for the purposes of **OC11** it will be termed **Transmission HV Apparatus**.

OC11.2 OBJECTIVE

OC11.2.1 The overall objective of **OC11** is to ensure, so far as possible, the safe and effective operation of the **Total System** and to reduce the risk of human error faults by requiring, in certain circumstances, that the numbering and nomenclature of **Users HV Apparatus** and **OTSDUW HV Apparatus** shall be in accordance with the system used from time to time by **The Company**.

OC11.3 SCOPE

OC11.3.1 **OC11** applies to **The Company** and to **Users**, which in **OC11** means:-

- (a) **Generators**;
- (b) **Generators** undertaking **OTSDUW**;
- (c) **Network Operators**;
- (d) **Non-Embedded Customers**;
- (e) **DC Converter Station** owners; and
- (f) **HVDC System Owners**

OC11.4 PROCEDURE

OC11.4.1.1 The term "**User Site**" means a site owned (or occupied pursuant to a lease, licence or other agreement) by a **User** in which there is a **Connection Point** (and in the case of **OTSDUW**, where there is a **Connection Point** or an **Interface Point**). For the avoidance of doubt, where a site is owned by **The Company** (in England and Wales) or a **Relevant Transmission Licensee** (in Scotland or **Offshore**) but occupied by a **User** (as aforesaid), the site is a **User Site**.

OC11.4.1.2 The term "**Transmission Site**" means a site owned (or occupied pursuant to a lease, licence or other agreement) by **The Company** (in England and Wales) or by a **Relevant Transmission Licensee** (in Scotland or **Offshore**) in which there is a **Connection Point** (or in the case of **OTSDUW**, an **Interface Point**). For the avoidance of doubt, where a site is owned by a **User** but occupied by **The Company** (in England and Wales) or a **Relevant Transmission Licensee** (in Scotland or **Offshore**)(as aforesaid), the site is an **Transmission Site**.

OC11.4.2

Transmission HV Apparatus Or OTSDUW HV Apparatus On Users' Sites

- (a) **Transmission HV Apparatus** or **OTSDUW HV Apparatus** on **Users' Sites** shall have numbering and nomenclature in accordance with the system used from time to time by **The Company**;
- (b) when **The Company** (for sites in England and Wales) or the **Relevant Transmission Licensee** (for sites in Scotland or **Offshore**) is to install its **HV Apparatus** on a **Users Site**, **The Company** shall (unless it gives rise to a **Modification** under the **CUSC**, in which case the provisions of the **CUSC** as to the timing apply) notify the relevant **User** of the numbering and nomenclature to be adopted for that **HV Apparatus** at least eight months prior to proposed installation. When **OTSDUW HV Apparatus** is to be installed on a **Users Site**, **The Company** shall notify the relevant **User** of the numbering and nomenclature to be adopted for that **OTSDUW HV Apparatus** at least eight months prior to proposed installation;
- (c) in the case of **HV Apparatus**, the notification will be made in writing to the relevant **User** and will consist of both a proposed **Operation Diagram** incorporating the proposed new **Transmission HV Apparatus** to be installed, its proposed numbering and nomenclature, and the date of its proposed installation. In the case of **OTSDUW HV Apparatus**, the notification will be provided as part of the **OTSDUW Network Data and Information**;
- (d) the relevant **User** will respond in writing to **The Company** within one month of the receipt of the notification, confirming receipt and confirming either that any other **HV Apparatus** of the relevant **User** on such **User Site** does not have numbering and/or nomenclature which could be confused with that proposed by **The Company**, or, to the extent that it does, that the relevant other numbering and/or nomenclature will be changed before installation of the **Transmission HV Apparatus** or **OTSDUW HV Apparatus**;
- (e) the relevant **User** will not install, or permit the installation of, any **HV Apparatus**, including **OTSDUW HV Apparatus** on such **User Site** which has numbering and/or nomenclature which could be confused with **Transmission HV Apparatus** which is either already on that **User Site** or which **The Company** has notified that **User** will be installed on that **User Site**.

OC11.4.3

User HV Apparatus Or OTSDUW HV Apparatus On Transmission Sites

- (a) **User HV Apparatus** and any **OTSDUW HV Apparatus** on **Transmission Sites** shall have numbering and nomenclature in accordance with the system used from time to time by **The Company**;
- (b) when a **User** is to install its **HV Apparatus** on an **Transmission Site**, or it wishes to replace existing **HV Apparatus** on an **Transmission Site** and it wishes to adopt new numbering and nomenclature for such **HV Apparatus**, the **User** shall (unless it gives rise to a **Modification** under the **CUSC** in which case the provisions of the **CUSC** as to the timing apply) notify **The Company** of the details of the **HV Apparatus** and the proposed numbering and nomenclature to be adopted for that **HV Apparatus**, at least eight months prior to proposed installation;
- (c) the notification will be made in writing to **The Company** and shall consist of both a proposed **Operation Diagram** incorporating the proposed new **HV Apparatus** of the **User** to be installed, its proposed numbering and nomenclature, and the date of its proposed installation;
- (d) **The Company** will respond in writing to the **User** within one month of the receipt of the notification stating whether or not **The Company** accepts the **User's** proposed numbering and nomenclature and, if they are not acceptable, it shall give details of the numbering and nomenclature which the **User** shall adopt for that **HV Apparatus**;
- (e) when a **User** is to install **OTSDUW HV Apparatus** on a **Transmission Site**, **The Company** shall notify the relevant **User** of the numbering and nomenclature to be adopted for that **HV Apparatus** at least eight months prior to proposed installation. This notification will be provided as part of the **OTSDUW Network Data and Information**.

OC11.4.4 Changes

Where **The Company** in its reasonable opinion has decided that it needs to change the existing numbering or nomenclature of **Transmission HV Apparatus** on a **Users Site** or of **Users HV Apparatus** on an **Transmission Site**:

- (a) the provisions of paragraph OC11.4.2 shall apply to such change of numbering or nomenclature of **Transmission HV Apparatus** with any necessary amendments to those provisions to reflect that only a change is being made; and
- (b) in the case of a change in the numbering or nomenclature of **Users HV Apparatus** on an **Transmission Site**, **The Company** will (unless it gives rise to a **Modification** under the **CUSC**, in which case the provisions of the **CUSC** as to the timing apply) notify the **User** of the numbering and/or nomenclature the **User** shall adopt for that **HV Apparatus** (the notification to be in a form similar to that envisaged under OC11.4.2) at least eight months prior to the change being needed and the **User** will respond in writing to **The Company** within one month of the receipt of the notification, confirming receipt.

In either case the notification shall indicate the reason for the proposed change.

OC11.4.5 **Users** will be provided upon request with details of **The Company's** then current numbering and nomenclature system in order to assist them in planning the numbering and nomenclature for their **HV Apparatus** or **OTSDUW HV Apparatus** on **Transmission Sites** and **OTSDUW HV Apparatus** on **Users Sites**.

OC11.4.6 When a **User** installs **HV Apparatus** or **OTSDUW HV Apparatus** which is the subject of **OC11**, the **User** shall be responsible for the provision and erection of clear and unambiguous labelling showing the numbering and nomenclature. Where a **User** is required by **OC11** to change the numbering and/or nomenclature of **HV Apparatus** which is the subject of **OC11**, the **User** will be responsible for the provision and erection of clear and unambiguous labelling by the required date.

When either **The Company** (for sites in England and Wales), or a **Relevant Transmission Licensee** (for sites in Scotland or **Offshore**) installs **HV Apparatus** which is the subject of **OC11**, **The Company** shall be responsible for the provision and erection of a clear and unambiguous labelling showing the numbering and nomenclature. Where **The Company** changes the numbering and /or nomenclature of **HV Apparatus** which is the subject of **OC11**, **The Company** will be responsible for the provision and erection of clear and unambiguous labelling showing the numbering and nomenclature by the required date.

OC11.4.7 For sites in England and Wales, **The Company** will not change its system of numbering and nomenclature in use immediately prior to the **Transfer Date** (which is embodied in OM5 (Operation Memorandum No.5 - Numbering and Nomenclature of HV Apparatus on the CEGB Grid System Issue 3 June 1987)), other than to reflect new or newly adopted technology or **HV Apparatus**. For the avoidance of doubt, this OC11.4.7 refers to the system of numbering and nomenclature, and does not preclude changes to the numbering and/or nomenclature of **HV Apparatus** which are necessary to reflect newly installed **HV Apparatus**, or re-configuration of **HV Apparatus** installed, and similar changes being made in accordance with that system of numbering and nomenclature.

< END OF OPERATING CODE NO. 11 >

OPERATING CODE NO. 12
(OC12)

SYSTEM TESTS

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OC12.1 INTRODUCTION

OC12.1.1 **Operating Code No.12 ("OC12")** relates to **System Tests**, which are tests which involve simulating conditions or the controlled application of irregular, unusual or extreme conditions, on the **Total System** or any part of the **Total System**, but which do not include commissioning or recommissioning tests or any other tests of a minor nature.

OC12.1.2 **OC12** deals with the responsibilities and procedures for arranging and carrying out **System Tests** which have (or may have) an effect on the **Systems** of **The Company** and **Users** and/or on the **System** of any **Externally Interconnected System Operator**. Where a **System Test** proposed by a **User** will have no effect on the **National Electricity Transmission System**, then such a **System Test** does not fall within **OC12** and accordingly **OC12** shall not apply to it. A **System Test** proposed by **The Company** which will have an effect on the **System** of a **User** will always fall within **OC12**.

OC12.2 OBJECTIVE

The overall objectives of **OC12** are:

OC12.2.1 to ensure, so far as possible, that **System Tests** proposed to be carried out either by:

- (a) a **User** (or certain persons in respect of **Systems Embedded** within a **Network Operator's System**) which may have an effect on the **Total System** or any part of the **Total System** (in addition to that **User's System**) including the **National Electricity Transmission System**; or
- (b) by **The Company** which may have an effect on the **Total System** or any part of the **Total System** (in addition to the **National Electricity Transmission System**)

do not threaten the safety of either their personnel or the general public, cause minimum threat to the security of supplies and to the integrity of **Plant** and/or **Apparatus**, and cause minimum detriment to **The Company** and **Users**;

OC12.2.2 to set out the procedures to be followed for establishing and reporting **System Tests**.

OC12.3 SCOPE

OC12 applies to **The Company** and to **Users**, which in **OC12** means:-

- (a) **Generators** other than in respect of **Embedded Medium Power Stations** and **Embedded Small Power Stations** (and the term **Generator** in **OC12** shall be constructed accordingly);
- (b) **Network Operators**;
- (c) **Non-Embedded Customers**; and
- (d) **DC Converter Station** owners other than in respect of **Embedded DC Converter Stations**.
- (e) **HVDC System Owners** other than in respect of **Embedded HVDC Systems**.

The procedure for the establishment of **System Tests** on the **National Electricity Transmission System**, with **Externally Interconnected System Operators** which do not affect any **User**, is set out in the **Interconnection Agreement** with each **Externally Interconnected System Operator**. The position of **Externally Interconnected System Operators** and **Interconnector Users** is also referred to in **OC12.4.2**.

OC12.3.2 Each **Network Operator** will liaise within **The Company** as necessary in those instances where an **Embedded Person** intends to perform a **System Test** which may have an effect on the **Total System** or any part of the **Total System** (in addition to that **Generator's** or other **User's System**) including the **National Electricity Transmission System**. **The Company** is not required to deal with such persons.

OC12.3.3 Each **Network Operator** shall be responsible for co-ordinating with the **Embedded Person** or such other person and assessing the effect of any **System Tests** upon:

- (a) any **Embedded Medium Power Station, Embedded Small Power Stations, Embedded HVDC System** or **Embedded DC Converter Station** within the **Network Operator's System**; or
- (b) any other **User** connected to or within the **Network Operator's System**.

The Company is not required to deal with such persons.

OC12.4 PROCEDURE

OC12.4.1 Proposal Notice

OC12.4.1.1 Where a **User** (or in the case of a **Network Operator**, a person in respect of **Systems Embedded** within its **System**, as the case may be) has decided that it would like to undertake a **System Test** it shall submit a notice (a "**Proposal Notice**") to **The Company** at least twelve months in advance of the date it would like to undertake the proposed **System Test**.

OC12.4.1.2 The **Proposal Notice** shall be in writing and shall contain details of the nature and purpose of the proposed **System Test** and shall indicate the extent and situation of the **Plant** and/or **Apparatus** involved.

OC12.4.1.3 If **The Company** is of the view that the information set out in the **Proposal Notice** is insufficient, it will contact the person who submitted the **Proposal Notice** (the "**Test Proposer**") as soon as reasonably practicable, with a written request for further information. **The Company** will not be required to do anything under **OC12** until it is satisfied with the details supplied in the **Proposal Notice** or pursuant to a request for further information.

OC12.4.1.4 If **The Company** wishes to undertake a **System Test**, **The Company** shall be deemed to have received a **Proposal Notice** on that **System Test**

OC12.4.1.5 Where, under **OC12**, **The Company** is obliged to notify or contact the **Test Proposer**, **The Company** will not be so obliged where it is **The Company** that has proposed the **System Test**. **Users** and the **Test Panel**, where they are obliged under **OC12** to notify, send reports to or otherwise contact both **The Company** and the **Test Proposer**, need only do so once where **The Company** is the proposer of the **System Test**.

OC12.4.2 Preliminary Notice And Establishment Of Test Panel

OC12.4.2.1 Using the information supplied to it under OC12.4.1 **The Company** will determine, in its reasonable estimation, which **Users**, other than the **Test Proposer**, may be affected by the proposed **System Test**. If **The Company** determines, in its reasonable estimation, that an **Externally Interconnected System Operator** and/or **Interconnector User** (or **Externally Interconnected System Operators** and/or **Interconnector Users**) may be affected by the proposed **System Test**, then (provided that the **Externally Interconnected System Operator** and/or **Interconnector User** (or each **Externally Interconnected System Operator** and/or **Interconnector User** where there is more than one affected) undertakes to all the parties to the Grid Code to be bound by the provisions of the Grid Code for the purposes of the **System Test**) for the purposes of the remaining provisions of this **OC12**, that **Externally Interconnected System Operator** and/or **Interconnector User** (or each of those **Externally Interconnected System Operators** and/or **Interconnector Users**) will be deemed to be a **User** and references to the **Total System** or to the **Plant** and/or **Apparatus** of a **User** will be deemed to include a reference to the **Transmission** or distribution **System** and **Plant** and/or **Apparatus** of that **Externally Interconnected System Operator** and/or **Interconnector User** or (as the case may be) those **Externally Interconnected System Operators** and/or **Interconnector Users**. In the event that the **Externally Interconnected System Operator** and/or **Interconnector User** (or any of the **Externally Interconnected System Operators** and/or **Interconnector Users** where there is more than one affected) refuses to so undertake, then the **System Test** will not take place.

- OC12.4.2.2 **The Company** will appoint a person to co-ordinate the **System Test** (a "**Test Co-ordinator**") as soon as reasonably practicable after it has, or is deemed to have, received a **Proposal Notice** and in any event prior to the distribution of the **Preliminary Notice** referred to below. The **Test Co-ordinator** shall act as Chairman of the **Test Panel** and shall be an ex-officio member of the **Test Panel**.
- (a) Where **The Company** decides, in its reasonable opinion, that the **National Electricity Transmission System** will or may be significantly affected by the proposed **System Test**, then the **Test Co-ordinator** will be a suitably qualified person nominated by **The Company** after consultation with the **Test Proposer** and the **Users** identified under OC12.4.2.1.
 - (b) Where **The Company** decides, in its reasonable opinion, that the **National Electricity Transmission System** will not be significantly affected by the proposed **System Test**, then the **Test Co-ordinator** will be a suitably qualified person nominated by the **Test Proposer** after consultation with **The Company**.
 - (c) **The Company** will, as soon as reasonably practicable after it has received, or is deemed to have received, a **Proposal Notice**, contact the **Test Proposer** where the **Test Co-ordinator** is to be a person nominated by the **Test Proposer** and invite it to nominate a person as **Test Co-ordinator**. If the **Test Proposer** is unable or unwilling to nominate a person within seven days of being contacted by **The Company** then the proposed **System Test** will not take place.
- OC12.4.2.3 **The Company** will notify all **Users** identified by it under OC12.4.2.1 of the proposed **System Test** by a notice in writing (a "**Preliminary Notice**") and will send a **Preliminary Notice** to the **Test Proposer**. The **Preliminary Notice** will contain:
- (a) the details of the nature and purpose of the proposed **System Test**, the extent and situation of the **Plant** and/or **Apparatus** involved and the identity of the **Users** identified by **The Company** under OC12.4.2.1 and the identity of the **Test Proposer**;
 - (b) an invitation to nominate within one month a suitably qualified representative (or representatives, if the **Test Co-ordinator** informs **The Company** that it is appropriate for a particular **User** including the **Test Proposer**) to be a member of the **Test Panel** for the proposed **System Test**;
 - (c) the name of the **The Company** representative (or representatives) on the **Test Panel** for the proposed **System Test**; and
 - (d) the name of the **Test Co-ordinator** and whether he was nominated by the **Test Proposer** or by **The Company**.
- OC12.4.2.4 The **Preliminary Notice** will be sent within one month of the later of either the receipt by **The Company** of the **Proposal Notice**, or of the receipt of any further information requested by **The Company** under OC12.4.1.3. Where **The Company** is the proposer of the **System Test**, the **Preliminary Notice** will be sent within one month of the proposed **System Test** being formulated.
- OC12.4.2.5 Replies to the invitation in the **Preliminary Notice** to nominate a representative to be a member of the **Test Panel** must be received by **The Company** within one month of the date on which the **Preliminary Notice** was sent to the **User** by **The Company**. Any **User** which has not replied within that period will not be entitled to be represented on the **Test Panel**. If the **Test Proposer** does not reply within that period, the proposed **System Test** will not take place and **The Company** will notify all **Users** identified by it under OC12.4.2.1 accordingly.
- OC12.4.2.6 **The Company** will, as soon as possible after the expiry of that one month period, appoint the nominated persons to the **Test Panel** and notify all **Users** identified by it under OC12.4.2.1 and the **Test Proposer**, of the composition of the **Test Panel**.
- OC12.4.3 Test Panel
- OC12.4.3.1 A meeting of the **Test Panel** will take place as soon as possible after **The Company** has notified all **Users** identified by it under OC12.4.2.1 and the **Test Proposer** of the composition of the **Test Panel**, and in any event within one month of the appointment of the **Test Panel**.

- OC12.4.3.2 The **Test Panel** shall consider:
- (a) the details of the nature and purpose of the proposed **System Test** and other matters set out in the **Proposal Notice** (together with any further information requested by **The Company** under OC12.4.1.3);
 - (b) the economic, operational and risk implications of the proposed **System Test**;
 - (c) the possibility of combining the proposed **System Test** with any other tests and with **Plant** and/or **Apparatus** outages which arise pursuant to the **Operational Planning** requirements of **The Company** and **Users**; and
 - (d) implications of the proposed **System Test** on the operation of the **Balancing Mechanism**, in so far as it is able to do so.
- OC12.4.3.3 **Users** identified by **The Company** under OC12.4.2.1, the **Test Proposer** and **The Company** (whether or not they are represented on the **Test Panel**) shall be obliged to supply that **Test Panel**, upon written request, with such details as the **Test Panel** reasonably requires in order to consider the proposed **System Test**.
- OC12.4.3.4 The **Test Panel** shall be convened by the **Test Co-ordinator** as often as he deems necessary to conduct its business.
- OC12.4.4 Proposal Report
- OC12.4.4.1 Within two months of first meeting, the **Test Panel** will submit a report (a "**Proposal Report**"), which will contain:
- (a) proposals for carrying out the **System Test** (including the manner in which the **System Test** is to be monitored);
 - (b) an allocation of costs (including un-anticipated costs) between the affected parties (the general principle being that the **Test Proposer** will bear the costs); and
 - (c) such other matters as the **Test Panel** considers appropriate.
- The **Proposal Report** may include requirements for indemnities (including an indemnity from the relevant **Network Operator** to **The Company** and other **Users** in relation to its **Embedded Persons**) to be given in respect of claims and losses arising from the **System Test**. All **System Test** procedures must comply with all applicable legislation.
- OC12.4.4.2 If the **Test Panel** is unable to agree unanimously on any decision in preparing its **Proposal Report**, the proposed **System Test** will not take place and the **Test Panel** will be dissolved.
- OC12.4.4.3 The **Proposal Report** will be submitted to **The Company**, the **Test Proposer** and to each **User** identified by **The Company** under OC12.4.2.1.
- OC12.4.4.4 Each recipient will respond to the **Test Co-ordinator** with its approval of the **Proposal Report** or its reason for non-approval within fourteen days of receipt of the **Proposal Report**. If any recipient does not respond, the **System Test** will not take place and the **Test Panel** will be dissolved.
- OC12.4.4.5 In the event of non-approval by one or more recipients, the **Test Panel** will meet as soon as practicable in order to determine whether the proposed **System Test** can be modified to meet the objection or objections.
- OC12.4.4.6 If the proposed **System Test** cannot be so modified, the **System Test** will not take place and the **Test Panel** will be dissolved.
- OC12.4.4.7 If the proposed **System Test** can be so modified, the **Test Panel** will, as soon as practicable, and in any event within one month of meeting to discuss the responses to the **Proposal Report**, submit a revised **Proposal Report** and the provisions of OC12.4.4.3 and OC12.4.4.4 will apply to that submission.
- OC12.4.4.8 In the event of non-approval of the revised **Proposal Report** by one or more recipients, the **System Test** will not take place and the **Test Panel** will be dissolved.

OC12.4.5 Test Programme

OC12.4.5.1 If the **Proposal Report** (or, as the case may be, the revised **Proposal Report**) is approved by all recipients, the proposed **System Test** can proceed and at least one month prior to the date of the proposed **System Test**, the **Test Panel** will submit to **The Company**, the **Test Proposer** and each **User** identified by **The Company** under OC12.4.2.1, a programme (the "**Test Programme**") stating the switching sequence and proposed timings of the switching sequence, a list of those staff involved in carrying out the **System Test** (including those responsible for site safety) and such other matters as the **Test Panel** deems appropriate.

OC12.4.5.2 The **Test Programme** will, subject to OC12.4.5.3, bind all recipients to act in accordance with the provisions of the **Test Programme** in relation to the proposed **System Test**.

OC12.4.5.3 Any problems with the proposed **System Test** which arise or are anticipated after the issue of the **Test Programme** and prior to the day of the proposed **System Test**, must be notified to the **Test Co-ordinator** as soon as possible in writing. If the **Test Co-ordinator** decides that these anticipated problems merit an amendment to, or postponement of, the **System Test**, he shall notify the **Test Proposer** (if the **Test Co-ordinator** was not appointed by the **Test Proposer**), **The Company** and each **User** identified by **The Company** under OC12.4.2.1 accordingly.

OC12.4.5.4 If on the day of the proposed **System Test**, operating conditions on the **Total System** are such that any party involved in the proposed **System Test** wishes to delay or cancel the start or continuance of the **System Test**, they shall immediately inform the **Test Co-ordinator** of this decision and the reasons for it. The **Test Co-ordinator** shall then postpone or cancel, as the case may be, the **System Test** and shall, if possible, agree with the **Test Proposer** (if the **Test Co-ordinator** was not appointed by the **Test Proposer**), **The Company** and all **Users** identified by **The Company** under OC12.4.2.1 another suitable time and date. If he cannot reach such agreement, the **Test Co-ordinator** shall reconvene the **Test Panel** as soon as practicable, which will endeavour to arrange another suitable time and date for the **System Test**, in which case the relevant provisions of **OC12** shall apply.

OC12.4.6 Final Report

OC12.4.6.1 At the conclusion of the **System Test**, the **Test Proposer** shall be responsible for preparing a written report on the **System Test** (the "**Final Report**") for submission to **The Company** and other members of the **Test Panel**. The **Final Report** shall be submitted within three months of the conclusion of the **System Test** unless a different period has been agreed by the **Test Panel** prior to the **System Test** taking place.

OC12.4.6.2 The **Final Report** shall not be submitted to any person who is not a member of the **Test Panel** unless the **Test Panel**, having considered the confidentiality issues arising, shall have unanimously approved such submission.

OC12.4.6.3 The **Final Report** shall include a description of the **Plant** and/or **Apparatus** tested and a description of the **System Test** carried out, together with the results, conclusions and recommendations.

OC12.4.6.4 When the **Final Report** has been prepared and submitted in accordance with OC12.4.6.1, the **Test Panel** will be dissolved.

OC12.4.7 Timetable Reduction

OC12.4.7.1 In certain cases a **System Test** may be needed on giving less than twelve months notice. In that case, after consultation with the **Test Proposer** and **User(s)** identified by **The Company** under OC12.4.2.1, **The Company** shall draw up a timetable for the proposed **System Test** and the procedure set out in OC12.4.2 to OC12.4.6 shall be followed in accordance with that timetable.

< END OF OPERATING CODE NO. 12 >

BALANCING CODE NO. 3

(BC3)

FREQUENCY CONTROL PROCESS

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BC3.1 INTRODUCTION

BC3.1.1 **BC3** sets out the procedure for **The Company** to use in relation to **EU Code Users** and **GB Code Users** to undertake **System Frequency** control. **System Frequency** will be controlled by response from **Gensets** (and **DC Converters** at **DC Converter Stations** and **HVDC Systems**) operating in **Limited Frequency Sensitive Mode** or **Frequency Sensitive Mode**, by the issuing of instructions to **Gensets** (and **DC Converters** at **DC Converter Stations** and **HVDC Systems**) and by control of **Demand**. The requirements for **Frequency** control are determined by the consequences and effectiveness of the **Balancing Mechanism**, and accordingly, **BC3** is complementary to **BC1** and **BC2**.

BC3.1.2 Inter-Relationship With Ancillary Services

The provision of response (other than by operation in **Limited Frequency Sensitive Mode** or in accordance with BC3.7.1(c)) in order to contribute towards **Frequency** control, as described in **BC3**, by **Generators** or **DC Converter Station** owners or **HVDC System Owners** will be an **Ancillary Service**. **Ancillary Services** are divided into three categories, **System Ancillary Services** Parts 1 and 2 and **Commercial Ancillary Services**. **System Ancillary Services**, Parts 1 and 2, are those **Ancillary Services** listed in CC.8.1 (as applicable to **GB Code Users**) or ECC8.1 (as applicable to **EU Code Users**); those in Part 1 of CC.8.1 or Part 1 of ECC.8.1 are those for which the **Connection Conditions** or **European Connection Conditions** (as applicable) require the capability as a condition of connection and those in Part 2 are those which may be agreed to be provided by **Users** and which can only be utilised by **The Company** if so agreed. **Commercial Ancillary Services** like those **System Ancillary Services** set out in Part 2 of CC.8.1 (as applicable to **GB Code Users**) or Part 2 of ECC.8.1 (as applicable to **EU Code Users**), may be agreed to be provided by **Users** and which can only be utilised by **The Company** if so agreed.

BC3.1.3 The provision of **Frequency** control services, if any, from an **External System** via a **DC Converter Station** or **HVDC System** will be provided for in the **Ancillary Services Agreement** and/or **Bilateral Agreement** with the **DC Converter Station** owner or **HVDC System Owner** and/or any other relevant agreements with the relevant **EISO**.

BC3.1.4 The provision of **Frequency** control services, if any, from an **Offshore Power Station** connected to an **Offshore Transmission System** that includes a **Transmission DC Converter** will be facilitated (where necessary) through appropriate data signals provided to the **Offshore Power Station** by the **Relevant Transmission Licensee** in accordance with the **STC**.

BC3.2 OBJECTIVE

The procedure for **The Company** to direct **System Frequency** control is intended to enable (as far as possible) **The Company** to meet the statutory requirements of **System Frequency** control.

BC3.3 SCOPE

BC3 applies to **The Company** and to **GB Code Users** and **EU Code Users**, which in this **BC3** means:

- (a) **GB Generators** with regard to their **Large Power Stations** (except those **Large Power Stations** with a **Registered Capacity** less than 50MW comprising of **Power Park Modules**),
- (b) **EU Generators** with regard to their **Large Power Stations**
- (c) **Network Operators**,
- (d) **DC Converter Station** owners and **HVDC System Owners**,
- (e) other providers of **Ancillary Services**,
- (f) **Externally Interconnected System Operators**.

BC3.4 MANAGING SYSTEM FREQUENCY

BC3.4.1 Statutory Requirements

When **The Company** determines it is necessary (by having monitored the **System Frequency**), it will, as part of the procedure set out in **BC2**, issue instructions (including instructions for **Commercial Ancillary Services**) in order to seek to regulate **System Frequency** to meet the statutory requirements of **Frequency** control. **Gensets** (except those owned and/or operated by **GB Generators** comprising of a **Power Park Module** in a **Power Station** with a **Registered Capacity** less than 50MW and those owned and/or operated by **GB Generators** comprising of a **Power Park Module** in Scotland with a **Completion Date** before 1 July 2004) and **DC Converters** at **DC Converter Stations** or **HVDC Systems** when transferring **Active Power** to the **Total System**, operating in **Frequency Sensitive Mode** will be instructed by **The Company** to operate taking due account of the **Target Frequency** notified by **The Company**.

BC3.4.2 Target Frequency

The Company will give 15 minutes notice of variation in **Target Frequency**.

BC3.4.3 Electric Time

The Company will endeavour (in so far as it is able) to control electric clock time to within plus or minus 10 seconds by specifying changes to **Target Frequency**, by accepting bids and offers in the **Balancing Mechanism**. Errors greater than plus or minus 10 seconds may be temporarily accepted at **The Company's** reasonable discretion.

BC3.5 RESPONSE FROM GENSETS (AND DC CONVERTERS AT DC CONVERTER STATIONS AND HVDC SYSTEMS WHEN TRANSFERRING ACTIVE POWER TO THE TOTAL SYSTEM)

BC3.5.1 Capability

Each **Genset** (except those owned and/or operated by **GB Generators** and comprising of **Power Park Modules** in a **Power Station** with a **Registered Capacity** less than 50MW and those owned and/or operated by **GB Generators** and comprising of **Power Park Modules** in Scotland with a **Completion Date** before 1 July 2004) and each **DC Converter** at a **DC Converter Station** and **HVDC System** must at all times have the capability to operate automatically so as to provide response to changes in **Frequency** in accordance with the requirements of CC.6.3.7 or ECC.6.3.7 (as applicable) in order to contribute to containing and correcting the **System Frequency** within the statutory requirements of **Frequency** control. For **DC Converters** at **DC Converter Stations** and **HVDC Systems**, BC3.1.3 also applies. In addition each **Genset** (and each **DC Converter** at a **DC Converter Station** and **HVDC System**) must at all times have the capability to operate in a **Limited Frequency Sensitive Mode**.

BC3.5.2 Limited Frequency Sensitive Mode

Each **Synchronised Genset** producing **Active Power** (and each **DC Converter** at a **DC Converter Station** and **HVDC System**) must operate at all times in a **Limited Frequency Sensitive Mode** (unless instructed in accordance with BC3.5.4 below to operate in **Frequency Sensitive Mode**). Operation in **Limited Frequency Sensitive Mode** must achieve the capability requirement described in CC.6.3.3 (in respect of **GB Code Users**) and ECC.6.3.3 (in respect of **EU Code Users**) and for **System Frequencies** up to 50.4Hz and shall be deemed not to be in contravention of CC.6.3.7 or ECC.6.3.7 (as applicable).

BC3.5.3 (a) Existing Gas Cooled Reactor Plant

The Company will permit **Existing Gas Cooled Reactor Plant** other than **Frequency Sensitive AGR Units** to operate in **Limited Frequency Sensitive Mode** at all times.

(b) Power Park Modules belonging to GB Generators In Operation Before 1 January 2006

The Company will permit **Power Park Modules** which were in operation before 1 January 2006 and owned and/or operated by **GB Generators** to operate in **Limited Frequency Sensitive Mode** at all times. For the avoidance of doubt **Power Park Modules** owned and/or operated by **GB Generators** in England and Wales with a **Completion Date** on or after 1 January 2006 and **Power Park Modules** owned and/or operated by **GB Generators** in operation in Scotland after 1 January 2006 with a completion date after 1 July 2004 and in a **Power Station** with a **Registered Capacity** of 50MW or more will be required to operate in both **Limited Frequency Sensitive Mode** and **Frequency Sensitive Mode** of operation depending on **System** conditions. For the avoidance of doubt these requirements do not apply to **EU Generators**.

BC3.5.4 Frequency Sensitive Mode

- (a) **The Company** may issue an instruction to a **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System** if agreed as described in BC3.1.3) to operate so as to provide **Primary Response** and/or **Secondary Response** and/or **High Frequency Response** (in the combinations agreed in the relevant **Ancillary Services Agreement**). When so instructed, the **Genset** or **DC Converter** at a **DC Converter Station** or **HVDC System** must operate in accordance with the instruction and will no longer be operating in **Limited Frequency Sensitive Mode**, but by being so instructed will be operating in **Frequency Sensitive Mode**.
- (b) **Frequency Sensitive Mode** is the generic description for a **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System**) operating in accordance with an instruction to operate so as to provide **Primary Response** and/or **Secondary Response** and/or **High Frequency Response** (in the combinations agreed in the relevant **Ancillary Services Agreement**).
- (c) The magnitude of the response in each of those categories instructed will be in accordance with the relevant **Ancillary Services Agreement** with the **Generator** or **DC Converter Station** owner or **HVDC System Owner**.
- (d) Such instruction will continue until countermanded by **The Company** or until;
- (i) the **Genset** is **De-Synchronised**; or
 - (ii) the **DC Converter** or **HVDC System** ceases to transfer **Active Power** to or from the **Total System** subject to the conditions of any relevant agreement relating to the operation of the **DC Converter Station** or **HVDC System**,
- whichever is the first to occur.
- (e) **The Company** will not so instruct **Generators** in respect of **Existing Gas Cooled Reactor Plant** other than **Frequency Sensitive AGR Units**.
- (f) **The Company** will not so instruct **GB Generators** in respect of **Power Park Modules**:
- (i) in Scotland in a **Power Station** with a **Completion Date** before 1 July 2004; or,
 - (ii) in a **Power Station** with a **Registered Capacity** of less than 50MW.
 - (iii) in England and Wales with a **Completion Date** before 1 January 2006.

BC3.5.5 System Frequency Induced Change

A **System Frequency** induced change in the **Active Power** output of a **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System**) which assists recovery to **Target Frequency** must not be countermanded by a **Generator** or **DC Converter Station** owner or **HVDC System Owner** except where it is done purely on safety grounds (relating to either personnel or plant) or, where necessary, to ensure the integrity of the **Power Station** or **DC Converter Station** or **HVDC System**.

BC3.6 RESPONSE TO LOW FREQUENCY

BC3.6.1 Low Frequency Relay Initiated Response From Gensets And DC Converters At DC Converter Stations and HVDC Systems

- (a) **The Company** may utilise **Gensets** (and **DC Converters** at **DC Converter Stations** and **HVDC Systems**) with the capability of **Low Frequency Relay** initiated response as:
- (i) synchronisation and generation from standstill;
 - (ii) generation from zero generated output;
 - (iii) increase in generated output;
 - (iv) increase in **DC Converter** or **HVDC System** output to the **Total System** (if so agreed as described in BC3.1.3);
 - (v) decrease in **DC Converter** or **HVDC System** input from the **Total System** (if so agreed as described in BC3.1.3);
- in establishing its requirements for **Operating Reserve**.

- (b) (i) **The Company** will specify within the range agreed with **Generators** and/or **EISOs** and/or **DC Converter Station** owners or **HVDC System Owners** (if so agreed as described in BC3.1.3), **Low Frequency Relay** settings to be applied to **Gensets** or **DC Converters at DC Converter Stations** or **HVDC Systems** pursuant to BC3.6.1 (a) and instruct the **Low Frequency Relay** initiated response placed in and out of service.
- (ii) **Generators** and/or **EISOs** and/or **DC Converter Station** owners or **HVDC System Owners** (if so agreed as described in BC3.1.3) will comply with **The Company** instructions for **Low Frequency Relay** settings and **Low Frequency Relay** initiated response to be placed in or out of service. **Generators** or **DC Converter Station** owners or **HVDC System Owners** or **EISOs** may not alter such **Low Frequency Relay** settings or take **Low Frequency Relay** initiated response out of service without **The Company's** agreement (such agreement not to be unreasonably withheld or delayed), except for safety reasons.

BC3.6.2 Low Frequency Relay Initiated Response From Demand And Other Demand Modification Arrangements (Which May Include A DC Converter Station or HVDC System When Importing Active Power From The Total System)

- (a) **The Company** may, pursuant to an **Ancillary Services Agreement**, utilise **Demand** with the capability of **Low Frequency Relay** initiated **Demand** reduction in establishing its requirements for **Frequency Control**.
- (b) (i) **The Company** will specify within the range agreed the **Low Frequency Relay** settings to be applied pursuant to BC3.6.2 (a), the amount of **Demand** reduction to be available and will instruct the **Low Frequency Relay** initiated response to be placed in or out of service.
- (ii) **Users** will comply with **The Company** instructions for **Low Frequency Relay** settings and **Low Frequency Relay** initiated **Demand** reduction to be placed in or out of service. **Users** may not alter such **Low Frequency Relay** settings or take **Low Frequency Relay** initiated response out of service without **The Company's** agreement, except for safety reasons.
- (iii) In the case of any such **Demand** which is **Embedded**, **The Company** will notify the relevant **Network Operator** of the location of the **Demand**, the amount of **Demand** reduction to be available, and the **Low Frequency Relay** settings.
- (c) **The Company** may also utilise other **Demand** modification arrangements pursuant to an agreement for **Ancillary Services**, in order to contribute towards **Operating Reserve**.

BC3.7 RESPONSE TO HIGH FREQUENCY REQUIRED FROM SYNCHRONISED GENSETS (AND DC CONVERTERS AT DC CONVERTER STATIONS AND HVDC SYSTEMS WHEN TRANSFERRING ACTIVE POWER TO THE TOTAL SYSTEM)

BC3.7.1 Plant In Frequency Sensitive Mode Instructed To Provide High Frequency Response

- (a) Each **Synchronised Genset** (or each **DC Converter** at a **DC Converter Station** or **HVDC System**) in respect of which the **Generator** or **DC Converter Station** owner or **HVDC System Owner** and/or **EISO** has been instructed to operate so as to provide **High Frequency Response**, which is producing **Active Power** and which is operating above the **Designed Minimum Operating Level**, is required to reduce **Active Power** output in response to an increase in **System Frequency** above the **Target Frequency** (or such other level of **Frequency** as may have been agreed in an **Ancillary Services Agreement**). The **Target Frequency** is normally 50.00 Hz except where modified as specified under BC3.4.2.
- (b) (i) The rate of change of **Active Power** output with respect to **Frequency** up to 50.5 Hz shall be in accordance with the provisions of the relevant **Ancillary Services Agreement** with each **Generator** or **DC Converter Station** owner or **HVDC System Owner**. If more than one rate is provided for in the **Ancillary Services Agreement** **The Company** will instruct the rate when the instruction to operate to provide **High Frequency Response** is given.
- (ii) The reduction in **Active Power** output by the amount provided for in the relevant **Ancillary Services Agreement** must be fully achieved within 10 seconds of the time of the **Frequency** increase and must be sustained at no lesser reduction thereafter.
- (iii) It is accepted that the reduction in **Active Power** output may not be to below the **Designed Minimum Operating Level**.
- (c) In addition to the **High Frequency Response** provided, the **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System**) must continue to reduce **Active Power** output in response to an increase in **System Frequency** above 50.5 Hz at a minimum rate of 2 per cent of output per 0.1 Hz deviation of **System Frequency** above that level, such reduction to be achieved within five minutes of the rise to or above 50.5 Hz. For a **Power Station** with a **Completion Date** after 1st January 2009 this reduction in **Active Power** should be delivered in accordance with in (i) to (iv) below. For the avoidance of doubt, the provision of this reduction in **Active Power** output is not an **Ancillary Service**.
- (i) The reduction in **Active Power** output must be continuously and linearly proportional as far as practical, to the excess of **Frequency** above 50.5 Hz and must be provided increasingly with time over the period specified in (iii) below.
- (ii) As much as possible of the proportional reduction in **Active Power** output must result from the frequency control device (or speed governor) action and must be achieved within 10 seconds of the time of the **Frequency** increase above 50.5 Hz.
- (iii) The residue of the proportional reduction in **Active Power** output which results from automatic action of the **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System**) output control devices other than the frequency control devices (or speed governors) must be achieved within 3 minutes from the time of the **Frequency** increase above 50.5 Hz.
- (iv) Any further residue of the proportional reduction which results from non-automatic action initiated by the **Generator** or **DC Converter Station** owner or **HVDC System Owner** shall be initiated within 2 minutes, and achieved within 5 minutes, of the time of the **Frequency** increase above 50.5 Hz.

BC3.7.2 Plant In Limited Frequency Sensitive Mode

BC.3.7.2.1 Plant in Limited Frequency Sensitive Mode applicable to GB Code Users

The following requirements are applicable to **GB Code Users** in respect of **Plant** operating in **Limited Frequency Sensitive Mode**. For the avoidance of doubt, these requirements do not apply to **EU Generators** and **HVDC System Owners** for whom the requirements of BC.3.7.2.2 apply.

- (a) Each **Synchronised Genset** (or **DC Converter** at a **DC Converter Station**) operating in a **Limited Frequency Sensitive Mode** which is producing **Active Power** is also required to reduce **Active Power** output in response to **System Frequency** when this rises above 50.4 Hz. In the case of **DC Converters** at **DC Converter Stations**, the provisions of BC3.7.7 are also applicable. For the avoidance of doubt, the provision of this reduction in **Active Power** output is not an **Ancillary Service**. Such provision is known as "**Limited High Frequency Response**".
- (b)
 - (i) The rate of change of **Active Power** output must be at a minimum rate of 2 per cent of output per 0.1 Hz deviation of **System Frequency** above 50.4 Hz.
 - (ii) The reduction in **Active Power** output must be continuously and linearly proportional, as far as is practicable, to the excess of **Frequency** above 50.4 Hz and must be provided increasingly with time over the period specified in (iii) below.
 - (iii) As much as possible of the proportional reduction in **Active Power** output must result from the frequency control device (or speed governor) action and must be achieved within 10 seconds of the time of the **Frequency** increase above 50.4 Hz.
 - (iv) The residue of the proportional reduction in **Active Power** output which results from automatic action of the **Genset** (or **DC Converter** at a **DC Converter Station**) output control devices other than the frequency control devices (or speed governors) must be achieved within 3 minutes from the time of the **Frequency** increase above 50.4 Hz.
 - (v) Any further residue of the proportional reduction which results from non-automatic action initiated by the **Generator** or **DC Converter Station** owner shall be initiated within 2 minutes, and achieved within 5 minutes, of the time of the **Frequency** increase above 50.4 Hz.
- (c) Each **GB Code User** in respect of a **Genset** (or **DC Converter** at a **DC Converter Station**) which is providing **Limited High Frequency Response** in accordance with this BC3.7.2 must continue to provide it until the **Frequency** has returned to or below 50.4 Hz or until otherwise instructed by **The Company**.

BC.3.7.2.2 Plant in Limited Frequency Sensitive Mode applicable to EU Code Users

EU Code Users in respect of **Gensets** and **HVDC Systems** are required to operate in **Limited Frequency Sensitive Mode** at all times unless instructed by **The Company** to operate in **Frequency Sensitive Mode**. Where **EU Code Users Gensets** and **HVDC Systems** are required to operate in **Limited Frequency Sensitive Mode** then the requirements of ECC.6.3.7.1 and ECC.6.3.7.2 shall apply. For the avoidance of doubt, the requirements defined in BC.3.7.2.1 do not apply to **New Generators** and **HVDC System Owners**.

BC3.7.3 Plant Operation To Below Minimum Generation or Minimum Stable Operating Level

- (a) As stated in CC.A.3.2 and ECC.A.3.2, steady state operation below **Minimum Generation** or the **Minimum Stable Operating Level** or the **Minimum Active Power Transmission Capacity** is not expected but if **System** operating conditions cause operation below the **Minimum Generation** or **Minimum Stable Operating Level** or the **Minimum Active Power Transmission Capacity** which gives rise to operational difficulties for the **Genset** (or **DC Converter** at a **DC Converter Station** or **HVDC System**) then **The Company** should not, upon request, unreasonably withhold issuing a **Bid-Offer Acceptance** to return the **Power Generating Module** and/or **Generating Unit** and/or **CCGT Module** and/or **Power Park Module** or **DC Converter** or **HVDC System** to an output not less than the **Minimum Generation** or the **Minimum Stable Operating Level** or the **Minimum Active Power Transmission Capacity**. In the case of a **DC Converter** or **HVDC System** not participating in the **Balancing Mechanism**, then **The Company** will, upon request, attempt to return the **DC Converter** or **HVDC System** to an output not less than **Minimum Generation** or **Minimum Stable Operating Level** or the **Minimum Active Power Transmission Capacity** or to zero transfer or to reverse the transfer of **Active Power**.
- (b) It is possible that a **Synchronised Genset** (or a **DC Converter** at a **DC Converter Station** or **HVDC System**) which responded as required under BC3.7.1 or BC3.7.2 to an excess of **System Frequency**, as therein described, will (if the output reduction is large or if the **Genset** (or a **DC Converter** at a **DC Converter Station** or **HVDC System**) output has reduced to below the **Designed Minimum Operating Level** or **Minimum Regulating Level** or the **Minimum Active Power Transmission Capacity** trip after a time.
- (c) All reasonable efforts should in the event be made by the **Generator** or **DC Converter Station** owner or **HVDC System Owner** to avoid such tripping, provided that the **System Frequency** is below 52Hz.
- (d) If the **System Frequency** is at or above 52Hz, the requirement to make all reasonable efforts to avoid tripping does not apply and the **Generator** or **DC Converter Station** owner or **HVDC System Owner** is required to take action to protect the **Power Generating Modules** and/or **Generating Units** and/or **Power Park Modules** or **DC Converters** or **HVDC Systems** as specified in CC.6.3.13 or ECC.6.3.13.1.
- (e) In the event of the **System Frequency** becoming stable above 50.5Hz, after all **Genset** and **DC Converter** and **HVDC System** action as specified in BC3.7.1 and BC3.7.2 has taken place, **The Company** will issue appropriate **Bid-Offer Acceptances** and/or **Ancillary Service** instructions, which may include **Emergency Instructions** under **BC2** to trip **Gensets** (or, in the case of **DC Converters** at **DC Converter Stations** or **HVDC Systems**, to stop or reverse the transfer of **Active Power**) so that the **Frequency** returns to below 50.5Hz and ultimately to **Target Frequency**.
- (f) If the **System Frequency** has become stable above 52 Hz, after all **Genset** and **DC Converter** or **HVDC System** action as specified in BC3.7.1 and BC3.7.2 has taken place, **The Company** will issue **Emergency Instructions** under **BC2** to trip appropriate **Gensets** (or in the case of **DC Converters** at **DC Converter Stations** or **HVDC Systems** to stop or reverse the transfer of **Active Power**) to bring the **System Frequency** to below 52Hz and follow this with appropriate **Bid-Offer Acceptances** or **Ancillary Service** instructions or further **Emergency Instructions** under **BC2** to return the **System Frequency** to below 50.5 Hz and ultimately to **Target Frequency**.

BC3.7.4 The **Generator** or **DC Converter Station** owner or **HVDC System Owner** will not be in breach of any of the provisions of BC2 by following the provisions of BC3.7.1, BC3.7.2 or BC3.7.3.

BC3.7.5 Information Update To The Company

In order that **The Company** can deal with the emergency conditions effectively, it needs as much up to date information as possible and accordingly **The Company** must be informed of the action taken in accordance with BC3.7.1(c) and BC3.7.2 as soon as possible and in any event within 7 minutes of the rise in **System Frequency**, directly by telephone from the **Control Point** for the **Power Station** or **DC Converter Station** or **HVDC System**.

BC3.7.6 (a) Existing Gas Cooled Reactor Plant

For the avoidance of doubt, **Generating Units** within **Existing Gas Cooled Reactor Plant** are required to comply with the applicable provisions of this BC3.7 (which, for the avoidance of doubt, other than for **Frequency Sensitive AGR Units**, do not include BC3.7.1).

(b) Power Park Modules In Operation Before 1 January 2006.

For the avoidance of doubt, **GB Generators** who own and/or operate **Power Park Modules** which are in operation before 1 January 2006 (irrespective of their **Completion Date**) are required to comply with the applicable provisions of this BC3.7 (which, for the avoidance of doubt do not include BC3.7.1).

BC3.7.7 Externally Interconnected System Operators

The Company will use reasonable endeavours to ensure that, if **System Frequency** rises above 50.4Hz, and an **Externally Interconnected System Operator** (in its role as operator of the **External System**) is transferring power into the **National Electricity Transmission System** from its **External System**, the amount of power transferred in to the **National Electricity Transmission System** from the **System** of that **Externally Interconnected System Operator** is reduced at a rate equivalent to (or greater than) that which applies for **Synchronised Gensets** operating in **Limited Frequency Sensitive Mode** which are producing **Active Power**. This will be done either by utilising existing arrangements which are designed to achieve this, or by issuing **Emergency Instructions** under **BC2**.

< END OF BALANCING CODE 3 >

GENERAL CONDITIONS (GC)

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GC.1 INTRODUCTION

GC.1.1 The **General Conditions** contain provisions which are of general application to all provisions of the **Grid Code**. Their objective is to ensure, to the extent possible, that the various sections of the **Grid Code** work together and work in practice for the benefit of all **Users**.

GC.2 SCOPE

GC.2.1 The **General Conditions** apply to all **Users** (including, for the avoidance of doubt, **The Company**).

GC.3 UNFORESEEN CIRCUMSTANCES

GC.3.1 If circumstances arise which the provisions of the **Grid Code** have not foreseen, **The Company** shall, to the extent reasonably practicable in the circumstances, consult promptly and in good faith all affected **Users** in an effort to reach agreement as to what should be done. If agreement between **The Company** and those **Users** as to what should be done cannot be reached in the time available, **The Company** shall determine what is to be done. Wherever **The Company** makes a determination, it shall do so having regard, wherever possible, to the views expressed by **Users** and, in any event, to what is reasonable in all the circumstances. Each **User** shall comply with all instructions given to it by **The Company** following such a determination provided that the instructions are consistent with the then current technical parameters of the particular **User's System** registered under the **Grid Code**. **The Company** shall promptly refer all such unforeseen circumstances and any such determination to the Panel for consideration in accordance with GC.4.2(e).

GC.4 NOT USED

GC.5 COMMUNICATION BETWEEN THE COMPANY AND USERS

GC.5.1 Unless otherwise specified in the **Grid Code**, all instructions given by **The Company** and communications (other than relating to the submission of data and notices) between **The Company** and **Users** (other than **Generators**, **DC Converter Station** owners or **Suppliers**) shall take place between the **The Company Control Engineer** based at the **Transmission Control Centre** notified by **The Company** to each **User** prior to connection, and the relevant **User Responsible Engineer/Operator**, who, in the case of a **Network Operator**, will be based at the **Control Centre** notified by the **Network Operator** to **The Company** prior to connection.

GC.5.2 Unless otherwise specified in the **Grid Code** all instructions given by **The Company** and communications (other than relating to the submission of data and notices) between **The Company** and **Generators** and/or **DC Converter Station** owners and/or **Suppliers** shall take place between the **The Company Control Engineer** based at the **Transmission Control Centre** notified by **The Company** to each **Generator** or **DC Converter Station** owner prior to connection, or to each **Supplier** prior to submission of **BM Unit Data**, and either the relevant **Generator's** or **DC Converter Station** owner's or **Supplier's Trading Point** (if it has established one) notified to **The Company** or the **Control Point** of the **Supplier** or the **Generator's Power Station** or **DC Converter Station**, as specified in each relevant section of the **Grid Code**. In the absence of notification to the contrary, the **Control Point** of a **Generator's Power Station** will be deemed to be the **Power Station** at which the **Generating Units** or **Power Park Modules** are situated.

GC.5.3 Unless otherwise specified in the **Grid Code**, all instructions given by **The Company** and communications (other than relating to the submission of data and notices) between **The Company** and **Users** will be given by means of the **Control Telephony** referred to in CC.6.5.2.

- GC.5.4 If the **Transmission Control Centre** notified by **The Company** to each **User** prior to connection, or the **User Control Centre**, notified in the case of a **Network Operator** to **The Company** prior to connection, is moved to another location, whether due to an emergency or for any other reason, **The Company** shall notify the relevant **User** or the **User** shall notify **The Company**, as the case may be, of the new location and any changes to the **Control Telephony** or **System Telephony** necessitated by such move, as soon as practicable following the move.
- GC.5.5 If any **Trading Point** notified to **The Company** by a **Generator** or **DC Converter Station** owner prior to connection, or by a **Supplier** prior to submission of **BM Unit Data**, is moved to another location or is shut down, the **Generator**, **DC Converter Station** owner or **Supplier** shall immediately notify **The Company**.
- GC.5.6 The recording (by whatever means) of instructions or communications given by means of **Control Telephony** or **System Telephony** will be accepted by **The Company** and **Users** as evidence of those instructions or communications.

GC.6 MISCELLANEOUS

GC.6.1 Data and Notices

- GC.6.1.1 Data and notices to be submitted either to **The Company** or to **Users** under the **Grid Code** (other than data which is the subject of a specific requirement of the **Grid Code** as to the manner of its delivery) shall be delivered in writing either by hand or sent by first-class pre-paid post, or by facsimile transfer or by electronic mail to a specified address or addresses previously supplied by **The Company** or the **User** (as the case may be) for the purposes of submitting that data or those notices.
- GC.6.1.2 References in the **Grid Code** to “in writing” or “written” include typewriting, printing, lithography, and other modes of reproducing words in a legible and non-transitory form and in relation to submission of data and notices includes electronic communications.
- GC.6.1.3 Data delivered pursuant to paragraph GC.6.1.1, in the case of data being submitted to **The Company**, shall be addressed to the **Transmission Control Centre** at the address notified by **The Company** to each **User** prior to connection, or to such other Department within **The Company** or address, as **The Company** may notify each **User** from time to time, and in the case of notices to be submitted to **Users**, shall be addressed to the chief executive of the addressee (or such other person as may be notified by the **User** in writing to **The Company** from time to time) at its address(es) notified by each **User** to **The Company** in writing from time to time for the submission of data and service of notices under the **Grid Code** (or failing which to the registered or principal office of the addressee).
- GC.6.1.4 All data items, where applicable, will be referenced to nominal voltage and **Frequency** unless otherwise stated.

GC.7 OWNERSHIP OF PLANT AND/OR APPARATUS

References in the **Grid Code** to **Plant** and/or **Apparatus** of a **User** include **Plant** and/or **Apparatus** used by a **User** under any agreement with a third party.

GC.8 SYSTEM CONTROL

Where a **User's System** (or part thereof) is, by agreement, under the control of **The Company**, then for the purposes of communication and co-ordination in operational timescales **The Company** can (for those purposes only) treat that **User's System** (or part thereof) as part of the **National Electricity Transmission System**, but, as between **The Company** and **Users**, it shall remain to be treated as the **User's System** (or part thereof).

GC.9 EMERGENCY SITUATIONS

Users should note that the provisions of the **Grid Code** may be suspended, in whole or in part, during a Security Period, as more particularly provided in the **Fuel Security Code**, or pursuant to any directions given and/or orders made by the **Secretary of State** under section 96 of the **Act** or under the Energy Act 1976.

GC.10 MATTERS TO BE AGREED

Save where expressly stated in the **Grid Code** to the contrary where any matter is left to **The Company** and **Users** to agree and there is a failure so to agree the matter shall not without the consent of both **The Company** and **Users** be referred to arbitration pursuant to the rules of the **Electricity Supply Industry Arbitration Association**.

GC.11 GOVERNANCE OF ELECTRICAL STANDARDS

GC.11.1 In relation to the **Electrical Standards** the following provisions shall apply.

- GC.11.2 (a) If a **User**, or in respect of (a) or (b) to the annex, **The Company**, or in respect of (c) or (d) to the annex, the **Relevant Transmission Licensee**, wishes to:-
- (i) raise a change to an **Electrical Standard**;
 - (ii) add a new standard to the list of **Electrical Standards**;
 - (iii) delete a standard from being an **Electrical Standard**,
- it shall activate the **Electrical Standards** procedure.
- (b) The **Electrical Standards** procedure is the notification to the secretary to the **Panel** of the wish to so change, add or delete an **Electrical Standard**. That notification must contain details of the proposal, including an explanation of why the proposal is being made.

GC.11.3 Ordinary Electrical Standards Procedure

- (a) Unless it is identified as an urgent **Electrical Standards** proposal (in which case GC.11.4 applies) or unless the notifier requests that it be tabled at the next **Panel** meeting, as soon as reasonably practicable following receipt of the notification, the **Panel** secretary shall forward the proposal, with a covering paper, to **Panel** members.
- (b) If no objections are raised within 20 Business Days of the date of the proposal, then it shall be deemed approved pursuant to the **Electrical Standards** procedure, and **The Company** shall make the change to the relevant **Electrical Standard** or the list of **Electrical Standards** contained in the Annex to this GC.11.
- (c) If there is an objection (or if the notifier had requested that it be tabled at the next **Panel** meeting rather than being dealt with in writing), then the proposal will be included in the agenda for the next following **Panel** meeting.
- (d) If there is broad consensus at the **Panel** meeting in favour of the proposal, **The Company** will make the change to the **Electrical Standard** or the list of **Electrical Standards** contained in the Annex to this GC.11.
- (e) If there is no such broad consensus, including where the Panel believes that further consultation is needed, **The Company** will establish a **Panel** working group if this was thought appropriate and in any event **The Company** shall undertake a consultation of **Authorised Electricity Operators** liable to be materially affected by the proposal.
- (f) Following such consultation, **The Company** will report back to **Panel** members, either in writing or at a **Panel** meeting. If there was broad consensus in the consultation, then **The Company** will make the change to the **Electrical Standard** or the list of **Electrical Standards** contained in the Annex to this GC.11.

- (g) Where following such consultation there is no broad consensus, the matter will be referred to the **Authority** who will decide whether the proposal should be implemented and will notify **The Company** of its decision. If the decision is to so implement the change, **The Company** will make the change to the **Electrical Standard** or the list of **Electrical Standards** contained in the Annex to this GC.11.
- (h) In all cases where a change is made to the list of **Electrical Standards**, **The Company** will publish and circulate a replacement page for the Annex to this GC covering that list and reflecting the change.

GC.11.4 Urgent Electrical Standards Procedure

- (a) If the notification is marked as an urgent **Electrical Standards** proposal, the **Panel** secretary will contact **Panel** members in writing to see whether a majority who are contactable agree that it is urgent and in that notification the secretary shall propose a timetable and procedure which shall be followed.
- (b) If such members do so agree, then the secretary will initiate the procedure accordingly, having first obtained the approval of the **Authority**.
- (c) If such members do not so agree, or if the **Authority** declines to approve the proposal being treated as an urgent one, the proposal will follow the ordinary **Electrical Standards** procedure as set out in GC.11.3 above.
- (d) If a proposal is implemented using the urgent **Electrical Standards** procedure, **The Company** will contact all **Panel** members after it is so implemented to check whether they wish to discuss further the implemented proposal to see whether an additional proposal should be considered to alter the implementation, such proposal following the ordinary **Electrical Standards** procedure.

GC.12 CONFIDENTIALITY

GC.12.1 **Users** should note that although the **Grid Code** contains in certain sections specific provisions which relate to confidentiality, the confidentiality provisions set out in the **CUSC** apply generally to information and other data supplied as a requirement of or otherwise under the **Grid Code**. To the extent required to facilitate the requirements of the **EMR Documents**, **Users** that are party to the **Grid Code** but are not party to the **CUSC Framework Agreement** agree that the confidentiality provisions of the **CUSC** are deemed to be imported into the **Grid Code**.

GC.12.2 **The Company** has obligations under the **STC** to inform **Relevant Transmission Licensees** of certain data. **The Company** may pass on **User** data to a **Relevant Transmission Licensee** where:

- (a) **The Company** is required to do so under a provision of Schedule 3 of the **STC**; and/or
- (b) permitted in accordance with PC.3.4, PC.3.5 and OC2.3.2.

GC.12.3 **The Company** has obligations under the **EMR Documents** to inform **EMR Administrative Parties** of certain data. **The Company** may pass on **User** data to an **EMR Administrative Party** where **The Company** is required to do so under an **EMR Document**.

GC.12.4 **The Company** may use **User** data for the purpose of carrying out its **EMR Functions**.

GC.13 RELEVANT TRANSMISSION LICENSEES

GC.13.1 It is recognised that the **Relevant Transmission Licensees** are not parties to the **Grid Code**. Accordingly, notwithstanding that Operating Code No. 8 Appendix 1 ("OC8A") and Appendix 2 ("OC8B"), OC7.6, OC9.4 and OC9.5 refer to obligations which will in practice be performed by the **Relevant Transmission Licensees** in accordance with relevant obligations under the **STC**, for the avoidance of doubt all contractual rights and obligations arising under OC8A, OC8B, OC7.6, OC9.4 and OC9.5 shall exist between **The Company** and the relevant **User** and in relation to any enforcement of those rights and obligations OC8A, OC8B, OC7.6, OC9.4 and OC9.5 shall be so read and construed. The **Relevant Transmission Licensees** shall enjoy no enforceable rights under OC8A, OC8B, OC7.6, OC9.4 and OC9.5 nor shall they be liable (other than pursuant to the **STC**) for failing to discharge any obligations under OC8A, OC8B, OC7.6, OC9.4 and OC9.5.

GC.13.2 For the avoidance of doubt nothing in this **Grid Code** confers on any **Relevant Transmission Licensee** any rights, powers or benefits for the purpose of the Contracts (Rights of Third Parties) Act 1999.

GC.14 BETTA TRANSITION ISSUES

GC.14.1 The provisions of the Appendix to the **General Conditions** apply in relation to issues arising out of the transition associated with the designation of **GC Modification Proposals** by the **Secretary of State** in accordance with the provisions of the Energy Act 2004 for the purposes of Condition C14 of **The Company's Transmission Licence**.

GC.15 EMBEDDED EXEMPTABLE LARGE AND MEDIUM POWER STATIONS

GC.15.1 This GC.15.1 shall have an effect until and including 31st March 2007.

- (i) CC.6.3.2, CC.6.3.7, CC.8.1 and BC3.5.1; and

- (ii) Planning Code obligations and other Connection Conditions; shall apply to a **User** who owns or operates an **Embedded Exemptable Large Power Station**, or a **Network Operator** in respect of an **Embedded Exemptable Medium Power Station**, except where and to the extent that, in respect of that **Embedded Exemptable Large Power Station** or **Embedded Exemptable Medium Power Station**, **The Company** agrees or where the relevant **User** and **The Company** fail to agree, where and to the extent that the **Authority** consents.

GC.16

NOT USED

ANNEX TO THE GENERAL CONDITIONS

The **Electrical Standards** are as follows:

(a) **Electrical Standards** applicable in England and Wales

The Relevant Electrical Standards Document (RES)		Reference	Issue	Date
Parts 1 to 3			2.0	22 nd Jan 2015
Part 4 – Specific Requirements				
1	Back-Up Protection Grading across The Company's and other Network Operator Interfaces	PS(T)044(RES)	2.0	22 nd Jan 2015
2	Ratings and General Requirements for Plant, Equipment, Apparatus and Services for the National Grid System and Connections Points to it.	TS 1 (RES)	1.0 Draft	9 th Jan 2006
3	Substations	TS 2.01 (RES)	1.0 Draft	9 th Jan 2006
4	Switchgear	TS 2.02 (RES)	2.0	22 nd Jan 2015
5	Substation Auxiliary Supplies	TS 2.12 (RES)	2.0	22 nd Jan 2015
6	Ancillary Light Current Equipment	TS 2.19 (RES)	2.0	22 nd Jan 2015
7	Substation Interlocking Schemes	TS 3.01.01 (RES)	1.0 Draft	9 th Jan 2006
8	Earthing Requirements	TS 3.01.02 (RES)	2.0	22 nd Jan 2015
9	Circuit Breakers	TS 3.02.01 (RES)	2.0	22 nd Jan 2015
10	Disconnectors and Earthing Switches	TS 3.02.02 (RES)	2.0	22 nd Jan 2015
11	Current Transformers for Protection and General Use on the 132kV, 275kV and 400kV Systems	TS 3.02.04 (RES)	2.0	22 nd Jan 2015
12	Voltage Transformers	TS 3.02.05 (RES)	1.0 Draft	9 th Jan 2006
13	Bushings	TS 3.02.07 (RES)	2.0	22 nd Jan 2015
14	Solid Core Post Insulators for Substations	TS 3.02.09 (RES)	2.0	22 nd Jan 2015
15	Voltage Dividers	TS 3.02.12 (RES)	1.0 Draft	9 th Jan 2006
16	Gas Insulated Switchgear	TS 3.02.14 (RES)	2.0	22 nd Jan 2015
17	Environmental and Test Requirements for Electronic Equipment	TS 3.24.15 (RES)	2.0	22 nd Jan 2015
18	Busbar Protection	TS 3.24.34 (RES)	2.0	22 nd Jan 2015
19	Circuit Breaker Fail Protection	TS 3.24.39 (RES)	2.0	22 nd Jan 2015
20	System Monitor – Dynamic System Monitoring (DSM)	TS 3.24.70 (RES)	2.0	22 nd Jan 2015
21	Protection & Control for HVDC Systems	TS 3.24.90 (RES)	2.0	22 nd Jan 2015
22	Ancillary Services Business Monitoring	TS 3.24.95 (RES)	2.0	22 nd Jan 2015

23	Guidance for Conductor Jointing in Substations	TGN(E)187 (RES)	2.0	22 nd Jan 2015
Additional Requirements				
Control Telephony Electrical Standard			1.0	17 th Sept 2007

(b) Electronic data communications facilities.

Communications Standards for Electronic Data Communication Facilities and Automatic Logging Devices	Issue 4	26 th Aug 2015
EDT Interface Specification	Issue 4	18 th Dec 2000
EDT Submitter Guidance Note	Issue 1	21 st Dec 2001
EDL Message Interface Specification	Issue 4	20 th Jun 2000
EDL Instruction Interface Valid Reason Codes	Issue 2	23 rd Jul 2001
MODIS Interface Specification	Version 4	26 th May 2015

(c) Scottish **Electrical Standards** for **SPT's Transmission System**.

SPTTS 1	Requirements for the SP Transmission System and Connection Points to it.	Issue 1
SPTTS 2.1	Substations	Issue 1
SPTTS 2.2	Switchgear	Issue 1
SPTTS 2.3	Transformers and Reactors	Issue 1
SPTTS 2.5	Cables	Issue 1
SPTTS 2.6	Protection	Issue 1
SPTTS 2.7	Substation Control Systems	Issue 1
SPTTS 2.12	Substation Auxiliary Supplies	Issue 1

(d) Scottish **Electrical Standards** for **SHETL's Transmission System**.

1. NGTS 1: Rating and General Requirements for Plant, Equipment, Apparatus and Services for the National Grid System and Direct Connection to it. Issue 3 March 1999.
2. NGTS 2.1: Substations
Issue 2 May 1995
3. NGTS 3.1.1: Substation Interlocking Schemes.
Issue 1 October 1993.
4. NGTS 3.2.1: Circuit Breakers and Switches.
Issue 1 September 1992.
5. NGTS 3.2.2: Disconnectors and Earthing Switches.
Issue 1 March 1994.
6. NGTS 3.2.3: Metal-Oxide surge arresters for use on 132, 275 and 400kV systems.
Issue 2 May 1994.
7. NGTS 3.2.4: Current Transformers for protection and General use on the 132, 275 and 400kV systems.
Issue 1 September 1992.
8. NGTS 3.2.5: Voltage Transformers for use on the 132, 275 and 400 kV systems.
Issue 2 March 1994.
9. NGTS 3.2.6: Current and Voltage Measurement Transformers for Settlement Metering of 33, 66, 132, 275 and 400kV systems.
Issue 1 September 1992.
10. NGTS 3.2.7: Bushings for the Grid Systems.
Issue 1 September 1992.
11. NGTS 3.2.9: Post Insulators for Substations.
Issue 1 May 1996.
12. NGTS 2.6: Protection
Issue 2 June 1994.
13. NGTS 3.11.1: Capacitors and Capacitor Banks.
Issued 1 March 1993.

APPENDIX TO THE GENERAL CONDITIONS

- GC.A.1 Introduction
- GC.A.1.1 This Appendix to the **General Conditions** deals with issues arising out of the transition associated with the designation of amendments to the **Grid Code** by the **Secretary of State** in accordance with the provisions of the Energy Act 2004 for the purposes of Condition C14 of **The Company's Transmission Licence** at that time. For the purposes of this Appendix to the **General Conditions**, the version of the **Grid Code** as amended by the changes designated by the **Secretary of State** and as further amended from time to time shall be referred to as the "**GB Grid Code**".
- GC.A.1.2 The provisions of this Appendix to the **General Conditions** shall only apply to **Users** (as defined in GC.A.1.4) and **The Company** after **Go-Live** for so long as is necessary for the transition requirements referred to in GC.A.1.1 and cut-over requirements (as further detailed in GC.A.3.1) to be undertaken.
- GC.A.1.3 In this Appendix to the **General Conditions**:
- (a) **Existing E&W Users** and **E&W Applicants** are referred to as "**E&W Users**";
 - (b) **Users** who as at 1 January 2005 have entered into an agreement or have accepted an offer for connection to and/or use of the **Transmission System** of **The Company** are referred to as "**Existing E&W Users**";
 - (c) **Users** (or prospective **Users**) other than **Existing E&W Users** who apply during the **Transition Period** for connection to and/or use of the **Transmission System** of **The Company** are referred to as "**E&W Applicants**";
 - (d) Existing **Scottish Users** and **Scottish Applicants** are referred to as "**Scottish Users**";
 - (e) **Users** who as at 1 January 2005 have entered into an agreement or have accepted an offer for connection to and/or use of the **Transmission System** of either **Relevant Transmission Licensee** are referred to as "**Existing Scottish Users**";
 - (f) **Users** (or prospective **Users**) other than **Existing Scottish Users** who apply during the **Transition Period** for connection to and/or use of the **Transmission System** of either **Relevant Transmission Licensee** are referred to as "**Scottish Applicants**";
 - (g) the term "**Transition Period**" means the period from **Go-Active** to **Go-Live** (unless it is provided to be different in relation to a particular provision), and is the period with which this Appendix to the **General Conditions** deals;
 - (h) the term "**Interim GB SYS**" means the document of that name referred to in Condition C11 of **The Company's Transmission Licence**;
 - (i) the term "**Go-Active**" means the date on which the amendments designated by the **Secretary of State** to the **Grid Code** in accordance with the Energy Act 2004 come into effect; and
 - (j) the term "**Go-Live**" means the date which the **Secretary of State** indicates in a direction shall be the BETTA go-live date.
- GC.A.1.4 The provisions of GC.2.1 shall not apply in respect of this Appendix to the **General Conditions**, and in this Appendix to the **General Conditions** the term "**Users**" means:
- (a) **Generators**;
 - (b) **Network Operators**;
 - (c) **Non-Embedded Customers**;
 - (d) **Suppliers**;
 - (e) **BM Participants**; and
 - (f) **Externally Interconnected System Operators**,

(g) **DC Converter Station** owners

to the extent that the provisions of this Appendix to the **General Conditions** affect the rights and obligations of such **Users** under the other provisions of the **GB Grid Code**.

- GC.A.1.5 The **GB Grid Code** has been introduced with effect from **Go-Active** pursuant to the relevant licence changes introduced into **The Company's Transmission Licence**. **The Company** is required to implement and comply, and **Users** to comply, with the **GB Grid Code** subject as provided in this Appendix to the **General Conditions**, which provides for the extent to which the **GB Grid Code** is to apply to **The Company** and **Users** during the **Transition Period**.
- GC.A.1.6 This Appendix to the **General Conditions** comprises:
- (a) this Introduction;
 - (b) **GB Grid Code** transition issues; and
 - (c) Cut-over issues.
- GC.A.1.7 Without prejudice to GC.A.1.8, the failure of any **User** or **The Company** to comply with this Appendix to the **General Conditions** shall not invalidate or render ineffective any part of this Appendix to the **General Conditions** or actions undertaken pursuant to this Appendix to the **General Conditions**.
- GC.A.1.8 A **User** or **The Company** shall not be in breach of any part of this Appendix to the **General Conditions** to the extent that compliance with that part is beyond its power by reason of the fact that any other **User** or **The Company** is in default of its obligations under this Appendix to the **General Conditions**.
- GC.A.1.9 Without prejudice to any specific provision under this Appendix to the **General Conditions** as to the time within which or the manner in which a **User** or **The Company** should perform its obligations under this Appendix to the **General Conditions**, where a **User** or **The Company** is required to take any step or measure under this Appendix to the **General Conditions**, such requirement shall be construed as including any obligation to:
- (a) take such step or measure as quickly as reasonably practicable; and
 - (b) do such associated or ancillary things as may be necessary to complete such step or measure as quickly as reasonably practicable.
- GC.A.1.10 **The Company** shall use reasonable endeavours to identify any amendments it believes are needed to the **GB Grid Code** in respect of the matters referred to for the purposes of Condition C14 of **The Company's Transmission Licence** and in respect of the matters identified in GC.A.1.11, and, having notified the **Authority** of its consultation plans in relation to such amendments, **The Company** shall consult in accordance with the instructions of the **Authority** concerning such proposed amendments.
- GC.A.1.11 The following matters potentially require amendments to the **GB Grid Code**:
- (a) The specific detail of the obligations needed to manage implementation in the period up to and following (for a temporary period) **Go-Live** to achieve the change to operation under the **GB Grid Code** (to be included in GC.A.3).
 - (b) Information (including data) and other requirements under the **GB Grid Code** applicable to **Scottish Users** during the **Transition Period** (to be included in GC.A.2).
 - (c) The conclusions of Ofgem/DTI in relation to small and/or embedded generator issues under BETTA and allocation of access rights on a GB basis.
 - (d) Any arrangements required to make provision for operational liaison, including **Black Start** and islanding arrangements in Scotland.
 - (e) Any arrangements required to make provision for cascade hydro **BM Units**.
 - (f) Any consequential changes to the safety co-ordination arrangements resulting from **STC** and **STC** procedure development.

(g) Any arrangements required to reflect the **Electrical Standards** for the **Transmission Systems** of **SPT** and **SHETL**.

(h) The conclusions of Ofgem/DTI in relation to planning and operating standards.

GC.A.1.12 **The Company** shall notify the **Authority** of any amendments that **The Company** identifies as needed pursuant to GC.A.1.10 and shall make such amendments as the **Authority** approves.

GC.A.2 GB Grid Code Transition

General Provisions

GC.A.2.1 The provisions of the **GB Grid Code** shall be varied or suspended (and the requirements of the **GB Grid Code** shall be deemed to be satisfied) by or in accordance with, and for the period and to the extent set out in this GC.A.2, and in accordance with the other applicable provisions in this Appendix to the **General Conditions**.

GC.A.2.2 E&W Users:

In furtherance of the licence provisions referred to in GC.A.1.5, E&W Users shall comply with the GB Grid Code during the Transition Period, but shall comply with and be subject to it subject to this Appendix to the General Conditions, including on the basis that:

- (a) during the **Transition Period** the **Scottish Users** are only complying with the **GB Grid Code** in accordance with this Appendix to the **General Conditions**; and
- (b) during the **Transition Period** the **National Electricity Transmission System** shall be limited to the **Transmission System** of **The Company**, and all rights and obligations of **E&W Users** in respect of the **National Electricity Transmission System** under the **GB Grid Code** shall only apply in respect of the **Transmission System** of **The Company**, and all the provisions of the **GB Grid Code** shall be construed accordingly.

GC.A.2.3 Scottish Users:

In furtherance of the licence provisions referred to in GC.A.1.5, Scottish Users shall comply with the GB Grid Code and the GB Grid Code shall apply to or in relation to them during the Transition Period only as provided in this Appendix to the General Conditions.

GC.A.2.4 THE COMPANY:

In furtherance of the licence provisions referred to in GC.A.1.5, **The Company** shall implement and comply with the **GB Grid Code** during the **Transition Period**, but shall implement and comply with and be subject to it subject to, and taking into account, all the provisions of this Appendix to the **General Conditions**, including on the basis that:

- (a) during the **Transition Period** **The Company's** rights and obligations in relation to **E&W Users** in respect of the **National Electricity Transmission System** under the **GB Grid Code** shall only apply in respect of the **Transmission System** of **The Company**, and all the provisions of the **GB Grid Code** shall be construed accordingly; and
- (b) during the **Transition Period** **The Company's** rights and obligations in relation to **Scottish Users** in respect of the **National Electricity Transmission System** under the **GB Grid Code** shall only be as provided in this Appendix to the **General Conditions**.

Specific Provisions

GC.A.2.5 Definitions:

The provisions of the **GB Grid Code Glossary and Definitions** shall apply to and for the purposes of this Appendix to the **General Conditions** except where provided to the contrary in this Appendix to the **General Conditions**.

GC.A.2.6

Identification of Documents:

In the period beginning at **Go-Active**, **Scottish Users** will work with **The Company** to identify and agree with **The Company** any documents needed to be in place in accordance with the **GB Grid Code**, to apply from **Go-Live** or as earlier provided for under this Appendix to the **General Conditions**, including (without limitation) **Site Responsibility Schedules**, **Gas Zone Diagrams** and **OC9 Desynchronised Island Procedures**.

GC.A.2.7

Data:

Each **Scottish User** must provide, or enable a **Relevant Transmission Licensee** to provide, **The Company**, as soon as reasonably practicable upon request, with all data which **The Company** needs in order to implement, with effect from **Go-Live**, the **GB Grid Code** in relation to Scotland. This data will include, without limitation, the data that a new **User** is required to submit to **The Company** under CC.5.2. **The Company** is also entitled to receive data on **Scottish Users** over the **Relevant Transmission Licensees'** SCADA links to the extent that **The Company** needs it for use in testing and in order to implement, with effect from **Go-Live**, the **GB Grid Code** in relation to Scotland. After **Go-Live** such data shall, notwithstanding GC.A.1.2, be treated as though it had been provided to **The Company** under the enduring provisions of the **GB Grid Code**.

GC.A.2.8

Verification of Data etc:

The Company shall be entitled to request from a **Scottish User** (which shall comply as soon as reasonably practicable with such a request) confirmation and verification of any information (including data) that has been received by a **Relevant Transmission Licensee** under an existing grid code and passed on to **The Company** in respect of that **Scottish User**. After **Go-Live** such information (including data) shall, notwithstanding GC.A.1.2, be treated as though provided to **The Company** under the enduring provisions of the **GB Grid Code**.

GC.A.2.9

Grid Code Review Panel:

- (a) The individuals whose names are notified to **The Company** by the **Authority** prior to **Go-Active** as **Panel** members (and alternate members, if applicable) are agreed by **Users** (including **Scottish Users**) and **The Company** to constitute the **Panel** members and alternate members of the **Grid Code Review Panel** as at the first meeting of the **Grid Code Review Panel** after **Go-Active** as if they had been appointed as **Panel** members (and alternate members) pursuant to the relevant provisions of the Constitution and Rules of the **Grid Code Review Panel** incorporating amendments equivalent to the amendments to GC.4.2 and GC.4.3 designated by the **Secretary of State** in accordance with the provisions of the Energy Act 2004 for the purposes of Condition C14 of **The Company's Transmission Licence**.
- (b) The provisions of GC.4 of the **GB Grid Code** shall apply to, and in respect of, **Scottish Users** from **Go-Active**.

GC.A.2.10

Interim GB SYS:

Where requirements are stated in, or in relation to, the **GB Grid Code** with reference to the **Seven Year Statement**, they shall be read and construed as necessary as being with reference to the **Interim GB SYS**.

GC.A.2.11

General Conditions:

The provisions of GC.4, GC.12 and GC.13.2 of the **GB Grid Code** shall apply to and be complied with by **Scottish Users** in respect of this Appendix to the **General Conditions**.

GC.A.2.12

OC2 Data

- (a) The following provisions of the **GB Grid Code** shall apply to and be complied with by **Scottish Users** with effect from the relevant date indicated below:
- (i) OC2.4.1.2.3 (a) from 19 January 2005 in respect of 2 to 52 week submissions,
 - (ii) OC2.4.1.2.4 (c) from 25 February 2005 in respect of 2 to 49 day submissions,
 - (iii) OC2.4.1.2.4 (b) from 22 March 2005 in respect of 2 to 14 day submissions,

The data to be submitted in respect of OC2.4.1.2.3 (a) and OC2.4.1.2.4 (b) and (c) need only be in respect of dates on or after 1 April 2005.

GC.A.3 Cut-over

GC.A.3.1 It is anticipated that it will be appropriate for arrangements to be put in place for final transition to BETTA in the period up to and following (for a temporary period) **Go-Live**, for the purposes of:

- (a) managing the transition from operations under the **Grid Code** as in force immediately prior to **Go-Active** to operations under the **GB Grid Code** and the **BSC** as in force on and after **Go-Active**;
- (b) managing the transition from operations under the existing grid code applicable to **Scottish Users** as in force immediately prior to **Go-Active** to operations under the **GB Grid Code** as in force on and after **Go-Active**;
- (c) managing the transition of certain data from operations under the existing grid code applicable to **Scottish Users** before and after **Go-Active**; and
- (d) managing **GB Grid Code** systems, processes and procedures so that they operate effectively at and from **Go-Live**.

- GC.A.3.2
- (a) The provisions of **BC1** (excluding BC1.5.1, BC1.5.2 and BC1.5.3) shall apply to and be complied with by **Scottish Users** and by **The Company** in respect of such **Scottish Users** with effect from 11:00 hours on the day prior to **Go-Live**
 - (b) Notwithstanding (a) above, **Scottish Users** may submit data for **Go-Live** 3 days in advance of **Go-Live** on the basis set out in the **Data Validation, Consistency and Defaulting Rules** which shall apply to **Scottish Users** and **The Company** in respect of such **Scottish Users** on that basis and for such purpose.
 - (c) The **Operational Day** for the purposes of any submissions by **Scottish Users** prior to **Go-Live** under a) and b) above for the day of **Go-Live** shall be 00:00 hours on **Go Live** to 05:00 hours on the following day.
 - (d) The provisions of **BC2** shall apply to and be complied with by **Scottish Users** and by **The Company** in respect of such **Scottish Users** with effect from 23:00 hours on the day prior to **Go-Live**.
 - (e) The provisions of **OC7.4.8** shall apply to and be complied with by **Scottish Users** and by **The Company** in respect of such **Scottish Users** with effect from 11:00 hours on the day prior to **Go-Live**.
 - (f) In order to facilitate cut-over, **Scottish Users** acknowledge and agree that **The Company** will exchange data submitted by such **Scottish Users** under **BC1** prior to Go-Live with the Scottish system operators to the extent necessary to enable the cut-over.
 - (g) Except in the case of **Reactive Power**, **Scottish Users** should only provide **Ancillary Services** from **Go-Live** where they have been instructed to do so by **The Company**. In the case of **Reactive Power**, at **Go-Live** a **Scottish Users** MVA_r output will be deemed to be the level instructed by **The Company** under **BC2**, following this **Scottish Users** should operate in accordance with **BC2.A.2.6** on the basis that MVA_r output will be allowed to vary with system conditions.

< END OF GENERAL CONDITIONS >

GOVERNANCE RULES

(GR)

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PART A

GR.1 INTRODUCTION

- GR.1.1 This section of the Grid Code sets out how the Grid Code is to be amended and the procedures set out in this section, to the extent that they are dealt with in the Code Administration Code of Practice, are consistent with the principles contained in the Code Administration Code of Practice. Where inconsistencies or conflicts exist between the Grid Code and the Code Administration Code of Practice, the Grid Code shall take precedence.
- GR.1.2 There is a need to bring proposed amendments to the attention of Users and others, to discuss such proposals and to report on them to the Authority and in furtherance of this, the Governance Rules set out the functions of a Grid Code Review Panel and Workgroups and for consultation by the Code Administrator.
- GR.1.3 For the purpose of these Governance Rules the term “User” shall mean any person who is under any obligation or granted any rights under the **Grid Code**.

PART B

GR.2 CODE ADMINISTRATOR

- GR.2.1 **The Company** shall establish and maintain a **Code Administrator** function, which shall carry out the roles referred to in GR.2.2 and GR.3.2. **The Company** shall ensure the functions are consistent with the **Code Administration Code of Practice**.
- GR.2.2 The **Code Administrator** shall in conjunction with other code administrators, maintain, publish, review and (where appropriate) amend from time to time the **Code Administration Code of Practice** approved by the **Authority** provided that any amendments to the **Code Administration Code of Practice** proposed by the **Code Administrator** are approved by the **Grid Code Review Panel** prior to being raised by the **Code Administrator**, and any amendments to be made to the **Code Administration Code of Practice** are approved by the **Authority**.

GR.3 THE GRID CODE REVIEW PANEL

- GR.3.1 Establishment and Composition
- GR.3.1.1 The **Grid Code Review Panel** shall be the standing body to carry out the functions referred to in GR.3.2
- GR.3.1.2 The **Grid Code Review Panel** shall comprise the following members:
- (a) the person appointed as the chairman of the **Grid Code Review Panel** (the “**Panel Chairman**”) in accordance with GR.4.1, who shall (subject to GR.11.4) be a voting member unless they are an employee of **The Company** in which case they will be a non-voting member;
 - (b) the following members, appointed in accordance with GR.4.2 (a), who shall be non-voting members:
 - (i) a representative of the **Code Administrator**;
 - (ii) a representative of the **Authority** appointed in accordance with GR.4.3;
 - (iii) a person representing the BSC Panel appointed in accordance with GR.4.2(d); and the chair of the **GCDF**;
 - (c) the following members who shall be voting **Panel Members**:

- (i) a representative of **The Company** appointed in accordance with GR.4.2(c);
 - (ii) two representatives of the **Network Operators**;
 - (iii) a representative of **Suppliers**;
 - (iv) a representative of the **Onshore Transmission Licensees** (who may be an employee of **The Company**);
 - (v) a representative of the **Offshore Transmission Licensees**;
 - (vi) four representatives of the **Generators**;
 - (vii) the **Consumer Representative**, appointed in accordance with GR.4.2(b);
 - (viii) the person appointed (if the **Authority** so decides) by the Authority in accordance with GR.4.4;
- (d) a secretary (the “**Panel Secretary**”), who shall be a person appointed and provided by the **Code Administrator** to assist the **Grid Code Review Panel** and who shall be responsible for the administration of the **Grid Code Review Panel** and **Grid Code Modification Proposals**. The **Panel Secretary** will be a non-voting member of the **Grid Code Review Panel**.

GR.3.2

Functions of the **Grid Code Review Panel** and the **Code Administrator’s** Role

- (a) The **Grid Code Review Panel** shall have the functions assigned to it in these Governance Rules.
- (b) Without prejudice to GR.3.2(a) and to the further provisions of these Governance Rules, the **Grid Code Review Panel** shall endeavour at all times to operate:
 - (i) in an efficient, economical and expeditious manner, taking account of the complexity, importance and urgency of particular **Grid Code Modification Proposals**; and
 - (ii) with a view to ensuring that the **Grid Code** facilitates achievement of the **Grid Code Objectives**.
- (c) **The Company** shall be responsible for implementing or supervising the implementation of **Approved Modifications** and **Approved Grid Code Self Governance Proposals** and **Approved Grid Code Fast Track Proposals** in accordance with the provisions of the **Grid Code** which shall reflect the production of the revised **Grid Code**. The **Code Administrator** and **The Company** shall be responsible for implementing and supervising the implementation of any amendments to their respective systems and processes necessary for the implementation of the **Approved Modification** and the **Approved Grid Code Self-Governance Proposals** provided there is no successful appeal and the **Approved Grid Code Fast Track Proposals** provided no objections are received in accordance with GR.26. However, it will not include the implementation of **Users’** systems and processes. The **Code Administrator** will carry out its role in an efficient, economical and expeditious manner and (subject to any extension granted by the **Authority** where the **Code Administrator** has applied for one in accordance with GR.3.2(d) or (e) in accordance with the **Implementation Date**.
- (d) Subject to notifying **Users**, the **Code Administrator** will, with the **Authority’s** approval, apply to the **Authority** for a revision or revisions to the **Implementation Date** where the **Code Administrator** becomes aware of any circumstances which is likely to mean that the **Implementation Date** is unachievable, which shall include as a result of a **Legal Challenge**, at any point following the approval of the **Grid Code Modification Proposal**.
- (e) In the event that the Authority’s decision to approve or not to approve a **Grid Code Modification Proposal** is subject of **Legal Challenge** (and the party raising such **Legal Challenge** has received from the relevant authority the necessary permission to proceed) then the **Code Administrator** will, with the **Authority’s** approval, apply to the **Authority** for a revision or revisions to the **Proposed Implementation Date** in the **Grid Code Modification Report** in respect of such **Grid Code Modification Proposal** as necessary such that if such **Grid Code Modification Proposal** were to be approved following such **Legal Challenge** the **Proposed Implementation Date** would be achievable.

- (f) Prior to making any request to the **Authority** for any revision pursuant to GR.3.2(d) (including where it is necessary as a result of a **Legal Challenge**) or GR.3.2(e) the **Code Administrator** shall consult on the revision with **Users** and such other person who may properly be considered to have an appropriate interest in it in accordance with GR.21.2 and GR.21.8. The request to the **Authority** shall contain copies of (and a summary of) all written representations or objections made by consultees during the consultation period.

GR.3.3 Duties of Panel Members

- (a) A person appointed as a **Panel Member**, or an **Alternate Member**, by **Users** under GR.3.1 or GR.7.2, by the **Authority** under GR.4.3 and the person appointed as **Panel Chairman** under GR.4.1, and each of their alternates when acting in that capacity:
- (i) shall act impartially and in accordance with the requirements of the **Grid Code**; and
 - (ii) shall not be representative of, and shall act without undue regard to the particular interests of the persons or body of persons by whom he was appointed as **Panel Member** and any **Related Person** from time to time.
- (b) Such a person shall not be appointed as a **Panel Member** or an **Alternate Member** (as the case may be) unless he shall have first:
- (i) confirmed in writing to the **Code Administrator** for the benefit of all **Users** that he agrees to act as a **Panel Member** or **Alternate Member** in accordance with the **Grid Code** and acknowledges the requirements of GR.3.3 (a) and GR.3.3(c);
 - (ii) where that person is employed, provided to the **Panel Secretary** a letter from his employer agreeing that he may act as **Panel Member** or **Alternate Member**, and that the requirement in GR.3.3(a)(ii) shall prevail over his duties as an employee.
- (c) A **Panel Member** or **Alternate Member** shall, at the time of appointment and upon any change in such interests, disclose (in writing) to the **Panel Secretary** any such interests (in relation to the **Grid Code**) as are referred to in GR.3.3(a)(ii).
- (d) Upon a change in employment of a **Panel Member** or **Alternate Member**, he shall so notify the **Panel Secretary** and shall endeavour to obtain from his new employer and provide to the **Panel Secretary** a letter in the terms required in GR.3.3(b)(ii); and he shall be removed from office if he does not do so within a period of sixty (60) days after such change in employment.

GR.4 APPOINTMENT OF PANEL MEMBERS

GR.4.1 Panel Chairman

- (a) The **Panel Chairman** shall be a person appointed (or re-appointed) by **The Company**, having particular regard to the views of the **Grid Code Review Panel**, and shall act independently of **The Company**.
- (b) A person shall be appointed or re-appointed as the **Panel Chairman** where the **Authority** has approved such appointment or reappointment and **The Company** has given notice to the **Panel Secretary** of such appointment, with effect from the date of such notice or (if later) with effect from the date specified in such notice.

GR.4.2 Other Panel Members:

- (a) the **Network Operators, Suppliers, Onshore Transmission Licensees, Offshore Transmission Licensees** and **Generators** may appoint **Panel Members** by election in accordance with Annex GR.A.

- (b) The **Citizens Advice** or the **Citizens Advice Scotland** may appoint one person as a **Panel Member** representing customers by giving notice of such appointment to the **Panel Secretary**, and may remove and re-appoint by notice.
- (c) **The Company** shall appoint the **The Company** representative referred to at GR.3.1.2(c)(i) and shall give notice of the identity of such person to the **Panel Secretary**, and may remove and re-appoint by notice to the **Panel Secretary**.
- (d) The **BSC Panel** shall appoint a representative to be the member of the **Grid Code Review Panel** referred to at GR.3.1.2(c) (iii) and shall give notice of the identity of such person to the **Panel Secretary**, and may remove and re-appoint by notice to the **Panel Secretary**.

GR.4.3. The **Authority** shall from time to time notify the **Panel Secretary** of the identity of the **Authority** representative referred to at GR.3.1.2(b)(ii).

GR.4.4 Appointment of Further Member:

- (a) If in the opinion of the **Authority** there is a class or category of person (whether or not a **User**) who have interests in respect of the **Grid Code** but whose interests:
 - (i) are not reflected in the composition of **Panel Members** for the time being appointed; but
 - (ii) would be so reflected if a particular person was appointed as an additional **Panel Member**, then the **Authority** may at any time appoint (or re-appoint) that person as a **Panel Member** by giving notice of such appointment to the **Panel Secretary** but in no event shall the **Authority** be able to appoint more than one person so that there could be more than one such **Panel Member**.
- (b) A person appointed as a **Panel Member** pursuant to this GR.4.4 shall remain appointed, subject to GR.5 and GR.6, notwithstanding that the conditions by virtue of which he was appointed (for example that the interests he reflects are otherwise reflected) may cease to be satisfied.

GR.4.5 Natural Person

No person other than an individual shall be appointed a **Panel Member** or his alternate.

GR.5 TERM OF OFFICE

The term of office of a **Panel Member**, the **Panel Chairman** and **Alternate Members** shall be a period expiring on 31 December every second year. A **Panel Member**, the **Panel Chairman** and **Alternate Member** shall be eligible for reappointment on expiry of his term of office.

GR.6 REMOVAL FROM OFFICE

GR.6.1 A person shall cease to hold office as the **Panel Chairman**, a **Panel Member** or an **Alternate Member**:

- (a) upon expiry of his term of office unless re-appointed;
- (b) if he:
 - (i) resigns from office by notice delivered to the **Panel Secretary**;
 - (ii) becomes bankrupt or makes any arrangement or composition with his creditors generally;
 - (iii) is or may be suffering from mental disorder and either is admitted to hospital in pursuance of an application under the Mental Health Act 1983 or the Mental Health (Scotland) Act 1960 or an order is made by a court having jurisdiction in matters concerning mental disorder for his detention or for the appointment of a receiver, *curator bonis* or other person with respect to his property or affairs;
 - (iv) becomes prohibited by law from being a director of a company under the Companies Act 1985;

- (v) dies; or
 - (vi) is convicted on an indictable offence; or
- (c) as provided for in GR.3.3(d);
- (d) if the **Grid Code Review Panel** resolves (and the **Authority** does not veto such resolution by notice in writing to the **Panel Secretary** within fifteen (15) **Business Days**) that he should cease to hold office on grounds of his serious misconduct;
- (e) if the **Grid Code Review Panel** resolves (and the **Authority** does not veto such resolution by notice in writing to the **Panel Secretary** within fifteen (15) **Business Days**) that he should cease to hold office due to a change in employer notwithstanding compliance with GR.3.3(d).

GR.6.2 A **Grid Code Review Panel** resolution under GR.6.1(d) or (e) shall, notwithstanding any other paragraph, require the vote in favour of at least all **Panel Members** less one (other than the **Panel Member** or **Alternate Member** who is the subject of such resolution) and for these purposes an abstention shall count as a vote cast in favour of the resolution. A copy of any such resolution shall forthwith be sent to the **Authority** by the **Panel Secretary**.

GR.6.3 A person shall not qualify for appointment as a **Panel Member** or **Alternate Member** if at the time of the proposed appointment he would be required by the above to cease to hold that office.

GR.6.4 The **Panel Secretary** shall give prompt notice to **The Company**, all **Panel Members**, all **Users** and the **Authority** of the appointment or re-appointment of any **Panel Member** or **Alternate Member** or of any **Panel Member** or **Alternate Member** ceasing to hold office and publication on the **Website** and (where relevant details are supplied to the **Panel Secretary**) despatch by electronic mail shall fulfil this obligation.

GR.7 ALTERNATES

GR.7.1 Alternate: Panel Chairman

The **Panel Chairman** shall preside at every meeting of the **Grid Code Review Panel** at which he is present. If he is unable to be present at a meeting, he may appoint an alternate (who shall be a senior employee of **The Company**) to act as the **Panel Chairman**, who may or may not be a **Panel Member**. If neither the **Panel Chairman** nor his alternate is present at the meeting within half an hour of the time appointed for holding the meeting, the **Panel Members** present may appoint one of their number to be the chairman of the meeting.

GR.7.2 Alternate(s): other Panel Members.

- (a) At the same time that the parties entitled to vote in the relevant election appoint **Elected Panel Members** under GR.4.2(a), they shall appoint the following **Alternate Members**:
- (i) one alternate representative of the **Suppliers**;
 - (ii) one alternate representative of the **Onshore Transmission Licensees**;
 - (iii) one alternate representative of the **Offshore Transmission Licensees**; and
 - (iv) two alternate representatives of the **Generators**.

In the event that the election process fails to appoint an **Alternate Member** for any of the **Elected Panel Members**, each **Elected Panel Member** shall be entitled (but not obligated) to each at their own discretion nominate their own **Alternate Member**.

- (b) Any **Panel Member** that is not an **Elected Panel Member** shall be entitled (but not obligated) to each at their own discretion nominate their own **Alternate Member**.
- (c) A **Panel Member** shall give notice to the **Panel Secretary** in the event it will be represented by an **Alternate Member** for any one **Grid Code Review Panel** meeting.

- (d) Where a **Panel Member** has nominated an **Alternate Member** in accordance with GR.7.2(a) or (b), they may remove such **Alternate Member**, by giving notice of such removal, and any nomination of a different **Alternate Member**, to the **Panel Secretary**. A **Panel Member** may not choose as his **Alternate Member**: any party who is already acting as an **Alternate Member** for another **Panel Member**; or another **Panel Member**.
- (e) All information to be sent by the **Panel Secretary** to **Panel Members** pursuant to these **Governance Rules** shall also be sent by the **Panel Secretary** to each **Alternate Member** by electronic mail (where relevant details shall have been provided by each **Alternate Member**).

GR.7.3 Alternates: General Provisions

- (a) The appointment or removal by a **Panel Member** of an **Alternate Member** shall be effective from the time when such notice is given to the **Panel Secretary** or (if later) the time specified in such notice.
- (b) The **Panel Secretary** shall promptly notify all **Panel Members** and **Users** of appointment or removal by any **Panel Member** of any alternate and publication on the **Website** and (where relevant details have been provided to the **Panel Secretary**) despatch by electronic mail shall fulfil this obligation.

GR.7.4 Alternates: Rights, Cessation and References

- (a) Where the **Panel Chairman** or a **Panel Member** has appointed an alternate:
 - (i) the alternate shall be entitled:
 - i. unless the appointing **Panel Member** shall otherwise notify the **Panel Secretary**, to receive notices of meetings of the **Grid Code Review Panel**;
 - ii. to attend, speak and vote at any meeting of the **Grid Code Review Panel** at which the **Panel Member** by whom he was appointed is not present, and at such meeting to exercise and discharge all of the functions, duties and powers of such **Panel Member**;
 - (ii) the **Alternate Member** shall have the same voting rights the **Panel Member** in whose place he is attending;
 - (iii) GR.8, GR.9, GR.10, GR.11 and GR.12 shall apply to the **Alternate Member** as if he were the appointing **Panel Member** and a reference to a **Panel Member** elsewhere in the **Grid Code** shall, unless the context otherwise requires, include his duly appointed **Alternate Member**.
 - (iv) for the avoidance of doubt, the appointing **Panel Member** shall not enjoy any of the rights transferred to the **Alternate Member** at any meeting at which, or in relation to any matter on which, the **Alternate Member** acts on his behalf.
- (b) A person appointed as an **Alternate Member** shall automatically cease to be such **Alternate Member**:
 - (i) if the appointing **Panel Member** ceases to be a **Panel Member**;
 - (ii) if any of the circumstances in GR.6.1(b) applies in relation to such person, but, in the case of a person elected as an **Alternate Member**, they shall continue to be an **Alternate Member** available for appointment under GR.7.2.

GR.8 MEETINGS

GR.8.1 Meetings of the **Grid Code Review Panel** shall be held at regular intervals and at least every 2 months at such time and such place as the **Grid Code Review Panel** shall decide.

- GR.8.2 A regular meeting of the **Grid Code Review Panel** may be cancelled if:
- (a) the **Panel Chairman** considers, having due regard to the lack of business in the agenda, that there is insufficient business for the **Grid Code Review Panel** to conduct and requests the **Panel Secretary** to cancel the meeting;
 - (b) the **Panel Secretary** notifies all **Panel Members**, not less than five (5) **Business Days** before the date for which the meeting is to be convened, of the proposal to cancel the meeting; and
 - (c) by the time three (3) **Business Days** before the date for which the meeting is or is to be convened, no **Panel Member** has notified the **Panel Secretary** that he objects to such cancellation.
- GR.8.3 If any **Panel Member** wishes, acting reasonably, to hold a special meeting (in addition to regular meetings under GR.8.1) of the **Grid Code Review Panel**:
- (a) he shall request the **Panel Secretary** to convene such a meeting and inform the **Panel Secretary** of the matters to be discussed at the meeting;
 - (b) the **Panel Secretary** shall promptly convene the special meeting for a day as soon as practicable but not less than five (5) **Business Days** after such request.
- GR.8.4 Any meeting of the **Grid Code Review Panel** shall be convened by the **Panel Secretary** by notice (which will be given by electronic mail if the relevant details are supplied to the **Panel Secretary**) to each **Panel Member** (and to the **Authority**):
- (a) setting out the date, time and place of the meeting and (unless the **Grid Code Review Panel** has otherwise decided) given at least five (5) **Business Days** before the date of the meeting;
 - (b) accompanied by an agenda of the matters for consideration at the meeting and any supporting papers available to the **Panel Secretary** at the time the notice is given (and the **Panel Secretary** shall circulate to **Panel Members** any late papers as and when they are received by him).
- GR.8.5 The **Panel Secretary** shall send a copy of the notice convening a meeting of the **Grid Code Review Panel**, and the agenda and papers accompanying the notice, to the **Panel Members and Alternate Members**, and publication on the **Website** and despatch by electronic mail (if the relevant details are supplied to the **Panel Secretary**) shall fulfil this obligation.
- GR.8.6 Any **Panel Member** (or, at the **Panel Member's** request, the **Panel Secretary**) may notify matters for consideration at a meeting of the **Grid Code Review Panel** in addition to those notified by the **Panel Secretary** under GR.8.4 by notice to all **Panel Members** and persons entitled to receive notice under GR.8.5, not less than three (3) **Business Days** before the date of the meeting.
- GR.8.7 The proceedings of a meeting of the **Grid Code Review Panel** shall not be invalidated by the accidental omission to give or send notice of the meeting or a copy thereof or any of the accompanying agenda or papers to, or failure to receive the same by, any person entitled to receive such notice, copy, agenda or paper.
- GR.8.8 A meeting of the **Grid Code Review Panel** may consist of a conference between **Panel Members** who are not all in one place but who are able (by telephone or otherwise) to speak to each of the others and to be heard by each of the others simultaneously.
- GR.8.9 With the consent of all **Panel Members** (whether obtained before, at or after any such meeting) the requirements of this GR.8 as to the manner in and notice on which a meeting of the **Grid Code Review Panel** is convened may be waived or modified provided that no meeting of the **Grid Code Review Panel** shall be held unless notice of the meeting and its agenda has been sent to the persons entitled to receive the same under GR.8.5 at least 24 hours before the time of the meeting.
- GR.8.10 Subject to GR.8.11, no matter shall be resolved at a meeting of the **Grid Code Review**

Panel unless such matter was contained in the agenda accompanying the **Panel Secretary's** notice under GR.8.4 or was notified in accordance with GR.8.6.

GR.8.11 Where:

- (a) any matter (not contained in the agenda and not notified pursuant to GR.8.4 and GR.8.6) is put before a meeting of the **Grid Code Review Panel**, and
- (b) in the opinion of the **Grid Code Review Panel** it is necessary (in view of the urgency of the matter) that the **Grid Code Review Panel** resolve upon such matter at the meeting, the **Grid Code Review Panel** may so resolve upon such matter, and the **Grid Code Review Panel** shall also determine at such meeting whether the decision of the **Grid Code Review Panel** in relation to such matter should stand until the following meeting of the **Grid Code Review Panel**, in which case (at such following meeting) the decision shall be reviewed and confirmed or (but not with effect earlier than that meeting, and only so far as the consequences of such revocation do not make implementation of the **Grid Code** or compliance by **Users** with it impracticable) revoked.

GR.9 **PROCEEDINGS AT MEETINGS**

GR.9.1 Subject as provided in the **Grid Code**, the **Grid Code Review Panel** may regulate the conduct of and adjourn and reconvene its meetings as it sees fit.

GR.9.2 Meetings of the **Grid Code Review Panel** shall be open to attendance by a representative of any **User** (including any **Authorised Electricity Operator; The Company** or a **Materially Affected Party**), the **Citizens Advice** or the **Citizens Advice Scotland** and any person invited by the **Panel Chairman** and/or any other **Panel Member**.

GR.9.3 The **Panel Chairman** and any other **Panel Member** may invite any person invited by them under GR.9.2, and/or any attending representative of a **User**, to speak at the meeting (but such person shall have no vote).

GR.9.4 As soon as practicable after each meeting of the **Grid Code Review Panel**, the **Panel Secretary** shall prepare and send (by electronic mail or otherwise) to **Panel Members** the minutes of such meeting, which shall be (subject to GR.9.5) approved (or amended and approved) at the next meeting of the **Grid Code Review Panel** after they were so sent, and when approved (excluding any matter which the **Grid Code Review Panel** decided was not appropriate for such publication) shall be placed on the **Website**.

GR.9.5 If, following the circulation of minutes (as referred to in GR.9.4), the meeting of the **Grid Code Review Panel** at which they were to be approved is cancelled pursuant to GR.8.2, such minutes (including any proposed changes thereto which have already been received) shall be recirculated with the notification of the cancellation of the meeting of the **Grid Code Review Panel**. **Panel Members** shall confirm their approval of such minutes to the **Panel Secretary** (by electronic mail) no later than five (5) **Business Days** following such minutes being re-circulated. If no suggested amendments are received within such five (5) **Business Days** period, the minutes will be deemed to have been approved. If the minutes are approved, or deemed to have been approved, (excluding any matter which the **Grid Code Review Panel** decided was not appropriate for such publication) they shall be placed on the **Website**. If suggested amendments are received within such five (5) **Business Days** period, the minutes shall remain unapproved and the process for approval (or amendment and approval) of such minutes at the next meeting of the **Grid Code Review Panel**, as described in GR.9.4, shall be followed.

GR.10 **QUORUM**

GR.10.1 No business shall be transacted at any meeting of the **Grid Code Review Panel** unless a quorum is present throughout the meeting.

GR.10.2 Subject to GR.10.4, a quorum shall be 6 **Panel Members** who have a vote present (subject to GR.8.8) in person or by their alternates, of whom at least one shall be appointed by **The Company**. Where a **Panel Member** is represented by an **Alternate Member**, that **Alternate Member** cannot represent any other **Panel Member** at the same meeting.

GR.10.3 If within half an hour after the time for which the meeting of the **Grid Code Review Panel** has been convened a quorum is not present (and provided the **Panel Secretary** has not been notified by **Panel Members** that they have been delayed and are expected to arrive within a reasonable time):

- (a) the meeting shall be adjourned to the same day in the following week (or, if that day is not a **Business Day** the next **Business Day** following such day) at the same time;
- (b) the **Panel Secretary** shall give notice of the adjourned meeting as far as practicable in accordance with GR.8.

GR.10.4 If at the adjourned meeting there is not a quorum present within half an hour after the time for which the meeting was convened, those present shall be a quorum.

GR.11 **VOTING**

GR.11.1 At any meeting of the **Grid Code Review Panel** any matter to be decided which shall include the **Grid Code Review Panel Recommendation Vote** shall be put to a vote of those **Panel Members** entitled to vote in accordance with these **Governance Rules** upon the request of the **Panel Chairman** or any **Panel Member**.

GR.11.2 Subject to GR.11.4, in deciding any matter at any meeting of the **Grid Code Review Panel** each **Panel Member** other than the **Panel Chairman** shall cast one vote.

GR.11.3 Except as otherwise expressly provided in the **Grid Code**, and in particular GR.6.2, any matter to be decided at any meeting of the **Grid Code Review Panel** shall be decided by simple majority of the votes cast at the meeting (an abstention shall not be counted as a cast vote).

GR.11.4 The **Panel Chairman** shall not cast a vote as a **Panel Member** but shall have a casting vote on any matter where votes are otherwise cast equally in favour of and against the relevant motion. Where the vote is in respect of a **Grid Code Modification Proposal** the **Panel Chairman** may only use such casting vote to vote against such **Grid Code Modification Proposal**. The **Panel Chairman** will have a free vote in respect of any other vote. Where any person other than the actual **Panel Chairman** is acting as chairman he shall not have a casting vote.

GR.11.5 Any resolution in writing signed by or on behalf of all **Panel Members** shall be valid and effectual as if it had been passed at a duly convened and quorate meeting of the **Grid Code Review Panel**. Such a resolution may consist of several instruments in like form signed by or on behalf of one or more **Panel Members**.

GR.12 **PROTECTIONS FOR PANEL MEMBERS**

GR.12.1 Subject to GR.12.2 all **CUSC Parties** shall jointly and severally indemnify and keep indemnified each **Panel Member**, the **Panel Secretary** and each member of a **Workgroup** (“**Indemnified Persons**”) in respect of all costs (including legal costs), expenses, damages and other liabilities properly incurred or suffered by such **Indemnified Persons** when acting in or in connection with his office under the **Grid Code**, or in what he in good faith believes to be the proper exercise and discharge of the powers, duties, functions and discretions of that office in accordance with the **Grid Code**, and all claims, demands and proceedings in connection therewith other than any such costs, expenses, damages or other liabilities incurred or suffered as a result of the wilful default or bad faith of such **Indemnified Person**.

GR.12.2 The indemnity provided in GR.12.1 shall not extend to costs and expenses incurred in the ordinary conduct of being a **Panel Member** or **Panel Secretary**, or member of a **Workgroup** including, without limitation, accommodation costs and travel costs or any remuneration for their services to the **Grid Code Review Panel** or **Workgroup**.

GR.12.3 The **Users** agree that no **Indemnified Person** shall be liable for anything done when acting properly in or in connection with his office under the **Grid Code**, or anything done in what he in good faith believes to be the proper exercise and discharge of the powers,

duties, functions and discretions of that office in accordance with the **Grid Code**. Each **CUSC Party** hereby irrevocably and unconditionally waives any such liability of any **Indemnified Person** and any rights, remedies and claims against any **Indemnified Person** in respect thereof.

GR.12.4 Without prejudice to GR.12.2, nothing in GR.12.3 shall exclude or limit the liability of an **Indemnified Person** for death or personal injury resulting from the negligence of such **Indemnified Person**.

PART C

GR.13 **GRID CODE MODIFICATION REGISTER**

GR.13.1 The **Code Administrator** shall establish and maintain a register ("**Grid Code Modification Register**") in a form as may be agreed with the **Authority** from time to time, which shall record the matters set out in GR.13.3.

GR.13.2 The purpose of the **Grid Code Modification Register** shall be to assist the **Grid Code Review Panel** and to enable the **Grid Code Review Panel, Users** and any other persons who may be interested to be reasonably informed of the progress of **Grid Code Modification Proposals** and **Approved Modifications** from time to time.

GR.13.3 The **Grid Code Modification Register** shall record in respect of current outstanding **Grid Code Review Panel** business:

- (a) details of each **Grid Code Modification Proposal** (including the name of the **Proposer**, the date of the **Grid Code Modification Proposal** and a brief description of the **Grid Code Modification Proposal**);
- (b) whether such **Grid Code Modification Proposal** is an **Urgent Modification**;
- (c) the current status and progress of each **Grid Code Modification Proposal**, if appropriate the anticipated date for reporting to the **Authority** in respect thereof, and whether it has been withdrawn, rejected or implemented for a period of three (3) months after such withdrawal, rejection or implementation or such longer period as the **Authority** may determine;
- (d) the current status and progress of each **Approved Modification**, each **Approved Grid Code Self-Governance Proposal**, and each **Approved Fast Track Proposal**; and
- (e) such other matters as the **Grid Code Review Panel** may consider appropriate from time to time to achieve the purpose of GR.13.2.

GR.13.4 The **Grid Code Modification Register** (as updated from time to time and indicating the revisions since the previous issue) shall be published on the **Website** or (in the absence, for whatever reason, of the **Website**) in such other manner and with such frequency (being not less than once per month) as the **Code Administrator** may decide in order to bring it to the attention of the **Grid Code Review Panel, Users** and other persons who may be interested.

GR.14 **CHANGE CO-ORDINATION**

GR.14.1 The **Code Administrator** shall establish (and, where appropriate, revise from time to time) joint working arrangements for change co-ordination with each **Core Industry Document Owner** and with the **STC Modification Panel** to facilitate the identification, co-ordination, making and implementation of change to **Core Industry Documents** and the **STC** consequent on a **Grid Code Modification Proposal**, including, but not limited to, changes that are appropriate in order to avoid conflict or inconsistency as between the **Grid Code** and any **Core Industry Document** and the **STC**, in a full and

timely manner.

GR.14.2 The working arrangements referred to in GR.14.1 shall be such as to enable the consideration, development and evaluation of **Grid Code Modification Proposals**, and the implementation of **Approved Modifications**, to proceed in a full and timely manner and enable changes to **Core Industry Documents** and the **STC** consequent on an amendment to be made and given effect wherever possible (subject to any necessary consent of the **Authority**) at the same time as such **Grid Code Modification Proposal** is made and given effect.

GR.15 GRID CODE MODIFICATION PROPOSALS

GR.15.1 A proposal to modify the **Grid Code** may be made:

- (a) by any **User**; any **Authorised Electricity Operator** liable to be materially affected by such a proposal; the **Citizens Advice** or the **Citizens Advice Scotland**;
- (b) under GR.25.5, by the **Grid Code Review Panel**; or
- (c) by the **Authority**:
 - (i) following publication of its **Significant Code Review** conclusions; or
 - (ii) under GR.17; or
 - (iii) in order to comply with or implement the **Electricity Regulation** and/or any relevant legally binding decisions of the European Commission and/or the **Agency**.

GR.15.2 A **Standard Modification** shall follow the procedure set out in GR.18 to GR.22.

GR.15.3 A **Grid Code Modification Proposal** shall be submitted in writing to the **Panel Secretary** and, subject to the provisions of GR.15.4 below, shall contain the following information in relation to such proposal:

- (a) the name of the **Proposer**;
- (b) the name of the representative of the **Proposer** who shall represent the **Proposer** in person for the purposes of this GR.15;
- (c) a description (in reasonable but not excessive detail) of the issue or defect which the proposed modification seeks to address;
- (d) a description (in reasonable but not excessive detail) of the proposed modification and of its nature and purpose;
- (e) where possible, an indication of those parts of the **Grid Code** which would require amendment in order to give effect to (and/or would otherwise be affected by) the proposed modification and an indication of the nature of those amendments or effects;
- (f) the reasons why the **Proposer** believes that the proposed modification would better facilitate achievement of the **Grid Code Objectives** as compared with the current version of the **Grid Code** together with background information in support thereof;
- (g) the reasoned opinion of the **Proposer** as to why the proposed modification should not fall within a current **Significant Code Review**, whether the proposed modification should be treated as a **Self-Governance Modification** or whether the proposed modification fails to meet the **Self-Governance Criteria** and as a result should proceed along the **Standard Modification** route;
- (h) the reasoned opinion of the Proposer as to whether that impact is likely to be material and if so an assessment of the quantifiable impact of the proposed modification on greenhouse gas emissions, to be conducted in accordance with such current guidance on the treatment of carbon costs and evaluation of the greenhouse gas

emissions as may be issued by the **Authority** from time to time;

- (i) where possible, an indication of the impact of the proposed modification on **Core Industry Documents** and the **STC**;
- (j) where possible, an indication of the impact of the proposed modification on relevant computer systems and processes used by **Users**.

GR.15.4 The **Proposer** of a **Grid Code Fast Track Proposal** is not required to provide the items referenced at GR.15.3 (f) – (j) inclusive, unless either:

- (a) the **Grid Code Review Panel** has, pursuant to GR.26.5 or GR.26.6, not agreed unanimously that the **Grid Code Fast Track Proposal** meets the **Fast Track Criteria**, or has not unanimously approved the **Grid Code Fast Track Proposal**; or
- (b) there has been an objection to the **Approved Fast Track Proposal** pursuant to GR.26.12, whereupon the **Proposer** shall be entitled to provide the additional information required pursuant to GR.15.3 for a **Grid Code Modification Proposal** within 28 days of the **Panel Secretary's** request. Where the **Proposer** fails to provide the additional information in accordance with such timescales, the **Panel Secretary** may reject such proposal in accordance with GR.15.5.

GR.15.5 If a proposal fails in any material respect to provide the information in GR.15.3 (excluding (e), (i) and (j) thereof), the **Panel Secretary** may reject such proposal provided that:

- (a) the **Panel Secretary** shall furnish the **Proposer** with the reasons for such rejection;
- (b) the **Panel Secretary** shall report such rejection to the **Grid Code Review Panel** at the next **Grid Code Review Panel** meeting, with details of the reasons;
- (c) if the **Grid Code Review Panel** decides or the **Authority** directs to reverse the **Panel Secretary's** decision to refuse the submission, the **Panel Secretary** shall notify the **Proposer** accordingly and the proposal shall be dealt with in accordance with these Governance Rules;
- (d) nothing in these Governance Rules shall prevent a **Proposer** from submitting a revised proposal in compliance with the requirements of GR.15.3 in respect of the same subject-matter.

GR.15.6 Without prejudice to the development of a **Workgroup Alternative Grid Code Modification(s)** pursuant to GR.20.10 and GR.20.15, the **Grid Code Review Panel** shall direct in the case of (a), and may direct in the case of (b), the **Panel Secretary** to reject a proposal pursuant to GR.15, other than a proposal submitted by **The Company** pursuant to a direction issued by the **Authority** following a **Significant Code Review** in accordance with GR.16.4, or an Authority Led modification, if and to the extent that such proposal has, in the opinion of the **Grid Code Review Panel**, substantially the same effect as:

- (a) a **Pending Grid Code Modification Proposal**; or
- (b) a **Rejected Grid Code Modification Proposal**, where such proposal is made at any time within two (2) months after the decision of the **Authority** not to direct **The Company** to modify the **Grid Code** pursuant to the **Transmission Licence** in the manner set out in such **Grid Code Modification Proposal**, and the **Panel Secretary** shall notify the **Proposer** accordingly.

GR.15.7 Promptly upon receipt of a **Grid Code Modification Proposal**, the **Panel Secretary** shall:

- (a) allocate a unique reference number to the **Grid Code Modification Proposal**;
- (b) enter details of the **Grid Code Modification Proposal** on the **Grid Code**

Modification Register.

- GR.15.8 Subject to GR.8.6 and GR.26, where the **Grid Code Modification Proposal** is received more than five (5) **Business Days** prior to the next **Grid Code Review Panel** meeting, the **Panel Secretary** shall place the **Grid Code Modification Proposal** on the agenda of the next **Grid Code Review Panel** meeting and otherwise shall place it on the agenda of the next succeeding **Grid Code Review Panel** meeting.
- GR.15.9 It shall be a condition to the right to make a proposal to modify the **Grid Code** under this GR.15 that the **Proposer**:
- (a) grants a non-exclusive royalty free licence to all **Users** who request the same covering all present and future rights, **IPRs** and moral rights it may have in such proposal (as regards use or application in Great Britain); and
 - (b) warrants that, to the best of its knowledge, information and belief, no other person has asserted to the **Proposer** that such person has any **IPRs** or normal rights or rights of confidence in such proposal, and, in making a proposal, a **Proposer** which is a **Grid Code Party** shall be deemed to have granted the licence and given the warranty in (a) and (b) above.
 - (c) The provisions of this GR.15.9 shall apply to any **WG Consultation Alternative Request**, and also to a **Relevant Party** supporting a **Grid Code Modification Proposal** in place of the original **Proposer** in accordance with GR.15.10 (a) for these purposes the term **Proposer** shall include any such **Relevant Party** or a person making such a **WG Consultation Alternative Request**.
- GR.15.10 Subject to GR.16.1, which deals with the withdrawal of a **Grid Code Modification Proposal** made pursuant to a direction following a **Significant Code Review**, a **Proposer** may withdraw his support for a **Standard Modification** by notice to the **Panel Secretary** at any time prior to the **Grid Code Review Panel Recommendation Vote** undertaken in relation to that **Standard Modification** pursuant to GR.22.4, and a **Proposer** may withdraw his support for a **Grid Code Modification Proposal** that meets the **Self-Governance Criteria** by notice to the **Panel Secretary** at any time prior to the **Grid Code Review Panel Self-Governance Vote** undertaken in relation to that **Grid Code Modification Proposal** pursuant to GR.24.9, and a **Proposer** may withdraw his support for a **Grid Code Fast Track Proposal** by notice to the **Panel Secretary** at any time prior to the **Panel's** vote on whether to approve the **Grid Code Fast Track Proposal** pursuant to GR.26 in which case the **Panel Secretary** shall forthwith:
- (a) notify those parties specified in GR.15.1 as relevant in relation to the **Grid Code Modification Proposal** in question (a "**Relevant Party**") that he has been notified of the withdrawal of support by the **Proposer** by publication on the **Website** and (where relevant details are supplied) by electronic mail. A **Relevant Party** may within five (5) **Business Days** notify the **Panel Secretary** that it is prepared to support the **Grid Code Modification Proposal** in place of the original **Proposer**. If such notice is received, the name of such **Relevant Party** shall replace that of the original **Proposer** as the **Proposer**, and the **Grid Code Modification Proposal** shall continue. If more than one notice is received, the first received shall be utilised;
 - (b) if no notice of support is received under (a), the matter shall be discussed at the next **Grid Code Review Panel** meeting. If the **Grid Code Review Panel** so agrees, it may notify **Relevant Parties** that the **Grid Code Modification Proposal** is to be withdrawn, and a further period of five (5) **Business Days** shall be given for support to be indicated by way of notice;
 - (c) if no notice of support is received under (a) or (b), the **Grid Code Modification Proposal** shall be marked as withdrawn on the **Grid Code Modification Register**; Code Administrator as Critical Friend
- GR.15.11 The **Code Administrator** shall provide assistance insofar as is reasonably practicable and on reasonable request to parties with an interest in the **Grid Code Modification Proposal** process that request it in relation to the **Grid Code**, as provided for in the **Code**

Administration Code of Practice, including, but not limited to, assistance with:

- (a) Drafting a **Grid Code Modification Proposal**;
- (b) Understanding the operation of the **Grid Code**;
- (c) Their involvement in, and representation during, the **Grid Code Modification Proposal** process (including but not limited to **Grid Code Review Panel**, and/or **Workgroup** meetings) as required or as described in the **Code Administration Code of Practice**; and
- (d) accessing information relating to **Grid Code Modification Proposals** and/or **Approved Modifications**.

GR.16

SIGNIFICANT CODE REVIEW

GR.16.1

If any party specified under GR.15.1 (other than the **Authority**) makes a **Grid Code Modification Proposal** during a **Significant Code Review Phase**, unless exempted by the **Authority** or unless GR.16.4(b) applies, the **Grid Code Review Panel** shall assess whether the **Grid Code Modification Proposal** falls within the scope of a **Significant Code Review** and the applicability of the exceptions set out in GR.16.4 and shall notify the **Authority** of its assessment, its reasons for that assessment and any representations received in relation to it as soon as practicable.

GR.16.2

The **Grid Code Review Panel** shall proceed with the **Grid Code Modification Proposal** made during a **Significant Code Review Phase** in accordance with GR.18 (notwithstanding any consultation undertaken pursuant to GR.16.5 and its outcome), unless directed otherwise by the **Authority** pursuant to GR.16.3.

GR.16.3

Subject to GR.16.4, the **Authority** may at any time direct that a **Grid Code Modification Proposal** made during a **Significant Code Review Phase** falls within the scope of a **Significant Code Review** and must not be made during the **Significant Code Review Phase**. If so directed, the **Grid Code Review Panel** will not proceed with that **Grid Code Modification Proposal**, and the **Proposer** shall decide whether the **Grid Code Modification Proposal** shall be withdrawn or suspended until the end of the **Significant Code Review Phase**. If the **Proposer** fails to indicate its decision whether to withdraw or suspend the **Grid Code Modification Proposal** within twenty- eight (28) days of the **Authority's** direction, it shall be deemed to be suspended. If the **Grid Code Modification Proposal** is suspended, it shall be open to the **Proposer** at the end of the **Significant Code Review Phase** to indicate to the **Grid Code Review Panel** that it wishes that **Grid Code Modification Proposal** to proceed, and it shall be considered and taken forward in the manner decided upon by the **Grid Code Review Panel** at the next meeting, and it is open to the **Grid Code Review Panel** to take into account any work previously undertaken in respect of that **Grid Code Modification Proposal**. If the **Proposer** makes no indication to the **Grid Code Review Panel** within twenty-eight (28) days of the end of the **Significant Code Review Phase** as to whether or not it wishes the **Grid Code Modification Proposal** to proceed, it shall be deemed to be withdrawn.

GR.16.4

A **Grid Code Modification Proposal** that falls within the scope of a **Significant Code Review** may be made where:

- (a) the **Authority** so determines, having taken into account (among other things) the urgency of the subject matter of the **Grid Code Modification Proposal**; or
- (b) the **Grid Code Modification Proposal** is made by **The Company** pursuant to a direction from the **Authority** ; or
- (c) it is raised by the **Authority** pursuant to GR15.1(c)(iii) who reasonably

considers the **Grid Code Modification Proposal** to be necessary to comply with or implement the **Electricity Regulation** and/or any relevant legally binding decisions of the European Commission and/or the **Agency**;
or

- (d) it is raised by the **Authority** and is in respect of a **Significant Code Review**.

GR.16.5 Where a direction under GR.16.3 has not been issued, GR.16.4 does not apply and the **Grid Code Review Panel** considers that a **Grid Code Modification Proposal** made during a **Significant Code Review Phase** falls within the scope of a **Significant Code Review**, the **Grid Code Review Panel** may consult on its suitability as part of the **Standard Modification** route set out in GR.19, GR.20, GR.21 and GR.22.

GR.16.6 If, within twenty eight (28) days after the **Authority** has published its **Significant Code Review** conclusions:

- (a) the **Authority** issues directions to **The Company**, including directions to **The Company** to make a **Grid Code Modification Proposal**, **The Company** shall comply with those directions and **The Company** and all **Users** shall treat the **Significant Code Review Phase** as ended *on the date on which The Company makes a Grid Code Modification Proposal in accordance with the Authority's directions*;
- (b) the **Authority** issues to the **The Company** a statement that no directions under sub-paragraph (a) will be issued in relation to a **Grid Code Modification Proposal**, **The Company** and all **Users** shall treat the **Significant Code Review Phase** as ended on the date of such statement;
- (c) the **Authority** raises a **Grid Code Modification Proposal** in accordance with GR.15.1(c) or GR.17 **The Company** and all **Users** shall treat the **Significant Code Review Phase** as ended;
- (d) the **Authority** issues a statement that it will continue work on the **Significant Code Review**, **The Company** and all **Users** shall treat the **Significant Code Review Phase** as continuing until it is brought to an end in accordance with GR.16.7;
- (e) neither directions under sub-paragraph (a) nor a statement under sub-paragraphs (b) or (d) have been issued, nor a **Grid Code Modification Proposal** under sub-paragraph (c) has been made, the **Significant Code Review Phase** will be deemed to have ended. The **Authority's** published conclusions and directions to **The Company** will not fetter any voting rights of the **Panel Members** or the procedures informing the **Grid Code Modification Report**.

GR.16.7 If the **Authority** issues a statement under GR.16.6(d) and/or a direction in accordance with GR.16.10, the **Significant Code Review Phase** will be deemed to have ended when:

- (a) the **Authority** issues a statement that the **Significant Code Review Phase** has ended;
- (b) one of the circumstances in sub-paragraphs GR.16.6(a) or (c) occurs (irrespective of whether such circumstance occurs within twenty-eight (28) days after the **Authority** has published its **Significant Code Review** conclusions); or
- (c) the **Authority** makes a decision consenting, or otherwise, to an **Authority-Led Modification** following the **Grid Code Review Panel's** submission of its **Grid Code Modification Report**.

- GR.16.8 Any **Grid Code Modification Proposal** in respect of a **Significant Code Review** that is not an **Authority-Led Modification** raised pursuant to GR.17 shall be treated as a **Standard Modification** and shall proceed through the process for **Standard Modifications** set out in GR.18, GR.19, GR.20, GR.21 and GR.22
- GR.16.9 **The Company** may not, without the prior consent of the **Authority**, withdraw a **Grid Code Modification Proposal** made pursuant to a direction issued by the **Authority** pursuant to GR.16.4(b)).
- GR.16.10 Where a **Grid Code Modification Proposal** has been raised in accordance with GR.16.4(b) or GR.15.1(a), or by the **Authority** under GR.15.1(c) and it is in respect of a **Significant Code Review**, the **Authority** may issue a direction (a “backstop **direction**”), which requires such proposal(s) and any alternatives to be withdrawn and which causes the **Significant Code Review Phase** to recommence.

GR.17 AUTHORITY LED MODIFICATIONS

Power to develop a proposed modification

- GR.17.1 The **Authority** may develop a **Authority-Led Modification** in respect of a **Significant Code Review**, in accordance with the procedures set out in this GR.17.

- GR.17.2 An Authority-led modification may be submitted where the SCR phase is extended by a statement issued by the Authority as described in GR.16.6(d), or where a direction is issued under GR.16.10.

Authority-Led Modification Report

- GR.17.3 The **Authority** may submit its proposed **Authority-Led Modification** to the **Code Administrator**, together with such supplemental information as the **Authority** considers appropriate.

- GR.17.4 Upon receipt of the **Authority’s** proposal under GR.17.3, the **Code Administrator** shall prepare a written report on the proposal (the "**Authority-Led Modification Report**"). Where the **Code Administrator** does not reasonably believe the information provided by the **Authority** under 17.3 to be sufficient for it to prepare an **Authority-Led Modification Report** the **Code Administrator** will notify the **Authority** as soon as reasonably practical. The **Authority-Led Modification Report** must be consistent with the information provided by the **Authority** under GR.17.3, and shall:

- (a) be addressed and delivered to the **Grid Code Review Panel**;
- (b) set out the legal text of the proposed **Authority-Led Modification**;
- (c) include a description of the proposed **Authority-Led Modification**;
- (d) include a summary of the views (including any recommendations) from parties consulted in respect of the proposed **Authority-Led Modification**;
- (e) include an analysis of whether (and, if so, to what extent) the proposed **Authority-Led Modification** would better facilitate achievement of the **Grid Code Objective(s)** with a detailed explanation of the **Authority’s** reasons for its assessment, including, where the impact is likely to be material, an assessment of the quantifiable impact of the proposed **Authority-Led Modification** on greenhouse gas emissions, to be conducted in accordance with such current guidance on the treatment of carbon costs and evaluation of the greenhouse gas emissions as may be issued by the **Authority** from time to time, and providing a detailed explanation of the **Authority’s** reasons for that assessment;
- (f) specify the proposed implementation timetable (including the **Proposed**

Implementation Date);

- (g) provide an assessment of:
- (i) the impact of the proposed **Authority-Led Modification** on the **Core Industry Documents** and the **STC**;
 - (ii) the changes which would be required to the **Core Industry Documents** and the **STC** in order to give effect to the proposed **Authority-Led Modification**;
 - (iii) the mechanism and likely timescale for the making of the changes referred to in (ii);
 - (iv) the changes and/or developments which would be required to central computer systems and, if practicable, processes used in connection with the operation of arrangements established under the **Core Industry Documents** and the **STC**;
 - (v) the mechanism and likely timescale for the making of the changes referred to in (iv);
 - (vi) an estimate of the costs associated with making and delivering the changes referred to in (ii) and (iv), such costs are expected to relate to: for (ii) the costs of amending the **Core Industry Document(s)** and **STC** and for (iv) the costs of changes to computer systems and possibly processes which are established for the operation of the **Core Industry Documents** and the **STC**, together with an analysis and a summary of representations in relation to such matters, including any made by **Small Participants**, the **Citizens Advice** and the **Citizens Advice Scotland**;
- (h) contain, to the extent such information is available to the **Code Administrator**, an assessment of the impact of the proposed **Authority-Led Modification** on **Users** in general (or classes of **Users**), including the changes which are likely to be required to their internal systems and processes and an estimate of the development, capital and operating costs associated with implementing the changes to the **Grid Code** and to **Core Industry Documents** and the **STC**;
- (i) include copies of (and a summary of) all written representations or objections made by parties consulted by the **Authority** in respect of the proposed **Authority-Led Modification** and subsequently maintained; and
- (j) have appended a copy of any impact assessment prepared by **Core Industry Document Owners** and the **STC** committee and the views and comments of the **Code Administrator** in respect thereof.

GR.17.5 Where the **Authority-Led Modification Report** is received more than five (5) **Business Days** prior to the next **Grid Code Review Panel** meeting, the **Panel Secretary** shall place the proposed **Authority-Led Modification** on the agenda of the next **Grid Code Review Panel** meeting and otherwise shall place it on the agenda of the next succeeding **Grid Code Review Panel** meeting.

Grid Code Review Panel Decision

GR.17.6 In the case of **Authority-Led Modifications** GR.22 shall apply, save for GR.22.1 and GR.22.2 and the **Authority-Led Modification Report** shall be used as the draft **Grid Code Modification Report**.

GR.17.7 Where an **Authority-Led Modification** has been approved in accordance with Section GR.22, GR.25 (Implementation) shall apply.

GR.18 GRID CODE MODIFICATION PROPOSAL EVALUATION

GR.18.1 This GR.18 is subject to the **Urgent Modification** procedures set out in GR.23 and the **Significant Code Review** procedures set out in GR.16.

GR.18.2 A **Grid Code Modification Proposal** shall, subject to GR.15.8, be discussed by the **Grid Code Review Panel** at the next following **Grid Code Review Panel** meeting convened.

- GR.18.3 The **Proposer's** representative shall attend such **Grid Code Review Panel** meeting and the **Grid Code Review Panel** may invite the **Proposer's** representative to present his **Grid Code Modification Proposal** to the **Grid Code Review Panel**.
- GR.18.4 The **Grid Code Review Panel** shall evaluate each **Grid Code Modification Proposal** against the **Self-Governance Criteria**.
- GR.18.5 The **Grid Code Review Panel** shall follow the procedure set out in GR.24 in respect of any **Modification** that the **Grid Code Review Panel** considers meets the **Self-Governance Criteria** unless the **Authority** makes a direction in accordance with GR.24.2 and in such a case that **Modification** shall be a **Standard Modification** and shall follow the procedure set out in GR.19, GR.20, GR.21 and GR.22.
- GR.18.6 Unless the **Authority** makes a direction in accordance with GR.24.4, a **Modification** that the **Grid Code Review Panel** considers does not meet the **Self-Governance Criteria** shall be a **Standard Modification** and shall follow the procedure set out in GR.19, GR.20, GR.21 and GR.22.
- GR.18.7 The **Grid Code Review Panel** shall evaluate each **Grid Code Fast Track Proposal** against the **Fast Track Criteria**.
- GR.18.8 The **Grid Code Review Panel** shall follow the procedure set out in GR.26 in respect of any **Grid Code Fast Track Proposal**. The provisions of GR.19 to GR.24 shall not apply to a **Grid Code Fast Track Proposal**.

GR.19 PANEL PROCEEDINGS

GR.19.1

- (a) The **Code Administrator** and the **Grid Code Review Panel** shall together establish a timetable to apply for the **Grid Code Modification Proposal** process. That timetable must comply with any direction(s) issued by the **Authority** setting and/or amending a timetable in relation to a **Grid Code Modification Proposal** that is in the respect of a **Significant Code Review**.
- (b) The **Grid Code Review Panel** shall establish the part of the timetable for the consideration by the **Grid Code Review Panel** and by a **Workgroup** (if any) which shall be no longer than six months unless in any case the particular circumstances of the **Grid Code Modification Proposal** (taking due account of its complexity, importance and urgency) justify an extension of such timetable, and provided the **Authority**, after receiving notice, does not object, taking into account all those issues.
- (c) The **Code Administrator** shall establish the part of the timetable for the consultation to be undertaken by the **Code Administrator** under these **Governance Rules** and separately the preparation of a **Grid Code Modification Report** to the **Authority**. Where the particular circumstances of the **Grid Code Modification Proposal** (taking due account of its complexity, importance and urgency) justify an extension of such timescales and provided the **Authority**, after receiving notice, does not object, taking into account all those issues, the **Code Administrator** may revise such part of the timetable.
- (d) In setting such a timetable, the **Grid Code Review Panel** and the **Code Administrator** shall exercise their respective discretions such that, in respect of each **Grid Code Modification Proposal**, a **Grid Code Modification Report** may be submitted to the **Authority** as soon after the **Grid Code Modification Proposal** is made as is consistent with the proper evaluation of such **Grid Code Modification Proposal**, taking due account of its complexity, importance and urgency.
- (e) Having regard to the complexity, importance and urgency of particular **Grid Code Modification Proposals**, the **Grid Code Review Panel** may determine the priority of **Grid Code Modification Proposals** and may (subject to any objection from the **Authority** taking into account all those issues) adjust the priority of the relevant **Grid Code Modification Proposal** accordingly.

- GR.19.2 In relation to each **Grid Code Modification Proposal**, the **Grid Code Review Panel** shall determine at any meeting of the **Grid Code Review Panel** whether to:
- (a) amalgamate the **Grid Code Modification Proposal** with any other **Grid Code Modification Proposal**;
 - (b) establish a **Workgroup** of the **Grid Code Review Panel**, to consider the **Grid Code Modification Proposal**;
 - (c) review the evaluation made pursuant to GR.18.4, taking into account any new information received; or
 - (d) proceed directly to wider consultation (in which case the **Proposer's** right to vary his **Grid Code Modification Proposal** shall lapse).
- GR.19.3 The **Grid Code Review Panel** may decide to amalgamate a **Grid Code Modification Proposal** with one or more other **Grid Code Modification Proposals** where the subject-matter of such **Grid Code Modification Proposals** is sufficiently proximate to justify amalgamation on the grounds of efficiency and/or where such **Grid Code Modification Proposals** are logically dependent on each other. Such amalgamation may only occur with the consent of the **Proposers** of the respective **Grid Code Modification Proposals**. The **Authority** shall be entitled to direct that a **Grid Code Modification Proposal** is not amalgamated with one or more other **Grid Code Modification Proposals**.
- GR.19.4 Without prejudice to each **Proposer's** right to withdraw his **Grid Code Modification Proposal** prior to the amalgamation of his **Grid Code Modification Proposal** where **Grid Code Modification Proposals** are amalgamated pursuant to GR.19.3:
- (a) such **Grid Code Modification Proposals** shall be treated as a single **Grid Code Modification Proposal**;
 - (b) references in these **Governance Rules** to a **Grid Code Modification Proposal** shall include and apply to a group of two or more **Grid Code Modification Proposals** so amalgamated; and
 - (c) the **Proposers** of each such **Grid Code Modification Proposal** shall cooperate in deciding which of them is to provide a representative for any **Workgroup** in respect of the amalgamated **Grid Code Modification Proposal** and, in default of agreement, the **Panel Chairman** shall nominate one of the **Proposers** for that purpose.
- GR.19.5 In respect of any **Grid Code Modification Proposal** that the **Grid Code Review Panel** determines to proceed directly to wider consultation in accordance with GR.19.2, the **Grid Code Review Panel**, may at any time prior to the **Grid Code Review Panel Recommendation Vote** having taken place decide to establish a **Workgroup** of the **Grid Code Review Panel** and the provisions of GR.20 shall apply. In such case the **Grid Code Review Panel** shall be entitled to adjust the timetable referred to at GR.19.1(b) and the **Code Administrator** shall be entitled to adjust the timetable referred to at GR.19.1(c), provided that the **Authority**, after receiving notice, does not object.

GR.20 WORKGROUPS

- GR.20.1 If the **Grid Code Review Panel** has decided not to proceed directly to wider consultation (or where the provisions of GR.19.5, GR.23.10 or GR.25.5 apply), a **Workgroup** will be established by the **Grid Code Review Panel** to assist the **Grid Code Review Panel** in evaluating whether a **Grid Code Modification Proposal** better facilitates achieving the **Grid Code Objectives** and whether a **Workgroup Alternative Grid Code Modification(s)** would, as compared with the **Grid Code Modification Proposal**, better facilitate achieving the **Grid Code Objectives** in relation to the issue or defect identified in the **Grid Code Modification Proposal**.
- GR.20.2 A single **Workgroup** may be responsible for the evaluation of more than one **Grid Code Modification Proposal** at the same time, but need not be so responsible.

- GR.20.3 A **Workgroup** shall comprise at least five (5) persons (who may be **Panel Members**) selected by the **Grid Code Review Panel** from those nominated by **Users**, the **Citizens Advice** or the **Citizens Advice Scotland** for their relevant experience and/or expertise in the areas forming the subject-matter of the **Grid Code Modification Proposal(s)** to be considered by such **Workgroup** (and the **Grid Code Review Panel** shall ensure, as far as possible, that an appropriate cross-section of representation, experience and expertise is represented on such **Workgroup**) provided that there shall always be at least one member representing **The Company** and if, and only if, the **Grid Code Review Panel** is of the view that a **Grid Code Modification Proposal** is likely to have an impact on the **STC**, the **Grid Code Review Panel** may invite the **STC** committee to appoint a representative to become a member of the **Workgroup**. A representative of the **Authority** may attend any meeting of a **Workgroup** as an observer and may speak at such meeting.
- GR.20.4 The **Code Administrator** shall in consultation with the **Grid Code Review Panel** appoint the chairman of the **Workgroup** who shall act impartially and as an independent chairman.
- GR.20.5 The **Grid Code Review Panel** may add further members or the **Workgroup** chairman may add or vary members to a **Workgroup**.
- GR.20.6 The **Grid Code Review Panel** may (but shall not be obliged to) replace any member or observer of a **Workgroup** appointed pursuant to GR.20.3 at any time if such member is unwilling or unable for whatever reason to fulfil that function and/or is deliberately and persistently disrupting or frustrating the work of the **Workgroup**.
- GR.20.7 The **Grid Code Review Panel** shall determine the terms of reference of each **Workgroup** and may change those terms of reference from time to time as it sees fit.
- GR.20.8 The terms of reference of a **Workgroup** must include provision in respect of the following matters:
- (a) those areas of a **Workgroup's** powers or activities which require the prior approval of the **Grid Code Review Panel**;
 - (b) the seeking of instructions, clarification or guidance from the **Grid Code Review Panel**, including on the suspension of a **Workgroup Alternative Grid Code Modification(s)** during a **Significant Code Review Phase**;
 - (c) the timetable for the work to be done by the **Workgroup**, in accordance with the timetable established pursuant to GR.19.1 (save where GR.19.5 applies); and
 - (d) the length of any **Workgroup Consultation**.
- In addition, prior to the taking of any steps which would result in the undertaking of a significant amount of work (including the production of draft legal text to modify the **Grid Code** in order to give effect to a **Grid Code Modification Proposal** and/or **Workgroup Alternative Grid Code Modification(s)**, with the relevant terms of reference setting out what a significant amount of work would be in any given case), the **Workgroup** shall seek the views of the **Grid Code Review Panel** as to whether to proceed with such steps and, in giving its views, the **Grid Code Review Panel** may consult the **Authority** in respect thereof.
- GR.20.9 Subject to the provisions of this GR.20.9 and unless otherwise determined by the **Grid Code Review Panel**, the **Workgroup** shall develop and adopt its own internal working procedures for the conduct of its business and shall provide a copy of such procedures to the **Panel Secretary** in respect of each **Grid Code Modification Proposal** for which it is responsible. Unless the **Grid Code Review Panel** otherwise determines, meetings of each **Workgroup** shall be open to attendance by a representative of any **User**, (including any **Authorised Electricity Operator**; **The Company** or a **Materially Affected Party**), the **Citizens Advice**, the **Citizens Advice Scotland**, the **Authority** and any person invited by the chairman, and the chairman of a **Workgroup** may invite any such person to speak at such meetings, other than the **Authority** who may speak at any time as per

GR.20.3.

- GR.20.10 After development by the **Workgroup** of the **Grid Code Modification Proposal**, and (if applicable) after development of any draft **Workgroup Alternative Grid Code Modification(s)**, the **Workgroup** may (subject to the provisions of GR.20.16) consult ("**Workgroup Consultation**") on the **Grid Code Modification Proposal** and, if applicable, on any draft **Workgroup Alternative Grid Code Modification(s)** with:
- (a) **Users**; and
 - (b) such other persons who may properly be considered to have an appropriate interest in it.
- GR.20.11 The **Workgroup Consultation** will be undertaken by issuing a **Workgroup Consultation** paper (and its provision in electronic form on the **Website** and in electronic mails to **Users** and such other persons, who have supplied relevant details, shall meet this requirement).
- Such **Workgroup Consultation** paper will include:
- (a) Issues which arose in the **Workgroup** discussions
 - (b) Details of any draft **Workgroup Alternative Grid Code Modification(s)**
 - (c) The date proposed by the **Code Administrator** as the **Proposed Implementation Date**.
- GR.20.12 **Workgroup Consultation** papers will be copied to **Core Industry Document Owners** and the secretary of the **STC** committee.
- GR.20.13 Any **Authorised Electricity Operator**; the **Citizens Advice** or the **Citizens Advice Scotland**, **The Company** or a **Materially Affected Party** may (subject to GR.20.17) raise a **Workgroup Consultation Alternative Request** in response to the **Workgroup Consultation**. Such **Workgroup Consultation Alternative Request** must include:
- (a) the information required by GR.15.3 (which shall be read and construed so that any references therein to "amendment proposal" or "proposal" shall be read as "request" and any reference to "Proposer" shall be read as "requester"); and
 - (b) sufficient detail to enable consideration of the request including details as to how the request better facilitates the **Grid Code Objectives** than the current version of the **Grid Code**, than the **Grid Code Modification Proposal** and than any draft **Workgroup Alternative Grid Code Modification(s)**.
- GR.20.14 The **Workgroup** shall consider and analyse any comments made or any **Workgroup Consultation Alternative Request** made by any **User** (including any **Authorised Electricity Operator**; **The Company** or a **Materially Affected Party**), the **Citizens Advice** and the **Citizens Advice Scotland** in response to the **Workgroup Consultation**.
- GR.20.15 If a majority of the members of the **Workgroup** or the chairman of the **Workgroup** believe that the **Workgroup Consultation Alternative Request** will better facilitate the **Grid Code Objectives** than the current version of the **Grid Code**, the **Workgroup** shall develop it as a **Workgroup Alternative Grid Code Modification(s)** or, where the chairman of the **Workgroup** agrees, amalgamate it with one or more other draft **Workgroup Alternative Grid Code Modification(s)** or **Workgroup Consultation Alternative Request(s)**;
- GR.20.16 Unless the **Grid Code Review Panel** directs the **Workgroup** otherwise pursuant to GR.20.17, and provided that a **Workgroup Consultation** has been undertaken in respect of the **Grid Code Modification Proposal**, no further **Workgroup Consultation** will be required in respect of any **Workgroup Alternative Grid Code Modification(s)** developed in respect of such **Grid Code Modification Proposal**.
- GR.20.17 The **Grid Code Review Panel** may, at the request of the chairman of the **Workgroup**, direct the **Workgroup** to undertake further **Workgroup Consultation(s)**. At the same

time as such direction the **Grid Code Review Panel** shall adjust the timetable referred to at GR.19.1(b) and the **Code Administrator** shall be entitled to adjust the timetable referred to at GR.19.1 (c), provided that the **Authority**, after receiving notice, does not object. No **Workgroup Consultation Alternative Request** may be raised by any **User** (including any **Authorised Electricity Operator; The Company** or a **Materially Affected Party**), the **Citizens Advice** and the **Citizens Advice Scotland** during any second or subsequent **Workgroup Consultation**.

GR.20.18 The **Workgroup** shall finalise the **Workgroup Alternative Grid Code Modification(s)** for inclusion in the report to the **Grid Code Review Panel**.

GR.20.19

- (a) Each **Workgroup** chairman shall prepare a report to the **Grid Code Review Panel** responding to the matters detailed in the terms of reference in accordance with the timetable set out in the terms of reference.
- (b) If a **Workgroup** is unable to reach agreement on any such matter, the report must reflect the views of the members of the **Workgroup**.
- (c) The report will be circulated in draft form to **Workgroup** members and a period of not less than five (5) **Business Days** or if all **Workgroup** members agree three (3) **Business Days** given for comments thereon. Any unresolved comments made shall be reflected in the final report.

GR.20.20 The chairman or another member (nominated by the chairman) of the **Workgroup** shall attend the next **Grid Code Review Panel** meeting following delivery of the report and may be invited to present the findings and/or answer the questions of **Panel Members** in respect thereof. Other members of the **Workgroup** may also attend such **Grid Code Review Panel** meeting.

GR.20.21 At the meeting referred to in GR.20.20 the **Grid Code Review Panel** shall consider the **Workgroup's** report and shall determine whether to:-

- (a) refer the proposed **Grid Code Modification Proposal** back to the **Workgroup** for further analysis (in which case the **Grid Code Review Panel** shall determine the timetable and terms of reference to apply in relation to such further analysis); or
- (b) proceed then to wider consultation as set out in GR.21; or
- (c) decide on another suitable course of action.

GR.20.22 Subject to GR.16.4 if, at any time during the assessment process carried out by the **Workgroup** pursuant to this GR.20, the **Workgroup** considers that a **Grid Code Modification Proposal** or any **Workgroup Alternative Grid Code Modification(s)** falls within the scope of a **Significant Code Review**, it shall consult on this as part of the **Workgroup Consultation** and include its reasoned assessment in the report to the **Grid Code Review Panel** prepared pursuant to GR.20.19. If the **Grid Code Review Panel** considers that the **Grid Code Modification Proposal** or the **Workgroup Alternative Grid Code Modification(s)** falls within the scope of a **Significant Code Review**, it shall consult with the **Authority**. If the **Authority** directs that the **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** falls within the scope of the **Significant Code Review**, the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** shall be suspended or withdrawn during the **Significant Code Review Phase**, in accordance with GR.16.3.

GR.20.23 The **Proposer** may, at any time prior to the final evaluation by the **Workgroup** (in accordance with its terms of reference and working practices) of that **Grid Code Modification Proposal** against the **Grid Code Objectives**, vary his **Grid Code Modification Proposal** on notice (which may be given verbally) to the chairman of the **Workgroup** provided that such varied **Grid Code Modification Proposal** shall address the same issue or defect originally identified by the **Proposer** in his **Grid Code Modification Proposal**.

GR.20.24 The **Grid Code Review Panel** may (but shall not be obliged to) require a **Grid Code Modification Proposal** to be withdrawn if, in the **Panel's** opinion, the **Proposer** of that **Grid Code Modification Proposal** is deliberately and persistently disrupting or frustrating the work of the **Workgroup** and that **Grid Code Modification Proposal** shall be deemed to have been so withdrawn. In the event that a **Grid Code Modification Proposal** is so withdrawn, the provisions of GR.15.10 shall apply in respect of that **Grid Code Modification Proposal**.

GR.21 THE CODE ADMINISTRATOR CONSULTATION

GR.21.1 In respect of any **Grid Code Modification Proposal** where a **Workgroup** has been established GR.21.2 to GR.21.6 shall apply.

GR.21.2 After consideration of any **Workgroup** report on the **Grid Code Modification Proposal** and if applicable any **Workgroup Alternative Grid Code Modification(s)** by the **Grid Code Review Panel** and a determination by the **Grid Code Review Panel** to proceed to wider consultation, the **Code Administrator** shall bring to the attention of and consult on the **Grid Code Modification Proposal** and if applicable any **Workgroup Alternative Grid Code Modification(s)** with:

- (i) **Users**; and
- (ii) such other persons who may properly be considered to have An appropriate interest in it, including **Small Participants**, the **Citizens Advice** and the **Citizens Advice Scotland**.

GR.21.3 The consultation will be undertaken by issuing a Consultation Paper (and its provision in electronic form on the **Website** and in electronic mails to **Users** and such other persons, who have supplied relevant details, shall meet this requirement).

GR.21.4 The Consultation Paper will contain:

- (a) the proposed drafting for the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** (unless the **Authority** decides none is needed in the **Grid Code Modification Report** under GR.21.5) and will indicate the issues which arose in the **Workgroup** discussions, where there has been a **Workgroup** and will incorporate **The Company's** and the **Grid Code Review Panel's** initial views on the way forward; and
- (b) the date proposed by the **Code Administrator** as the **Proposed Implementation Date** and, where the **Workgroup** terms of reference require and the dates proposed by the **Workgroup** are different from those proposed by the **Code Administrator**, those proposed by the **Workgroup**. In relation to a **Grid Code Modification Proposal** that meets the **Self-Governance Criteria**, the **Code Administrator** may not propose an implementation date earlier than the sixteenth (16) **Business Day** following the publication of the **Grid Code Review Panel's** decision to approve or reject the **Grid Code Modification Proposal**. Views will be invited on these dates.

GR.21.5 Where the **Grid Code Review Panel** is of the view that the proposed text to amend the Grid Code for a **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** is not needed in the **Grid Code Modification Report**, the **Grid Code Review Panel** shall consult (giving its reasons as to why it is of this view) with the **Authority** as to whether the **Authority** would like the **Grid Code Modification Report** to include the proposed text to amend the **Grid Code**. If it does not, no text needs to be included. If it does, and no detailed text has yet been prepared, the **Code Administrator** shall prepare such text to modify the **Grid Code** in order to give effect to such **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** and shall seek the conclusions of the relevant **Workgroup** before consulting those identified in GR.21.2.

GR.21.6 Consultation Papers will be copied to **Core Industry Document Owners** and the secretary of the **STC** committee.

- GR.21.7 In respect of any **Grid Code Modification Proposal** where a **Workgroup** has not been established GR.21.8 to GR.21.11 shall apply.
- GR.21.8 After determination by the **Grid Code Review Panel** to proceed to wider consultation, such consultation shall be conducted by the **Code Administrator** on the **Grid Code Modification Proposal** with:
- (i) **Users**; and
 - (ii) such other persons who may properly be considered to have an appropriate interest in it, including **Small Participants**, the **Citizens Advice** and the **Citizens Advice Scotland**.
- GR.21.9 The consultation will be undertaken by issuing a Consultation Paper (and its provision in electronic form on the **Website** and in electronic mails to **Users** and such other persons, who have supplied relevant details, shall meet this requirement).
- GR.21.10 The Consultation Paper will contain:
- (a) the proposed drafting for the **Grid Code Modification Proposal** (unless the Authority decides none is needed in the **Grid Code Modification Report** under GR.21.11) and will incorporate **The Company's** and the **Grid Code Review Panel's** initial views on the way forward; and
 - (b) the date proposed by the **Code Administrator** as the **Proposed Implementation Date**. Views will be invited on this date.
- GR.21.11 Where the **Grid Code Review Panel** is of the view that the proposed text to amend the **Grid Code** for a **Grid Code Modification Proposal** is not needed, the **Grid Code Review Panel** shall consult (giving its reasons to why it is of this view) with the **Authority** as to whether the **Authority** would like the **Grid Code Modification Report** to include the proposed text to amend the **Grid Code**. If it does not, no text needs to be included. If it does, and no detailed text has yet been prepared, the **Code Administrator** shall prepare such text to modify the **Grid Code** in order to give effect to such **Grid Code Modification Proposal** and consult those identified in GR.21.2.

GR.22 GRID CODE MODIFICATION REPORTS

- GR.22.1 Subject to the **Code Administrator's** consultation having been completed, the **Grid Code Review Panel** shall prepare and submit to the **Authority** a report (the "**Grid Code Modification Report**") in accordance with this GR.22 for each **Grid Code Modification Proposal** which is not withdrawn.
- GR.22.2 The matters to be included in a **Grid Code Modification Report** shall be the following (in respect of the **Grid Code Modification Proposal**):
- (a) A description of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)**, including the details of, and the rationale for, any variations made (or, as the case may be, omitted) by the **Proposer** together with the views of the **Workgroup**;
 - (b) the **Panel Members' Recommendation**;
 - (c) a summary (agreed by the **Grid Code Review Panel**) of the views (including any recommendations) from **Panel Members** in the **Grid Code Review Panel Recommendation Vote** and the conclusions of the **Workgroup** (if there is one) in respect of the **Grid Code Modification Proposal** and of any **Workgroup Alternative Grid Code Modification(s)**;
 - (d) an analysis of whether (and, if so, to what extent) the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** would better facilitate achievement of the **Grid Code Objective(s)** with a detailed explanation of the **Grid Code Review Panel's** reasons for its assessment, including, where the

impact is likely to be material, an assessment of the quantifiable impact of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** on greenhouse gas emissions, to be conducted in accordance with such current guidance on the treatment of carbon costs and evaluation of the greenhouse gas emissions as may be issued by the **Authority** from time to time, and providing a detailed explanation of the **Grid Code Review Panel's** reasons for that assessment;

- (e) an analysis of whether (and, if so, to what extent) any **Workgroup Alternative Grid Code Modification(s)** would better facilitate achievement of the **Grid Code Objective(s)** as compared with the **Grid Code Modification Proposal** and any other **Workgroup Alternative Grid Code Modification(s)** and the current version of the **Grid Code**, with a detailed explanation of the **Grid Code Review Panel's** reasons for its assessment, including, where the impact is likely to be material, an assessment of the quantifiable impact of the **Workgroup Alternative Grid Code Modification(s)** on greenhouse gas emissions, to be conducted in accordance with such current guidance on the treatment of carbon costs and evaluation of the greenhouse gas emissions as may be issued by the **Authority** from time to time, and providing a detailed explanation of the **Grid Code Review Panel's** reasons for that assessment;
- (f) the **Proposed Implementation Date** taking into account the views put forward during the process described at GR.21.4 (b) such date to be determined by the **Grid Code Review Panel** in the event of any disparity between such views and those of the **Code Administrator**;
- (g) an assessment of:
 - (i) the impact of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** on the **Core Industry Documents** and the **STC**;
 - (ii) the changes which would be required to the **Core Industry Documents** and the **STC** in order to give effect to the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)**;
 - (iii) the mechanism and likely timescale for the making of the changes referred to in (ii);
 - (iv) the changes and/or developments which would be required to central computer systems and, if practicable, processes used in connection with the operation of arrangements established under the **Core Industry Documents** and the **STC**;
 - (v) the mechanism and likely timescale for the making of the changes referred to in (iv);
 - (vi) an estimate of the costs associated with making and delivering the changes referred to in (ii) and (iv), such costs are expected to relate to: for (ii) the costs of amending the **Core Industry Document(s)** and **STC** and for (iv) the costs of changes to computer systems and possibly processes which are established for the operation of the **Core Industry Documents** and the **STC**, together with an analysis and a summary of representations in relation to such matters, including any made by **Small Participants**, the **Citizens Advice** and the **Citizens Advice Scotland**;
- (h) to the extent such information is available to the **Code Administrator**, an assessment of the impact of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** on **Users** in general (or classes of **Users** in general), including the changes which are likely to be required to their internal systems and processes and an estimate of the development, capital and operating costs associated with implementing the changes to the **Grid Code** and to **Core Industry Documents** and the **STC**;
- (i) copies of (and a summary of) all written representations or objections made by consultees during the consultation in respect of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** and subsequently maintained;

- (j) a copy of any impact assessment prepared by **Core Industry Document Owners** and the **STC** committee and the views and comments of the **Code Administrator** in respect thereof;
- (k) whether or not, in the opinion of **The Company**, the **Grid Code Modification Proposal** (or any **Workgroup Alternative Grid Code Modification(s)**) should be made.

GR.22.3 A draft of the **Grid Code Modification Report** will be circulated by the **Code Administrator** to **Users, Panel Members** and such other persons who may properly be considered to have an appropriate interest in it (and its provision in electronic form on the **Website** and in electronic mails to **Users** and **Panel Members**, who must supply relevant details, shall meet this requirement) and a period of no less than five (5) **Business Days** given for comments to be made thereon. Any unresolved comments made shall be reflected in the final **Grid Code Modification Report**.

GR.22.4 A draft of the **Grid Code Modification Report** shall be tabled at the **Panel Meeting** prior to submission of that **Grid Code Modification Report** to the **Authority** as set in accordance with the timetable established pursuant to GR.19.1 at which the Panel may consider any minor changes to the legal drafting and:

- (i) if the change required is a typographical error the **Grid Code Review Panel** may instruct the **Code Administrator** to make the appropriate change and the **Panel Chairman** will undertake the **Grid Code Review Panel Recommendation Vote**; or
- (ii) if the change required is not considered to be a typographical error then the **Grid Code Review Panel** may direct the **Workgroup** to review the change. If the **Workgroup** unanimously agree that the change is minor the **Grid Code Review Panel** may instruct the **Code Administrator** to make the appropriate change and the **Panel Chairman** will undertake the **Grid Code Review Panel Recommendation Vote** otherwise the **Code Administrator** shall issue the **Grid Code Modification Proposal** for further **Code Administrator** consultation after which the **Panel Chairman** will undertake the **Grid Code Review Panel Recommendation Vote**.
- (iii) if a change is not required after consideration, the **Panel Chairman** will undertake the **Grid Code Review Panel Recommendation Vote**.

GR.22.5 A draft of the **Grid Code Modification Report** following the **Grid Code Review Panel Recommendation Vote** will be circulated by the **Code Administrator** to **Panel Members** (and in electronic mails to **Panel Members**, who must supply relevant details, shall meet this requirement) and a period of no less than five (5) **Business Days** given for comments to be made on whether the **Grid Code Modification Report** accurately reflects the views of the **Panel Members** as expressed at the **Grid Code Review Panel Recommendation Vote**. Any unresolved comments made shall be reflected in the final **Grid Code Modification Report**.

GR.22.6 Each **Grid Code Modification Report** shall be addressed and furnished to the **Authority** and none of the facts, opinions or statements contained in such may be relied upon by any other person.

GR.22.7 Subject to GR.22.9 to GR.22.12, in accordance with the **Transmission Licence**, the **Authority** may approve the **Grid Code Modification Proposal** or a **Workgroup Alternative Grid Code Modification(s)** contained in the **Grid Code Modification Report** (which shall then be an "**Approved Modification**" until implemented).

GR.22.8 The **Code Administrator** shall copy (by electronic mail to those persons who have supplied relevant details to the **Code Administrator**) the **Grid Code Modification Report** to:

- (i) each **Panel Member**; and
- (ii) any person who may request a copy, and shall place a copy on the **Website**.

- GR.22.9 **Revised Fixed Proposed Implementation Date**
- GR.22.9.1 Where the **Proposed Implementation Date** included in a **Grid Code Modification Report** is a **Fixed Proposed Implementation Date** and the **Authority** considers that the **Fixed Proposed Implementation Date** is or may no longer be appropriate or might otherwise prevent the **Authority** from making such decision by reason of the effluxion of time the **Authority** may direct the **Grid Code Review Panel** to recommend a revised **Proposed Implementation Date**.
- GR.22.9.2 Such direction may:
- (a) specify that the revised **Proposed Implementation Date** shall not be prior to a specified date;
 - (b) specify a reasonable period (taking into account a reasonable period for consultation) within which the **Grid Code Review Panel** shall be requested to submit its recommendation; and
 - (c) provide such reasons as the **Authority** deems appropriate for such request (and in respect of those matters referred to in GR.22.9.2 (a) and (b) above).
- GR.22.9.3 Before making a recommendation to the **Authority**, the **Grid Code Review Panel** will consult on the revised **Proposed Implementation Date**, and may in addition consult on any matters relating to the **Grid Code Modification Report** which in the **Grid Code Review Panel's** opinion have materially changed since the **Grid Code Modification Report** was submitted to the **Authority** and where it does so the **Grid Code Review Panel** shall report on such matters as part of its recommendation under **Grid Code** GR.22.9.4, with:
- (a) **Users**; and
 - (b) such other persons who may properly be considered to have an appropriate interest in it. Such consultation will be undertaken in accordance with GR.21.3 and GR.21.6.
- GR.22.9.4 Following the completion of the consultation held pursuant to GR.22.9.3 the **Grid Code Review Panel** shall report to the **Authority** with copies of all the consultation responses and recommending a **Revised Proposed Implementation Date**.
- GR.22.9.5 The **Authority** shall notify the **Grid Code Review Panel** as to whether or not it intends to accept the **Revised Proposed Implementation Date** and where the **Authority** notifies the **Grid Code Review Panel** that it intends to accept the **Revised Proposed Implementation Date**, the **Revised Proposed Implementation Date** shall be deemed to be the **Proposed Implementation Date** as specified in the **Grid Code Modification Report**.
- GR.22.10 **Authority Approval**
- If:
- (a) the **Authority** has not given notice of its decision in respect of a **Grid Code Modification Report** within two (2) calendar months (in the case of an **Urgent Modification**), or four (4) calendar months (in the case of all other **Grid Code Modification Proposals**) from the date upon which the **Grid Code Modification Report** was submitted to it; or
 - (b) the **Grid Code Review Panel** is of the reasonable opinion that the circumstances relating to the **Grid Code Modification Proposal** and/or **Workgroup Alternative Grid Code Modification** which is the subject of a **Grid Code Modification Report** have materially changed, the **Grid Code Review Panel** may request the **Panel Secretary** to write to the **Authority** requesting the **Authority** to give an indication of

the likely date by which the **Authority's** decision on the **Grid Code Modification Proposal** will be made.

GR.22.11 If the **Authority** determines that the **Grid Code Modification Report** is such that the **Authority** cannot properly form an opinion on the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)**, it may issue a direction to the **Grid Code Review Panel**:

- (a) specifying the additional steps (including drafting or amending existing drafting associated with the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)**), revision (including revision to the timetable), analysis or information that it requires in order to form such an opinion; and
- (b) requiring the **Grid Code Modification Report** to be revised and to be resubmitted.

GR.22.12 If a **Grid Code Modification Report** is to be revised and re-submitted in accordance with a direction issued pursuant to GR.22.11, it shall be re-submitted as soon after the **Authority's** direction as is appropriate, taking into account the complexity, importance and urgency of the **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)**. The **Grid Code Review Panel** shall decide on the level of analysis and consultation required in order to comply with the **Authority's** direction and shall agree an appropriate timetable for meeting its obligations. Once the **Grid Code Modification Report** is revised, the **Grid Code Review Panel** shall carry out its **Grid Code Review Panel Recommendation Vote** again in respect of the revised **Grid Code Modification Report** and re-submit it to the **Authority** in compliance with GR.22.4 to GR.22.6.

GR.23 URGENT MODIFICATIONS

GR.23.1 If a **Relevant Party** recommends to the **Panel Secretary** that a proposal should be treated as an **Urgent Modification** in accordance with this GR.23, the **Panel Secretary** shall notify the **Panel Chairman** who shall then, in accordance with GR.23.2 (a) to (e) inclusive, and notwithstanding anything in the contrary in these Governance Rules, endeavour to obtain the views of the **Grid Code Review Panel** as to the matters set out in GR.23.3. If for any reason the **Panel Chairman** is unable to do that, the **Panel Secretary** shall attempt to do so (and the measures to be undertaken by the **Panel Chairman** in the following paragraphs shall in such case be undertaken by the **Panel Secretary**).

GR.23.2

- (a) The **Panel Chairman** shall determine the time by which, in his opinion, a decision of the **Grid Review Panel** is required in relation to such matters, having regard to the degree of urgency in all circumstances, and references in this GR.23.1 to the "time available" shall mean the time available, based on any such determination by the **Panel Chairman**;
- (b) The **Panel Secretary** shall, at the request of the **Panel Chairman**, convene a meeting or meetings (including meetings by telephone conference call, where appropriate) of the **Grid Code Review Panel** in such manner and upon such notice as the **Panel Chairman** considers appropriate, and such that, where practicable within the time available, as many **Panel Members** as possible may attend;
- (c) Each **Panel Member** shall be deemed to have consented, for the purposes of GR.8.9. to the convening of such meeting or meetings in the manner and on the notice determined by the **Panel Chairman**. GR.8.10 shall not apply to any such business.
- (d) Where:
 - (i) it becomes apparent, in seeking to convene a meeting of the **Grid Code Review Panel** within the time available, that quorum will not be present; or

- (ii) it transpires that the meeting of the **Grid Code Review Panel** is not quorate and it is not possible to rearrange such meeting within the time available, the **Panel Chairman** shall endeavour to contact each **Panel Member** individually in order to ascertain such Panel Member's vote, and (subject to GR.23.2 (e)) any matter to be decided shall be decided by a majority of those **Panel Members** who so cast a vote. Where, for whatever reason no decision is reached, the **Panel Chairman** shall proceed to consult with the **Authority** in accordance with GR.23.5;
- (e) Where the **Panel Chairman** is unable to contact at least four **Panel Members** within the time available and where:
 - (i) It is only **The Company**, who has recommended that the proposal should be treated as an **Urgent Modification**, then those **Panel Members** contacted shall decide such matters, such decision may be a majority decision. Where in such cases no decision is made for whatever reason, the **Panel Chairman** shall proceed to consult with the **Authority** in accordance with GR.23.5; or
 - (ii) any **User** (including any **Authorised Electricity Operator; The Company** or a **Materially Affected Party**), the **Citizens Advice** or the **Citizens Advice Scotland** has recommended that the proposal should be treated as an **Urgent Modification**, then the **Panel Chairman** may decide the matter (in consultation with those **Panel Members** (if any) which he managed to contact) provided that the **Panel Chairman** shall include details in the relevant **Grid Code Modification Report** of the steps which he took to contact other **Panel Members** first.

GR.23.3 The matters referred to in GR.23.1 are:

- (a) whether such proposal should be treated as an **Urgent Modification** in accordance with this GR.23 and
- (b) the procedure and timetable to be followed in respect of such **Urgent Modification**.

GR.23.4 The **Panel Chairman** or, in his absence, the **Panel Secretary** shall forthwith provide the **Authority** with the recommendation (if any) ascertained in accordance with GR.23.2 (a) to (e) inclusive, of the **Grid Code Review Panel** as to the matters referred to in GR.23.2, and shall consult the **Authority** as to whether such **Grid Code Modification Proposal** is an **Urgent Modification** and, if so, as to the procedure and timetable which should apply in respect thereof.

GR.23.5 If the **Grid Code Review Panel** has been unable to make a recommendation in accordance with GR.23.2.(d) or GR.23.2(e) as to the matters referred to in GR.23.3 then the **Panel Chairman** or, in his absence, the **Panel Secretary** may recommend whether he considers that such proposal should be treated as an **Urgent Modification** and shall forthwith consult the **Authority** as to whether such **Grid Code Modification Proposal** is an **Urgent Modification** and, if so, as to the procedure and timetable that should apply in respect thereof.

GR.23.6 The **Grid Code Review Panel** shall:

- (a) not treat any **Grid Code Modification Proposal** as an **Urgent Modification** except with the prior consent of the **Authority**;
- (b) comply with the procedure and timetable in respect of any **Urgent Modification** approved by the **Authority**; and
- (c) comply with any direction of the **Authority** issued in respect of any of the matters on which the **Authority** is consulted pursuant to GR.23.4 or GR.23.5.

GR.23.7 For the purposes of this GR.23.7, the procedure and timetable in respect of an **Urgent Modification** may (with the approval of the **Authority** pursuant to GR.23.4 or GR.23.5) deviate from all or part of the **Grid Code Modification Procedures** or follow any other procedure or timetable approved by the **Authority**. Where the procedure and timetable approved by the **Authority** in respect of an **Urgent Modification** do not provide for the

establishment (or designation) of a **Workgroup** the **Proposer's** right to vary the **Grid Code Modification Proposal** pursuant to GR.15.10 and GR.20.23 shall lapse from the time and date of such approval.

- GR.23.8 The **Grid Code Modification Report** in respect of an **Urgent Modification** shall include:
- (a) a statement as to why the **Proposer** believes that such **Grid Code Modification Proposal** should be treated as an **Urgent Modification**;
 - (b) any statement provided by the **Authority** as to why the **Authority** believes that such **Grid Code Modification Proposal** should be treated as an **Urgent Modification**;
 - (c) any recommendation of the **Grid Code Review Panel** (or any recommendation of the **Panel Chairman**) provided in accordance with GR.23 in respect of whether any **Grid Code Modification Proposal** should be treated as an **Urgent Modification**; and
 - (d) the extent to which the procedure followed deviated from the process for **Standard Modifications** (other than the procedures in this GR.23).
- GR.23.9 Each **Panel Member** shall take all reasonable steps to ensure that an **Urgent Modification** is considered, evaluated and (subject to the approval of the **Authority**) implemented as soon as reasonably practicable, having regard to the urgency of the matter and, for the avoidance of doubt, an **Urgent Modification** may (subject to the approval of the **Authority**) result in the **Grid Code** being amended on the day on which such proposal is submitted.
- GR.23.10 Where an **Urgent Modification** results in an amendment being made in accordance with GR.25, the **Grid Code Review Panel** may or (where it appears to the **Grid Code Review Panel** that there is a reasonable level of support for a review amongst **Users**) shall following such amendment, establish a **Workgroup** on terms specified by the **Grid Code Review Panel** to consider and report as to whether any alternative amendment could, as compared with such amendment better facilitate achieving the **Grid Code Objectives** in respect of the subject matter of that **Urgent Modification**.
- GR.24 SELF-GOVERNANCE**
- GR.24.1 If the **Grid Code Review Panel**, having evaluated a **Grid Code Modification Proposal** against the **Self-Governance Criteria**, pursuant to GR.18.4, considers that the **Grid Code Modification Proposal** meets the **Self-Governance Criteria**, the **Grid Code Review Panel** shall submit to the **Authority** a **Self-Governance Statement** setting out its reasoning in reasonable detail.
- GR.24.2 The **Authority** may, at any time prior to the **Grid Code Review Panel's** determination made pursuant to GR.24.9, give written notice that it disagrees with the **Self-Governance Statement** and may direct that the **Grid Code Modification Proposal** proceeds through the process for **Standard Modifications** set out in GR.19, GR.20, GR.21 and GR.22;
- GR.24.3 Subject to GR.24.2, after submitting a **Self-Governance Statement**, the **Grid Code Review Panel** shall follow the procedure set out in GR.19, GR.20, GR.21 and GR.22.
- GR.24.4 The **Authority** may issue a direction to the **Grid Code Review Panel** in relation to a **Modification** to follow the procedure set out for **Modifications** that meet the **Self-Governance Criteria**, notwithstanding that no **Self-Governance Statement** has been submitted or a **Self Governance Statement** has been retracted.
- GR.24.5 Subject to the **Code Administrator's** consultation having been completed pursuant to GR.21, the **Grid Code Review Panel** shall prepare a report (the "**Grid Code**

Modification Self- Governance Report”).

- GR.24.6 The matters to be included in a **Grid Code Modification Self-Governance Report** shall be the following (in respect of the **Grid Code Modification Proposal**):
- (a) details of its analysis of the **Grid Code Modification Proposal** against the **Self-Governance Criteria**;
 - (b) copies of all consultation responses received;
 - (c) the date on which the **Grid Code Review Panel Self-Governance Vote** shall take place, which shall not be earlier than seven (7) days from the date on which the **Grid Code Modification Self- Governance Report** is furnished to the **Authority** in accordance with GR.24.8; and
 - (d) such other information that is considered relevant by the **Grid Code Review Panel**.
- GR.24.7 A draft of the **Grid Code Modification Self-Governance Report** will be circulated by the **Code Administrator** to **Users** and **Panel Members** (and its provision in electronic form on the **Website** and in electronic mails to **Users** and **Panel Members**, who must supply relevant details, shall meet this requirement) and a period of no less than five (5) **Business Days** given for comments to be made thereon. Any unresolved comments made shall be reflected in the final **Grid Code Modification Self-Governance Report**.
- GR.24.8 Each **Grid Code Modification Self-Governance Report** shall be addressed and furnished to the **Authority** and none of the facts, opinions or statements contained in such **Grid Code Modification Self-Governance Report** may be relied upon by any other person.
- GR.24.9 Subject to GR.24.11, if the **Authority** does not give written notice that its decision is required pursuant to GR.24.2, or if the **Authority** determines that the **Self-Governance Criteria** are satisfied in accordance with GR.24.4, then the **Grid Code Modification Self-Governance Report** shall be tabled at the **Panel Meeting** following submission of that **Grid Code Modification Self-Governance Report** to the **Authority** at which the **Panel Chairman** will undertake the **Grid Code Review Panel Self-Governance Vote** and the **Code Administrator** shall give notice of the outcome of such vote to the **Authority** as soon as possible thereafter.
- GR.24.10 If the **Grid Code Review Panel** vote to approve the **Grid Code Modification Proposal** pursuant to GR.24.9 (which shall then be an “Approved **Grid Code Self-Governance Proposal**”) until implemented).
- GR.24.11 The **Grid Code Review Panel** may at any time prior to the **Grid Code Review Panel’s** determination retract a **Self-Governance Statement** subject to GR.24.4, or if the **Authority** notifies the **Grid Code Review Panel** that it has determined that a **Grid Code Modification Proposal** does not meet the **Self-Governance Criteria** the **Grid Code Review Panel** shall treat the **Grid Code Modification Proposal** as a **Standard Modification** and shall comply with GR.22, using the **Grid Code Modification Self-Governance Report** as a basis for its **Grid Code Modification Report**.
- GR.24.12 The **Code Administrator** shall make available on the **Website** and copy (by electronic mail to those persons who have supplied relevant details to the **Code Administrator**) the **Grid Code Modification Self-Governance Report** prepared in accordance with GR.24 to:
- (i) each **Panel Member**; and
 - (ii) any person who may request a copy, and shall place a copy on the **Website**.
- GR.24.13 A **User** (including any **Authorised Electricity Operator**; **The Company** or a **Materially Affected Party**), the **Citizens Advice** or the **Citizens Advice Scotland** may appeal to the **Authority** the approval or rejection by the **Grid Code Review Panel** of a **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** in accordance with GR.24.9, provided that the **Panel Secretary** is also notified, and the

appeal has been made up to and including fifteen (15) **Business Days** after the **Grid Code Review Panel Self-Governance Vote** has been undertaken pursuant to GR.24.9. If such an appeal is made, implementation of the **Grid Code Modification Proposal** shall be suspended pending the outcome. The appealing **User** (including any **Authorised Electricity Operator; The Company** or a **Materially Affected Party**), the **Citizens Advice** or the **Citizens Advice Scotland** must notify the **Panel Secretary** of the appeal when the appeal is made.

- GR.24.14 The **Authority** shall consider whether the appeal satisfies the following criteria:
- (a) The appealing party is, or is likely to be, unfairly prejudiced by the implementation or non-implementation of that **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)**; or
 - (b) The appeal is on the grounds that, in the case of implementation, the **Grid Code Modification Proposal** or **Workgroup Alternative**
 - (c)
 - (d) **Grid Code Modification(s)** may not better facilitate the achievement of at least one of the **Grid Code Objectives**; or
 - (e) The appeal is on the grounds that, in the case of non-implementation, the **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** may better facilitate the achievement of at least one of the **Grid Code Objectives**; and
 - (f) It is not brought for reasons that are trivial, vexatious or have no reasonable prospect of success and if the **Authority** considers that the criteria are not satisfied, it shall dismiss the appeal.
- GR.24.15 Following any appeal to the **Authority**, a **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** shall be treated in accordance with any decision and/or direction of the **Authority** following that appeal.
- GR.24.16 If the **Authority** quashes the **Grid Code Review Panel's** determination in respect of a **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** made in accordance with GR.24.9 and takes the decision on the relevant **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** itself, following an appeal to the **Authority**, the **Grid Code Review Panel's** determination of that **Grid Code Modification Proposal** and any **Workgroup Alternative Grid Code Modification(s)** contained in the relevant **Grid Code Modification Self Governance Report** shall be treated as a **Grid Code Modification Report** submitted to the **Authority** pursuant to GR.22.6 (for the avoidance of doubt, subject to GR.22.8 to GR.22.12) and the **Grid Code Review Panel's** determination shall be treated as its recommendation pursuant to GR.22.4.
- GR.24.17 If the **Authority** quashes the **Grid Code Review Panel's** determination in respect of a **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** made in accordance with GR.24.9, the **Authority** may, following an appeal to the **Authority**, refer the **Grid Code Modification Proposal** back to the **Grid Code Review Panel** for further re-consideration and a further **Grid Code Review Panel Self-Governance Vote**.
- GR.24.18 Following an appeal to the **Authority**, the **Authority** may confirm the **Grid Code Review Panel's** determination in respect of a **Grid Code Modification Proposal** or **Workgroup Alternative Grid Code Modification(s)** made in accordance with GR.24.9.

GR.25 IMPLEMENTATION

- GR.25.1 The **Grid Code** shall be modified either in accordance with the terms of the direction by the **Authority** relating to, or other approval by the **Authority** of, the **Grid Code**

Modification Proposal or any **Workgroup Alternative Grid Code Modification(s)** contained in the relevant **Grid Code Modification Report**, or in respect of **Grid Code Modification Proposals** or any **Workgroup Alternative Grid Code Modification(s)** that are subject to the determination of the **Grid Code Review Panel** pursuant to GR.24.9, in accordance with the relevant **Grid Code Modification Self-Governance Report** subject to the appeal procedures set out in GR.24.13 to GR.24.18.

GR.25.2 The **Code Administrator** shall forthwith notify (by publication on the **Website** and, where relevant details are supplied by electronic mail):

- (a) each **User**;
- (b) each **Panel Member**;
- (c) the **Authority**;
- (d) each **Core Industry Document Owner**,
- (e) the secretary of the **STC** committee;
- (f) each **Materially Affected Party**; and
- (g) the **Citizens Advice** and the **Citizens Advice Scotland** of the change so made and the effective date of the change.

GR.25.3 A modification of the **Grid Code** shall take effect from the time and date specified in the direction, or other approval, from the **Authority** referred to in GR.25.1 or, in the absence of any such time and date in the direction or approval, from 00:00 hours on the day falling ten (10) **Business Days** after the date of such direction, or other approval, from the **Authority**. A modification of the **Grid Code** pursuant to GR.24.9 shall take effect, subject to the appeal procedures set out in GR.24.13 to GR.24.18, from the time and date specified by the **Code Administrator** in its notice given pursuant to GR.25.2, which shall be given after the expiry of the fifteen (15) **Business Day** period set out in GR.24.13 to allow for appeals, or where an appeal is raised in accordance with GR.24.13, on conclusion of the appeal in accordance with GR.24.15 or GR.24.18 but where conclusion of the appeal is earlier than the fifteen (15) **Business Day** period set out in GR.24.13, notice shall be given after the expiry of this period. A modification of the **Grid Code** pursuant to GR.26 shall take effect from the date specified in the **Grid Code Modification Fast Track Report**.

GR.25.4 A modification made pursuant to and in accordance with GR.25.1 shall not be impaired or invalidated in any way by any inadvertent failure to comply with or give effect to this Section.

GR.25.5 If a modification is made to the **Grid Code** in accordance with the **Transmission Licence** but other than pursuant to the other **Grid Code Modification Procedures** in these **Governance Rules**, the **Grid Code Review Panel** shall determine whether or not to submit the modification for review by a **Workgroup** established on terms specified by the **Grid Code Review Panel** to consider and report as to whether any alternative modification could, as compared with such modification better facilitate achieving the **Grid Code Objectives** in respect of the subject matter of the original modification. Where such a **Workgroup** is established the provisions of GR.20 shall apply as if such a modification were a **Grid Code Modification Proposal**.

Transitional Issues

GR.25.6 Notwithstanding the provisions of GR.25.3, **Modification GC0086** changes the **Grid Code** process for **Grid Code Modification Proposals** and therefore may affect other **Grid Code Modification Proposals** which have not yet become **Approved Modifications**. Consequently, this GR.25.6 deals with issues arising out of the implementation of **Modification GC0086**. In particular this deals with which version of the **Grid Code** process for **Grid Code Modification Proposals** will apply to **Grid Code Modification Proposal(s)** which were already instigated prior to the implementation of **Modification GC0086**. Any **Grid Code Modification Proposal** in respect of which a **Grid Code Modification Report** has been sent to the **Authority** prior to the date and time of implementation of **Modification GC0086** is known as an "**Old Modification**". Any **Grid Code Modification Proposal** in respect of which a **Grid Code Modification Report** has not been sent to the **Authority** as at the date and time of implementation of **Modification GC0086** is known as a "**New Modification**". The **Grid Code** provisions which will apply to any **Old**

Modification(s) are the provisions of the **Grid Code** in force immediately prior to the implementation of **GC0086**. The provisions of the **Grid Code** which will apply to any **New Modifications** are the provisions of the **Grid Code** in force from time to time.

GR.26 FAST TRACK

- GR.26.1 Where a **Proposer** believes that a modification to the **Grid Code** which meets the **Fast Track Criteria** is required, a **Grid Code Fast Track Proposal** may be raised. In such case the **Proposer** is only required to provide the details listed in GR.15.3 (a), (b), (c), (d), (e) and (k).
- GR.26.2 Provided that the **Panel Secretary** receives any modification to the **Grid Code** which the **Proposer** considers to be a **Grid Code Fast Track Proposal**, not less than ten (10) **Business Days** (or such shorter period as the **Panel Secretary** may agree, provided that the **Panel Secretary** shall not agree any period shorter than five (5) **Business Days**) prior to the next **Grid Code Review Panel** meeting, the **Panel Secretary** shall place the **Grid Code Fast Track Proposal** on the agenda of the next **Grid Code Review Panel** meeting, and otherwise, shall place it on the agenda of the next succeeding **Grid Code Review Panel** meeting.
- GR.26.3 To facilitate the discussion at the **Grid Code Review Panel** meeting, the **Code Administrator** will circulate a draft of the **Grid Code Modification Fast Track Report to Users**, the **Authority** and **Panel Members** (and its provision in electronic form on the **Website** and in electronic mails to **Users**, the **Authority** and **Panel Members**, who must supply relevant details, shall meet this requirement) for comment not less than five (5) **Business Days** ahead of the **Grid Code Review Panel** meeting which will consider whether or not the **Fast Track Criteria** are met and whether or not to approve the **Grid Code Fast Track Proposal**.
- GR.26.4 It is for the **Grid Code Review Panel** to decide whether or not a **Grid Code Fast Track Proposal** meets the **Fast Track Criteria** and if it does, to determine whether or not to approve the **Grid Code Fast Track Proposal**.
- GR.26.5 The **Grid Code Review Panel's** decision that a **Grid Code Fast Track Proposal** meets the **Fast Track Criteria** pursuant to GR.26.4 must be unanimous.
- GR.26.6 The **Grid Code Review Panel's** decision to approve the **Grid Code Fast Track Proposal** pursuant to GR.26.4 must be unanimous.
- GR.26.7 If the **Grid Code Review Panel** vote unanimously that the **Grid Code Fast Track Proposal** meets the **Fast Track Criteria** and to approve the **Grid Code Fast Track Proposal** (which shall then be an "**Approved Fast Track Proposal**") until implemented, or until an objection is received pursuant to GR.26.12), then subject to the objection procedures set out in GR.26.12 the **Grid Code Fast Track Proposal** will be implemented by **The Company** without the **Authority's** approval. If the **Grid Code Review Panel** do not unanimously agree that the **Grid Code Modification Proposal** meets the **Fast Track Criteria** and/or do not unanimously agree that the **Grid Code Fast Track Proposal** should be made, then the **Panel Secretary** shall, in accordance with GR.15.4(a) notify the **Proposer** that additional information is required if the **Proposer** wishes the **Grid Code Modification Proposal** to continue.
- GR.26.8 Provided that the **Grid Code Review Panel** have unanimously agreed to treat a **Grid Code Modification Proposal** as a **Grid Code Fast Track Proposal** and unanimously approved that **Grid Code Fast Track Proposal**, the **Grid Code Review Panel** shall prepare and approve the **Grid Code Modification Fast Track Report** for issue in accordance with GR.26.11.
- GR.26.9 The matters to be included in a **Grid Code Modification Fast Track Report** shall be the following (in respect of the **Grid Code Fast Track Proposal**):
- (a) a description of the proposed modification and of its nature and purpose;
 - (b) details of the changes required to the **Grid Code**, including the proposed legal text to modify the **Grid Code** to implement the **Grid Code Fast Track Proposal**;

- (c) details of the votes required pursuant to GR.26.5 and GR.26.6;
- (d) the intended implementation date, from which the **Approved Fast Track Proposal** will take effect, which shall be no sooner than fifteen (15) **Business Days** after the date of notification of the **Grid Code Review Panel's** decision to approve; and
- (e) details of how to object to the **Approved Fast Track Proposal** being made

- GR.26.10 Upon approval by the **Grid Code Review Panel** of the **Grid Code Modification Fast Track Report**, the **Code Administrator** will issue the report in accordance with GR.26.11.
- GR.26.11 The **Code Administrator** shall copy (by electronic mail to those persons who have supplied relevant details to the **Code Administrator**) the **Grid Code Modification Fast Track Report** prepared in accordance with GR.26 to:
- (i) each **Panel Member**;
 - (ii) the **Authority**; and
 - (iii) any person who may request a copy, and shall place a copy on the **Website**.
- GR.26.12 A **User**, any **Authorised Electricity Operator**; **The Company** or a **Materially Affected Party**, the **Citizens Advice**, the **Citizens Advice Scotland** or the **Authority** may object to the **Approved Fast Track Proposal** being implemented, and shall include with such objection the reasons for the objection. Any such objection must be made in writing (including by email) and be clearly stated to be an objection to the **Approved Fast Track Proposal** in accordance with this GR.26 of the **Grid Code** and be notified to the **Panel Secretary** by the date up to and including fifteen (15) **Business Days** after notification of the **Grid Code Review Panel's** decision to approve the **Grid Code Fast Track Proposal**. If such an objection is made the **Approved Fast Track Proposal** shall not be implemented. The **Panel Secretary** will notify each **Panel Member** and the **Authority** of the objection. The **Panel Secretary** shall notify the **Proposer**, in accordance with GR.15.4A that additional information is required if the **Proposer** wishes the **Grid Code Modification Proposal** to continue.

ANNEX GR.A Election of Users' Panel Members

Grid Code Review Panel Election Process

1. The election process has two main elements: nomination and selection.
2. The process will be used to appoint Panel Members in the category of Supplier, Generator, Offshore Transmission Owner and Onshore Transmission Owner.
3. The Code Administrator will publish the Election timetable by [September] in the year preceding the start of each term of office of Panel Members.
4. Each step of the process set out below will be carried out in line with the published timetable.
5. The Code Administrator will establish an Electoral Roll from representatives of parties listed on CUSC Schedule 1 or designated by the Authority as a Materially Affected Party as at 31st August in the year preceding the start of each term of office of Panel Members.
6. The Code Administrator will keep the Electoral Roll up to date.

Nomination Process

7. Each party on the Electoral Roll may nominate a candidate to stand for election for the GCRP.
8. Parties may only nominate a candidate for their own category; a Supplier may nominate a candidate for the Supplier Panel Member seat and a Generator may nominate a candidate for the Generator Panel Member seats. If a party able to nominate a candidate is both a Supplier and a Generator, they may nominate a candidate in each category.
9. The nominating party must complete the nomination form which will be made available by the Code Administrator and return it to the Code Administrator by the stated deadline.
10. The Code Administrator will draw up a list of candidates for each category of election.
11. Where there are fewer candidates than seats available or the same number of candidates as seats available, no election will be required and the nominated candidate(s) will be elected. The Code Administrator will publish a list of the successful candidates on the Grid Code website and circulate the results by email to the Grid Code circulation list.

Selection Process

12. The Code Administrator will send a numbered voting paper to each party on the electoral roll for each of the elections in which they are eligible to vote. The voting paper will contain a list of candidates for each election and will be sent by email.
13. Each eligible party may vote for one [1] candidate for each of the Supplier, Offshore Transmission Owner and Onshore Transmission Owner seats and four [4] candidates for the Generator seats.
14. Panel Members will be elected using the First Past the Post method.
15. In the event of two or more candidates receiving the same number of votes, the Code Administrator will draw lots to decide who is elected.
16. The Code Administrator will publish the results of the election on the Grid Code website and circulate the results by email to the Grid Code circulation list.
17. The Code Administrator will send an Election Report to Ofgem after the election is complete.

< END OF GOVERNANCE RULES >

REVISIONS

(R)

(This section does not form part of the Grid Code)

- R.1 **The Company Transmission Licence** sets out the way in which changes to the Grid Code are to be made and reference is also made to **The Company's** obligations under the General Conditions.
- R.2 All pages re-issued have the revision number on the lower left hand corner of the page and date of the revision on the lower right hand corner of the page.
- R.3 The Grid Code was introduced in March 1990 and the first issue was revised 31 times. In March 2001 the New Electricity Trading Arrangements were introduced and Issue 2 of the Grid Code was introduced which was revised 16 times. At British Electricity Trading and Transmission Arrangements (BETTA) Go-Active Issue 3 of the Grid Code was introduced and subsequently revised 35 times. At Offshore Go-active Issue 4 of the Grid Code was introduced and has been revised 13 times since its original publication. Issue 5 of the Grid Code was published to accommodate the changes made by Grid Code Modification A/10 which has incorporated the **Generator** compliance process into the Grid Code.
- R.4 This Revisions section provides a summary of the sections of the Grid Code changed by each revision to Issue 5.
- R.5 All enquiries in relation to revisions to the Grid Code, including revisions to Issues 1, 2, 3, 4 and 5 should be addressed to the Grid Code development team at the following email address:
Grid.Code@nationalgrid.com

Revision	Section	Related Modification	Effective Date
0	Glossary and Definitions	A/10 and G/11	17 August 2012
0	Planning Code – PC.2.1	G/11	17 August 2012
0	Planning Code – PC.5.4	G/11	17 August 2012
0	Planning Code – PC.8	G/11	17 August 2012
0	Planning Code – PC.8.2	G/11	17 August 2012
0	Planning Code – PC.A.1	G/11	17 August 2012
0	Planning Code – PC.A.2	A/10 and G/11	17 August 2012
0	Planning Code – PC.A.3	G/11	17 August 2012
0	Planning Code – PC.A.5	A/10 and G/11	17 August 2012
0	Compliance Processes	A/10	17 August 2012
0	Connection Conditions – CC.1.1	A/10	17 August 2012
0	Connection Conditions – CC.2.2	G/11	17 August 2012
0	Connection Conditions – CC.3.3	A/10	17 August 2012
0	Connection Conditions – CC.4.1	A/10	17 August 2012
0	Connection Conditions – CC.5.2	G/11	17 August 2012
0	Connection Conditions – CC.6.1	G/11	17 August 2012
0	Connection Conditions – CC.6.3	G/11	17 August 2012
0	Connection Conditions – CC.6.6	A/10	17 August 2012
0	Connection Conditions – CC.7.2	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Connection Conditions – CC.7.4	G/11	17 August 2012
0	Connection Conditions – CC.A.1	G/11	17 August 2012
0	Connection Conditions – CC.A.2	G/11	17 August 2012
0	Connection Conditions – CC.A.3	G/11	17 August 2012
0	Connection Conditions – CC.A.4	G/11	17 August 2012
0	Connection Conditions – CC.A.6	A/10	17 August 2012
0	Connection Conditions – CC.A.7	A/10 and G/11	17 August 2012
0	Connection Conditions – Figure CC.A.3.1	G/11	17 August 2012
0	Operating Code No. 2 – OC2.4	G/11	17 August 2012
0	Operating Code No. 2 – OC2.A.1	G/11	17 August 2012
0	Operating Code No. 5 – OC5.3	A/10	17 August 2012
0	Operating Code No. 5 – OC5.5	A/10 and G/11	17 August 2012
0	Operating Code No. 5 – OC5.7	G/11	17 August 2012
0	Operating Code No. 5 – OC5.8	A/10 and G/11	17 August 2012
0	Operating Code No. 5 – OC5.A.1	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.2	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.3	A/10	17 August 2012
0	Operating Code No. 5 – OC5.A.4	A/10	17 August 2012
0	Operating Code No. 7 – OC7.4	G/11	17 August 2012
0	Operating Code No. 8 – OC8.2	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Operating Code No. 8 – OC8A.1	G/11	17 August 2012
0	Operating Code No. 8 – OC8A.5	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.1	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.4	G/11	17 August 2012
0	Operating Code No. 8 – OC8B.5	G/11	17 August 2012
0	Operating Code No. 8 – OC8B Appendix E	G/11	17 August 2012
0	Operating Code No. 9 – OC9.2	G/11	17 August 2012
0	Operating Code No. 9 – OC9.4	G/11	17 August 2012
0	Operating Code No. 9 – OC9.5	G/11	17 August 2012
0	Operating Code No. 12 – OC12.3	G/11	17 August 2012
0	Operating Code No. 12 – OC12.4	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.5	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.8	G/11	17 August 2012
0	Balancing Code No. 1 – BC1.A.1	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.5	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.8	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.2	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.3	G/11	17 August 2012
0	Balancing Code No. 2 – BC2.A.4	G/11	17 August 2012
0	Balancing Code No. 3 – BC3.5	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	Balancing Code No. 3 – BC3.7	G/11	17 August 2012
0	Data Registration Code – DRC.1.5	G/11	17 August 2012
0	Data Registration Code – DRC.4.2	G/11	17 August 2012
0	Data Registration Code – DRC.4.4	G/11	17 August 2012
0	Data Registration Code – DRC.5.2	A/10 and G/11	17 August 2012
0	Data Registration Code – DRC.5.5	G/11	17 August 2012
0	Data Registration Code – DRC.6.1	A/10 and G/11	17 August 2012
0	Data Registration Code – DRC.6.2	A/10	17 August 2012
0	Data Registration Code – Schedule 1	A/10 and G/11	17 August 2012
0	Data Registration Code – Schedule 2	G/11	17 August 2012
0	Data Registration Code – Schedule 3	G/11	17 August 2012
0	Data Registration Code – Schedule 4	G/11	17 August 2012
0	Data Registration Code – Schedule 5	G/11	17 August 2012
0	Data Registration Code – Schedule 10	G/11	17 August 2012
0	Data Registration Code – Schedule 12A	G/11	17 August 2012
0	Data Registration Code – Schedule 14	A/10 and G/11	17 August 2012
0	Data Registration Code – Schedule 15	G/11	17 August 2012
0	Data Registration Code – Schedule 19	A/10	17 August 2012
0	General Conditions – GC.4	G/11	17 August 2012
0	General Conditions – GC.12	G/11	17 August 2012

Revision	Section	Related Modification	Effective Date
0	General Conditions – GC.15	G/11	17 August 2012
0	General Conditions – GC.A1	G/11	17 August 2012
0	General Conditions – GC.A2	G/11	17 August 2012
0	General Conditions – GC.A3	G/11	17 August 2012
1	Operating Code No. 8 – OC8A.5.3.4	C/12	6 November 2012
1	Operating Code No. 8 – OC8B.5.3.4	C/12	6 November 2012
2	Balancing Code No. 1 – BC1.2.1	B/12	31 January 2013
2	Balancing Code No. 1 – BC1.4.2	B/12	31 January 2013
2	Balancing Code No. 1 – BC1.A.1.5	B/12	31 January 2013
2	Connection Conditions – CC.7.7	D/12	31 January 2013
3	Glossary and Definitions	C/11	2 April 2013
3	Operating Code No. 8 – OC8A.4.3.5	B/10	2 April 2013
3	Operating Code No. 8 – OC8B.4.3.5	B/10	2 April 2013
3	Balancing Code No. 2 – BC2.5	C/11	2 April 2013
4	Glossary and Definitions	GC0060 (F/12)	19 August 2013
4	Planning Code – PC.A.5	GC0040 (A/12)	19 August 2013
4	Operating Code No. 2 – OC2.A.10	GC0060 (F/12)	19 August 2013
4	Data Registration Code – Schedule 1	GC0040 (A/12)	19 August 2013
4	Data Registration Code – Schedule 2	GC0060 (F/12)	19 August 2013

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5	Glossary and Definitions	GC0033, 71, 72 and 73	05 November 2013
5	General Conditions – GC.4	GC0071, 72 and 73	05 November 2013
5	General Conditions – GC.14	GC0071, 72 and 73	05 November 2013
5	General Conditions – GC.16	GC0071, 72 and 73	05 November 2013
6	Connection Conditions – CC.A.7	GC0065	13 December 2013
6	Planning Code – PC.A.3	GC0037	13 December 2013
6	Operating Code No. 2 – OC2.4.2	GC0037	13 December 2013
6	Operating Code No. 2 – Appendix 4	GC0037	13 December 2013
6	Balancing Code No. 1 – BC1.4.2	GC0037	13 December 2013
6	Balancing Code No. 1 – BC1.A.1.8	GC0037	13 December 2013
7	Glossary and Definitions	GC0044	31 March 2014
7	Operating Code No. 9 – OC9.2.5	GC0044	31 March 2014
7	Operating Code No. 9 – OC9.4.6	GC0044	31 March 2014
7	Operating Code No. 9 – OC9.4.7.4	GC0044	31 March 2014
7	Operating Code No. 9 – OC9.4.7.9	GC0044	31 March 2014
7	Operating Code No. 9 – OC9.4.7.10	GC0044	31 March 2014

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7	Balancing Code No. 2 – BC2.9.2.2	GC0044	31 March 2014
8	Glossary and Definitions	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Planning Code	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Connection Conditions	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Compliance Processes	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Operating Code No. 5	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Operating Code No. 7	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Operating Code No. 8	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Operating Code No. 8A	Secretary of State direction – Generator Commissioning Clause	10 June 2014
8	Operating Code No. 8B	Secretary of State direction – Generator Commissioning Clause	10 June 2014

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8	Balancing Code No. 2	Secretary of State direction – Generator Commissioning Clause	10 June 2014
9	Operating Code No. 6 – OC6.5	GC0050	01 July 2014
9	Operating Code No. 6 – OC6.7	GC0050	01 July 2014
9	Balancing Code No. 2 – Appendix 3 Annexures	GC0068	01 July 2014
9	Balancing Code No. 2 – Appendix 4 Annexure	GC0068	01 July 2014
10	Glossary and Definitions	Secretary of State direction – EMR	01 August 2014
10	Planning Code – PC.5.4	Secretary of State direction – EMR	01 August 2014
10	Planning Code – PC.5.6	Secretary of State direction – EMR	01 August 2014
10	General Conditions – GC.4.6	Secretary of State direction – EMR	01 August 2014
10	General Conditions – GC.12	Secretary of State direction – EMR	01 August 2014
11	Planning Code – PC.A.3.1.4	GC0042	21 August 2014
11	Planning Code – PC.A.5	GC0042	21 August 2014
11	Data Registration Code – DRC6.1.11	GC0042	21 August 2014
11	Data Registration Code – Schedule 11	GC0042	21 August 2014
12	Glossary and Definitions	GC0083	01 November 2014
12	Planning Code – PC.A.3.4.3	GC0083	01 November 2014

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12	Planning Code – PC.D.1	GC0052	01 November 2014
12	Operating Code No. 2 – OC2.4.2.3	GC0083	01 November 2014
12	Operating Code No. 2 – OC2.4.7	GC0083	01 November 2014
12	Operating Code No. 6 – OC6.1.5	GC0061	01 November 2014
12	Data Registration Code – Schedule 1	GC0052	01 November 2014
12	Data Registration Code – Schedule 2	GC0052	01 November 2014
12	Data Registration Code – Schedule 6	GC0083	01 November 2014
13	Glossary and Definitions	GC0063	22 January 2015
13	Connection Conditions – CC.6.5.6	GC0063	22 January 2015
13	Balancing Code No. 1 – BC1.A.1.3.1	GC0063	22 January 2015
13	General Conditions – Annex to General Conditions	GC0080	22 January 2015
14	Connection Conditions - CC6.1.7	GC0076	26 August 2015
15	Glossary and Definitions	GC0023	03 February 2016
15	Connection Conditions - CC6.2.2	GC0023	03 February 2016
15	Connection Conditions - CC6.2.3	GC0023	03 February 2016
15	Planning Code - PC.A.5.3.2	GC0028	03 February 2016
15	Connection Conditions - CC 6.3.2	GC0028	03 February 2016
15	Connection Conditions - CC 6.3.8	GC0028	03 February 2016
15	Compliance Processes – CP.A.3.3.2	GC0028	03 February 2016

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15	Compliance Processes – CP.A.3.3.3 & 4	GC0028	03 February 2016
15	Operating Code No. 2 – OC2.4.2.1	GC0028	03 February 2016
15	Operating Code No. 5 - OC5.A.2.7.5	GC0028	03 February 2016
15	Balancing Code No. 2 – BC2.A.2.6	GC0028	03 February 2016
15	Data Registration Code – Schedule 1	GC0028	03 February 2016
15	Connection Conditions - CC.6.1.5	GC0088	03 February 2016
15	Connection Conditions - CC.6.1.6	GC0088	03 February 2016
16	Connections Conditions - CC.6.3.15.1	GC0075	24 May 2016
16	Connections Conditions - CC.6.3.15.2	GC0075	24 May 2016
16	Connections Conditions - CC.A.7.2.3.1	GC0075	24 May 2016
16	Connections Conditions - CC.A.7.2.3.2	GC0075	24 May 2016
16	Operating Code No. 9 – OC9.4.7.9	Communications/ Interface Standards	24 May 2016
16	General Condition - Annex to General Conditions	Communications/ Interface Standards	24 May 2016
16	Glossary and Definitions – ‘Cluster’ removed	Housekeeping change - error resulting from Issue 3 Revision 10	24 May 2016
16	Glossary and Definitions – ‘Maximum Import Capacity’ amended	Housekeeping change – duplicate definition	24 May 2016
17	Connections Conditions - CC.6.3.15.1	GC0062	29 June 2016

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17	Connections Conditions - CC.6.3.15.2	GC0062	29 June 2016
17	Connections Conditions – Appendix 4	GC0062	29 June 2016
18	Operating Code No. 2 – OC2.4.1.3	GC0092	11 August 2016
19	Glossary and Definitions ‘Inadequate System Margin’ amended	GC0093	30 September 2016
19	Operating Conditions – OC7.4.8.4	GC0093	30 September 2016
19	Operating Conditions – OC7.4.8.5	GC0093	30 September 2016
19	Operating Conditions – OC7.4.8.6	GC0093	30 September 2016
19	Operating Conditions – OC7.4.8.6.1	GC0093	30 September 2016
19	Operating Conditions – OC7.4.8.10	GC0093	30 September 2016
19	Operating Conditions – Appendix 1	GC0093	30 September 2016
19	Balancing Conditions – BC1.5.4	GC0093	30 September 2016
19	Balancing Conditions – BC2.4.2	GC0093	30 September 2016
20	General Conditions - GC	GC0086	20 February 2017
20	Glossary and Definitions	GC0086	20 February 2017
20	Constitution and Rules of the Grid Code Review Panel	GC0086	20 February 2017
20	Governance Rules - GR	GC0086	20 February 2017

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21	Connection Conditions – CC	GC0077	21 March 2017
22	Glossary and Definitions	GC0100, 101 and 102	16 May 2018
22	Planning Code - PC	GC0100, 101 and 102	16 May 2018
22	Connections Code - CC	GC0100, 101 and 102	16 May 2018
22	European Connections Code - ECC	GC0100, 101 and 102	16 May 2018
22	Compliance Processes	GC0100, 101 and 102	16 May 2018
22	European Compliance Processes	GC0100, 101 and 102	16 May 2018
22	Operating Code No.1	GC0100, 101 and 102	16 May 2018
22	Operating Code No.2	GC0100, 101 and 102	16 May 2018
22	Operating Code No.5	GC0100, 101 and 102	16 May 2018
22	Operating Code No.6	GC0100, 101 and 102	16 May 2018
22	Operating Code No.7	GC0100, 101 and 102	16 May 2018
22	Operating Code No.8	GC0100, 101 and 102	16 May 2018
22	Operating Code No.8a	GC0100, 101 and 102	16 May 2018
22	Operating Code No.8b	GC0100, 101 and 102	16 May 2018

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22	Operating Code No.9	GC0100, 101 and 102	16 May 2018
22	Operating Code No.10	GC0100, 101 and 102	16 May 2018
22	Operating Code No.11	GC0100, 101 and 102	16 May 2018
22	Operating Code No.12	GC0100, 101 and 102	16 May 2018
22	Balancing Code No.1	GC0100, 101 and 102	16 May 2018
22	Balancing Code No.2	GC0100, 101 and 102	16 May 2018
22	Balancing Code No.3	GC0100, 101 and 102	16 May 2018
22	Data Registration Code	GC0100, 101 and 102	16 May 2018
23	Governance Rules	GC0119	10 August 2018
24	Glossary and Definitions	G0115 and GC0116	16 August 2018
24	Planning Code	GC0115	16 August 2018
24	Connection Conditions	GC0115	16 August 2018
24	European Connection Conditions	GC0115	16 August 2018
24	Compliance Processes	GC0115	16 August 2018
24	European Compliance Processes	GC0115	16 August 2018
24	Operating Code No.5	GC0115	16 August 2018
24	Operating Code No.8a	GC0115	16 August 2018

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24	Balancing Code No.1	GC0115	16 August 2018
24	Balancing Code No.2	GC0115	16 August 2018
24	Data Registration Code	GC0115	16 August 2018
25	Glossary and Definitions	GC0097 and GC0104	07 September 2018
25	Balancing Code No.1	GC0097	07 September 2018
25	Balancing Code No.2	GC0097	07 September 2018
25	Balancing Code No.4	GC0097	07 September 2018
25	Planning Code	GC0104	07 September 2018
25	Connection Conditions	GC0104	07 September 2018
25	European Connection Conditions	GC0104	07 September 2018
25	Demand Response Services	GC0104	07 September 2018
25	European Compliance Processes	GC0104	07 September 2018
25	Data Registration Code	GC0104	07 September 2018
26	Preface	GC0115	26 September 2018
26	Glossary Definitions	GC0115	26 September 2018
26	Operating Code 1	GC0115	26 September 2018
26	Operating Code 2	GC0115	26 September 2018
26	Operating Code 6	GC0115	26 September 2018
26	Operating Code 7	GC0115	26 September 2018

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26	Operating Code 8	GC0115	26 September 2018
26	Operating Code 8B	GC0115	26 September 2018
26	Operating Code 9	GC0115	26 September 2018
26	Operating Code 10	GC0115	26 September 2018
26	Operating Code 11	GC0115	26 September 2018
26	Operating Code 12	GC0115	26 September 2018
26	Balancing Code 3	GC0115	26 September 2018
26	General Conditions	GC0115	26 September 2018
26	Governance Rules	GC0115	26 September 2018
26	Glossary Definitions	GC0116	26 September 2018

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