# **MODIFICATION PROPOSAL FORM**

## **OUTTURN AVAILABILITY**

FORM GC1, PROPOSAL OF MODIFICATION TO GRID CODE.



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MODIFICATION PROPOSAL ORIGINATOR (CONTACT NAME)	GILL NOLAN		MODIFICATION PROPOSAL ORIGINATOR FAX NUMBER:		
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MODIFICATION PROPOSAL ORIGINATOR E-MAIL ADDRESS:	GILL.NOLAN	@EIRGRID.	MODIFICATION PROPOSAL NUMBER (EIRGRID USE ONLY)	MPID 268	
GRID CODE SECTION(S) AFFECTED BY PROPOSAL:		SDC1, Glos	SDC1, Glossary		
GRID CODE VERSION: Version 6.0					

#### **MODIFICATION PROPOSAL DESCRIPTION**

(MUST CLEARLY STATE THE DESIRED AMENDMENT, ALL TEXT/FORMULA CHANGES TO THE GRID CODE. THE REQUIRED REASON FOR THE MODIFICATION MUST STATED. ATTACH ANY FURTHER INFORMATION IF NECESSARY.)

On 29 September 2015, the SEMC published Decision Paper SEM-15-071 "Process for the Calculation of Outturn Availability". In this decision paper, the SEMC note that Outturn Availability is not defined in the Grid Code and requires that the TSOs bring forward a modification commensurate with this decision paper. (Please note: A corresponding modification to the Trading and Settlement Code is also being progressed in parallel.)

Outturn Availability is the name assigned in SEM to the set of availability data for the relevant day received by the SEM systems from the TSO systems following the end of that day. This set of data is subsequently used to develop the availability profile of each generator in the SEM and consequently affects the commercial position of the generator.

The Grid Code does not currently refer to the term Outturn Availability, as the submission of data from the TSO systems to the SEM systems after the relevant day is not within scope of the Grid Code.

The Grid Code specifies in SDC1.4.3.2 that each generator should use reasonable endeavours to ensure that it does not at any time declare the availability at levels or values different to those that the generator could achieve at the relevant time, with a number of exceptions, which are listed in SDC1.4.3.3.

This modification proposal adds the conditions set out in the SEMC decision paper as a further exception to clause SDC1.4.3.2 as follows:

#### SDC1.4.3.3A

SDC1.4.3.2 shall not apply for a CDGU or Controllable WFPS that is disconnected during any one or more of the following:

- (a) any TSO scheduled Annual Maintenance outage or portion thereof on the Outturn Availability Connection Assets lasting up to and including a maximum of five days in total in a calendar year; or
- (b) where work to the Transmission System is being carried out that is related to the relevant CDGU or Controllable WFPS. This does not include work carried out related to another Generation Unit with a different Connection Point but a shared asset.

The relevant CDGU or Controllable WFPS shall declare Availability at a value of zero during any one or more of (a) or (b) above, as advised by the TSO.

A similar approach for Demand Side units has been included, where a further exception to the relevant clause (SDC1.4.3.4) is added as SDC1.4.3.5A.

This modification proposal also adds an additional clause, SDC1.4.3.9 under a heading Outturn Availability: **Outturn Availability** shall be set equal to the declared value of **Availability**.

The modification proposal also adds four definitions to the Glossary for *Annual Maintenance Outage*, *Meshed Transmission Station*, *Outturn Availability* and *Outturn Availability Connection Asset*.

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IMPLICATION OF NOT IMPLEMENTING THE MODIFICATION	Outturn Availability will remain undefined in the Grid Code.  RAs' direction to the TSOs in SEM-15-071 will not be implemented.
Please submit the Modification Proposal by	fax, post or electronically, using the information supplied above
EIRGRID REVIEWER	
EIRGRID ASSESSMENT	

### **Red-line Version:**

#### SDC1.4.3 General Availability Requirements

#### SDC1.4.3.1 **Availability** of **Generating Units**

Each Generator and Generator Aggregator shall in relation to its CDGUs, Controllable WFPSs or Aggregated Generating Units maintain, repair, operate and fuel the CDGU and/or Controllable WFPS and/or Aggregated Generating Unit as required by Prudent Utility Practice and any legal requirements applicable to its jurisdiction, with a view to providing the required Ancillary Services as provided for in an Ancillary Services Agreement.

Each Generator, and where relevant each Generator Aggregator, shall, subject to the exceptions in SDC1.4.3.3 and SDC1.4.3.3A, use reasonable endeavours to ensure that it does not at any time declare in the case of its CDGU, Controllable WFPS, or Aggregated Generating Unit, the Availability, or Technical Parameters at levels or values different from those that the CDGU, Controllable WFPS, and/or an Aggregated Generating Unit could achieve at the relevant time. The TSO can reject declarations to the extent that they do not meet these requirements.

#### SDC1.4.3.3 SDC1.4.3.2 shall not apply to the extent:

- (a) it would require the **Generator** or, where relevant, the **Generator Aggregator** to declare levels or values better than the **Registered Capacity** and **Technical Parameters** as submitted under the **Planning Code** in respect of a **CDGU**, a **Controllable WFPS** and/or an **Aggregated Generating Unit**;
- (b) necessary during periods of **Scheduled Outage** or **Short Term Scheduled Outage** or otherwise with the consent of the **TSO**;
- (c) necessary while repairing or maintaining the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit or equipment necessary to the operation of the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit where such repair or maintenance cannot reasonably, in accordance with *Prudent Utility Practice*, be deferred to a period of Scheduled Outage or Short Term Scheduled Outage;
- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit); or
- (e) it is not lawful for the **Generator** to operate the **CDGU**, the **Controllable WFPS** and/or the **Aggregated Generating Units**.

# SDC1.4.3.3A SDC1.4.3.2 shall not apply for a CDGU, a Controllable WFPS, an Aggregated Generating Unit or Pumped Storage Plant Demand that is disconnected during any one or more of the following:

- (a) any TSO scheduled Annual Maintenance Outage or portion thereof on the Outturn Availability Connection Asset lasting up to and including a maximum of five days in total in a calendar year; or
- (b) where work to the Transmission System is being carried out that is driven by the relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand or driven by works related to the Connection Agreement of the relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand. This does not include work carried out related to another Generating Unit with a different Connection Point but a shared asset.

The relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand shall declare Availability at a value of zero during any one or more of (a) or (b) above, as advised by the TSO.

#### SDC1.4.3.4 Availability of Demand Side Units

Each **Demand Side Unit Operator** shall, subject to the exceptions in SDC1.4.3.5 <u>and SDC1.4.3.5A</u>, use reasonable endeavours to ensure that it does not at any time declare the **Demand Side Unit MW Availability** and the **Demand Side Unit** characteristics of its **Demand Side Unit** at levels or values different from those that the **Demand Side Unit** could achieve at the relevant time. The **TSO** can reject declarations to the extent that they do not meet these requirements.

#### SDC1.4.3.5 SDC1.4.3.4 shall not apply to the extent:

- it would require the **Demand Side Unit Operator** to declare levels or values better than **Demand Side Unit MW Capacity** and **Technical Parameters** as submitted under the Planning Code in respect of a **Demand Side Unit**;
- (b) necessary during periods of **Scheduled Outage** or **Short Term Scheduled Outage** or otherwise with the consent of the **TSO**;
- (c) necessary while repairing or maintaining the **Demand Side Unit** or equipment necessary to the operation of the **Demand Side Unit** where such repair or maintenance cannot reasonably, in accordance with **Prudent Utility Practice**, be deferred to a period of **Scheduled Outage** or **Short Term Scheduled Outage**.
- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the **Demand Side Unit**);
- (e) it is not lawful for the **Demand Side Unit Operator** to change its **Demand Side Unit MW Response** or to operate its **Demand Side Unit**.

# SDC1.4.3.5A SDC1.4.3.4 shall not apply for a **Demand Side Unit** that is disconnected during any one or more of the following:

- (a) any TSO scheduled Annual Maintenance Outage or portion thereof on the Outturn Availability Connection Asset lasting up to and including a maximum of five days in total in a calendar year; or
- (b) where work to the Transmission System is being carried out that is driven by the relevant Demand Side Unit or driven by works related to Connection Agreement of the relevant Demand Side Unit. This does not include work carried out related to another Generating Unit with a different Connection Point but a shared asset.

The relevant **Demand Side Unit** shall declare **Availability** at a value of zero during any one or more of (a) or (b) above, as advised by the **TSO**.

#### SDC1.4.3.9 **Outturn Availability**

Outturn Availability shall be set equal to the declared value of Availability.

#### **Glossary**

<b>Annual Maintenance Outage</b>	A transmission outage that is scheduled with reasonable notice to
	the relevant Generator(s) in advance of the start of the outage for
	planned maintenance of equipment that is part of an Outturn
	Availability Connection Asset.

Meshed Transmission Station	A Transmission Station which is looped into the Transmission
	System.

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Outturn Availability	The set of Availability data for the relevant CDGU, Controllable	
	WFPS, Aggregated Generating Unit, Pumped Storage Plant	
	Demand or Demand Side Unit as declared pursuant to SDC1.4 and	
	submitted by the TSO to SEM after the end of the Trading Day.	
Outturn Availability	Any equipment that is part of the Transmission System between	
Connection Asset	and including the Connection Point and the busbar clamps at the	
	Meshed Transmission Station for which the TSO schedules	
	outages.	

#### **Green-line Version:**

#### SDC1.4.3 General Availability Requirements

#### SDC1.4.3.1 Availability of Generating Units

Each Generator and Generator Aggregator shall in relation to its CDGUs, Controllable WFPSs or Aggregated Generating Units maintain, repair, operate and fuel the CDGU and/or Controllable WFPS and/or Aggregated Generating Unit as required by Prudent Utility Practice and any legal requirements applicable to its jurisdiction, with a view to providing the required Ancillary Services as provided for in an Ancillary Services Agreement.

SDC1.4.3.2 Each Generator, and where relevant each Generator Aggregator, shall, subject to the exceptions in SDC1.4.3.3 and SDC1.4.3.3A, use reasonable endeavours to ensure that it does not at any time declare in the case of its CDGU, Controllable WFPS, or Aggregated Generating Unit, the Availability, or Technical Parameters at levels or values different from those that the CDGU, Controllable WFPS, and/or an Aggregated Generating Unit could achieve at the relevant time. The TSO can reject declarations to the extent that they do not meet these requirements.

#### SDC1.4.3.3 SDC1.4.3.2 shall not apply to the extent:

- (a) it would require the Generator or, where relevant, the Generator Aggregator to declare levels or values better than the Registered Capacity and Technical Parameters as submitted under the Planning Code in respect of a CDGU, a Controllable WFPS and/or an Aggregated Generating Unit;
- (b) necessary during periods of **Scheduled Outage** or **Short Term Scheduled Outage** or otherwise with the consent of the **TSO**;
- (c) necessary while repairing or maintaining the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit or equipment necessary to the operation of the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit where such repair or maintenance cannot reasonably, in accordance with *Prudent Utility Practice*, be deferred to a period of Scheduled Outage or Short Term Scheduled Outage;
- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the CDGU, the Controllable WFPS and/or the Aggregated Generating Unit); or
- (e) it is not lawful for the **Generator** to operate the **CDGU**, the **Controllable WFPS** and/or the **Aggregated Generating Units**.

# SDC1.4.3.3A SDC1.4.3.2 shall not apply for a **CDGU**, a **Controllable WFPS**, an **Aggregated Generating Unit** or **Pumped Storage Plant Demand** that is disconnected during any one or more of the following:

- (c) any TSO scheduled Annual Maintenance Outage or portion thereof on the Outturn Availability Connection Asset lasting up to and including a maximum of five days in total in a calendar year; or
- (d) where work to the Transmission System is being carried out that is driven by the relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand or driven by works related to the Connection Agreement of the relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand. This does not include work carried out related to another Generating Unit with a different Connection Point but a shared asset.

The relevant CDGU, Controllable WFPS, Aggregated Generating Unit or Pumped Storage Plant Demand shall declare Availability at a value of zero during any one or more of (a) or (b) above, as advised by the TSO.

#### SDC1.4.3.4 Availability of Demand Side Units

Each **Demand Side Unit Operator** shall, subject to the exceptions in SDC1.4.3.5 and SDC1.4.3.5A, use reasonable endeavours to ensure that it does not at any time declare the **Demand Side Unit MW Availability** and the **Demand Side Unit** characteristics of its **Demand Side Unit** at levels or values different from those that the **Demand Side Unit** could achieve at the relevant time. The **TSO** can reject declarations to the extent that they do not meet these requirements.

#### SDC1.4.3.5 SDC1.4.3.4 shall not apply to the extent:

- (a) it would require the **Demand Side Unit Operator** to declare levels or values better than **Demand Side Unit MW Capacity** and **Technical Parameters** as submitted under the Planning Code in respect of a **Demand Side Unit**;
- (b) necessary during periods of **Scheduled Outage** or **Short Term Scheduled Outage** or otherwise with the consent of the **TSO**;
- (c) necessary while repairing or maintaining the **Demand Side Unit** or equipment necessary to the operation of the **Demand Side Unit** where such repair or maintenance cannot reasonably, in accordance with **Prudent Utility Practice**, be deferred to a period of **Scheduled Outage** or **Short Term Scheduled Outage**.
- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the **Demand Side Unit**);
- (e) it is not lawful for the **Demand Side Unit Operator** to change its **Demand Side Unit MW Response** or to operate its **Demand Side Unit**.

# SDC1.4.3.3A SDC1.4.3.2 shall not apply for a **Demand Side Unit** that is disconnected during any one or more of the following:

- (c) any TSO scheduled Annual Maintenance Outage or portion thereof on the Outturn Availability Connection Asset lasting up to and including a maximum of five days in total in a calendar year; or
- (d) where work to the **Transmission System** is being carried out that is driven by the relevant **Demand Side Unit** or driven by works related to **Connection Agreement** of the relevant **Demand Side Unit**. This does not include work carried out related to another **Generating Unit** with a different **Connection Point** but a shared asset.

The relevant **Demand Side Unit** shall declare **Availability** at a value of zero during any one or more of (a) or (b) above, as advised by the **TSO**.

#### SDC1.4.3.9 Outturn Availability

Outturn Availability shall be set equal to the declared value of Availability.

# **Glossary**

Annual Maintenance Outage	A transmission outage that is scheduled with reasonable notice to
	the relevant Generator(s) in advance of the start of the outage for
	planned maintenance of equipment that is part of an Outturn
	Availability Connection Asset.

Meshed Transmission Station	A Transmission Station which is looped into the Transmission
	System.

Outturn Availability	The set of <b>Availability</b> data for the relevant <b>CDGU</b> , <b>Controllable</b>
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	WFPS, Aggregated Generating Unit, Pumped Storage Plant  Demand or Demand Side Unit as declared pursuant to SDC1.4 and submitted by the TSO to SEM after the end of the Trading Day.
Outturn Availability Connection Asset	Any equipment that is part of the <b>Transmission System</b> between and including the <b>Connection Point</b> and the busbar clamps at the <b>Meshed Transmission Station</b> for which the <b>TSO</b> schedules outages.