**GRID CODE MODIFICATION GC0148**

**LEGAL TEXT**

**WAGCM2**

**DATED 13 JUNE 2022**

**SYSTEM STATE – EMERGECNY, BLACKOUT AND RESTORATION**

**RELEVANT GRID CODE EXTRACTS**

***Extracts from Glossary and Definitions***

|  |  |
| --- | --- |
| **GB NETS System State** | The state of the **GB NETS** as classified according to Article 18 of **Retained EU Law** (Commission Regulation (EU) 2017/1485“System Operation Guideline”, as monitored and determined in real-time by **The Company** according to Article 19 of **Retained EU Law** (Commission Regulation (EU) 2017/1485and which includes the following defined system states:  normal state’ means a situation in which the system is within operational security limits currently and will remain so after the occurrence of any contingency from the contingency list as created by **The Company** in accordance with **Retained EU Law** (Commission Regulation (EU) 2017/1485, and taking into account the effect of any available remedial actions;  ‘alert state’ (which shall, when reported on **BMRS** according to OC4.4.3, be recorded as ‘Awareness State’) means the system state in which the system is within operational security limits currently, but a contingency from the contingency list has been detected and in case of its occurrence the available remedial actions are not sufficient to maintain the normal state;  ‘emergency state’ means the system state in which one or more operational security limits are violated;  ‘blackout state’ means the system state in which the operation of part or all of the transmission system is terminated, which would equate to a **Total** or **Partial System Shutdown**; and  ‘restoration state’ means the system state in which the objective of all activities in the **Transmission System** is to re-establish system operation and maintain operational security after a blackout or emergency state. |

***Extracts from OC4***

**OPERATING CODE NO. 4**

**(OC4)**

**REAL TIME REPORTING OF GB NETS SYSTEM STATE AND OTHER OPERATIONAL INFORMATION IN EMERGENCY OR BLACKOUT OR RESTORATION SITUATIONS**

**CONTENTS**

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

Paragraph No/Title Page Number

OC4.1 INTRODUCTION 2

OC4.2 OBJECTIVES 2

OC4.3 SCOPE 2

OC4.4 REPORTING OF THE GB NETS SYSTEM STATE 2

OC4.1 INTRODUCTION

Operating Code No.4 ("OC4") is concerned with the real time reporting to stakeholders, by **The Company**, of the **GB NETS System State** and other relevant operational information in emergency, blackout or restoration states.

The possible **GB NETS System States** are defined within **Retained EU Law** (Commission Regulation (EU) 2017/1485“System Operation Guideline”. The **GB NETS System State** is monitored and determined by **The Company** in accordance with that regulation.

OC4.2 OBJECTIVES

The objective of OC4 is to require the real time reporting to stakeholders of the **GB NETS System State** and other relevant operational information in emergency, blackout or restoration states by **The Company**.

OC4.3 NOT USED

OC4.4 REPORTING OF THE GB NETS SYSTEM STATE

OC4.4.1 **The Company** shall inform at least the following stakeholders of the **GB NETS System State** in emergency, blackout or restoration states:

(i) **Network Operators** with a direct connection to the **Transmission System**;

(ii) **Defence Service Providers**;

(iii) Parties identified in Appendix A of the **System Restoration Plan** as SGUs and to **Restoration Service Providers**; and

(iv) The **Authority**,

OC4.4.2 **The Company** shall ensure that any changes to the **GB NETS System State** either entering or leaving the emergency, blackout or restoration states are reported to stakeholders without undue delay following a change in state.

OC4.4.2 The format of such a message will include, but is not limited to, the current **GB NETS System State** and the time at which the change in the state took place.

OC4.4.3 The reporting of the **GB NETS System State** will be carried out by means of messages inputted by **The Company** to the system warnings webpage of the **Balancing Mechanism Reporting Service** (**BMRS**).

OC4.5 REPORTING OF OPERATIONAL INFORMATION ONLY RELEVANT TO NETWORK OPERATORS

OC4.5.1 During the emergency, blackout or restoration states,**The Company** shall ensure that at least the following items of information are reported to **Network Operators** without undue delay:

(i) the limits of **Active Power** and **Reactive Power**, block loading to be made available, transformer tap and circuit breaker position at **Connection Points**;

(ii) the information on the current and planned status of **User’s** **Plant** and **Apparatus** connected to the **Network Operator’s System** where that information is available to **The Company**; and

(iii) all necessary information that may require the **Network Operator** to co-ordinate with an **Embedded User(s)**.

OC4.6 REPORTING OF OPERATIONAL INFORMATION RELEVANT TO DEFENCE SERVICE PROVIDERS

OC4.6.1 During the emergency, blackout or restoration states,**The Company** shall ensure that at least the following information is reported to **Defence Service Providers** as soon as is reasonably practicable and without undue delay:

1. information regarding the scheduled measures that require participation of **Defence Service Providers**.

OC4.7 REPORTING OF OPERATIONAL INFORMATION RELEVANT TO NETWORK OPERATORS, USER AND RESTORATION SERVICE PROVIDERS

OC4.7.1 During the emergency, blackout or restoration states,**The Company** shall ensure that at least the following items of information are reported to **Network Operators**, SGUs as defined in Appendix A of the **System Restoration Plan** and **Restoration Service Providers** as soon as is reasonably practicable and without undue delay:

(i) the ability and plans to re-energise parts of the **Total System** in accordance with the requirements of OC9.; and

(ii) the scheduled measures that require their participation.

OC4.8 REPORTING OF THE COMPANY AND TRANSMISSION LICENSEE ONLY RELEVANT OPERATIONAL INFORMATION

OC4.8.1 When the **GB NETS System State** is in either an emergency, blackout or restoration state,**The Company** shall ensure that at least the following items of information are reported to **Transmission Licensees** as soon as is reasonably practicable and without undue delay:

(i) the circumstances that led to the current system state of the **Transmission System**, to the extent that they are known; and

(ii) the potential problems requiring assistance for **Active Power** necessary.

OC4.9 REPORTING OF OPERATIONAL INFORMATION RELEVANT TO THE AUTHORITY

OC4.9.1 When the **GB NETS System State** is in either an emergency, blackout or restoration state,**The Company** shall ensure that relevant information is reported to **The Authority** without undue delay.

**< END OF OPERATING CODE NO. 4 >**