

MODIFICATION PROPOSAL FORM

SUBSTANTIVE MOD – POR DEFINITION (MPID 252)

FORM GC1, PROPOSAL OF MODIFICATION TO GRID CODE.



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MODIFICATION PROPOSAL ORIGINATOR:	EirGrid		
MODIFICATION PROPOSAL ORIGINATOR (CONTACT NAME)	David Cashman	MODIFICATION PROPOSAL ORIGINATOR FAX NUMBER:	
MODIFICATION PROPOSAL ORIGINATOR TELEPHONE NUMBER:	01-2370122	DATE:	11/06/14
MODIFICATION PROPOSAL ORIGINATOR E-MAIL ADDRESS:	david.cashman@eirgrid.com	MODIFICATION PROPOSAL NUMBER (EIRGRID USE ONLY)	MPID 252
GRID CODE SECTION(S) AFFECTED BY PROPOSAL:	OC4.6.3.3		
GRID CODE VERSION :	5.0		
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.)	<p>The current definition for Primary Operating Reserve (POR) does not include a requirement for sustained response over the POR timeframe. This modification aims to clarify this requirement.</p> <p>The purpose of the modification is to ensure that POR is provided on a consistent basis over the POR timeframe ensuring the system can be run more securely.</p>		
IMPLICATION OF NOT IMPLEMENTING THE MODIFICATION	Without the application of this modification there is scope for POR to not be provided over the full timeframe. Inconsistent performance of generators over this time could lead to system security issues during frequency excursions.		
<i>Please submit the Modification Proposal by fax, post or electronically, using the information supplied above</i>			
EIRGRID REVIEWER			

EIRGRID ASSESSMENT

OC4.6.3.3 Primary Operating Reserve (POR).

OC4.6.3.3.1 Primary Operating Reserve (POR) is the additional MW output (and/or reduction in **Demand**) required at the **Frequency** nadir (minimum) compared to the pre-incident output (or **Demand**), which is fully available and sustainable between 5 seconds and 15 seconds after the **Event** and where the nadir occurs between 5 and 15 seconds after ~~an~~ the **Event**.

OC4.6.3.3.2 If the actual **Frequency** nadir occurs less than 5 seconds or more than 15 seconds after the **Event**, ~~is before 5 seconds or after 15 seconds after the event~~, then for the purpose of **POR** monitoring (in accordance with OC 10.4.4) the nadir is deemed to be the lowest Frequency which did occur between 5 and 15 seconds after the **Event**.

OC4.6.3.4 Secondary Operating Reserve (SOR)

OC4.6.3.4.1 Secondary Operating Reserve (SOR) is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**), which is fully available and sustainable over the period from 15 to 90 seconds following an **Event**.

OC4.6.3.5 Tertiary Operating Reserve

OC4.6.3.5.1 Tertiary Operating Reserve band 1 (TOR1) is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 90 seconds to 5 minutes following an **Event**.

OC4.6.3.5.2 Tertiary Operating Reserve band 2 (TOR2) is the additional MW output (and/or reduction in **Demand**) required compared to the pre-incident output (or **Demand**) which is fully available and sustainable over the period from 5 minutes to 20 minutes following an **Event**.

Glossary:**Primary Operating Reserve (POR)**

Primary Operating Reserve (POR) is the additional MW output (and/or reduction in **Demand**) required at the **Frequency** nadir (minimum), compared to the pre-incident output (or **Demand**), which is fully available and sustainable between 5 seconds and 15 seconds after an **Event** and where the nadir occurs between 5 and 15 seconds after ~~an~~ the **Event**. If the actual **Frequency** nadir occurs less than 5 seconds or more than 15 seconds after the **Event**, ~~is before 5 seconds or after 15 seconds after the event~~, then for the purpose of POR monitoring the nadir is deemed to be the lowest **Frequency** which occurred between 5 and 15 seconds after the event.