

Public

All Recipients of the Serviced Grid Code

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THE SERVICED GRID CODE – ISSUE 6 REVISION 39

INCLUSION OF REVISED SECTION

- Glossary & Definitions
- Balancing Code 3
- General Conditions

SUMMARY OF CHANGES

These changes arise from the implementation of: [GC0169: Material changes arising from Grid Code Modification GC0136.](#)

Many thanks,

Code Administrator

National Energy System Operator

THE GRID CODE

ISSUE 6

REVISION 39

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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.</p>
Active Control Based Droop Power	<p>The Active Control Based Power output supplied by a Grid Forming Plant through controlled means (be it manual or automatic).</p> <p>For GBGF-I this is equivalent to a Synchronous Generating Unit with a traditional governor coupled to its prime mover.</p> <p>Active Control Based Droop Power is used by The Company to control System Frequency changes through the instruction of Primary Response and Secondary Response.</p>
Active Control Based Power	<p>The Active Power output supplied by a Grid Forming Plant through controlled means (be it manual or automatic) of the positive phase sequence Root Mean Square Active Power produced at fundamental System Frequency by the control system of a Grid Forming Unit.</p> <p>For GBGF-I, this is equivalent to a Synchronous Generating Unit with a traditional governor coupled to its prime mover.</p> <p>Active Control Based Power includes Active Power changes that results from a change to the Grid Forming Plant Owners available set points that have a 5 Hz limit on the bandwidth of the provided response.</p> <p>Active Control Based Power also includes Active Power components produced by the normal operation of a Grid Forming Plant that comply with the Engineering Recommendation P28 limits. These Active Power components do not have a 5 Hz limit on the bandwidth of the provided response.</p> <p>Active Control Based Power does not include Active Power components proportional to System Frequency, slip or deviation that provide damping power to emulate the natural damping function provided by a real Synchronous Generating Unit.</p>

<p>Active Damping Power</p>	<p>The Active Power naturally injected or absorbed by a Grid Forming Plant to reduce Active Power oscillations in the Total System.</p> <p>More specifically, Active Damping Power is the damped response of a Grid Forming Plant to an oscillation between the voltage at the Grid Entry Point or User System Entry Point and the voltage of the Internal Voltage Source of the Grid Forming Plant.</p> <p>For the avoidance of doubt, Active Damping Power is an inherent capability of a Grid Forming Plant that starts to respond naturally, within less than 5ms to low frequency oscillations in the System Frequency.</p>
<p>Active Energy</p>	<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 1000 kWh = 1 MWh 1000 MWh = 1 GWh 1000 GWh = 1 TWh</p>
<p>Active Frequency Response Power</p>	<p>The injection or absorption of Active Power by a Grid Forming Plant to or from the Total System during a deviation of the System Frequency away from the Target Frequency.</p> <p>For a GBGF-I this is very similar to Primary Response but with a response time to achieve the declared service capability (which could be the Maximum Capacity or Registered Capacity) within 1 second.</p> <p>For GBGF-I this can rapidly inject or absorb Active Power in addition to the phase-based Active Inertia Power to provide a system with desirable NFP plot characteristics.</p> <p>Active Frequency Response Power can be produced by any viable control technology.</p>
<p>Active Inertia Power</p>	<p>The injection or absorption of Active Power by a Grid Forming Plant to or from the Total System during a System Frequency change.</p> <p>The transient injection or absorption of Active Power from a Grid Forming Plant to the Total System as a result of the ROCOF value at the Grid Entry Point or User System Entry Point. This requires a sufficient energy storage capacity of the Grid Forming Plant to meet the Grid Forming Capability requirements specified in ECC.6.3.19.</p> <p>For the avoidance of doubt, this includes the rotational inertial energy of the complete drive train of a Synchronous Generating Unit.</p> <p>Active Inertia Power is an inherent capability of a Grid Forming Plant to respond naturally, within less than 5 ms, to changes in the System Frequency.</p> <p>For the avoidance of doubt, the Active Inertia Power has a slower frequency response compared with Active Phase Jump Power.</p>

Active Phase Jump Power	<p>The transient injection or absorption of Active Power from a Grid Forming Plant to the Total System as a result of changes in the phase angle between the Internal Voltage Source of the Grid Forming Plant and the Grid Entry Point or User System Entry Point.</p> <p>In the event of a disturbance or fault on the Total System, a Grid Forming Plant will instantaneously (within 5 ms) inject or absorb Active Phase Jump Power to the Total System as a result of the phase angle change.</p> <p>For GBGF-I as a minimum value this is up to the Phase Jump Angle Limit Power.</p> <p>Active Phase Jump Power is an inherent capability of a Grid Forming Plant that starts to respond naturally, within less than 5 ms and can have frequency components of over 1000 Hz.</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 1000 kW = 1 MW 1000 MW = 1 GW 1000 GW = 1 TW</p>
Active ROCOF Response Power	<p>The Active Inertia Power developed from a Grid Forming Plant plus the Active Frequency Response Power that can be supplied by a Grid Forming Plant when subject to a rate of change of the System Frequency.</p>
Additional BM Unit	<p>Has the meaning as set out in the BSC</p>
Affiliate	<p>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.</p>
AF Rules	<p>Has the meaning given to “allocation framework” in section 13(2) of the Energy Act 2013.</p>
Agency	<p>As defined in the ESO Licence.</p>
Aggregator	<p>A BM Participant who controls one or more Additional BM Units or Secondary BM Units.</p>
Aggregator Impact Matrix	<p>Defined for an Additional BM Unit or a Secondary BM Unit. Provides data allowing The Company 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.</p>
Alternate Member	<p>Shall mean an alternate member for the Panel Members elected or appointed in accordance with this GR.7.2(a) or (b).</p>

Anchor	Plant , owned and operated by a Restoration Contractor which can Start-Up from Shutdown and energise a part of the Total System upon instruction from The Company or a Network Operator or a relevant Transmission Licensee within a defined time period, without an external electrical power supply from the Total System .
Anchor DC Converter Test	A test carried out by an Anchor DC Converter Owner on an Anchor DC Converter while the Anchor DC Converter is disconnected from all external electrical power supplies from the Total System .
Anchor Generating Unit Test	A test carried out on an Anchor Generating Unit or a CCGT unit or a Power Generating Module , as the case may be, at an Anchor Power Station while the Anchor Power Station remains energised from the Total System .
Anchor HVDC System Test	A test carried out by an Anchor HVDC System Owner while the Anchor HVDC System is disconnected from all external electrical power supplies from the Total System .
Anchor Plant Capability	The ability of a Restoration Contractor's Plant to Start-Up from Shutdown and to energise and maintain a part of the Total System upon instruction from The Company or Relevant Transmission Licensee (in Scotland) or relevant Network Operator , within a defined time period, without an external electrical power supply from the Total System . In the case of a Local Joint Restoration Plan the defined period of time is within 2 hours of an instruction from The Company or Relevant Transmission Licensee . In the case of a Distribution Restoration Zone Plan , the defined period of time is within 8 hours of an instruction from relevant Network Operator .
Anchor Plant Test	A test conducted on Plant to confirm it is capable of meeting the requirements of an Anchor Restoration Contract .
Anchor Power Station Test	A test carried out by an Anchor Generator at an Anchor Power Station while that Anchor Power Station is disconnected from all external electrical power supplies from the Total System .
Anchor Restoration Contract	In the case of a Local Joint Restoration Plan or Offshore Local Joint Restoration Plan , a contract between The Company and an Anchor Restoration Contractor for the provision of an Anchor Plant Capability . In the case of a Distribution Restoration Zone Plan is an agreement between The Company and relevant Network Operator and Anchor Restoration Contractor for the provision of an Anchor Plant Capability .
Anchor Restoration Contractor	A Restoration Contractor with an Anchor Restoration Contract .
Anchor Plant Unit Test	A test carried out on a Generating Unit or a CCGT Unit or a Power Generating Module , or a HVDC System or a DC Converter as the case may be, at the site of an Anchor Plant while the Anchor Plant is supplied from all external power supplies.
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.
Apparatus	Other than in OC8 , means all equipment in which electrical conductors are used, supported or of which they may form a part. It includes Users' equipment which imposes Demand on the System . 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 .
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
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
Assimilated Law	Has the same meaning as that given by section 6(7) of the European Union (Withdrawal) Act 2018
Authorised Certifier	An entity that issues Equipment Certificates and Power Generating Module Documents and whose accreditation is given by the United Kingdom Accreditation Service or such other body as may be established from time to time to carry out the function of accreditation.
Authorised Electricity Operator	Any person (other than The Company) 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.
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.

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.
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 Energy Supplies	An electricity supply (which could be derived from an Auxiliary Diesel Engine or Auxiliary Gas Turbine or other source of energy) that is necessary to power the auxiliary and ancillary equipment on which a Power Generating Module or HVDC System or DC Converter or other item of Plant relies for it to be capable of generating Active or Reactive Power and which is generally supplied via a Unit Board or Station Board , or equivalent. Auxiliary Energy Supplies must be available without an external electrical power supply from the Total System . Auxiliary Energy Supplies do not include the mains-independent light current supplies necessary to operate Critical Tools and Facilities .
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 ESO 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 C9 of the ESO Licence .
Balancing Mechanism Window Period	Has the meaning set out in the BSC .
Baseline Forecast	Has the meaning given to the term 'baseline forecast' in Section G of the BSC .
Bid Acceptance	An acceptance by a BM Unit of a Bid-Offer Acceptance to decrease its export onto, or increase its import from, the National Electricity Transmission System , where in this context import and export are as defined in 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 .
Bilateral Embedded Generation Agreement (BEGA)	Has the meaning set out in the CUSC .
Block Loading Capability	The Active Power step and the time between steps (from no load to Rated MW), which a Generating Unit or Power Generating Module or Power Park Module or HVDC System or DC Converter Station (including Plant and Apparatus owned and operated by a Restoration Contractor) can instantaneously supply without causing it to trip or go outside the Frequency range of 47.5 Hz – 52 Hz assuming the Plant is initially operating at a nominal System Frequency of 50 Hz (or an otherwise agreed Frequency range).
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 .
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	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: <ul style="list-style-type: none"> (a) Moriston (b) Killin (c) Garry (d) Conon (e) Clunie (f) Beaully which will comprise more than one Power Station .
Cascade Hydro Scheme Matrix	The matrix described in Appendix 1 to BC1 under the heading Cascade Hydro Scheme Matrix .
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	<p>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.</p>
Category 4 Intertripping Scheme	<p>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.</p>
Caution Notice	<p>A notice conveying a warning against interference with Safety Precautions, which shall be attached (or affixed) at all Points of Isolation.</p>
CENELEC	<p>European Committee for Electrotechnical Standardisation.</p>
Citizens Advice	<p>Means the National Association of Citizens Advice Bureaux.</p>
Citizens Advice Scotland	<p>Means the Scottish Association of Citizens Advice Bureaux.</p>
CfD Counterparty	<p>A person designated as a "CfD counterparty" under section 7(1) of the Energy Act 2013.</p>
CfD Documents	<p>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.</p>

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, in either case to carry out any of the CFD settlement activities (or any successor entity performing CFD settlement activities).
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 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: <ul style="list-style-type: none"> (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.
Competitively Appointed Transmission Licensee	A person granted a Transmission Licence (as defined in Section 6(1)b of the Act) to own and operate an Onshore Transmission System on the basis of competitive tendering undertaken pursuant to Section 6C of the Electricity Act 1989.
Competitively Appointed Transmission Licensee Interface Point	The electrical point of connection between a Transmission System owned by a Competitively Appointed Transmission Licensee and the assets of another Transmission Licensee .
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 .

<p>Compliance Statement</p>	<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 and/or Electricity Storage 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;</p> <p>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>
<p>Configuration 1 AC Connected Offshore Power Park Module</p>	<p>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 Transmission Interface Points.</p>
<p>Configuration 2 AC Connected Offshore Power Park Module</p>	<p>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.</p>
<p>Configuration 1 DC Connected Power Park Module</p>	<p>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 Transmission Interface Points.</p>
<p>Configuration 2 DC Connected Power Park Module</p>	<p>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 more than one Onshore substation at its Transmission Interface Points.</p>
<p>Connection Conditions or CC</p>	<p>That portion of the Grid Code which is identified as the Connection Conditions being applicable to GB Code Users.</p>
<p>Connection Entry Capacity</p>	<p>Has the meaning set out in the CUSC.</p>

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 Based Reactive Power	The Reactive Power supplied by a Grid Forming Plant through controlled means based on operator adjustment selectable setpoints (these may be manual or automatic).
Control Calls	Telephone calls whose destination and/or origin is a Control Centre or Control Point , either from dedicated control desk telephone systems or dedicated telephone handsets, and which, for the purpose of Control Telephony , have 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.

<p>Control Point</p>	<p>The point from which:-</p> <ul style="list-style-type: none"> (a) A Non-Embedded Customer's Plant and Apparatus is controlled; or (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: <ul style="list-style-type: none"> (i) 50 MW or more in NGET's Transmission Area; or (ii) 30 MW or more in SPT's Transmission Area; or (iii) 10 MW or more in SHETL's Transmission Area, (iv) 10 MW or more which is connected to an Offshore Transmission System <p>is physically controlled by a BM Participant; or</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>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>
<p>Control Telephony</p>	<p>The principal method by which a User's Responsible Engineer/Operator, the relevant Transmission Licensees' Control Engineers and The Company's Control Engineers speak to one another for the purposes of control of the Total System in both normal and emergency operating conditions.</p>
<p>Core Industry Document</p>	<p>As defined in the ESO Licence.</p>
<p>Core Industry Document Owner</p>	<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>

<p>Critical Tools and Facilities</p>	<p>Apparatus and tools required in relation to System Restoration:</p> <p>a) In the case of The Company include, but are not limited to:</p> <ul style="list-style-type: none"> i) Tools for operating and monitoring the Transmission System including but not limited to state estimation, the Balancing Mechanism, Load and System Frequency control, alarms, real time system operation and operational security analysis including off line transmission analysis; ii) The ability to control, protect and monitor transmission assets including switchgear, tap changers and other Transmission System equipment including where available auxiliary equipment and to ensure the safe operation of Plant and Apparatus and the safety of personnel; iii) Control Telephony systems as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5; iv) Operational telephony as provided for in STCP 04-5; and v) Tools and communications systems to facilitate cross border operations. <p>b) In the case of Generators, HVDC System Owners, DC Converter Station Owners, Defence Service Providers and Restoration Contractors:</p> <ul style="list-style-type: none"> i) Tools for monitoring relevant Plant and Apparatus; ii) The ability to control, protect and monitor their Plant and Apparatus necessary for System Restoration including as applicable primary Plant, switchgear, tap changers and other auxiliary equipment and to ensure the safe operation of Plant and personnel; and iii) Control Telephony as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5. <p>c) In the case of BM Participants and Virtual Lead Parties who are not Generators, HVDC System Owners, DC Converter Station owners, Defence Service Providers or Restoration Contractors as provided for in item b) above:</p> <ul style="list-style-type: none"> i) Tools for monitoring relevant Plant and Apparatus (excluding Plant and Apparatus not owned by the BM Participant or Virtual Lead Party); and ii) Control Telephony as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5 <p>d) In the case of Network Operators:</p> <ul style="list-style-type: none"> i) Control room Apparatus and tools for monitoring their System including but not limited to, alarms, real time system operation and operational security analysis including off line network analysis; ii) The ability to control, protect and monitor those assets necessary for System Restoration including switchgear, tap changers and other network equipment including where available auxiliary equipment and to ensure the safe operation of Plant and personnel; and iii) Control Telephony as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5. <p>e) In the case of Non-Embedded Customers:</p> <ul style="list-style-type: none"> i) Tools for monitoring their System including but not limited to, alarms and real time system operation;
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	<p>ii) The ability to control, protect and monitor those assets necessary for System Restoration including switchgear, tap changers and other network equipment including where available auxiliary equipment and to ensure the safe operation of Plant and personnel; and</p> <p>iii) Control Telephony as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5.</p>
CUSC	Has the meaning set out in the ESO Licence .
CUSC Contract	<p>One or more of the following agreements as envisaged in condition E2 of the ESO 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	Has the meaning set out in the ESO Licence .
CUSC Party	As defined in the ESO Licence and “CUSC Parties” shall be construed accordingly.
Customer	A person to whom electrical power is provided (whether or not they are 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 .
Damping Factor (ζ)	<p>The ratio of the actual damping to critical damping.</p> <p>For a GBGF-I the open loop phase angle, for an open loop gain of one, is measured from the systems Nichols Chart.</p> <p>This angle is used to define the system’s equivalent Damping Factor that is the same as the Damping Factor of a second order system with the same open loop phase angle.</p> <p>Alternatively, the Damping Factor refers to the damping of a specific oscillation mode that is associated with the second order system created by the power to angle transfer function as shown in Figure PC.A.5.8.1(a) and PCA.5.8.1(b).</p>

Data Publisher	The person providing a reporting service, in relation to data which is submitted to the reporting service under OC2.4.2.3 or a Transmission Licensee , in relation to data which the Transmission Licensee is required to publish.
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 Company's 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 GB Code User's .
DC Converter Station	An installation comprising one or more Onshore DC Converters connecting a direct current interconnector: to the National Electricity Transmission System ; or, (if the installation has a rating of 50 MW 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.
Defence Service Provider	A User with a legal or contractual obligation to provide a service contributing to one or several measures of the System Defence Plan or a party with a contract to meet one or more measures of the System Defence Plan .
Defined Active Damping Power	The Active Damping Power supplied by a GBGF-I when it is operating at the Grid Oscillation Value defined in Table PC.A.5.8.2.
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 directed 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 The Company or Network Operator or Relevant Transmission Licensee , which results in an Active Power modification.
Demand Response Provider	A party (other than The Company) 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 The Company 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 The Company 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 The Company or Network Operator or Relevant Transmission Licensee .
Demand Response Transmission Constraint Management	A Demand Response Service derived from Demand within a Demand Facility or Closed Distribution System that is available for modulation by The Company or Network Operator or Relevant Transmission Licensee to manage transmission constraints within the System .

Demand Response Service	<p>A Demand Response Service includes one of 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 The Company. 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 The Company 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 .
Designated Information Exchange System	A facsimile machine or, as agreed between each User with respect to their Control Centre , Trading Point or Control Point and The Company , an Electronic Communication Platform that facilitates the exchange of information between a User and The Company .
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	<p>(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</p> <p>(b) The act of ceasing to consume electricity at an importing BM Unit; and the term "De-Synchronising" shall be construed accordingly.</p>
De-synchronised Island Procedure	A formal procedure as set out in OC9.5.4 for the purpose of Synchronising Power Islands
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 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 submitted in accordance with PC.4.4.2 or PC.4.4.4 as applicable.
Disconnection	The physical separation of Users (or Customers) from the National Electricity Transmission System or a User System as the case may be.
Discrimination	The quality where a relay or protective system is enabled to pick out and cause to be disconnected only the faulty Apparatus .
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 .
Distribution Restoration Contract	An agreement between an Anchor Plant Owner or Top Up Restoration Contractor and The Company and a Network Operator under which the Anchor Restoration Contractor or Top Up Restoration Contractor , on instruction, provides a service to energise and/or contribute to the establishment of a Distribution Restoration Zone .
Distribution Restoration Zone	Part of a Network Operator's System which is capable of being energised by an Anchor Plant following a Total System Shutdown or Partial System Shutdown . The Distribution Restoration Zone shall contain an Anchor Plant and may also include one or more Top Up Restoration Contractor's Plants . The Distribution Restoration Zone primarily comprises part of the Network Operator's System but may include relevant parts of the National Electricity Transmission System in which case Relevant Transmission Licensees would be party to the Distribution Restoration Zone Plan .

Distribution Restoration Zone Control System (DRZCS)	A mains-independent automatic control and supervisory system which assesses the status and operational conditions of part of a Network Operator's System and where relevant, part of the Transmission System for the purposes of operating Restoration Contractor's Plant and Apparatus and/or modulating Restoration Contractors' Demand in addition to operating items of the Network Operator's Plant and Apparatus and relevant Transmission Licensee's Plant and Apparatus for the purposes of establishing and operating a Distribution Restoration Zone .
Distribution Restoration Zone Plan	A plan produced and agreed by a Network Operator, The Company, Restoration Contractors and in certain situations a Transmission Licensee under OC9.4.7.7, detailing the agreed method and procedure by which a Network Operator will instruct a Restoration Contractor with an Anchor Plant to energise, part of a Network Operator's System Total System within 8 hours of that instruction, and subsequently meet complementary blocks of local Demand so as to form a Power Island . A Distribution Restoration Zone Plan may require the use of Top Up Restoration Plant . A Distribution Restoration Zone Plan is distinct from and falls outside the provisions of a Local Joint Restoration Plan .
Droop	The ratio of the per unit steady state change in speed (or Frequency), to the per unit steady state change in Active 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 .
Dynamic Reactive Compensation Equipment	Plant and Apparatus capable of injecting or absorbing Reactive Power in a controlled manner which includes but is not limited to Synchronous Compensators, Static Var Compensators (SVC), or STATCOM devices.
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 NGET's Transmission System , any Competitively Appointed Transmission Licensee's Transmission System with Plant and Apparatus located in NGET's Transmission Area 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	A way of providing a connection between conductors and earth by an Earthing Device which is either: <ul style="list-style-type: none"> (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 (b) maintained and/or secured in position by such other method which must be in accordance with the Local Safety Instructions of NGET or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be.
Earthing Device	A means of providing a connection between a conductor and earth being of adequate strength and capability.
Elected Panel Members	Shall mean the following Panel Members elected in accordance with GR4.2(a): <ul style="list-style-type: none"> (a) the representative of the Suppliers; (b) the representative of the Onshore Transmission Licensees; (c) the representative of the Offshore Transmission Licensees; and (d) the representatives of the Generators
Electrical Standard	A standard listed in the Annex to the General Conditions .
Electricity Balancing Regulation	as defined in the CUSC .
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 ESO Licence .
Electricity Storage	The conversion of electrical energy into a form of energy which can be stored, the storing of that energy, and the subsequent reconversion of that energy back into electrical energy.

Electricity Storage Module	Is either one or more Synchronous Electricity Storage Unit(s) or Non-Synchronous Electricity Storage Unit(s) which could also be part of a Power Generating Module . For the avoidance of doubt, Non-Controllable Electricity Storage Equipment would not be considered to be classed as an Electricity Storage Module or as an Electricity Storage Unit .
Electricity Storage Unit	A Synchronous Electricity Storage Unit or Non-Synchronous Electricity Storage Unit .
Electricity Supply Licence	The licence granted pursuant to Section 6(1) (d) of the Act .
Electricity System Operator Licence or ESO Licence	Means a licence granted or treated as granted under section 6(1)(da) of the Act .
Electricity System Restoration Standard	As defined in Special Condition 2.2 of The Company's Transmission Licence.
Electricity Ten Year Statement	A statement of network development information, prepared annually by The Company in accordance with the terms of the ESO Licence condition C12 for each of the nine succeeding financial years.
Electromagnetic Compatibility Level	Has the meaning set out in Engineering Recommendation G5 .
Electronic Communication Platform	An information exchange platform established, provided, and maintained by The Company that facilitates the exchange of information between a User and The Company .
Electronic Power Converter	Electrical Plant and Apparatus which uses switched solid state power electronic devices to produce a real voltage waveform, that has a fundamental component with harmonics.
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 Relevant 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 Generation Control	Any or all of the following methods by which a Network Operator can achieve a reduction in the Active Power output of Embedded Power Stations to implement an instruction issued by The Company : (a) Embedded Generation De-energisation ; or (b) where this is achievable in a suitable timescale to comply with an instruction, arranging to reduce the Active Power output of Embedded Power Stations or Embedded Generator Unit(s) connected to their System .

Embedded Generation Deenergisation	The de-energisation by Network Operators of one or more Embedded Power Stations or Embedded Generating Units from their System as part of an Embedded Generation Control action.
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 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.
Engineering Recommendation G5	Means Engineering Recommendation G5/5.
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	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 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.
Estimated Registered Data	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 nine succeeding Financial Years will be an estimate of what is expected.

<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. (j) A Storage User in respect of an Electricity Storage Module whose Main Plant and Apparatus is connected to the System on or after 20 May 2020 and who concluded Purchase
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	Contracts for its Main Plant and Apparatus on or after 20 May 2019.
EU Generator	A Generator or OTSDUA who is also an EU Code User .
EU Grid Supply Point	A Grid Supply Point where either:- <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 relevant 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 Assimilated Law (Commission Regulation (EU) 543/2013), 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 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):- (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 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
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 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.
Final-Balancing Compliance Notification	A notification from The Company to an EU Generator in respect of an Embedded Small Power Station with a Bilateral Embedded Generation Agreement with The Company , with a Completion Date on or after 05-09-2024, confirming that the Generator has demonstrated compliance with: (a) Engineering Recommendation G99 supported by the final operational notification from the relevant Network Operator , (b) the relevant sections of the Grid Code as applicable, and (c) the Bilateral Embedded Generation Agreement , and that all the items in the schedule of Unresolved Issues have been completed to The Company's satisfaction.
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	<p>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:</p> <p>(a) with the Grid Code, (or where they apply, that relevant derogations have been granted), 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 specified in such notification.</p>
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	As defined in the ESO 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 Hz) at which a System is running.
Frequency Containment Reserves (FCR)	means, in the context of Balancing Services , the Active Power reserves available to contain System Frequency after the occurrence of an imbalance.
Frequency Response Deadband	<p>An interval used intentionally to make the Frequency control unresponsive.</p> <p>In the case of mechanical governor systems, the Frequency Response Deadband is the same as Frequency Response Insensitivity.</p>

Frequency Response 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.
Frequency Restoration Reserves (FRR)	Means, in the context of Balancing Services , the Active Power reserves available to restore System Frequency to the nominal Frequency .
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.
Future State of Energy (FSoE)	For each Electricity Storage Module, this is a series of MWh figures and associated times, which is calculated by The Company using the data provided under BC1.A.11.1, making up an estimated profile of the energy stored in that Electricity Storage Module.
Gas System Planner Licence or GSP Licence	Means a licence granted or treated as granted under section 7AA(1) of the Gas Act 1986 .
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> <p>(a) A Generator or OTSDUA whose Main Plant and Apparatus (excluding a DC Connected Power Park Module) 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</p> <p>(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</p> <p>(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; or</p> <p>(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.</p>
GB Generator	A Generator , or OTSDUA , who is also a GB Code User .
GB Generator Final-Balancing Compliance Notification	<p>A notification from The Company to a GB Generator in respect of an Embedded Small Power Station with a Bilateral Embedded Generation Agreement with The Company, with a Completion Date on or after 5 September 2024, confirming that the GB Generator has demonstrated compliance with:</p> <p>(a) the relevant sections of the Grid Code as applicable, and</p> <p>(b) the Bilateral Embedded Generation Agreement,</p> <p>and that all the items in the schedule of Unresolved Issues have been completed to The Company's satisfaction.</p>

GB Generator Interim-Balancing Compliance Notification	A notification from The Company to a GB Generator in respect of an Embedded Small Power Station with a Bilateral Embedded Generation Agreement with The Company , with a Completion Date on or after 5 September 2024, acknowledging that the GB Generator has demonstrated compliance, except for the Unresolved Issues , with: <ul style="list-style-type: none"> (a) the relevant sections of the Grid Code as applicable, and (b) the Bilateral Embedded Generation Agreement.
GBGF Fast Fault Current Injection	The ability of a Grid Forming Plant to supply reactive current, that starts to be delivered into the Total System in less than 5 ms when the voltage falls below 90% of its nominal value at the Grid Entry Point or User System Entry Point .
GB Grid Forming - Inverter or GBGF-I	Is any Power Park Module, HVDC System, DC Converter, OTSDUW Plant and Apparatus, Non-Synchronous Electricity Storage Module, Dynamic Reactive Compensation Equipment or any Plant and Apparatus (including a smart load) which is connected or partly connected to the Total System via an Electronic Power Converter which has a Grid Forming Capability (GBGF-I) .
GB Grid Forming – Synchronous or GBGF-S	Is a Synchronous Power Generating Module, Synchronous Electricity Storage Module or Synchronous Generating Unit with a Grid Forming Capability .
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, Relevant Transmission Licensee’s 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	<p>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):</p> <p>(a) which forms part of the BM Unit which represents that Cascade Hydro Scheme;</p> <p>(b) at an Embedded Exemptable Large Power Station, where the relevant Bilateral Agreement specifies that compliance with BC1 and/or BC2 is required:</p> <p>(i) to each Generating Unit, or</p> <p>(ii) to each Power Park Module where the Power Station comprises Power Park Modules.</p>
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 or undertakes Electricity Storage 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 MVA _r 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 and/or Electricity Storage 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 .
Governor Deadband	An interval used intentionally to make the frequency control unresponsive.
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 condition E3.2(b) of the ESO 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 Chairperson 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 Chairperson 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 Forming Active Power	Grid Forming Active Power is the inherent Active Power produced by Grid Forming Plant that includes Active Inertia Power plus Active Phase Jump Power plus Active Damping Power .

Grid Forming Capability	<p>Is (but not limited to) the capability a Power Generating Module, HVDC Converter (which could form part of an HVDC System), Generating Unit, Power Park Module, DC Converter, OTSDUW Plant and Apparatus, Electricity Storage Module, Dynamic Reactive Compensation Equipment or any Plant and Apparatus (including a smart load) whose supplied Active Power is directly proportional to the difference between the magnitude and phase of its Internal Voltage Source and the magnitude and phase of the voltage at the Grid Entry Point or User System Entry Point and the sine of the Load Angle. As a consequence, Plant and Apparatus which has a Grid Forming Capability has a frequency of rotation of the Internal Voltage Source which is the same as the System Frequency for normal operation, with only the Load Angle defining the relative position between the two. In the case of a GBGF-I, a Grid Forming Unit forming part of a GBGF-I shall be capable of sustaining a voltage at its terminals irrespective of the voltage at the Grid Entry Point or User System Entry Point for normal operating conditions.</p> <p>For GBGF-I, the control system, which determines the amplitude and phase of the Internal Voltage Source, shall have a response to the voltage and System Frequency at the Grid Entry Point or User System Entry Point) with a bandwidth that is less than a defined value as shown by the control system's NFP Plot. Exceptions to this requirement are only allowed during transients caused by System faults, voltage dips/surges and/or step or ramp changes in the phase angle which are large enough to cause damage to the Grid Forming Plant via excessive currents.</p>
Grid Forming Electronic Power Converter	A Grid Forming Plant whose output is derived from an Electronic Power Converter with a GBGF-I capability.
Grid Forming Plant	A site which contains Plant and Apparatus which is classified as either a GBGF-S or a GBGF-I
Grid Forming Plant Owner	The owner or operator of a Grid Forming Plant .
Grid Forming Unit	A Power Park Unit or Electricity Storage Unit or a Synchronous Power Generating Unit or individual Load with a Grid Forming Capability .
Grid Oscillation Value	An injected test frequency signal applied at nominal System Frequency with a superimposed oscillatory response overlaid onto the nominal System Frequency with an amplitude of 0.05 Hz peak to peak at a frequency of 1 Hz and is used for determining the rating of the Defined Active Damping Power .
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 .
GSP Group	Has the meaning as set out in the BSC .

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 and Figure ECC.A.3.3.
High Voltage or HV	For E&W Transmission Systems , a voltage exceeding 650 V. For Scottish Transmission Systems , a voltage exceeding 1000 V.
Historic Frequency Data	System Frequency data at a maximum of 1 second intervals for the whole month, published by The Company as detailed in OC3.4.4.
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
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 .
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 .
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 .
Inertia Constant H	For a GBGF-S the Inertia Constant H is measured in MWs/MVA.
Inertia Constant He	For a GBGF- I Electronic Power Converter the Inertia Constant He , is measured in MWs/MVA and produced by the Active ROCOF Response Power .

Information Request Notice	A notice that will be issued by The Company to a relevant party setting out The Company's reasonable requirements for relevant information in accordance with section 172 of the Energy Act 2023. This will be prepared in accordance with The Company's published Information Request Statement .
Information Request Statement	A statement prepared and published by The Company , in accordance with section 172 of the Energy Act 2023 and condition D2.5 of the ESO Licence and GSP Licence , setting out the process that The Company will follow when requesting information from relevant parties by the issue of an Information Request Notice .
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.
Interconnector	As defined in the BSC .
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 Reference Programme	Has the meaning given to that term in section BC1.A.3.
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 .
Interim-Balancing Compliance Notification	A notification from The Company to an EU Generator in respect of an Embedded Small Power Station with a Bilateral Embedded Generation Agreement with The Company , with a Completion Date on or after 5 September 2024, acknowledging that the Generator has demonstrated compliance, except for the Unresolved Issues , with: (a) Engineering Recommendation G99 as required by the relevant Network Operator , (b) The relevant sections of the Grid Code and Bilateral Embedded Generation Agreement .
Interim Operational Notification or ION	A notification from The Company to a Generator or DC Converter Station owner or HVDC System Owner or Network Operator or Non-Embedded Customer acknowledging that the User has demonstrated compliance, except for the Unresolved Issues ; (a) with the Grid Code, and (b) where applicable, with Appendices F1 to F5 of the Bilateral Agreement , 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 or ECP .
Intermittent Power Source	The primary source of power for a Generating Unit or Power Generating Module that cannot be considered as controllable, e.g. wind, wave or solar. For the avoidance of doubt, the output from an Electricity Storage Module would not be considered to be an Intermittent Power Source .

Internal Voltage Source or IVS	<p>For a GBGF-S, a real magnetic field, that rotates synchronously with the System Frequency under normal operating conditions, which as a consequence induces an internal voltage (which is often referred to as the Electro Motive Force (EMF)) in the stationary generator winding that has a real impedance.</p> <p>In a GBGF-I, switched power electronic devices are used to produce a voltage waveform, with harmonics, that has a fundamental rotational component called the Internal Voltage Source (IVS) that rotates synchronously with the System Frequency under normal operating conditions.</p> <p>For a GBGF-I there must be an impedance between the Internal Voltage Source and the Grid Entry Point or User System Entry Point.</p> <p>For the avoidance of doubt, the impedance between the Internal Voltage Source and the Grid Entry Point or User System Entry Point could be virtual, real, or a combination of the two.</p>
Intertripping	<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>
Intertrip Apparatus	Apparatus which performs Intertripping .
IP Completion Day	31 December 2020 as defined in Section 39 of the European Union (Withdrawal Agreement) Act 2020.
IP Turbine Power Fraction	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 .
Isolating Device	A device for achieving Isolation .

<p>Isolation</p>	<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> <p>(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</p> <p>(ii) maintained and/or secured by such other method which must be in accordance with the Local Safety Instructions or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be; or</p> <p>(b) an adequate physical separation which must be in accordance with and maintained by the method set out in the Local Safety Instructions or the Safety Rules of the Relevant Transmission Licensee or that User, as the case may be.</p>
<p>ISOP</p>	<p>Independent System Operator and Planner, means a person designated by the Secretary of State under section 162 of the Energy Act 2023 as the holder of the ESO Licence, and the GSP Licence. For the time being that person is the NESO.</p>
<p>Joint System Incident</p>	<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>
<p>Key Safe</p>	<p>A device for the secure retention of keys.</p>
<p>Key Safe Key</p>	<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) NGET’s Transmission System where such Power Station has a Registered Capacity of 100 MW or more; or (ii) SPT’s Transmission System where such Power Station has a Registered Capacity of 30 MW or more; or (iii) SHETL’s Transmission System where such Power Station has a Registered Capacity of 10 MW or more; or (iv) an Offshore Transmission System where such Power Station has a Registered Capacity of 10 MW 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) NGET’s Transmission System and such Power Station has a Registered Capacity of 100 MW or more; or (ii) SPT’s Transmission System and such Power Station has a Registered Capacity of 30 MW or more; or (iii) SHETL’s Transmission System and such Power Station has a Registered Capacity of 10 MW 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) NGET’s Transmission Area where such Power Station has a Registered Capacity of 100 MW or more; or (ii) SPT’s Transmission Area where such Power Station has a Registered Capacity of 30 MW or more; or (iii) SHETL’s Transmission Area where such Power Station has a Registered Capacity of 10 MW 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>Legally Binding Decisions of the European Commission and/or the Agency</p>	<p>Any relevant legally binding decision or decisions of the European Commission and/or the Agency, but a binding decision does not include a decision that is not, or so much of a decision as is not, Assimilated Law.</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>

Licence Standards	Those standards set out or referred to in condition E7 of The Company's ESO Licence and/or condition D3 and/or condition E16 of a Relevant Transmission Licensee's Transmission Licence .
Limited-Balancing Compliance Notification	A notification from The Company to an EU Generator in respect of an Embedded Small Power Station with a Bilateral Embedded Generation Agreement with The Company , with a Completion Date on or after 5 September 2024, stating that the Generator's Plant and/or Apparatus specified in such notification may be, or is, unable to comply: <ul style="list-style-type: none"> (a) with the relevant provisions of the Grid Code and the Bilateral Embedded Generation Agreement; and/or (b) in accordance with ECP.9.1 (ii) of the Grid Code, upon receipt of notification from the Network Operator concerning an EU Generator failing to meet the requirements of Engineering Recommendation G99 or any provisions of the Grid Code, or where applicable Bilateral Agreement.
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 50.4 Hz, 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 50.4 Hz leading to a reduction in Active Power in accordance with the provisions of BC3.7.2.1.
Limited Membership Workgroup	A Workgroup having less than five (5) but more than two (2) persons that have nominated themselves for membership in addition to the Code Administrator representative and the chairperson of the Workgroup . Members of a Limited Membership Workgroup where employed by companies that are considered to be an Affiliate of each other will be considered to be a single workgroup member for the purposes of fulfilling this minimum requirement.

Limited Operational Notification or LON	<p>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> <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> <p>and specifying the Unresolved Issues.</p>
Load	The Active, Reactive or Apparent Power , as the context requires, generated, transmitted or distributed.
Loaded	Supplying electrical power to the System .
Load Angle	The angle in radians between the voltage of the Internal Voltage Source and the voltage at the Grid Entry Point or User System Entry Point .
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	<p>A plan produced and agreed by The Company, Transmission Licensee, Restoration Contractors and a Network Operator under OC9.4.7.7, detailing the agreed method and procedure by which The Company or Transmission Licensee in Scotland will instruct a Restoration Contractor with an Anchor Plant to energise, part of the Total System within 2 hours of that instruction and subsequently meet complementary blocks of local Demand so as to form a Power Island. A Local Joint Restoration Plan may require the use of Top Up Restoration Plant.</p> <p>A Local Joint Restoration Plan is distinct from and falls outside the provisions of a Distribution Restoration Zone Plan.</p>
Local Safety Instructions	For safety co-ordination in England and Wales, instructions on each User Site and Transmission Site , approved by NGET's , the relevant Competitively Appointed Transmission Licensee's or User's relevant manager as relevant for the User Site location, setting down the methods of achieving the objectives of NGET's or the relevant Competitively Appointed Transmission Licensee'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 their 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 .
London Court of International Arbitration	The leading London-based arbitral institution and not-for-profit company limited by guarantee of that name with a registered company number of 0204767 providing for the resolution of commercial disputes in accordance with its arbitration rules.
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 V. For Scottish Transmission Systems , a voltage exceeding 50 V but not exceeding 1000 V.
LV Side of the Offshore Platform	Unless otherwise specified in the Bilateral Agreement , the busbar on the Offshore Platform (typically 33 kV) 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 and Electricity Storage Modules) is one or more of the principal items of Plant or Apparatus required to convert or re-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 Delivery Offer (MDO)	As defined in BC1.A.1.5 Dynamic Parameters .
Maximum Delivery Bid (MDB)	As defined in BC1.A.1.5 Dynamic Parameters .
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 supply to the Total System , less any demand associated solely with facilitating the operation of that Power Generating Module and not fed into the System . In the case of an Electricity Storage Module , the Maximum Capacity is the maximum continuous Active Power which an Electricity Storage Module can export to the Total System less any demand associated with facilitating the operation of that Electricity Storage Module when fully charged and operating in a mode analogous to Generation .
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 .
Maximum Import Power	The maximum continuous Active Power which an Electricity Storage Module can import from the Total System , when fully discharged and operating in a mode analogous to Demand .
Medium Power Station	<p>A Power Station which is</p> <p>(a) directly connected to NGET's Transmission System where such Power Station has a Registered Capacity of 50 MW or more but less than 100 MW;</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 NGET's Transmission System and such Power Station has a Registered Capacity of 50 MW or more but less than 100 MW;</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 NGET's Transmission Area and such Power Station has a Registered Capacity of 50 MW or more but less than 100 MW.</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 V but not exceeding 650 V.
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 or Electricity Storage Module 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 or HVDC System Owner , down to which the Power Generating Module (including a DC Connected Power Park Module) or HVDC System 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.
Minister of the Crown	As defined in the ESO Licence .
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 Electricity Storage Modules'. 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 and Electricity Storage Modules'.
National Electricity Transmission System Losses	The losses of electricity incurred on the National Electricity Transmission System .
National Electricity Transmission System Operator Area	Means the area by that name as set out in the terms of the ESO 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 - 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 – Embedded Generation Control Imminent	<p>A warning issued by The Company, in accordance with OC7.4.8.12, which is intended to provide short term notice, where possible, to those Network Operators who are likely to receive Embedded Generation Control 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 - High Risk of Embedded Generation Reduction	<p>A warning issued by The Company, in accordance with OC7.4.8.11, which is intended to alert recipients that there is a high risk of Embedded Generation Control being implemented and which may result from a National Electricity Transmission System Warning – System NRAPM.</p>
National Electricity Transmission System Warning – Localised NRAPM	<p>A warning issued by The Company, in accordance with OC.7.4.8.10, which is intended to invite a response from and to alert recipients to a decreased Localised NRAPM.</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>
National Electricity Transmission System Warning – System NRAPM	<p>A warning issued by The Company, in accordance with OC.7.4.8.9, which is intended to invite a response from and to alert recipients to a decreased System NRAPM.</p>
National Energy System Operator or NESO	<p>The company with registered number 11014226, as the designated ISOP and holder of the ESO Licence and the GSP Licence.</p>

Network Data	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 .
Network Frequency Perturbation Plot	<p>A form of Bode Plot which plots the amplitude (%) and phase (degrees) of the resulting output oscillation responding to an applied input oscillation across a frequency base. The plot will be used to assess the capability and performance of a Grid Forming Plant and to ensure that it does not pose a risk to other Plant and Apparatus connected to the Total System.</p> <p>For GBGF-I, these are used to provide data to The Company which together with the associated Nichols Chart (or equivalent) defines the effects on a GBGF-I for changes in the frequency of the applied input oscillation.</p> <p>The input is the applied as an input oscillation and the output is the resulting oscillations in the GBGF-I's Active Power.</p> <p>For the avoidance of doubt, Generators in respect of GBGF-S can provide their data using the existing formats and do not need to supply NFP plots.</p>
Network Gas Supply Emergency	Has the meaning set out in the BSC .
Network Operator	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 .
NGET	National Grid Electricity Transmission plc (NO: 2366977) whose registered office is at 1-3 Strand, London, WC2N 5EH.
Nichols Chart	For a GBGF-I , a chart derived from the open loop Bode Plots that are used to produce an NFP Plot . The Nichols Chart plots open loop gain versus open loop phase angle. This enables the open loop phase for an open loop gain of 1 to be identified for use in defining the GBGF-I's equivalent Damping Factor .
No-Load 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].
No System Connection	As defined in OC8A.1.6.2 and OC8B.1.7.2.
Non-CUSC Party	A Party who does not accede to the Connection and Use of System Code (CUSC) .
Non-Synchronous Electricity Storage Module	A Power Park Module comprising solely of one or more Non-Synchronous Electricity Storage Units .
Notification of User's Intention to Operate	A notification from a Network Operator or Non-Embedded Customer to The Company informing The Company 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 .

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-Controllable Electricity Storage Equipment	An item of storage Plant , including but not limited to a Synchronous Flywheel or Synchronous Compensation Equipment or Regenerative Braking whose active output power cannot be independently controlled.
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 Electricity Storage Module	A Power Park Module comprising solely of one or more Non-Synchronous Electricity Storage Units .
Non-Synchronous Electricity Storage Unit	A Power Park Unit which can produce electrical energy by converting or re-converting another source of energy such that the frequency of the generated voltage is not inherently in synchronism with the frequency of the System .
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.
Offer Acceptance	An acceptance by a BM Unit of a Bid-Offer Acceptance to increase its export onto, or decrease its import from, the National Electricity Transmission System , where in this context import and export are as defined in the BSC .
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 .
Offshore Generating Unit	Unless otherwise provided in the Grid Code, any Apparatus located Offshore which produces electrical energy by converting or re-converting another source of energy, including, an Offshore Synchronous Generating Unit or Offshore Non-Synchronous Generating Unit which could also be part of a Power Generating Module or Electricity Storage Module
Offshore Grid Entry Point	In the case of:- (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 Local Joint Restoration Plan	A plan produced and agreed by The Company , Offshore Transmission Licensees , Restoration Contractors , a Network Operator and in some cases an Onshore Transmission Licensee under OC9.4.7.7, detailing the agreed method and procedure by which The Company will instruct a Restoration Contractor with an Anchor Plant located Offshore to energise, part of the Total System (including but not limited to parts of the Offshore Transmission System) within 2 hours of that instruction and subsequently meet complementary blocks of local Demand so as to form a Power Island . An Offshore Local Joint Restoration Plan may require the use of Top Up Restoration Plant . An Offshore Local Joint Restoration Plan is distinct from and falls outside the provisions of a Distribution Restoration Zone Plan .
Offshore Non-Synchronous Generating Unit	An Offshore Generating Unit that is not an Offshore Synchronous Generating Unit including for the avoidance of doubt a Power Park Unit or Non-Synchronous Electricity Storage Unit located Offshore .
Offshore Platform	A single structure comprising of Plant and Apparatus located Offshore which includes one or more Offshore Grid Entry Points .

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 or Non-Synchronous Electricity Storage Unit 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>A Generating Unit or Synchronous Electricity Storage Unit located Offshore 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 or Synchronous Electricity Storage 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	<p>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.</p>
Offshore Transmission Licensee	<p>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.</p>
Offshore Transmission System	<p>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.</p>

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 electrical energy by converting or re-converting another source of energy, including, an Onshore Synchronous Generating Unit or Onshore Non-Synchronous Generating Unit which could also be part of a Power Generating Module or an Electricity Storage Module .
Onshore Grid Entry Point	A point at which an Onshore Generating Unit or a CCGT Module or a CCGT Unit or an Onshore Power Generating Module or an Onshore DC Converter or an Onshore HVDC Converter or an Onshore Power Park Module or an Onshore Electricity Storage 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 or Synchronous Electricity Storage Unit including for the avoidance of doubt a Power Park Unit or Non-Synchronous Electricity Storage Unit located Onshore .
Onshore Power Park Module	A collection of Non-Synchronous Generating Units that are powered by an Intermittent Power Source or connected through power electronic conversion technology or Non-Synchronous Electricity Storage Units , joined together by a System (registered as a Power Park Module under the PC) 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 or Onshore Synchronous Electricity Storage Unit (which could also be part of an Onshore Power Generating Module) including, for the avoidance of doubt, a CCGT Unit or Synchronous Electricity Storage 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 or Synchronous Electricity Storage Module located Onshore .
Onshore Transmission Licensee	NGET, SPT, SHETL, or a Competitively Appointed Transmission Licensee.
Onshore Transmission System	The system consisting (wholly or mainly) of high voltage electric lines owned or operated by Onshore Transmission Licensees or operated by The Company 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 05:00 hours on one day to 05:00 hours 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 Electricity Storage 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 ESO 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 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 forecast value (in MW), profiled across the time period affected by the unplanned or planned Event of the 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 Chairperson	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 or European Connection Conditions . An exhaustive list of Part 1 System Ancillary Services is included in that part of CC.8.1 or ECC.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 or ECC.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.
Peak Current Rating	<p>For a GBGF-I this is the larger of either the: -</p> <ul style="list-style-type: none"> • The registered maximum steady-state current plus the maximum additional current to supply the Active ROCOF Response Power plus the Defined Active Damping Power; or. • The registered maximum steady-state current plus the maximum additional current to supply the Phase Jump Angle limit power, or. <p>This is the maximum short term total current as declared by the Grid Forming Plant Owner in accordance with PC.A.5.8.1.</p>
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 System Restoration .

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 ESO 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 Jump Angle	The difference in the measured phase angle of the voltage at the Grid Entry Point or User System Entry Point in a given mains half cycle compared with the measured phase angle of the voltage at the Grid Entry Point or User System Entry Point in the previous mains half cycle.
Phase Jump Angle Limit	The maximum Phase Jump Angle when applied to a GBGF-I which will result in a linear controlled response without activating current limiting functions. This is specified for a System angle near to zero which will be considered to be the normal operating angle under steady state conditions.
Phase Jump Angle Withstand	The maximum Phase Jump Angle change when applied to a GBGF-I which will result in the GBGF-I remaining in stable operation with current limiting functions activated. This is specified for a System angle near to zero which will be considered to be the normal operating angle under steady state conditions.
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 , except in the instance of a Stage 2 or higher Network Gas Supply Emergency , with 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 or ECC.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 , co-ordinated 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 electrical or mechanical or meteorological data (including wind speed) measured at each Power Park Unit at a specified time. Power Available shall be a value between 0 MW 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 unit that is not generating or supplying power 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 , a Synchronous Electricity Storage Module , a Power Park Module or a Non-Synchronous Electricity Storage 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 Active 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	Part of the Total System which is disconnected from, and out of Synchronism with, the rest of the Total System containing Generating Unit(s) at one or more Power Stations , and/or HVDC Systems and/or DC Converters , together with complementary local Demand .
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 or Electricity Storage 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 hours 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	<p>A report submitted by the Test Panel which contains:</p> <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	<p>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.</p>
Proposer	<p>In relation to a particular Grid Code Modification Proposal, the person who makes such Grid Code Modification Proposal.</p>
Protection	<p>The provisions for detecting abnormal conditions on a System and initiating fault clearance or actuating signals or indications.</p>
Protection Apparatus	<p>A group of one or more Protection relays and/or logic elements designated to perform a specified Protection function.</p>
Pumped Storage	<p>A hydro unit in which water can be raised by means of pumps and stored to be used for the generation of electrical energy;</p>
Pumped Storage Generating Unit	<p>A Generating Unit at a Pumped Storage Plant</p>
Pumped Storage Generator	<p>A Generator which owns and/or operates any Pumped Storage Plant.</p>
Pumped Storage Plant	<p>A Power Station comprising Pumped Storage Generating Units.</p>
Pumped Storage Unit	<p>A Generating Unit within a Pumped Storage Plant. For the avoidance of doubt, a Pumped Storage Unit is not considered to form part of an Electricity Storage Unit unless specifically declared by the Generator.</p>
Purchase Contracts	<p>A final and binding contract for the purchase of the Main Plant and Apparatus.</p>
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>

Quick Resynchronisation Capability	The capability of a Type C or Type D Power Generating Module as defined in ECC.6.3.5.6. For the avoidance of doubt this requirement is only mandatory for EU Code Generators who own or operate a Type C or Type D Power Generating Module but does not preclude owners of other generation electing to provide the capability.
Quick Resynchronisation Unit Test	A test undertaken on Generating Unit forming part of a Type C or Type D Power Generating Module as detailed in OC5.7.2.5 necessary to determine its ability to demonstrate a Quick Resynchronisation Capability .
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, Electricity Storage 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. (d) in an importing mode, is that input up to which an Electricity Storage Module was designed to operate being the maximum continuous electric input which the Electricity Storage Module was designed to achieve under normal operating conditions. In an exporting mode is:- <ul style="list-style-type: none"> (i) that output up to which the Synchronous Electricity Storage Unit was designed to operate (Calculated as specified in British Standard BS EN 60034 – 1: 1995); or (ii) the nominal rating for the MW output of a Non-Synchronous Electricity Storage Module being the maximum continuous electric output power which the Non-Synchronous Electricity Storage Module was designed to achieve under normal operating conditions.
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 MVAr over the range referred to in CC 6.3.2, ECC.6.3.2 or otherwise.
Reactive Despatch to Zero MVar Network Restriction	A Reactive Despatch Network Restriction which prevents an Embedded Power Generating Module, an Embedded Generating Unit, Embedded Power Park Module, Embedded HVDC System, HVDC Converter at an Embedded HVDC Converter Station or DC Converter at an Embedded DC Converter Station from supplying power at zero MVar at all Active Power output levels up to and including Rated MW at the Grid Entry Point (or User System Entry Point if Embedded).
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 .
Regenerative Braking	A method of braking in which energy is extracted from the parts braked, which may be returned directly to the System and the purpose of the braking is motion control.

<p>Registered Capacity</p>	<ul style="list-style-type: none"> (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). (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 Station. (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. (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. (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. (f) In the case of an Electricity Storage Module, the normal full load amount of Active Power transferable from an Electricity Storage Module at the Grid Entry Point (or in the case of an Embedded Electricity Storage Module at the User System Entry Point), as declared by the Generator, expressed in whole MW, or in MW to one decimal place.
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Registered Data	Those items of Standard Planning Data and Detailed Planning Data which upon connection become fixed (subject to any subsequent changes).
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> <p>In the case of an Electricity Storage Module, the maximum amount of Active Power transferable into an Electricity Storage Module at the Grid Entry Point (or in the case of an Embedded Electricity Storage Module at the User System Entry Point), as declared by the Generator, expressed in whole MW.</p>
Regulations	The Utilities Contracts Regulations 1996, as amended from time to time.
Regulated Sections	Parts of the Grid Code that are referenced in Governance Rules Annex GR.B as amended from time to time with the approval of the Authority .
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 ESO 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 their immediate family, their employer (and any former employer of theirs within the previous 12 months), any partner with whom they are in partnership, and any company or Affiliate of a company in which they or any member of their 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 NGET , and/or a Competitively Appointed Transmission Licensee with Plant and Apparatus located in NGET's Transmission Area 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 Competitively Appointed Transmission Licensee with Plant and Apparatus located in either SPT's or SHETL's Transmission Area and/or a Scottish Offshore Transmission Licensee .
Relevant Transmission Licensee	Means National Grid Electricity Transmission plc (NGET) in its Transmission Area or SP Transmission plc (SPT) in its Transmission Area or Scottish Hydro-Electric Transmission plc (SHETL) in its Transmission Area or any Offshore Transmission Licensee in its Transmission Area or any Competitively Appointed Transmission Licensee with Plant and Apparatus located in NGET's , SPT's or SHETL's Transmission Area as appropriate.
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 NGET which: <ul style="list-style-type: none"> (a) are Embedded in a User System and which are not directly connected by Plant and/or Apparatus owned by NGET to a sub-station owned by NGET; and (b) are by agreement between NGET and such User operated under the direction and control of such User.
Replacement Reserves (RR)	Means, in the context of Balancing Services , the Active Power reserves available to restore or support the required level of FRR to be prepared for additional system imbalances, including generation reserves;
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 a Relevant Transmission Licensee to sign Site Responsibility Schedules on behalf of that User or Relevant Transmission Licensee as the case may be.
Restoration Contractor	An Anchor Restoration Contractor or a Top Up Restoration Contractor .
Restoration Plan	Either a Local Joint Restoration Plan , a Distribution Restoration Zone Plan or an Offshore Local Joint Restoration Plan as the context requires.
Restoration Service Provider	A User or a party with a legal or contractual obligation to provide a service contributing to one or several measures of the System Restoration Plan .
Restoration Service Test	A test carried out on a Plant to confirm it has an Anchor Plant Capability or Top Up Restoration Capability .

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.
ROCOF	Rate of Change of Frequency
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 Relevant Transmission Licensee 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 , any Competitively Appointed Transmission Licensee's Transmission System with Plant and Apparatus located in SPT's or SHETL's Transmission Area 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 and the ESO Licence in force at the time of entering into the relevant Bilateral Agreement .
Self-Governance Criteria	A proposed Modification that, if implemented, <ul style="list-style-type: none"> (a) is unlikely to have a material effect on: <ul style="list-style-type: none"> (i) existing or future electricity consumers; and (ii) competition in the generation, storage, distribution, or supply of electricity or any commercial activities connected with the generation, storage, 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 (b) is unlikely to discriminate between different classes of Users. (c) other than where the modification meets the Fast Track Criteria, will not constitute an amendment to the Regulated Sections of the Grid Code.

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	The statement made by the Grid Code Review Panel and submitted to the Authority : (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 (b) providing a detailed explanation of the Grid Code Review Panel's reasons for that opinion.
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.
SF₆ Gas Zone	A segregated zone surrounding electrical conductors within a casing containing SF ₆ gas.
SHETL	Scottish Hydro-Electric Transmission plc.
Shutdown	In the case of a Generating Unit is the condition of a Generating Unit where the generator rotor is at rest or on barring or equivalent. In the case of an HVDC System or DC Converter Station , is the condition of an HVDC System or DC Converter Station where the HVDC System or DC Converter Station is de-energised and therefore not importing or exporting Apparent Power to or from the Total System . In the case of Auxiliaries , the state where they are de-energised and not capable of fulfilling their function until restarted or resupplied.
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 Event	An Event , as defined in OC3.4.1.

Significant Incident	An Event which either: (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 Intraday Coupling	The continuous process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the intraday market.
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) NGET’s Transmission System where such Power Station has a Registered Capacity of less than 50 MW; or (ii) SPT’s Transmission System where such Power Station has a Registered Capacity of less than 30 MW; 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 10 MW; <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) NGET’s Transmission System and such Power Station has a Registered Capacity of less than 50 MW; or (ii) SPT’s Transmission System and such Power Station has a Registered Capacity of less than 30 MW; or (iii) SHETL’s Transmission System and such Power Station has a Registered Capacity of less than 10 MW; <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) NGET’s Transmission Area and such Power Station has a Registered Capacity of less than 50 MW; or (ii) SPT’s Transmission Area and such Power Station has a Registered Capacity of less than 30 MW; or (iii) SHETL’s Transmission Area and such Power Station has a Registered Capacity of less than 10 MW; <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>Space Weather Advisory Statement</p>	<p>A statement issued by The Company to advise of a space weather related matter for information and further consideration.</p>
<p>Space Weather Cancellation Notification</p>	<p>A notification issued by The Company following Met Office guidance signalling that a space weather situation has concluded.</p>
<p>Space Weather Cessation Notification</p>	<p>A notification issued by The Company following Met Office guidance signalling a return to a Space Weather Prepare Notification level.</p>
<p>Space Weather Experienced Notification</p>	<p>A notification issued by The Company following Met Office guidance that impacts (consistent with a space weather event) have been seen or experienced in GB. This triggers the preparation and issuing of Space Weather Outcome Statements.</p>

Space Weather Imminent Notification	A notification issued by The Company following Met Office guidance of imminent space weather of a nature and anticipated level of G5 (using the Met Office ranking). A Space Weather Imminent Notification is likely to be issued 20 to 60 minutes ahead of a space weather event being forecast to impact the NETS .
Space Weather Outcome Statement	A statement that is issued by a User to The Company where, following the issuing of a Space Weather Experienced Notification , their Plant or Apparatus has seen or experienced impacts that they believe, at the time, are or may be of a nature consistent with a space weather event.
Space Weather Output Usable Declaration	A declaration of the Output Usable that would apply to a Generator in respect of their Generating Unit and/or Power-Generating Module and/or Power Park Module , or Interconnector Owner in respect of their External Interconnection Circuits or Restoration Contractor in respect of their Plant and Apparatus following the issue of a Space Weather Imminent Notification until such time as specified by the Generator , Interconnector Owner or Restoration Contractor after either a Space Weather Cessation Notification or a Space Weather Cancellation Notification being issued by The Company .
Space Weather Prepare Notification	A notification issued by The Company following Met Office guidance of space weather related activity that is of a nature and anticipated level of G5 (using the Met Office ranking). A Space Weather Prepare Notification is likely to be issued 12 to 36 hours ahead of a space weather event being forecast to impact the NETS .
Speeder Motor Setting Range	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.
SPT	SP Transmission plc.
Standard Contract Terms	The standard terms and conditions applicable to Ancillary Services provided by Demand Response Providers and published on the Website from time to time.
Standard Modifications	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. A Grid Code Modification Proposal that constitutes an amendment to the Regulated Sections of the Grid Code shall be a Standard Modification except where it is an Urgent Modification or where it meets the Fast Track Criteria .
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 User in an application for a CUSC Contract , as reflected in the PC .
Standard Product	Means a harmonised balancing product defined by all EU TSOs for the exchange of balance services.

Specific Product	Means in the context of Balancing Services a product that is not a standard product.
Start Time	The time named as such in an instruction issued by The Company pursuant to the BC .
Start-Up	In the case of a Generating Unit is the action of bringing a Generating Unit from Shutdown to Synchronous Speed . In the case of an HVDC System or DC Converter Station , is the action of bringing the HVDC System or DC Converter Station from Shutdown to a state where it is energised.
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 132/11 kV or 275/11 kV), 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.
Storage User	A Generator who owns or operates one or more Electricity Storage Modules . For the avoidance of doubt: (a) Assimilated Law (Commission Regulation (EU) 2016/631, Commission Regulation (EU) 2016/1388 and Commission Regulation (EU) 2016/1485) shall not apply to Storage Users ; and (b) the European Connection Conditions (ECC's) shall apply to Storage Users on the basis set out in Paragraph ECC1.1(d).
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 The Company , results in substantial amendment to the Bilateral Agreement .
Supergrid Voltage	Any voltage greater than 200 kV.

Supplier	<p>(a) A person supplying electricity under an Electricity Supply Licence; or</p> <p>(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.</p>
Surplus	<p>A MW figure equal to the total Output Usable:</p> <p>(a) minus the forecast of Active Power Demand, and</p> <p>(b) minus the Operational Planning Margin.</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>
Synchronous Area	<p>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.</p>
Synchronous Electricity Storage Module	<p>A Synchronous Power Generating Module which can convert or re-convert electrical energy from another source of energy such that the frequency of the generated voltage, the rotor speed and the frequency of network voltage are in a constant ratio and thus in synchronism. For the avoidance of doubt a Synchronous Electricity Storage Module could comprise of one or more Synchronous Electricity Storage Units.</p>
Synchronous Electricity Storage Unit	<p>A Synchronous Generating Unit which can supply or absorb electrical energy such that the frequency of the generated voltage, the rotor speed and the frequency of the equipment are in constant ratio and thus in synchronism with the network.</p>
Synchronising Generation	<p>The amount of MW (in whole MW) produced at the moment of synchronising.</p>
Synchronising Group	<p>A group of two or more Gensets) which require a minimum time interval between their Synchronising or De-Synchronising times.</p>
Synchronous Compensation	<p>The operation of rotating synchronous Apparatus for the specific purpose of either the generation or absorption of Reactive Power.</p>
Synchronous Compensation Equipment	<p>Apparatus which has the function of providing Synchronous Compensation. For the avoidance of doubt, one or more Synchronous Compensation units would not constitute an Electricity Storage Module unless it could be operated in a controllable manner.</p>

Synchronous Electricity Storage Module	A Synchronous Power Generating Module which can convert and reconvert electrical energy from another source of energy such that the frequency of the generated voltage, the rotor speed and the frequency of network voltage are in a constant ratio and thus in synchronism. For the avoidance of doubt a Synchronous Electricity Storage Module could comprise of one or more Synchronous Electricity Storage Units .
Synchronous Electricity Storage Unit	A Synchronous Generating Unit which can supply and absorb electrical energy such that the frequency of the generated voltage, the rotor speed and the frequency of the equipment are in constant ratio and thus in synchronism with the network.
Synchronous Flywheel	An item of synchronously rotating Plant for the specific purpose of contributing inertia to the System . One or more Synchronous Flywheels would not be considered to form an Electricity Storage Module unless it could be operated in a controllable manner for its AC input and output power.
Synchronous Generating Unit	Any Onshore Synchronous Generating Unit or Offshore Synchronous Generating Unit .
Synchronous Generating Unit Performance Chart	A diagram showing the Active 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 convert or re-convert electrical energy from another source of energy such that the frequency of the supplied voltage, the rotor 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 or one or more Synchronous Electricity Storage 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 Defence Plan	A document prepared by The Company , as published on its Website , outlining how the requirements of the “defence plan”, as provided for by Assimilated Law (Commission Regulation (EU) 2017/2196), has been implemented within the GB Synchronous Area .
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 Incidents Report	A report submitted to the GCRP on a monthly basis, containing, but not limited to, a list of Significant Events , as detailed in OC3.4.1.
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 ESO Licence .
System Restoration	The procedure necessary for a recovery from a Total Shutdown or Partial Shutdown .
System Restoration Region	Those regions of the Total System as defined in Appendix 1 of OC9.
System Restoration Plan	A document prepared by The Company , as published on its Website , outlining how the requirements of the “restoration plan”, as defined in Assimilated Law (Commission Regulation (EU) 2017/2196), has been implemented within the GB Synchronous Area .
System Telephony	An alternative method by which a User’s Responsible Engineer/Operator , the relevant Transmission Licensees’ Control Engineers 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 or System to Electricity Storage 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 .
Target Frequency	That Frequency determined by The Company , in its reasonable opinion, as the desired operating Frequency of the Total System or of a relevant Power Island . This will normally be 50.00 Hz plus or minus 0.05 Hz, except in exceptional circumstances as determined by The Company for example which may be operating the System during disputes affecting fuel supplies or following a Total Shutdown or Partial Shutdown where Power Islands are established, and each Power Island has its own unique Frequency .
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.
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 hours to 10:15 hours). 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 hours to 11:00 hours). 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	An IT system which implements the TERRE auction.
TERRE Data Validation and Consistency Rules	A document produced by the central TERRE project detailing the correct format of submissions for TERRE .
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 .
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 Plan	A document prepared by The Company , as published on its Website , outlining how the requirements of the “ Test Plan ”, as provided for by Assimilated Law (Commission Regulation (EU) 2017/2196), has been implemented within the GB Synchronous Area .
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 .
Test Signal	A signal in the form of a sine wave, applied to a GBGF-I to demonstrate its ability to contribute to Active Damping Power .
The Company	Has the meaning given to NESO or National Energy System Operator .
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 .

Top Up Restoration Capability	The ability of a Restoration Contractor's Plant to Start-Up from Shutdown and to be Synchronised and remain Synchronised to a part of the Total System upon instruction from The Company or Relevant Transmission Licensee (in Scotland) or relevant Network Operator , within a defined time period, pursuant to the terms of the Top Up Restoration Contract , once external electrical power supplies are restored to that Restoration Contractor's site. In the case of a Local Joint Restoration Plan , an instruction from The Company or Transmission Licensee in Scotland to a Restoration Contractor in respect of their Top Up Restoration Plant would generally be issued immediately after an instruction to an Anchor Restoration Contractor with the Top Up Capability expected to be delivered consecutively after external power supplies had been restored to the Top Up Restoration Contractor's site. In the case of a Distribution Restoration Zone Plan , an instruction from a Network Operator to a Restoration Contractor in respect of their Top Up Restoration Plant would generally be issued immediately after an instruction to an Anchor Restoration Contractor with the Top Up Capability expected to be delivered consecutively after external power supplies had been restored to the Top Up Restoration Contractor's site. For the avoidance of doubt a Restoration Contractor with a Top Up Restoration Capability shall have sufficient Auxiliary Energy Supplies to be capable of delivering the service they have agreed to provide as soon as their Connection Point or User System Entry Point is energised.
Top Up Restoration Contract	In the case of a Local Joint Restoration Plan or Offshore Local Joint Restoration Plan is a contract between The Company and Top Up Restoration Contractor for the provision of a Top Up Restoration Capability . In the case of a Distribution Restoration Zone Plan , an agreement between The Company and relevant Network Operator and Top Up Restoration Contractor for the provision of Top Up Restoration Capability .
Top Up Restoration Contractor	A Restoration Contractor with a Top Up Restoration Contract .
Top Up Restoration Plant	Plant owned and operated by a Top Up Restoration Contractor .
Top Up Restoration Plant Test	A test conducted on a Top Up Restoration Plant to confirm it is capable of meeting the requirements of a Top Up Restoration Contract .
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 System Restoration .
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 NET's Transmission Area or a Competitively Appointed Transmission Licensee with Plant and Apparatus located in NET's Transmission Area , a Transmission circuit which connects a System operating at a voltage above 132 kV to a System operating at a voltage of 132 kV or below. In SHETL's Transmission Area and SPT's Transmission Area , or a Competitively Appointed Transmission Licensee with Plant and Apparatus located in SHETL's Transmission Area and/or SPT's Transmission Area , a Transmission circuit which connects a System operating at a voltage of 132 kV or above to a System operating at a voltage below 132 kV.
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	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	<p>Has the same meaning as the term "licensee's transmission system" in the Transmission Licence of a Transmission Licensee.</p> <p>Where references are made in this document to NGET's, SPT's, or SHETL's Transmission System, such reference shall be deemed to include:</p> <ul style="list-style-type: none"> • a Competitively Appointed Transmission Licensee's Transmission System where that Competitively Appointed Transmission Licensee's Transmission System has onshore interface point(s) with only one of NGET's, SPT's, or SHETL's Transmission Systems; or • elements of a Competitively Appointed Transmission Licensee's Transmission System located within NGET's, SPT's, or SHETL's Transmission Area where the Competitively Appointed Transmission Licensee's Transmission System has onshore interface point(s) with more than one of NGET's, SPT's and/or SHETL's Transmission Systems.
Turbine Time Constant	<p>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.</p>
Type A Power Generating Module	<p>A Power Generating Module (including an Electricity Storage 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 1 MW.</p>
Type B Power Generating Module	<p>A Power Generating Module (including an Electricity Storage Module) with a Grid Entry Point or User System Entry Point below 110 kV and a Maximum Capacity of 1 MW or greater but less than 10 MW.</p>
Type C Power Generating Module	<p>A Power Generating Module (including an Electricity Storage Module) with a Grid Entry Point or User System Entry Point below 110 kV and a Maximum Capacity of 10 MW or greater but less than 50 MW.</p>
Type D Power Generating Module	<p>A Power Generating Module: (including an Electricity Storage Module):</p> <p>with a Grid Entry Point or User System Entry Point at, or greater than, 110 kV; or</p> <p>with a Grid Entry Point or User System Entry Point below 110 kV and with Maximum Capacity of 50 MW or greater.</p>
Unbalanced Load	<p>The situation where the Load on each phase is not equal.</p>
Under-excitation Limiter	<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>
Under Frequency Relay	<p>An electrical measuring relay intended to operate when its characteristic quantity (Frequency) reaches the relay settings by a decrease in Frequency.</p>
Unit Board	<p>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.</p>

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 23/11 kV and 15/6.6 kV.
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 the CP or the ECP 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	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 an Embedded;</p> <p>Power Generating Module,</p> <p>Generating Unit,</p> <p>CCGT Module,</p> <p>CCGT Unit,</p> <p>Power Park Module,</p> <p>Electricity Storage Module,</p> <p>DC Converter; or</p> <p>HVDC Converter,</p> <p>connects to the User System.</p>
Virtual Lead Party	As defined in the BSC .
Voltage Jump Reactive Power	<p>The transient Reactive Power injected or absorbed from a Grid Forming Plant to the Total System as a result of either a step or ramp change in the difference between the voltage magnitude and/or phase of the voltage of the Internal Voltage Source of the Grid Forming Plant and Grid Entry Point or User System Entry Point.</p> <p>In the event of a voltage magnitude and phase change at the Grid Entry Point or User System Entry Point, a Grid Forming Plant will instantaneously (within 5 ms) supply Voltage Jump Reactive Power to the Total System as a result of the voltage magnitude change.</p>
Water Time Constant	Bears the meaning ascribed to the term "Water inertia time" in IEC308 .
Website	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 .

Weekly ACS Conditions	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 .
WG Consultation Alternative Request	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.20.16. 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 .
Workgroup	A Workgroup established by the Grid Code Review Panel pursuant to GR.20.1.
Workgroup Consultation	As defined in GR.20.13, and any further consultation which may be directed by the Grid Code Review Panel pursuant to GR.20.20.
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 chairperson 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 .

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 and 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. **Assimilated Law** (Commission 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.
- (xiv) Except where expressly stated to the contrary, reference to Commission Regulations means the Commission Regulation (EU) as it forms part of **Assimilated Law**, as such regulation may be amended.

< END OF GLOSSARY & DEFINITIONS >

BALANCING CODE NO. 3

(BC3)

FREQUENCY CONTROL PROCESS

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

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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), each **Type C** and **Type D Power Generating Module** within a **Power Station** owned and operated by an **EU Generator** with a **CUSC Contract** 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**) and **Power Generating Module** 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 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 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 **EU Code Users** in respect of **Gensets** and **HVDC Systems**.

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 52Hz, 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 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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(This contents page does not form part of the Grid Code)

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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 a) **The Company** and **Network Operators**, and b) **The Company** and **Non-Embedded Customers**, shall take place between the **The Company's Control Engineer** based at **The Company's Control Centre** notified by **The Company** to each **Network Operator** and **Non-Embedded Customer** prior to connection, and the relevant **User's Responsible Engineer/Operator**. In the case of a **Network Operator**, the **Responsible Engineer/Operator** shall 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** or **DC Converter Station** owners or **HVDC System Owners** or **Suppliers** or **Interconnectors**, shall take place between:-
- i) **The Company's Control Engineer** based at **The Company's Control Centre** to each **Generator's** or **DC Converter Station** owner's or **Interconnector's** or **HVDC System Owner's Control Point** or **Trading Point** (if one has been established) prior to connection, or:-
 - ii) **The Company's Control Engineer** based at **The Company's Control Centre** to the **Trading Point** or **Control Point** of each **Supplier** (if they have one) prior to submission of **BM Unit Data**.
- Prior to connection or the submission of **BM Unit Data** as provided for in GC5.2(i) and (ii), **Generators**, **DC Converter Station** owners, **HVDC System Owners**, **Interconnectors** and **Suppliers**, shall notify **The Company** of contact details and communication routes in respect of their **Control Point** and **Trading Point** (as relevant) to permit the submission of operational data 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 or ECC.6.5.2.
- GC.5.4 Where location and contact arrangements of **The Company's Control Centre** changes or the location and contact arrangements of a **Network Operator's Control Centre** changes, whether due to an emergency or for any other reason, **The Company** shall notify the relevant **Network Operator** or the **Network Operator** 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 or **HVDC System Owner** or **Interconnector** 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, **HVDC System Owner**, **Interconnector** 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**, **The Company**, **NGET**, a **Relevant Scottish Transmission Licensee** or an **Offshore 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.

The Company, **NGET**, **SPT**, **SHETL**, **Offshore Transmission Licensee** or a **User** may activate the **Electrical Standards** procedure in relation to the **Electrical Standards** in (b) in the annex to the **General Conditions**.

The Company, **NGET**, a relevant **Offshore Transmission Licensee** or a **User** may activate the **Electrical Standards** procedure in relation to the **Electrical Standards** in (a) in the annex to the **General Conditions**.

The Company, **SPT**, a relevant **Offshore Transmission Licensee** or a **User** may activate the **Electrical Standards** procedure in relation to the **Electrical Standards** in (c) in the annex to the **General Conditions**.

The Company, **SHETL**, a relevant **Offshore Transmission Licensee** or a **User** may activate the **Electrical Standards** procedure in relation to the **Electrical Standards** in (d) in the annex to the **General Conditions**.

(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 NOT USED.
- GC.15 EMBEDDED EXEMPTABLE LARGE AND MEDIUM POWER STATIONS
- GC.15.1 NOT USED.
- GC.16 SYSTEM DEFENCE PLAN, SYSTEM RESTORATION AND TEST PLAN
- GC.16.1 In relation to the **System Defence Plan**, **System Restoration Plan** and **Test Plan** the following provisions shall apply.
- GC.16.2 If a **User** or **The Company**, wishes to raise a change to the **System Defence Plan**, **System Restoration Plan** or **Test Plan**, they shall notify the **Panel Secretary** of the proposed change to the **System Defence Plan**, **System Restoration Plan** or **Test Plan**.

In respect of the **System Defence Plan** the proposal shall not change the characteristics of the service to be provided or the conditions for aggregation, as any such changes that relate to the terms and conditions for **Defence Service Providers**; as set out in Article 4 paragraph 4 of **Assimilated Law** (Commission Regulation (EU) 2017/2196), as amended by Statutory Instrument 533 (2019); is subject to a separate change procedure. That notification must contain details of the proposal, including an explanation of why the proposal is being made.

In respect of the **System Restoration Plan**, the proposal shall not change the characteristics of the service to be provided or conditions for aggregation or the target geographical distribution of power sources with **System Restoration** and island operation capabilities, as any such changes that relate to the terms and conditions for **Restoration Service Providers**; as set out in Article 4 paragraph 4 of **Assimilated Law** (Commission Regulation (EU) 2017/2196), as amended by Statutory Instrument 533 (2019); is subject to a separate change procedure. . That notification must contain details of the proposal, including an explanation of why the proposal is being made.

In respect of the **Test Plan**, the proposal shall include an explanation of why the proposal is being made.

Any such change proposals shall take into account the legitimate expectations, where necessary, of **User's**, **Defence Service Providers** or **Restoration Service Providers** based on the initially specified or agreed requirements or methodologies.

GC.16.3 Ordinary Procedure

- (a) Unless it is identified as an urgent proposal (in which case GC.16.4 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** and a consultation of not less than one month shall be undertaken.
- (b) For the **System Defence Plan** and the **System Restoration Plan** if no objections are raised following the consultation, then the modification shall be deemed approved, and **The Company** shall make the change to the **System Defence Plan** or the **System Restoration Plan**, and the **Panel Secretary** shall as soon as reasonably possible, publish it on **The Company's Website** and inform **Users** and other persons who may be interested.
- (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 to change the **System Defence Plan** or **System Restoration Plan** or **Test Plan** will be included on the agenda for the next **Panel** meeting.
- (d) For the **System Defence Plan** and the **System Restoration Plan** if there is a majority consensus at the **Panel** meeting in favour of the proposal, **The Company** will make the change to the **System Defence Plan** or the **System Restoration Plan** as soon as reasonably possible and the **Panel Secretary** shall publish it on **The Company's Website** and inform **Users** and other persons who may be interested.
- (e) If there is no such majority consensus in respect of the **System Defence Plan** or the **System Restoration Plan** or the **Test Plan**, **The Company** will request guidance from the **Panel** on an appropriate way forward. If the **Panel** decides a working group is required then the procedure under GR15 shall apply unless otherwise directed by **The Authority**.
- (f) In the case of a modification to the **Test Plan**, it shall be submitted to **The Authority** for approval. If approved **The Company** will make the change to the **Test Plan** as soon as reasonably possible and the **Panel Secretary** shall publish it on **The Company's Website** and inform **Users** and other persons who may be interested.

GC.16.4 Urgent Procedure

- (a) If the notification to change the **System Defence Plan** or **System Restoration Plan** or **Test Plan** is marked as an urgent 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 case the **Panel Secretary** shall propose a timetable and procedure which shall be followed. The **Panel Secretary** shall as soon as reasonably possible, publish the proposal on **The Company's Website** and inform **User's** and other persons who may be interested.
- (b) If such **Panel Members** do so agree, then the **Panel Secretary** will initiate the procedure accordingly, having first obtained the approval of **The Authority** that urgency is warranted in accordance with the criteria set out in **The Authority's** published guidance.
- (c) If such **Panel 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 procedure as set out in GC.16.3.
- (d) If a proposal to change the **System Defence Plan** or **System Restoration Plan** is developed using the urgent procedure, **The Company** will contact all **Panel Members** after it is agreed as being urgent to check whether they wish to discuss further the proposal to see whether an additional proposal should be considered to alter the implementation, such proposal following the ordinary procedure as provided for in GC.16.3 or, if agreed by **The Authority**, urgency as provided for in GC.16.4.

GC.17 DIRECTIONS RELATED TO NATIONAL SECURITY

- GC.17.1 The **Secretary of State** may issue a direction to **The Company** as referred to in condition B4 of the **ESO Licence** where in the opinion of the **Secretary of State** there is a risk relating to national security that may detrimentally impact the resilience, safety or security of the energy system, or the continuity of essential services, and it is in the interest of national security that a direction should be issued to **The Company**.
- GC.17.2 **The Company** must comply with any such direction that has been issued by the **Secretary of State**. **Users** should note that **The Company** is not required to comply with any other obligation in the **ESO licence** where and to the extent that compliance with that obligation would be inconsistent with the requirement to comply with such a direction, for the period set out in the direction. This includes the requirement set out in condition E3 of **ESO licence** to comply with this **Grid Code**.
- GC.17.3 **The Company** is required under condition B4 of its **ESO Licence** to inform the **Secretary of State** of any conflict with the obligations as identified in GC.17.2 as soon as reasonably practicable after the conflict is identified. **The Company** will include in such a notice, details of any identified impact or non-compliance that will be caused or will be likely to be caused to **Users**, and in such a case will also seek clarification of whether this can be shared with the affected **User**.
- GC.17.4 Where reasonably practicable and subject to the agreement of the **Secretary of State** to share any such specific details, **The Company** will inform affected **Users** as identified in GC.17.3 of what actions **The Company** will take or has taken, or not taken, to comply with a direction or amended direction (including when such a direction is revoked) and what identified impact or non-compliance this will or is likely to cause to the **User**.
- GC.17.5 **The Company's** obligations under this code shall be suspended without liability where and to the extent that compliance with any such obligation would be inconsistent with the requirement upon **The Company** to comply with a direction.
- GC.17.6 **A User's** obligations under this code shall be suspended without liability where and to the extent that the **User** is unable to comply with any such obligation as a result of any action taken, or not taken, by **The Company** to comply with a direction.
- GC.17.7 The **Secretary of State** may at any time amend or revoke any direction issued to **The Company** as referred to in condition B4 of the **ESO Licence**

GC.18 ADVISORY AND INFORMATION REQUESTS

GC.18.1 **The Company** is required to provide advice, analysis or information to the **Authority** or to a **Minister of the Crown** when requested in accordance with section 171 of the **Energy Act 2023** and condition D1 of the **ESO Licence** and **GSP Licence**.

GC.18.2 **The Company** may by notice request from **Users** such information as it reasonably requires in connection with the exercise of any of its functions, in accordance with section 172 of the **Energy Act 2023**. It will do so by the issue of an **Information Request Notice**. The purposes of this may include to assist in the fulfilment of a request for advice, analysis or information as set out in GC.18.1.

GC.18.3 **The Company** is required by condition D2 of the **ESO Licence** and **GSP Licence** to prepare, submit for approval by the **Authority** and publish on its website once approved an **Information Request Statement** that sets out further detail on the process **The Company** expects to follow when requesting information from other parties.

The **Information Request Statement** must include, but need not be limited to, the following matters as set out in condition D2.5 of the **ESO Licence** and **GSP Licence**:

- (a) the process **The Company** expects to follow when issuing an **Information Request Notice**, including any further detail around the expected engagement between **The Company** and recipient of an **Information Request Notice**; and
- (b) the details to be included in an **Information Request Notice** issued by **The Company**.

GC.18.4 A **User** to whom a request is made under GC.18.2 must, so far as reasonably practicable, provide the requested information within such reasonable period, and in such reasonable form and manner, as may be specified in the **Information Request Notice**.

GC.18.5 **The Company** must, unless the **Authority** otherwise consents, maintain for a period of 6 years and provide to the **Authority** where required a record of information requests as detailed in condition D2.12 of the **ESO Licence** and **GSP Licence** including

- (a) a copy of the **Information Request Notice**;
- (b) any subsequent variations to the original information requested;
- (c) the recipient's response to the notice, including any refusal or challenges to the notice or requested information;
- (d) the time taken for the recipient to provide the requested information;
- (e) the manner and form the information was provided in; and
- (f) the information provided in response to the notice, and whether such information complied, in **The Company's** view, with the **Information Request Notice**

ANNEX TO THE GENERAL CONDITIONS

The **Electrical Standards** are as follows:

(a) **Electrical Standards** applicable for **NGET's Transmission System**

The Relevant Electrical Standards Document (RES)		Reference	Issue	Date
Parts 1 to 3			3.0	March 2018
Part 4 – Specific Requirements				
1	Back-Up Protection Grading across NGET's and other Network Operator Interfaces	PS(T)044(RES)	1.0	September 2014
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	February 2018
3	Substations	TS 2.01 (RES)	1.0	February 2018
4	Switchgear	TS 2.02 (RES)	1.0	October 2014
5	Substation Auxiliary Supplies	TS 2.12 (RES)	1.0	October 2014
6	Ancillary Light Current Equipment	TS 2.19 (RES)	1.0	October 2014
7	Substation Interlocking Schemes	TS 3.01.01 (RES)	1.0	February 2018
8	Earthing Requirements	TS 3.01.02 (RES)	1.0	October 2014
9	Circuit Breakers	TS 3.02.01 (RES)	2.0	February 2018
10	Disconnectors and Earthing Switches	TS 3.02.02 (RES)	1.0	October 2014
11	Current Transformers for Protection and General Use on the 132kV, 275kV and 400kV Systems	TS 3.02.04 (RES)	1.0	October 2014
12	Voltage Transformers	TS 3.02.05 (RES)	1.0	September 2016
13	Bushings	TS 3.02.07 (RES)	1.0	October 2014
14	Solid Core Post Insulators for Substations	TS 3.02.09 (RES)	1.0	October 2014
15	Voltage Dividers	TS 3.02.12 (RES)	1.0	September 2016
16	Gas Insulated Switchgear	TS 3.02.14 (RES)	1.0	October 2014
17	Environmental and Test Requirements for Electronic Equipment	TS 3.24.15 (RES)	1.0	October 2014
18	Busbar Protection	TS 3.24.34 (RES)	1.0	October 2014
19	Circuit Breaker Fail Protection	TS 3.24.39 (RES)	1.0	October 2014
20	Synchronising And Voltage Selection	TS.3.24.60 (RES)	2.0	January 2018
21	System Monitor – Dynamic System Monitoring (DSM)	TS 3.24.70 (RES)	2.0	February 2018
22	System Monitoring – Fault Recording	TS 3.24.71 (RES)	1.0	February 2018
23	Protection & Control for HVDC Systems	TS 3.24.90 (RES)	1.0	October 2014
24	Ancillary Services Business Monitoring	TS 3.24.95 (RES)	2.0	February 2018

25	Operational Data Transmission	TS 3.24.100 (RES)	1.0	February 2018
26	Guidance for Working in Proximity to Live Conductors	TGN(E)186 (RES)	1.0	October 2018
Additional Requirements				

- (b) Electronic data communications facilities and other requirements applicable in all **Transmission Areas**.

Communications Standards for Electronic Data Communication Facilities and Automatic Logging Devices	Version 9	8 th April 2025
EDT Interface Specification	Issue 5	8 th April 2025
EDT Submitter Guidance Note	Issue 1	21 st Dec 2001
EDL Message Interface Specification	Issue 8	13 th April 2026
EDL Instruction Interface Valid Reason Codes	Issue 10	5 th Nov 2025
MODIS Interface Specification	Version 4	26 th May 2015
Control Telephony Electrical Standard	Issue 4	8 th April 2025
Distribution Restoration Zone Control System High Level Functional Requirements	1.0	4 th June 2024

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

RES-01-100	Relevant Electrical Standards for Plant, Equipment and Apparatus for connection to the SP Transmission System	Issue 1
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(d) Scottish **Electrical Standards** applicable 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

PART A

NOT USED

PART B

GC.B.1 Introduction

GC.B.1.1 This Appendix Part B to the **General Conditions** deals with issues arising out of the transition associated with the approval and implementation of **Grid Code Modification Proposal GC0112** (Modifications relating to the separation of **System** operations and **Transmission Owner** roles) The process and amendments referred to in this Appendix Part B took place before the designation of **The Company** as the **ISOP** and shall be construed accordingly, including where relevant being based on those arrangements that were in place at the time.

GC.B.1.2 This Appendix Part B sets out the arrangements such that:

B.1.2.1 the **Post GC0112 Grid Code** reflects the **Transfer of the System Operator Role**;

B.1.2.2 certain amendments are made to **Grid Code Related Agreements/Documents** to reflect the **Transfer of the System Operator Role**,

B.1.2.2 arrangements can be put in place prior to the **SO Transfer Date** to enable the transition of the operations with **NGET** under the **Pre GC0112 Grid Code** to operations with **The Company** under the **Post GC0112 Grid Code**; and

B.1.2.3 each **User** co-operates in relation to the transition.

GC.B.1.3 The provisions of the **Post GC0112 Grid Code** shall be suspended until the **SO Transfer Date** except for this Appendix Part B (and any related definitions within it) which will take immediate effect on the **Implementation Date** for **GC0112**.

GC.B.1.4 In this (and solely for the purposes of this) Appendix Part B the following terms have the following meaning:

B.1.4.1 the term "**Grid Code Related Agreements/Documents**" shall mean each or any of those agreements or documents entered into under or envisaged by the **Pre GC0112 Grid Code** prior to the **SO Transfer Date** which continue on and after the **SO Transfer Date**;

B.1.4.2 the term "**GC0112**" shall mean **Grid Code Modification Proposal 0112** (Amendments relating to the transfer of the system operator functions from **NGET** to **NGESO**);

B.1.4.3 the term "**NGET**" shall mean National Grid Electricity Transmission plc;

B.1.4.4 the term "**NGESO**" shall mean National Grid Electricity System Operator Limited (No. 11014226), the company name previously given to **The Company**.";

B.1.4.5 the term "**Post GC0112 Grid Code**" means the version of the Grid Code as amended by **GC0112**;

B.1.4.6 the term "**Pre GC Grid Code**" means the version of the Grid Code prior to amendment by **GC0112**;

B.1.4.7 the term "**SO Transfer Date**" means the date on which **NGET's Transmission Licence** is transferred in part to **NGESO** to reflect the **Transfer of the System Operator Role**; and

- B.1.4.8 the term “**Transfer of the System Operator Role**” means the the transfer, by means of the transfer in part of **NGET’s Transmission Licence**, of the system operator role to **NGESO/The Company**.
- GC.B.1.5 Without prejudice to any specific provision under this Appendix Part B as to the time within which or the manner in which any party should perform its obligations under this Appendix Part B, where a party is required to take any step or measure under this Appendix Part B, such requirement shall be construed as including any obligation to:
- B.1.5.1 take such step or measure as quickly as reasonably practicable; and
- B.1.5.2 do such associated or ancillary things as may be necessary to complete such step or measure as quickly as reasonably practicable.
- GC.B.2 **GC0112: Amendments to Existing Agreements and Documents**
- GC.B.2.1 Each **Grid Code Related Agreement/Document** in place or issued by a party in accordance with the terms of the **Pre GC0112 Grid Code** shall be read and construed, with effect from the **SO Transfer Date**, as if it (and any defined terms within it and the effect of it and those defined terms) recognise and reflect the **Transfer of the SO Functions** and as if any references in it to **NGET** in the context of its system operator role were references to **NGESO/The Company** as appropriate.
- GC.B.2.2 In the context of any **Site Responsibility Schedule** in existence at the **SO Transfer Date** and which would require, following the **Transfer of the System Operator Role**, the signature of either **NGESO** instead of **NGET** or both the signature of **NGESO** and **NGET**, **NGESO** and **NGET** acknowledge and the **Users** agree that the signature of **NGET** on such **Site Responsibility Schedule** shall be considered to be the signature of **NGESO** and/or **NGET** as appropriate.
- GC.B.3 **GC0112: Transition**
- GC.B.3.1 Each party shall take such steps and do such things in relation to the Grid Code and the **Grid Code Related Agreements/Documentation** as are within its power and as are reasonably necessary or appropriate in order to give full and timely effect to the **Transfer of the SO Role** and the transition of the operations, systems, process and procedures and the rights and obligations relating to the **Transfer of the SO Role** under the Grid Code from **NGET** to **NGESO**.
- GC. B.3.2 Each party agrees that (a) all things done by **NGET** pursuant to the Grid Code in its system operator role prior to the **SO Transfer Date** shall be deemed to have been done by **NGESO** and (b) all things received by **NGET** pursuant to the Grid Code in its system operator role (including but not limited to notices) shall be deemed to have been received by **NGESO** and (c) all things issued by **NGET** (including but not limited to notices) shall be deemed to have been issued by **NGESO**.
- GC.B.3.3 In particular:
- B.1.5.1 **Users** acknowledge and agree that **NGET** can exchange information and data submitted by **Users** under the Grid Code prior to the **SO Transfer Date** with **NGESO** to the extent necessary to enable the transition of the system operator role from **NGET** to **NGESO**;
- B.1.5.2 **NGET** will identify and publish as soon as practicable and in any event prior to 31 January 2019 any specific requirements (such requirements being reasonable and recognising the timescale) on **Users** necessary to manage the transition of the operations, systems, process and procedures and the rights and obligations relating to the **Transfer of the SO Role** under the Grid Code from **NGET** to **NGESO**;

B.1.5.2 **Users** acknowledge that under the **Pre GC0112 Grid Code NGET** received certain data and information from **Users** which is no longer “live” data or information (“**Legacy Data**”) that if it was new data and information of that type would not be available to **NGET** as a **Relevant Transmisison Licence** from the **SO Transfer Date** consent to the retention of such **Legacy Data** by **NGET** where embedded in **NGET** systems or models.

< END OF GENERAL CONDITIONS >

REVISIONS

(R)

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

- R.1 **The ESO 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, which was revised 47 times. Issue 6 was published to incorporate all the non-material amendments as a result of modification GC0136.
- R.4 This Revisions section provides a summary of the sections of the Grid Code changed by each revision to Issue 6.
- 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@neso.energy

Revision	Section	Related Modification	Effective Date
0	Glossary & Definitions	GC0136	05 March 2021
0	Planning Code	GC0136	05 March 2021
0	Connection Conditions	GC0136	05 March 2021
0	European Connection Conditions	GC0136	05 March 2021
0	Demand Response Services	GC0136	05 March 2021
0	Compliance Processes	GC0136	05 March 2021
0	Europeans Compliance Processes	GC0136	05 March 2021
0	Operating Code 1	GC0136	05 March 2021
0	Operating Code 2	GC0136	05 March 2021
0	Operating Code 5	GC0136	05 March 2021
0	Operating Code 6	GC0136	05 March 2021
0	Operating Code 7	GC0136	05 March 2021
0	Operating Code 8	GC0136	05 March 2021
0	Operating Code 8A	GC0136	05 March 2021
0	Operating Code 8B	GC0136	05 March 2021
0	Operating Code 9	GC0136	05 March 2021
0	Operating Code 11	GC0136	05 March 2021
0	Operating Code 12	GC0136	05 March 2021
0	Balancing Code 2	GC0136	05 March 2021

Revision	Section	Related Modification	Effective Date
0	Balancing Code 3	GC0136	05 March 2021
0	Balancing Code 4	GC0136	05 March 2021
0	Balancing Code 5	GC0136	05 March 2021
0	Data Registration Code	GC0136	05 March 2021
0	General Conditions	GC0136	05 March 2021
0	Governance Rules	GC0136	05 March 2021
1	Glossary & Definitions	GC0130	18 March 2021
1	Operating Code 2	GC0130	18 March 2021
1	Data Registration Code	GC0130	18 March 2021
1	General Conditions	GC0130	18 March 2021
2	Glossary & Definitions	GC0147	17 May 2021
2	Operating Code 6B	GC0147	17 May 2021
2	Operating Code 7	GC0147	17 May 2021
2	Balancing Code 1	GC0147	17 May 2021
2	Balancing Code 2	GC0147	17 May 2021
3	Balancing Code 2	GC0144	26 May 2021
3	Balancing Code 4	GC0144	26 May 2021
4	Preface	GC0149	03 August 2021
4	Glossary & Definitions	GC0149	03 August 2021
4	Planning Code	GC0149	03 August 2021

Revision	Section	Related Modification	Effective Date
4	European Connection Conditions	GC0149	03 August 2021
4	European Compliance Processes	GC0149	03 August 2021
4	Demand Response Services Code	GC0149	03 August 2021
4	Operating Code 2	GC0149	03 August 2021
4	Balancing Code 4	GC0149	03 August 2021
4	Data Registration Code	GC0149	03 August 2021
4	Governance Rules	GC0149	03 August 2021
5	Operating Code 7	GC0109	23 August 2021
6	Connection Conditions	GC0134	01 September 2021
6	European Connection Conditions	GC0134	01 September 2021
6	Balancing Code 2	GC0134	01 September 2021
7	Operating Code 6B	GC0150	04 October 2021
8	Operating Code 2	GC0151	08 November 2021
8	Operating Code 3	GC0151	08 November 2021
8	Operating Code 5	GC0151	08 November 2021
9	Governance Rules	GC0152	29 December 2021
10	General Conditions	Electrical Standards - EDL Instruction Interface Valid Reason Codes	20 January 2022
11	Glossary & Definitions	GC0137	14 February 2022
11	Planning Code	GC0137	14 February 2022

Revision	Section	Related Modification	Effective Date
11	Connection Conditions	GC0137	14 February 2022
11	European Connection Conditions	GC0137	14 February 2022
11	European Compliance Processes	GC0137	14 February 2022
11	Data Registration Code	GC0137	14 February 2022
12	Glossary & Definitions	GC0153	09 March 2022
12	Connection Conditions	GC0153	09 March 2022
12	European Connection Conditions	GC0153	09 March 2022
12	Operating Code 6	GC0153	09 March 2022
12	Operating Code 8A	GC0153	09 March 2022
12	Operating Code 8B	GC0153	09 March 2022
12	Operating Code 12	GC0153	09 March 2022
12	Balancing Code 2	GC0153	09 March 2022
12	Governance Rules	GC0153	09 March 2022
13	Compliance Processes	GC0138	24 June 2022
13	European Compliance Processes	GC0138	24 June 2022
13	Operating Code 5	GC0138	24 June 2022
14	Glossary & Definitions	GC0157	06 October 2022
14	European Connection Conditions	GC0157	06 October 2022
14	Operating Code 2	GC0157	06 October 2022
14	Operating Code 5	GC0157	06 October 2022

Revision	Section	Related Modification	Effective Date
14	Data Registration Code	GC0157	06 October 2022
14	No changes to published Grid Code	GC0158	06 December 2022
15	Glossary & Definitions	GC0160	07 December 2022
15	Balancing Code 1	GC0160	07 December 2022
15	Balancing Code 2	GC0160	07 December 2022
16	Planning Code	GC0141	05 January 2023
16	Connection Conditions	GC0141	05 January 2023
16	European Connection Conditions	GC0141	05 January 2023
16	Compliance Processes	GC0141	05 January 2023
16	European Compliance Processes	GC0141	05 January 2023
17	Connection Conditions	GC0148	4 September 2023
17	European Compliance Processes	GC0148	4 September 2023
17	European Connection Conditions	GC0148	4 September 2023
17	General Conditions	GC0148	4 September 2023
17	Glossary & Definitions	GC0148	4 September 2023
17	Operating Code 5	GC0148	4 September 2023
17	Operating Code 6	GC0148	4 September 2023
17	Planning Code	GC0148	4 September 2023
18	Operating Code 6	GC0161	2 October 2023
19	European Connection Conditions	GC0165	4 December 2023

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19	Operating Code 12	GC0165	4 December 2023
19	Data Registration Code	GC0165	4 December 2023
19	Governance Rules	GC0165	4 December 2023
20	Operating Code 6	GC0162	15 December 2023
21	Glossary & Definitions	GC0156	4 March 2024
21	Planning Code	GC0156	4 March 2024
21	Connection Conditions	GC0156	4 March 2024
21	European Connection Conditions	GC0156	4 March 2024
21	Operating Code 1	GC0156	4 March 2024
21	Operating Code 2	GC0156	4 March 2024
21	Operating Code 5	GC0156	4 March 2024
21	Operating Code 9	GC0156	4 March 2024
21	Balancing Code 2	GC0156	4 March 2024
21	Balancing Code 4	GC0156	4 March 2024
21	Data Registration Code	GC0156	4 March 2024
21	General Conditions	GC0156	4 March 2024
22	Glossary & Definitions	GC0154	2 April 2024
22	Balancing Code 1	GC0154	2 April 2024
22	Balancing Code 2	GC0154	2 April 2024
23	Glossary & Definitions	GC0170	22 April 2024

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23	Planning Code	GC0170	22 April 2024
23	Connection Conditions	GC0170	22 April 2024
23	European Connection Conditions	GC0170	22 April 2024
23	Operating Code 2	GC0170	22 April 2024
23	Operating Code 5	GC0170	22 April 2024
23	Operating Code 9	GC0170	22 April 2024
23	Data Registration Code	GC0170	22 April 2024
23	General Conditions	GC0170	22 April 2024
24	General Conditions	Distribution Restoration Zone Control System Standard	4 June 2024
25	Glossary & Definitions	GC0163	5 July 2024
25	European Connection Conditions	GC0163	5 July 2024
26	Glossary & Definitions	GC0171	5 September 2024
26	Compliance Processes	GC0171	5 September 2024
26	European Compliance Processes	GC0171	5 September 2024
27	Glossary & Definitions	Establishing ISOP in industry codes 2024	1 October 2024
27	Planning Code	Establishing ISOP in industry codes 2024	1 October 2024
27	Connection Conditions	Establishing ISOP in industry codes 2024	1 October 2024
27	European Connection Conditions	Establishing ISOP in industry codes	1 October 2024

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		2024	
27	Demand Response Services	Establishing ISOP in industry codes 2024	1 October 2024
27	Compliance Processes	Establishing ISOP in industry codes 2024	1 October 2024
27	European Compliance Processes	Establishing ISOP in industry codes 2024	1 October 2024
27	Operating Code 2	Establishing ISOP in industry codes 2024	1 October 2024
27	Data Registration Code	Establishing ISOP in industry codes 2024	1 October 2024
27	General Conditions	Establishing ISOP in industry codes 2024	1 October 2024
27	Governance Rules	Establishing ISOP in industry codes 2024	1 October 2024
28	General Conditions	Electrical Standards - EDL Instruction Interface Valid Reason Codes	7 November 2024
29	Glossary & Definitions	GC0175	28 March 2025
29	Connection Conditions	GC0175	28 March 2025
29	European Connection Conditions	GC0175	28 March 2025
29	Operating Code 7	GC0175	28 March 2025
29	Balancing Code 1	GC0175	28 March 2025

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29	Balancing Code 2	GC0175	28 March 2025
29	General Conditions	GC0175	28 March 2025
30	Glossary & Definitions	GC0172	3 April 2025
30	General Conditions	GC0172	3 April 2025
31	Glossary & Definitions	GC0159	8 April 2025
31	Planning Code	GC0159	8 April 2025
31	Operating Code 9	GC0159	8 April 2025
31	General Conditions	Electrical Standards - Electronic Data Transfer (EDT) Interface Specification, Communications Standards, EDL Message Interface Specification, Control Telephony Standard	8 April 2025
32	Connection Conditions	GC0177	19 May 2025
32	European Connection Conditions	GC0177	19 May 2025
32	Compliance Processes	GC0177	19 May 2025
32	European Compliance Processes	GC0177	19 May 2025
33	European Connection Conditions	GC0180	11 June 2025
33	Operating Code 6B	GC0180	11 June 2025
33	Balancing Code 1	GC0180	11 June 2025
33	Balancing Code 2	GC0180	11 June 2025
34	Glossary & Definitions	GC0166	05 November 2025

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34	Balancing Code 1	GC0166	05 November 2025
34	Balancing Code 2	GC0166	05 November 2025
34	General Conditions	Electrical Standards - EDL Instruction Interface Valid Reason Codes	05 November 2025
35	Glossary & Definitions	GC0183	04 December 2025
35	Operating Code 2	GC0183	04 December 2025
35	Operating Code 7	GC0183	04 December 2025
35	Balancing Code 1	GC0183	04 December 2025
36	Operating Code 2	GC0174	12 December 2025
36	Data Registration Code	GC0174	12 December 2025
37	General Conditions	EDL Message Interface Specification	13 April 2026
38	Planning Code	GC0173	05 May 2026
38	Connection Conditions	GC0173	05 May 2026
38	European Connection Conditions	GC0173	05 May 2026
38	European Compliance Processes	GC0173	05 May 2026
38	Balancing Code 3	GC0173	05 May 2026
39	Glossary & Definitions	GC0169	07 May 2026
39	Balancing Code 3	GC0169	07 May 2026
39	General Conditions	GC0169	07 May 2026

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