

**Grid Code  
Modification  
Recommendation Form**



**Title of Recommended Proposal:**

MPID 288 Blackstart Test Scheduling

**MPID: 288**

<b>Date:</b>	20 January 2021
<b>Recommended at GCRP Meeting No.:</b>	Ireland GCRP Meeting dated 03 November 2020
<b>Grid Code Version:</b>	8.1 (this modification recommendation is based on the revision of Grid Code version 8.1, that was the version of Grid Code at the time the proposal was presented to the GCRP members. The current Grid Code in effect is Grid Code version 9).
<b>Grid Code Section(s) Impacted by Recommended Proposal:</b>	OC.10.5.7.3

**The Reason for the Recommended Modification:**

**Background to Modification:**

COMMISSION REGULATION (EU) 2017/2196 of 24 November 2017 “establishing a network code on electricity emergency and restoration” (referred to as **NCER** hereafter) came into force on the 18th of December 2017. The NCER details measures for the purposes of safeguarding operational security, preventing the propagation or deterioration of an incident to avoid a widespread disturbance and the blackout state as well to allow for the efficient and rapid restoration of the electricity system from the emergency or blackout states. The NCER includes

1. the management by TSOs of the emergency, blackout and restoration states;
2. the coordination of system operation across the Union in the emergency, blackout and restoration states;
3. the simulations and tests to guarantee a reliable, efficient and fast restoration of the interconnected transmission systems to the normal state from the emergency or blackout states;
4. the tools and facilities needed to guarantee a reliable, efficient and fast restoration of the interconnected transmission systems to the normal state from the emergency or blackout states.

Under NCER, a Black Start Station and a Black Start Unit are known as “Restoration Service Providers”.

As per NCER Article 2.2, the NCER applies to both new and existing Generators and Interconnectors.

**Modification Proposal Justification:**

Under Article 44.1 and Article 46 of the NCER, the Transmission System Operators (TSOs) of a member state is required to test Generation and Interconnector Black Start service providers “at least every three years”. This

modification will update the Grid Code to reflect this requirement. As the NCER has primacy, this is a legal requirement.

NCER Article 44.1: “Each restoration service provider which is a power generating module delivering black start service shall execute a black start capability test, at least every three years, following the methodology laid down in Article 45(5) of Regulation (EU) 2016/631 [RfG].”

NCER Article 46: “Each restoration service provider which is an HVDC system delivering a black start service shall execute a black start capability test, at least every three years, following the methodology laid down in Article 70(11) of Regulation (EU) 2016/1447.”

This modification proposes:

1. Including the NCER testing interval of “at least every three years” to Grid Code section OC.10.5.7.3 and
2. A re-wording of the existing clause OC.10.5.7.3 for the purpose of providing clarity and removing ambiguities.

For reference, the full NCER text is available on the [ENTSO-E website](#).

#### **History of Progression through GCRPs, Working Group and/or Consultation:**

On the 03 November 2020 this modification proposal was presented to the GCRP members. At the meeting no comments, questions or objections were raised by the panel members.

It was recommended by the GCRP members that the TSO issue a modification recommendation paper to the CRU for their review and approval.

#### **Summary Note of any Objections to the Recommended Change from GCRP Members or Consultation Responses:**

No objections were raised by the GCRP members in relation to the recommended change.

#### **Outcome of any GCRP Meeting Actions Relating to the Recommended Modification:**

Rory Griffin (CCGT) provided a comment on experience when the TSO requested Whitegate to be at the receiving end of a Blackstart Test as a remote station. Rory recommended that the TSO provide as much notice as possible when a supplier is asked to make their transformer available for such a test. The TSO passed on Rory’s comments and recommendation to the relevant team within EirGrid.

#### **Red-line Version of Impacted Grid Code Section(s) - show recommended changes to text:**

Deleted text in ~~strike-through red font~~ and new text highlighted in *blue font*

~~OC.10.5.7.3~~

~~The TSO may require a Generator or Interconnector Operator with a Black Start Station to carry out a Black Start Unit Test at any time (but will not require a Black Start Unit Test to be~~

~~carried out more than once in each calendar year in respect of any particular **CDGU** or **Interconnector** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test, and will not require a **Black Start Station Test** to be carried out more than once in every two calendar years in respect of any particular **CDGU** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test).~~

**OC.10.5.7.3 Black Start Test Intervals**

The **TSO** requires a **Generator** or **Interconnector Operator** with a **Black Start Station** to carry out a **Black Start Test** at least once every three calendar years.

**OC.10.5.7.3.1 Black Start Unit Test**

The **TSO** may require a **Black Start Unit Test** to be carried out at any time but no more than once in each calendar year in respect of any particular **CDGU** or **Interconnector** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test.

**OC.10.5.7.3.2 Black Start Station Test**

The **TSO** may require a **Black Start Station Test** to be carried out at any time but no more than once in every two calendar years in respect of any particular **CDGU** or **Interconnector** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test.

**Green-line Version of Impacted Grid Code Section(s) - show recommended final text:**

**OC.10.5.7.3 Black Start Test Intervals**

The **TSO** requires a **Generator** or **Interconnector Operator** with a **Black Start Station** to carry out a **Black Start Test** at least once every three calendar years.

**OC.10.5.7.3.1 Black Start Unit Test**

The **TSO** may require a **Black Start Unit Test** to be carried out at any time but no more than once in each calendar year in respect of any particular **CDGU** or **Interconnector** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test.

**OC.10.5.7.3.2 Black Start Station Test**

The **TSO** may require a **Black Start Station Test** to be carried out at any time but no more than once in every two calendar years in respect of any particular

**CDGU** or **Interconnector** unless it can justify on reasonable grounds the necessity for further tests or unless the further test is a re-test.