

MODIFICATION PROPOSAL FORM

MPID 247 – DS3 CLARIFICATION ON POST FAULT ACTIVE POWER RECOVERY

FORM GC1, PROPOSAL OF MODIFICATION TO GRID CODE.



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MODIFICATION PROPOSAL ORIGINATOR E-MAIL ADDRESS:	david.cashman@eirgrid.com	MODIFICATION PROPOSAL NUMBER (EIRGRID USE ONLY)	MPID 247
GRID CODE SECTION(S) AFFECTED BY PROPOSAL:	WFPS1.4.2		
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.)	The DS3 Grid Code modifications has developed updated fault ride through standards for WFPS. The new standards specify both active and reactive power responses from the WFPS. Clause WFPS1.4.2 gives the requirements for this. In point b) of WFPS1.4.2 the specification for the WFPS to provide 90% of its active power within 500 ms. The clause currently states that 90% of the Available Active Power should be provided however the intent is that 90% of the pre-fault Active Power should be provided. This point becomes important if the WFPS is in Active Power Control mode and is dispatched below the Available Active Power. This modification aims to clarify this point.		
IMPLICATION OF NOT IMPLEMENTING THE MODIFICATION	This modification aims to provide clarity to WFPS around the post fault active power recovery that is expected. At present the modification allows for 90% of Available Active Power to be provided however the TSO would only wish for 90% of the pre-fault Active Power to be provided post fault. The proposal is therefore to insert text to clarify this. Without this clarification WFPS may provide an Active Power response that is in excess of what is expected and this may result instability issues on the system.		

<i>Please submit the Modification Proposal by fax, post or electronically, using the information supplied above</i>	
EIRGRID REVIEWER	
EIRGRID ASSESSMENT	

WFPS1.4.2 In addition to remaining connected to the **Transmission System**, the **Controllable WFPS** shall have the technical capability to provide the following functions:

- a) During **Transmission System Voltage Dips**, the **Controllable WFPS** shall provide **Active Power** in proportion to retained **Voltage** and provide reactive current to the **Transmission System**, as set out in WFPS1.4.2(c).. The provision of reactive current shall continue until the **Transmission System Voltage** recovers to within the normal operational range of the **Transmission System** as specified in CC8.3.1, or for at least 500 ms, whichever is the sooner. The **Controllable WFPS** may use all or any available reactive sources, including installed statcoms or SVCs, when providing reactive support during **Transmission System Fault Disturbances** which result in **Voltage Dips**.

- b) The **Controllable WFPS** shall provide at least 90 % of its maximum **Available Active Power** or **Active Power Set-point, whichever is lesser**, as quickly as the technology allows and in any event within 500 ms of the **Transmission System Voltage** recovering to 90% of nominal **Voltage**, for **Fault Disturbances** cleared within 140 ms. For longer duration **Fault Disturbances**, the **Controllable WFPS** shall provide at least 90% of its maximum **Available Active Power** or **Active Power Set-point, whichever is lesser**, within 1 second of the **Transmission System Voltage** recovering to 90% of the nominal **Voltage**.