MODIFICATION RECOMMENDATION

FORMHOUSEKEEPING MOD - WFPS Active Power Control Mode (MPID 251)

RECOMMENDATION TO CER BY EIRGRID OF MODIFICATION TO GRID CODE.

ABSTRACT / TITLE OF MODIFICATION	**HOUSEKEEPING MOD - WFPS Active Power Control Mode (MPID 251)**
MODIFICATION NUMBER	MPID 251
RECOMMENDED AT GCRP MEETING NUMBER	39
LIST OF GRID CODE SECTION(S) AFFECTED BY PROPOSED MODIFICATION:	WFPS1.5.2.1 and WFPS1.5.3.3
CURRENT GRID CODE VERSION :	5
MODIFICATION DESCRIPTION Overview **THE REASON FOR THE RECOMMENDED MODIFICATION**	This modification aims to rectify an incorrect term in WFPS1.5.2.1 and WFPS1.5.3.3. In these clauses the term Active Power Dispatch Mode is referred to. This term is not a defined term and should be replaced by the defined term **Active Power Control Mode**.
History of Progression through GCRPs, Working Group and/or Consultation	EirGrid presented the modification proposal MPID 251 to the Grid Code Review Panel members at a meeting held at The Spencer Hotel in Dublin on the 11th June 2014. No objections were raised by the panel members and the modification was recommended for approval.
Summary Note of any Objections to the Recommended change from GCRP Members or Consultation Responses	No objections were raised.

Outcome of any GCRP Meeting Actions Relating to the Recommended Modification	No objections were raised.
Implication of not implementing the Modification	The incorrect term in clause WFPS1.5.2.1 and WFPS1.5.3.3 would remain in subsequent versions of the Grid Code.

RED-LINE VERSION

WFPS1.5.2.1 Active Power Control
The **Wind Farm Control System** shall be capable of operating each **WTG** at a reduced level if the **Controllable WFPS's Active Power** output has been restricted by the **TSO**. In this **Active Power Control Dispatch Mode**, the **Wind Farm Control System** shall be capable of receiving an on-line **Active Power Control Set-point** sent by the **TSO** and shall commence implementation of the set-point within 10 seconds of receipt of the signal from the **TSO**. The rate of change of output to achieve the **Active Power Control Set-point** should be the **Active Power Control Set-Point Ramp Rate** setting of the **Wind Farm Control System**, as advised by the TSO, as per WFPS1.5.4. The **TSO** acknowledges that if the **Active Power** output of the **Controllable WFPS** is initially less than the **Design Minimum Operating Level**, and if the **Controllable WFPS** is expected to increase its **Active Power** output, then it may not be able to achieve the specified ramp rate at first, due to **WTG**s going through a start-up sequence. In such a case, **WTGs** shall start up as quickly as the technology allows, and in any case, not longer than three minutes from the time the **Active Power Control Set-point** was received.
WFPS1.5.3.3 When acting to control **Transmission System Frequency**, the **Controllable WFPS** shall provide at least 60% of its expected additional **Active Power** response within 5 seconds, and 100% of its expected additional **Active Power** response within 15 seconds of the start of the **Transmission System Frequency** excursion outside the range FB-FC, or in the case of a **Controllable WFPS** in **Active Power Control Dispatch Mode**, when the **Transmission System Frequency** goes outside the deadband set out in WFPS1.5.3.2.

GREEN-LINE VERSION

WFPS1.5.2.1 Active Power Control
The **Wind Farm Control System** shall be capable of operating each **WTG** at a reduced level if the **Controllable WFPS's Active Power** output has been restricted by the **TSO**. In this **Active Power Control Mode**, the **Wind Farm Control System** shall be capable of receiving an on-line **Active Power Control Set-point** sent by the **TSO** and shall commence implementation of the set-point within 10 seconds of receipt of the signal

from the **TSO**. The rate of change of output to achieve the **Active Power Control Set-point** should be the **Active Power Control Set-Point Ramp Rate** setting of the **Wind Farm Control System**, as advised by the TSO, as per WFPS1.5.4. The **TSO** acknowledges that if the **Active Power** output of the **Controllable WFPS** is initially less than the **Design Minimum Operating Level**, and if the **Controllable WFPS** is expected to increase its **Active Power** output, then it may not be able to achieve the specified ramp rate at first, due to **WTG**s going through a start-up sequence. In such a case, **WTGs** shall start up as quickly as the technology allows, and in any case, not longer than three minutes from the time the **Active Power Control Set-point** was received.

WFPS1.5.3.3 When acting to control **Transmission System Frequency**, the **Controllable WFPS** shall provide at least 60% of its expected additional **Active Power** response within 5 seconds, and 100% of its expected additional **Active Power** response within 15 seconds of the start of the **Transmission System Frequency** excursion outside the range FB-FC, or in the case of a **Controllable WFPS** in **Active Power Control Mode**, when the **Transmission System Frequency** goes outside the deadband set out in WFPS1.5.3.2.