

MODIFICATION PROPOSAL FORM



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FORM GC1, PROPOSAL OF MODIFICATION TO GRID CODE.

MODIFICATION PROPOSAL ORIGINATOR:	EirGrid		
MODIFICATION PROPOSAL ORIGINATOR (CONTACT NAME)	Séamus Power	MODIFICATION PROPOSAL ORIGINATOR FAX NUMBER:	
MODIFICATION PROPOSAL ORIGINATOR TELEPHONE NUMBER:	01 2370522	DATE:	12 th November 2014
MODIFICATION PROPOSAL ORIGINATOR E-MAIL ADDRESS:	seamus.power@eirgrid.com	MODIFICATION PROPOSAL NUMBER (EIRGRID USE ONLY)	
GRID CODE SECTION(S) AFFECTED BY PROPOSAL:	CC.7.4, Definitions		
GRID CODE VERSION :	Version 5		
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>Following consultation with industry through the Demand Side Unit Joint Grid Code Working Group the following modification was proposed by EirGrid. It provides less onerous frequency requirements for Generation that operates as part of a Demand Side Unit that only synchronises for short periods of time to facilitate the smooth transfer of power. A vote among Demand Side Unit Joint Grid Code Working Group members at the 5th meeting which took place via teleconference on 09/05/2014 was divided with eleven members in favour of the modification and two against.</p> <p>It should be noted it is intended that CC.7.4 (k) be increased to 1 Hz/s when MPID229 RoCoF Definition Proposal is fully implemented. For the avoidance of doubt, it is intended in line with CER/14/081 that units will be required to declare compliance during the commissioning process and therefore will be assessed against this new standard.</p>		
IMPLICATION OF NOT IMPLEMENTING THE MODIFICATION	This modification is required to give clarity to DSU Operators on EirGrid's frequency requirements for Generation that operates as part of a Demand Side Unit.		
Please submit the Modification Proposal by fax, post or electronically, using the information supplied above			

EIRGRID REVIEWER	
EIRGRID ASSESSMENT	

Frequency Requirements for Generation Units operating as part of a DSU

CC.7.4 Each **Demand Side Unit** shall, as a minimum, have the following capabilities:

- (a) Able to provide **Demand Side Unit MW Response** between 0 MW and the **Demand Side Unit MW Capacity**;
- (b) **Maximum Ramp Up Rate** not less than 1.67% per minute of **Demand Side Unit MW Response** as specified in the **Dispatch Instruction**;
- (c) **Maximum Ramp Down Rate** not less than 1.67% per minute of **Demand Side Unit MW Response** as specified in the **Dispatch Instruction**;
- (d) **Minimum Down Time** not greater than 30 minutes;
- (e) **Maximum Down Time** not less than 2 hours;
- (f) **Minimum off time** not greater than 2 hours; ~~and~~
- (g) **Demand Side Unit MW Response Time** of not greater than 1 hour; ~~;~~
- (h) maintain **Demand Side Unit MW Response at Transmission System Frequencies** in the range 49.5Hz to 50.5Hz;
- (i) maintain **Demand Side Unit MW Response at Transmission System Frequencies** within the range 47.5Hz to 49.5Hz and 50.5Hz to 52Hz for a duration of 60 minutes;
- (j) maintain **Demand Side Unit MW Response at Transmission System Frequencies** within the range 47.0Hz to 47.5Hz for a duration of 20 seconds required each time the **Frequency** is below 47.5Hz; and
- (k) maintain **Demand Side Unit MW Response** for a rate of change of **Transmission System Frequency** up to and including 0.5 Hz per second as measured over a rolling 500 milliseconds period.

On-site **Generation** operated in **Continuous Parallel Mode** or **Shaving Mode** that forms part of a **Demand Side Unit**, shall, as a minimum, have the following capabilities:

- (h) operate continuously at normal rated output at **Transmission System Frequencies** in the range 49.5Hz to 50.5Hz;
- (i) remain synchronised to the **Transmission System** at **Transmission System Frequencies** within the range 47.5Hz to 52.0Hz for a duration of 60 minutes;
- (j) remain synchronised to the **Transmission System** at **Transmission System Frequencies** within the range 47.0Hz to 47.5Hz for a duration of 20 seconds required each time the **Frequency** is below 47.5Hz; and
- (k) remain synchronised to the **Transmission System** during a rate of change of **Transmission System Frequency** of values up to and including 0.5 Hz per second.

On-site **Generation** operated in **Lopping Mode** or **Automatic Mains Failure Mode** that forms part of a **Demand Side Unit**, shall, as a minimum, have the following capabilities:

- (p) operate continuously at normal rated output at **Transmission System Frequencies** in the range 49.5Hz to 50.5Hz;



