**LEGAL TEXT**

**CRITICAL TOOLS AND FACILITIES AND GOVERNANCE OF THE SYSTEM DEFECNE PLAN, SYSTEM RESTORATION PLAN AND TEST PLAN**

**RELEVANT GRID CODE EXTRACTS**

***Extracts from Glossary and Definitions***

|  |  |
| --- | --- |
| **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 Telephony** | 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. |
| **System Telephony** | The alternative 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. |
| **Critical Tools and Facilities** | **Apparatus** and tools required in relation to **Black Start**:  In the case of **The Company** include, but are not limited to:   1. 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; 2. 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; 3. **Control Telephony** systems as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5; 4. Operational telephony as provided for in STCP 04-5; and 5. Tools and communications systems to facilitate cross border operations.   In the case of **Generators**, **HVDC System Owners**, **DC Converter Station Owners**, **Defence Service Providers**, **Restoration Service Providers** and **Virtual Lead Parties**:   1. Tools for monitoring their **Plant** and **Apparatus**; 2. The ability to control, protect and monitor their **Plant** and **Apparatus** necessary for **Black Start** including as applicable primary **Plant**, switchgear, tap changers and other auxiliary equipment and to ensure the safe operation of **Plant** and personnel; and 3. **Control Telephony** as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5.   In the case of **Network Operators**:   1. 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; 2. The ability to control, protect and monitor those assets necessary for **Black Start** including switchgear, tap changers and other network equipment including where available auxiliary equipment and to ensure the safe operation of **Plant** and personnel; and 3. **Control Telephony** as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5.   In the case of **Non-Embedded Customers**:   1. Tools for monitoring their **System** including but not limited to, alarms and real time system operation; 2. The ability to control, protect and monitor those assets necessary for **Black Start** including switchgear, tap changers and other network equipment including where available auxiliary equipment and to ensure the safe operation of **Plant** and personnel; and 3. **Control Telephony** as provided for in CC.6.5.1 – CC.6.5.5 and ECC.6.5.1 – ECC.6.5.5. |
| **Virtual Lead Party** | As defined in the **BSC** |

***Extracts from General Conditions***

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 **Defence Service** to be provided or the conditions for aggregation. 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 **Restoration Service** to be provided or conditions for aggregation or the target geographical distribution of power sources with **Black Start** and island operation capabilities. 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

1. 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) If no objections are raised following the consultation, then it shall be deemed approved, and **The Company** shall make the change to the **System Defence Plan** or the **System Restoration Plan** or the **Test 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) 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** or **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.

(e) If there is no such majority consensus, **The Company** will establish a **Panel** working group if this was thought appropriate by a majority of the **Panel** or the **Authority**. If a **Panel** working group is required then the procedure under GR15 shall apply unless otherwise directed by **The Authority**.

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 GC16.4.

***Extracts from Connection Conditions***

**Extracts from CC**

………………………….

CC.6.5 Communications Plant

CC.6.5.1 In order to ensure control of the **National Electricity Transmission System**, telecommunications between **GB Code** **Users** and **The Company** must (including in respect of any **OTSDUW Plant and Apparatus** at the **OTSUA Transfer Time**), if required by **The Company**, be established in accordance with the requirements set down below.

CC.6.5.2 Control Telephony and System Telephony

CC.6.5.2.1 **Control Telephony** provides secure point to point telephony for routine **Control Calls**, priority **Control Calls** and emergency **Control Calls**.

CC.6.5.2.2 **System Telephony** uses an appropriate public communications network to provide telephony for **Control Calls**, inclusive of emergency **Control Calls**. For the avoidance of doubt, **System Telephony** could include, but shall not be limited to: an analogue or digital telephone line; a mobile telephone or an internet-based voice communication system, all of which shall be connected to an appropriate public communications network.

CC.6.5.2.3 Calls made and received over **Control Telephony** and **System Telephony** may be recorded and subsequently replayed for commercial and operational reasons.

CC.6.5.4 Obligations in respect of Control Telephony and System Telephony

CC.6.5.4.1 Where **The Company** requires **Control Telephony**, **Users** are required to use the **Control Telephony** to communicate with **The Company** and / or the **Transmission Licensees’** in respect of all **Connection Points** with the **National Electricity Transmission System**, all **Embedded** **Large Power Stations**, all **Embedded DC Converter Stations** and **Network Operators Control Centre** as appropriate. **The Company** shall provide **Control Telephony** interface equipment at the **GB Code** **User’s Control Point** or the **Network Operators Control Centre** as appropriate. Where the **GB Code** **User’s** or **Network Operators Control Centre** telephony equipment is not capable of providing the required facilities or is otherwise incompatible with the **Transmission** **Control Telephony**, **The Company** shall provide a **Control Telephony** handset(s). Details of the **Control Telephony** requirements are contained in the **Bilateral Agreement** with **GB Code** **User’s**.

CC.6.5.4.2 Where in **The Company’s** sole opinion the installation of **Control Telephony** is not practicable at a **GB Code** **User’s Control Point(s)**, **The Company** shall specify in the **Bilateral Agreement** whether **System Telephony** is required. Where **System Telephony** is required by **The Company**, the **GB Code** **User** shall ensure that **System Telephony** is installed.

CC.6.5.4.3 Where **System Telephony** is installed, **GB Code** **Users** are required to use the **System Telephony** for communication with **The Company** and the relevant **Transmission Licensees’** **Control Engineers** in respect of those **Control Point(s)** for which it has been installed. Details of and relating to the **System Telephony** required are contained in the **Bilateral Agreement**.

CC.6.5.4.4 Where **Control Telephony** or **System Telephony** is installed, routine testing of such facilities may be required by **The Company** (not normally more than once in any calendar month). The **GB Code** **User** and **The Company** shall use reasonable endeavours to agree a test programme and where **The Company** requests the assistance of the **GB Code** **User** in performing the agreed test programme the **User** shall provide such assistance.  **The Company** requires the **GB Code User** to test the backup power supplies feeding its **Control Telephony** facilities at least once every 5 years.

CC.6.5.4.5 **Control Telephony** and **System Telephony** shall only be used for the purposes of operational voice communication between **The Company** and the relevant **User**.

CC.6.5.4.6 **Control Telephony** contains emergency calling functionality to be used for operational communication only under normal and emergency conditions. Functionality enables **The Company** and **Users** to prioritise a call in the event of an emergency. **The Company** and **GB Code** **Users** shall only use such priority call functionality for urgent operational communications.

CC.6.5.5 Technical Requirements for Control Telephony and System Telephony

CC.6.5.5.1 Detailed information on the technicalinterfaces and support requirements for **Control Telephony** is provided in the **Control Telephony Electrical Standard** identified in the Annex to the **General Conditions**. Where additional information, or information in relation to **Control Telephony** applicable in Scotland, is requested by **GB Code** **Users**, this will be provided, where possible, by **The Company**.

CC.6.5.5.2 **System Telephony** shall consist of a dedicated telephone connected to an appropriate public communications network, that shall be configured by the relevant **GB Code** **User**. **The Company** shall provide a dedicated free-phone number (UK only), for the purposes of receiving incoming calls to **The Company**, which **GB Code** **Users** shall utilise for **System Telephony**.  **System Telephony** shall only be utilised by **The Company Control** **Engineer,** the relevant **Transmission Licensees’** **Control Engineers** and the **GB Code** **User’s Responsible Engineer/Operator** for the purposes of operational communications.

**…………………………**

CC.7.9 **GB Generators,** **DC Converter Station** owners and **BM Participants** shall provide a **Control Point.**

1. In the case of **GB** **Generators** and **DC** **Converter** **Station** owners, for each **Power Station** or **DC Converter** **Station** directly connected to the **National Electricity Transmission System** and for each **Embedded Large Power Station** or **Embedded** **DC Converter Station**, the **Control Point** shall receive and act upon instructions pursuant to OC7 and BC2 at all times that **Generating Units** or **Power Park Modules** at the **Power Station** are generating or available to generate or **DC Converters** at the **DC Converter Station** are importing or exporting or available to do so. In the case of all **BM** **Participants**, the **Control Point** shall be continuously manned except where the **Bilateral Agreement** specifies that compliance with BC2 is not required, in which case the **Control Point** shall be manned between the hours of 0800 and 1800 each day.
2. In the case of **BM** **Participants**, the **BM Participant’s** **Control** **Point** shall be capable of receiving and acting upon instructions from **The** **Company** andthe relevant **Transmission Licensees’** **Control Engineers**.

**The** **Company** will normally issue instructions via automatic logging devices in accordance with the requirements of CC.6.5.8(b).

Where the **BM** **Participant’s** **Plant** and **Apparatus** does not respond to an instruction from **The** **Company** via automatic logging devices, or where it is not possible for **The** **Company** to issue the instruction via automatic logging devices, **The** **Company** shall issue the instruction by telephone.

In the case of **BM** **Participants** who own and/or operate a **Power Station** or **DC Converter Station** with an aggregated **Registered** **Capacity** or **BM Participants** with **BM Units** with anaggregated **Demand Capacity** per **Control** **Point** of less than 50MW, or, where a site is not part of a **Virtual Lead Party** as defined in the **BSC**, a **Registered** **Capacity** or **Demand Capacity** per site of less than 10MW:

* + - 1. where this situation arises, a representative of the **BM** **Participant** is required to be available to respond to instructions from **The** **Company** via the **Control Telephony** or **System** **Telephony** system, as provided for in CC.6.5.4, between the hours of 0800-1800 each day.
      2. Outside the hours of 0800-1800 each day, the requirements of BC2.9.7 shall apply.

For the avoidance of doubt, where **The Company** has agreed with a **BM Participant** that **Control Telephony** is not required and where the **BM Participant** does not have a continuously manned **Control Point**, the **BM Participant** may be unable to act as a **Defence Service Provider** and shall be unable to act as a **Restoration Service Provider** or **Black Start Service Provider** where these require **Control** **Telephony** or a **Control** **Point** in respect of the specification of any such services falling into these categories.

CC.7.10 Obligations on Users in respect of Critical Tools and Facilities

CC.7.10.1In addition to the requirements of CC.6.5.1 – CC.6.5.5 and CC.6.5.8(b), **The Company**, each **GB Code** **User** and **Restoration Service Provider** shall ensure they have the appropriate **Critical Tools and Facilities** necessary to control their assets for **Black Start**, from their **Control Point** or **Control Centre** as appropriate for a minimum period of 72 hours (or such longer period as agreed between the **User** and/or **Restoration Service Provider** and **The Company**) following a **Total Shutdown** or **Partial Shutdown**.

CC.7.10.2 In satisfying this requirement, **The Company** and **GB Code** **Users** in respect of their **Critical Tools and Facilities** shall ensure as far as reasonably practical that they have adequate control equipment redundancy in place so that in the event of a failure of one or more components of the control system its function is unimpaired.

CC.7.10.3 Each **GB Code User** and **Restoration Service Provider** will report on the results of their management and testing for their **Critical Tools and Facilities** on request by **The Company**.

***Extracts from European Connection Conditions***

**Extracts from ECC**

………………………….

ECC.6.5 Communications Plant

ECC.6.5.1 In order to ensure control of the **National Electricity Transmission System**, telecommunications between **Users** and **The Company** must (including in respect of any **OTSDUW Plant and Apparatus** at the **OTSUA Transfer Time**), if required by **The Company**, be established in accordance with the requirements set down below.

ECC.6.5.2 Control Telephony and System Telephony

ECC.6.5.2.1 **Control Telephony** provides secure point to point telephony for routine **Control Calls**, priority **Control Calls** and emergency **Control Calls**.

ECC.6.5.2.2 **System Telephony** uses an appropriate public communications network to provide telephony for **Control Calls**, inclusive of emergency **Control Calls**. For the avoidance of doubt, **System Telephony** could include but shall not be limited to: an analogue or digital telephone line; a mobile telephone or an internet-based voice communication system, all of which would be connected to an appropriate public communications network.

ECC.6.5.2.3 Calls made and received over **Control Telephony** and **System Telephony** may be recorded and subsequently replayed for commercial and operational reasons.

ECC.6.5.3 Not Used

ECC.6.5.4 Obligations in respect of Control Telephony and System Telephony

ECC.6.5.4.1 Where **The Company** requires **Control Telephony**, **Users** are required to use the **Control Telephony** to communicate with **The Company** and / or the **Transmission Licensees’** in respect of all **Connection Points** with the **National Electricity Transmission System**, all **Embedded** **Large Power Stations**, **Embedded HVDC Systems** and **Network Operator’s Control Centres** as appropriate. **The Company** shall provide **Control Telephony** interface equipment at the **User’s Control Point or the Network Operator’s Control Centre** as appropriate**.** Where the **EU Code** **User’s** or **Network Operators Control Centre** telephony equipment is not capable of providing the required facilities or is otherwise incompatible with the **Transmission** **Control Telephony**, **The Company** shall provide a **Control Telephony** handset(s). Details of and relating to the **Control Telephony** requirements are contained in the **Bilateral Agreement** with **EU Code User’s**.

ECC.6.5.4.2 Where in **The Company’s** sole opinion the installation of **Control Telephony** is not practicable at a **User’s Control Point(s)**, **The Company** shall specify in the **Bilateral Agreement** whether **System Telephony** is required. Where **System Telephony** is required by **The Company**, the **User** shall ensure that **System Telephony** is installed.

ECC.6.5.4.3 Where **System Telephony** is installed, **EU Code** **Users** are required to use the **System Telephony** for communication with **The Company** and the relevant **Transmission Licensees’ Control Engineers** in respect of those **Control Point(s)** for which it has been installed. Details of and relating to the **System Telephony** required are contained in the **Bilateral Agreement**.ECC.6.5.4.4 Where **Control Telephony** or **System Telephony** is installed, routine testing of such facilities may be required by **The Company** (not normally more than once in any calendar month). The **User** and **The Company** shall use reasonable endeavours to agree a test programme and where **The Company** requests the assistance of the **User** in performing the agreed test programme the **User** shall provide such assistance. **The Company** requires the **EU Code User** to test the backup power supplies feeding its **Control Telephony** facilities at least once every 5 years.

ECC.6.5.4.5 **Control Telephony** and **System Telephony** shall only be used for the purposes of operational voice communication between **The Company** and the relevant **User**.

ECC.6.5.4.6 **Control Telephony** contains emergency calling functionality to be used for operational communication only under normal and emergency conditions. Functionality enables **The Company** and **Users** to utilise a priority call in the event of an emergency. **The Company** and EU Code **Users** shall only use such priority call functionality for urgent operational communications.ECC.6.5.5 Technical Requirements for Control Telephony and System Telephony

ECC.6.5.5.1 Detailed information on the technicalinterfaces and support requirements for **Control Telephony** is provided in the **Control Telephony Electrical Standard** identified in the Annex to the **General Conditions**. Where additional information, or information in relation to **Control Telephony** applicable in Scotland, is requested by **Users**, this will be provided, where possible, by **The Company**.

ECC.6.5.5.2 **System Telephony** shall consist of a dedicated telephone connected to an appropriate public communications network that shall be configured by the relevant **User**. **The Company** shall provide a dedicated free phone number (UK only), for the purposes of receiving incoming calls to **The Company**, which **Users** shall utilise for **System Telephony**.  **System Telephony** shall only be utilised by **The Company’s Control** **Engineer** and the **User’s Responsible Engineer/Operator** for the purposes of operational communications.

**…………………………..**

ECC.7.9 **Generators**, **HVDC System** owners and **BM Participants** shall provide a **Control Point**.

1. In the case of **EU** **Generators** and **HVDC System** owners, for each **Power Station** or **HVDC System** directly connected to the **National Electricity Transmission System** and for each **Embedded Large Power Station** or **Embedded** **HVDC System**, the **Control Point** shall receive and act upon instructions pursuant to OC7 and BC2 at all times that **Power Generating Modules** at the **Power Station** are generating or available to generate or **HVDC Systems** are importing or exporting or available to do so. In the case of all **BM Participants**, the **Control Point** shall be continuously manned except where the **Bilateral Agreement** specifies that compliance with BC2 is not required, in which case the **Control Point** shall be manned between the hours of 0800 and 1800 each day.
2. In the case of **BM** **Participants**, the **BM Participant**’s **Control** **Point** shall be capable of receiving and acting upon instructions from **The** **Company**.

**The** **Company** will normally issue instructions via automatic logging devices in accordance with the requirements of ECC.6.5.8(b).

Where the **BM** **Participant**’s **Plant** and **Apparatus** does not respond to an instruction from **The** **Company** via automatic logging devices, or where it is not possible for **The** **Company** to issue the instruction via automatic logging devices, **The** **Company** shall issue the instruction by telephone.

In the case of **BM** **Participants** who own and/or operate a **Power Station** or **HVDC System** with an aggregated **Registered** **Capacity** or **BM Participants** with **BM Units** with anaggregated **Demand Capacity** per **Control** **Point** of less than 50MW, or, where a site is not part of a **Virtual Lead Party** as defined in the **BSC**, a **Registered** **Capacity** or **Demand Capacity** per site of less than 10MW

1. where this situation arises, a representative of the **BM** **Participant** is required to be available to respond to instructions from **The** **Company** via the **Control Telephony** or **System** **Telephony** system, as provided for in ECC.6.5.4, between the hours of 0800-1800 each day.
2. Outside the hours of 0800-1800 each day, the requirements of BC2.9.7 shall apply.

For the avoidance of doubt, **BM Participants** who are unable to provide **Control Telephony** and do not have a continuously manned **Control Point** may be unable to act as a **Defence Service Provider** and shall be unable to act as a **Restoration Service Provider** or **Black Start Service Provider** where these require **Control** **Telephony** or a **Control** **Point** in respect of the specification of any such services falling into these categories.

ECC.7.10 Obligations on Users in respect of Critical Tools and Facilities

ECC.7.10.1In addition to the requirements of ECC.6.5.1 – ECC.6.5.5 and ECC.6.5.8(b), **The Company**, each **EU Code** **User** and **Restoration Service Provider** shall ensure they have the appropriate **Critical Tools and Facilities**,necessary to control their assets for **Black Start**, from their **Control Point** or **Control Centre** , as appropriate, for a minimum period of 72 hours (or such longer period as agreed between the **User** and/or **Restoration Service Provider** and **The Company**) following a **Total Shutdown** or **Partial Shutdown**.

ECC.7.10.2 In satisfying this requirement, **The Company** and **EU Code** **User’s** in respect of their **Critical Tools and Facilities** shall ensure as far as reasonably practical that they have adequate control equipment redundancy in place so that in the event of a failure of one or more components of the control system its function is unimpaired.

ECC.7.10.3 Each **EU Code User** and **Restoration Service Provider** will report on the results of their management and testing for their **Critical Tools and Facilities** on request from **The Company**.

***Extracts from OC5***

***…………………….***

OC5.5.3.3 The **User** is responsible for carrying out the test on their **Plant** and retains the responsibility for the safety of personnel and their **Plant** during the test.

**…………………….**