**Glossary and Definitions**

1. **List of Definitions extracted from GC0148**

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| **Anchor Generator** | A **Generator** who has a **Restoration Service Contract** in respect of any **Anchor Plant** the **Generator** owns and operates and in this context is a **Restoration Service Provider**. |
| **Anchor DC Converter** | An **Embedded DC Converter** with an **Anchor Plant Capability**. |
| **Anchor DC Converter Owner** | A **DC Converter** owner who owns and is responsible for an **Anchor DC Converter**. |
| **Anchor DC Converter Test** | A test carried out by an **Anchor DC Converter Owner** at an **Anchor DC Converter** while the **Anchor DC Converter** is disconnected from all external electrical power supplies from the **Total System**. |
| **Anchor Power Station** | An **Embedded Power Station** comprising **Anchor Plant**. |
| **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 **Network Operator’s System**. |
| **Anchor Generating Unit** | An **Embedded Generating Unit** with **Anchor Plant Capability**. |
| **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 **Network Operator’s System**. |
| **Anchor HVDC System** | An **Embedded HVDC System** with **Anchor Plant Capability**. |
| **Anchor HVDC System Owner** | An **HVDC System Owner** who owns and is responsible for an **Anchor HVDC System**. |
| **Anchor HVDC System Test** | A **Test** carried out by an **Anchor HVDC System Owner** with an **Anchor HVDC System** while the **Anchor HVDC System** is not energised from the **Network Operator’s System**. |
| **Anchor Plant** | **Anchor Plant** is **Plant** which has **Anchor Plant Capabilities.** |
| **Anchor Plant Capability** | Is the ability of a **Plant** to **Start-Up** from **Shutdown** and to energise part of the **Network Operator’s System** forming part of a **Distribution Restoration Zone** within 8 hours of being instructed to do so, without an external electrical power supply from the **Network Operator’s System**. |
| **Anchor Plant Owner** | The owner and/or operator who has a **Restoration Service Contract** in respect of any **Anchor Plant** the **Generator** owns and in this context is a **Restoration Service Provider.** |
| **Anchor Plant Test** | A test conducted on an **Anchor Plant** to confirm it is capable of meeting the requirements of the **Distribution Restoration Contract**. |
| **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**. |
| **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** and **Apparatus** 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 able to start without an electrical power supply from outside the **Power Station** or **HVDC System** or **HVDC Converter** or **DC Converter Station,** or other **Restoration Service Providers** site, within which it is situated. **Auxiliary Energy Supplies** do not include the mains-independent light current supplies necessary to operate **Critical Tools and Facilities**. |
| **Black Start Capability**  *(This will be changed to* ***Restoration Capability*** *in next revision of Grid Code)* | In the case of a **Black Start Station**, is the ability for at least one of its **Gensets** to **Start-Up** from **Shutdown** and to energise a part of the **System** and be **Synchronised** to the **System** upon instruction from **The Company**, within two hours, without an external electrical power supply.  In the case of a **Black Start HVDC System** is the ability of an **HVDC System** to **Start-Up** from **Shutdown** and to energise a part of the **Total System** and be **Synchronised** to the **System** upon instruction from **The Company**, within two hours, without an external electrical power supply from the **Total System**. |
| **Black Start Contract**  *(This will be changed to* ***Restoration Contract*** *in next revision of Grid Code)* | An agreement between a **Black Start Service Provider** and **The Company** under which the **Black Start Service Provider** provides **Black Start Capability** and other associated services. |
| **Black Start HVDC System**  *(This will be changed to* ***Restoration HVDC System*** *in next revision of Grid Code)* | An **HVDC System** or **DC Converter Station** which are registered, pursuant to the **Bilateral Agreement** with a **User**, as having a **Black Start Capability**. |
| **Black Start HVDC Test**  *(This will be changed to* ***Restoration HVDC Test*** *in next revision of Grid Code)* | A **Black Start Test** carried out by an **HVDC System Owner** or **DC Converter Station Owner** with a **Black Start HVDC System** while the **Black Start HVDC System** is disconnected from all external electrical power supplies from the **Total System**. |
| **Black Start Service Provider**  *(This will be changed to* ***Restoration Service Provider*** *in next revision of Grid Code)* | A **Generator** with a **Black Start Station** or an **HVDC System Owner** or **DC Converter Station Owner** with a **Black Start HVDC System**. |
| **Black Start Stations**  *(This will be changed to* ***Restoration Stations*** *in next revision of Grid Code)* | **Power Stations** which are registered, pursuant to the **Bilateral Agreement** with a **User**, as having a **Black Start Capability**. |
| **Black Start Station Test**  *(This will be changed to* ***Restoration Station Test*** *in next revision of Grid Code)* | **A Black Start Test** carried out by a **Generator** with a **Black Start Station** while the **Black Start Station** is disconnected from all external electrical power supplies from the **Total System**. |
| **Black Start Test**  *(This will be changed to* ***Restoration Test*** *in next revision of Grid Code)* | A **Black Start Test** carried out by a **Black Start Service Provider** on the instructions of **The Company**, in order to demonstrate that a **Black Start Station** or a **Black Start HVDC System** has a **Black Start Capability**. For the avoidance of doubt, a **Black Start Test** could comprise a **Black Start Station Test,** a **Black Start Unit Test** or **Black Start HVDC Test.** |
| **Black Start Unit Test**  *(This will be changed to* ***Restoration Unit Test*** *in next revision of Grid Code)* | A **Black Start Test** carried out on a **Generating Unit** or a **CCGT Unit** or a **Power Generating Module**, as the case may be, at a **Black Start Station** while the **Black Start Station** remains energised from an external alternating current electrical supply. |
| **Block Loading Capability** | The incremental **Active Power** steps, from no load to **Rated MW**, which a **Generating Unit** or **Power Generating Module** or **Power Park Module** or **HVDC System** (including **Anchor Plant** and **Plant** owned and operated by a **Restoration Service Provider**) can instantaneously supply without causing it to trip or go outside the **Frequency** range of 47.5 – 52Hz assuming the **Plant** is initially operating at a nominal **System Frequency** of 50Hz (or an otherwise agreed **Frequency** range). The time between each incremental step shall also be provided. |
| **De-synchronised Island Procedure** | Has the meaning set out in OC9.5.4. |
| **De-synchronised Island(s)** | Where parts of the **Total System** are **Out of Synchronism** with each other (each such part being termed a "**De-Synchronised Island)** but where there has been no **Total Shutdown** or **Partial Shutdown**, **The Company** will instruct **Users** to regulate generation or **Demand**, as the case may be, to enable the **De-Synchronised Islands** to be **Re-Synchronised** and **The Company** will inform those **Users** when **Re-Synchronisation** has taken place. |
| **Distribution Restoration Zone** | Part of a **Network Operator’s System** which is capable of being energised by **Anchor Plant** following a **Total System Shutdown** or **Partial System Shutdown**. The **Distribution Restoration Zone** shall contain **Anchor Plant** and may also include one or more **Restoration Service Providers’ Plant** and **Demand**. The **Distribution Restoration Zone** is primarily comprised of part of the **Network Operator’s System**, but may include relevant parts of the **National Electricity Transmission System** as provided for in the **Distribution Restoration Zone Plan.** |
| **Distribution Restoration Contract** | An agreement between an **Anchor Plant Owner** or other **Restoration Service Provider** and **The Company** and a **Network Operator** under which the **Restoration Service Provider**, on instruction, can provide services to energise and/or contribute to the establishment of a **Distribution Restoration Zone**. |
| **Distribution Restoration Zone Control System** | A mains-independent automatic control and supervisory system which assesses the status and operational conditions of a **Network Operator’s System** for the purposes of operating **Anchor Plant** and **Restoration Service Providers’ Plant** and/or modulating **Restoration Service Providers’ Demand** in addition to operating items of the **Network Operator’s Plant** and **Apparatus** for the purposes of establishing and operating a **Distribution Restoration Zone**. |
| **Distribution Restoration Zone Plan** | A plan produced under OC9.4.7.5.2 detailing the agreed method and procedure by which a **Network Operator** or **Distribution Restoration Zone Control System** will instruct an **Anchor Plant Owner** to energise part of the **Network Operator’s System** together with other **Restoration Service Providers** to meet blocks of local **Demand** so as to form a **Power Island**.  A **Distribution Restoration Zone Plan** is distinct from and falls outside the provisions of a **Local Joint Restoration Plan**. |
| **Local Joint Restoration Plan**  *(Black Start Service Provider will be changed to* ***Restoration Service Provider*** *in next revision of Grid Code)* | A plan produced under OC9.4.7.5.1 detailing the agreed method and procedure by which a **Black Start Service Provider** will energise part of the **Total System** and meet complementary blocks of local **Demand** so as to form a **Power Island**.  In Scotland, the plan may also: cover more than one **Black Start Service Provider**; including **Gensets** other than those at a **Black Start Station** and cover the creation of one or more **Power Islands**.  A **Distribution Restoration Zone Plan** is distinct from and falls outside the provisions of a **Local Joint Restoration Plan**. |
| **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. |
| **Power Island** | **Generating Units** at one or more **Power Stations,** and/or **HVDC Systems** and/or **DC Converters**, together with complementary local **Demand** and is connected to a section of network that is disconnected from, and out of **Synchronism** with, the rest of the **Total System.** |
| **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 a **Generating Unit** forming part of a **Type C** or **Type D Power Generating Module** as detailed in OC5.7.1, OC5.7.3 and OC5.7.4 necessary to determine its ability to demonstrate a **Quick Resynchronisation Capability**. |
| **Restoration Service Provider** | A party with a legal or contractual obligation to provide a service contributing to one or several measures of Grid Code (as described in the **System Restoration Plan**) which contribute to restoring parts of the **Total System** following a **Total Shutdown** or **Partial Shutdown**. For the avoidance of doubt this shall include any party contributing to either a **Local Joint Restoration Plan** or a **Distribution Restoration Zone Plan**. In the case of a **Distribution Restoration Zone Plan**, a **Restoration Service Provider** includes **Anchor Plant Owners** and other parties who are contracted to provide services from their **Plant** and **Apparatus** used to establish a **Distribution Restoration Zone**. |
| **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-energized 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-energized and not capable of fulfilling their function until restarted or resupplied. |
| **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 50.00Hz plus or minus 0.05Hz, except in exceptional circumstances as determined by **The Company**, in its reasonable opinion when this may be 49.90 or 50.10Hz. An example of exceptional circumstances may be difficulties caused in operating the **System** during disputes affecting fuel supplies. or following a **Total Shutdown** or **Partial Shutdown** where **Power Islands** are established, and each **Power Island** has its own unique **Frequency**. |

1. **Other Definitions**

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| **Term** | **Definition** | **Reference** |
| 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. | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| Black Start  *(This will be changed to* ***Restoration*** *in next revision of Grid Code)* | The procedure necessary for a recovery from a **Total Shutdown** or **Partial Shutdown**. | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Bilateral Agreement** | in relation to a **User**, a **Bilateral Connection Agreement** or a **Bilateral Embedded Generation Agreement**, or a **BELLA or a Virtual Lead Party Agreement** between **The Company** and the **User** | CUSC V1.15 |
| **Demand** | Forecast of next peak transmission demand | Electricity System Restoration Direction |
| **Grid Forming Capability** | 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.  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. | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **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. | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **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 **Retained EU Law** (Commission Regulation (EU) 2017/2196), has been implemented within the **GB Synchronous Area**. | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Type A Power Generating Module** | 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 1MW | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Type B Power Generating Module** | 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 1MW or greater but less than 10MW | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Type C Power Generating Module** | 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 10MW or greater but less than 50MW | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Type D Power Generating Module** | A **Power-generating Module**: (including an **Electricity Storage Module**):  with a **Grid Entry Point** or **User System Entry Point** at, or greater than, 110 kV; or  with a **Grid Entry Point** or **User System Entry Point** below 110 kV and with **Maximum Capacity** of 50MW or greater | Grid code Issue 6, Rev 12 dated 09 March 2022 |
| **Primary Restoration Service** | The ability for a Restoration Service Provider, or a combination of Providers connected at transmission or distribution, to meet the three basic requirements for Restoration;  1. To start-up (following a Total or Partial Shutdown) independently of external electrical supplies and support the re-starting of other Generators and Network Service Providers.  2. To be able to energise part of the network, and;  3. To be able to provide block loading of demand. | ESRS Working Group |
| **Primary Restoration Service Providers** | A provider of a Primary Restoration Service | ESRS Working Group |
| **Secondary Restoration Service** | The ability for a Restoration Service Provider, connected at transmission or distribution, to synchronise to part of the network after receiving external electrical supplies. | ESRS Working Group |
| **Secondary Restoration Service Providers** | A provider of a Secondary Restoration Service | ESRS Working Group |
| **Non- Restoration Service Providers** | These Generators do not have any obligation to support restoration in any form either via CUSC or any legal agreement. | ESRS Working Group |
| **Resilience of Supply** | Availability of infrastructure like communication network, Protection relays, SCADA, Back up auxiliary power such as diesel generator for minimum of 3 days (72 hours). | ESRS Working Group |