

**Grid Code
Modification Proposal Form**

Email to gridcode@eirgrid.com



Title of Modification Proposal:

MPID 287 Meteorological Signal Requirements

MPID (EirGrid Use Only): 287

Date:	16/10/2020		
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Grid Code Version:	8.1		
Grid Code Section(s) Impacted by Modification Proposal:	PPM1.7.1.2.1 PPM1.7.1.6 <i>Time Delays and Data Quality</i>		

Modification Proposal Justification:

Based on analysis of historical meteorological data in Ireland, it came to the attention of the TSO that the ranges currently specified in the Grid Code are not reflective of the wind speed as recorded by Controllable PPMs across Ireland. It is more appropriate that the units/ranges for each Controllable PPM be specified in the signal list. The TSO propose removing the units/ranges from Grid Code clause PPM1.7.1.2.1. The TSO do not intend to change signal list ranges for existing wind farms.

In December 2019, the TSO published version 2 of the [EirGrid Met Mast and Alternatives Study](#). The TSO propose to implement the recommendations as outlined in chapter 4.4 'Recommended Practice for a Met Data Delivery Requirement Policy'.

In order to implement the above recommendation, the TSO propose to amend Grid Code clause PPM.1.7.1.6 by removing '~~with an error of 2.5% or less~~' and replacing it with 'shall be accurate at least 97.5% of the time' for the relay of the Meteorological Data by a Controllable PPM as required per Grid Code clause PPM1.7.1.2.

Red-line Version of Impacted Grid Code Section(s) - show proposed changes to text:

Deleted text in ~~strike-through red font~~ and new text highlighted in blue font

PPM1.7.1.2.1 **Controllable PPMs comprising of Wind Turbine Generators** with a MEC in excess of 10 MW shall make the following meteorological data signals available at the designated **TSO Telecommunication Interface Cabinet** for that **Controllable PPM**:

- | | | |
|----|------------------------------------------------------------------------------|------------------------------------------------------|
| a) | Wind speed (at hub height or as agreed with the TSO)
- measurand signal; | {Units, Range}
{m/s, 0-70}; |
| b) | Wind direction (at hub height or as agreed with the TSO) - measurand signal; | {deg, 0-360}; |
| c) | Air temperature- measurand signal; | {deg C, -40-70} |
| d) | Air pressure- measurand signal. | {mBar, 735-1060} |

PPM1.7.1.6 Time Delays and Data Quality

Digital signal changes from the **Controllable PPMs** shall be relayed to the **TSO Telecommunication Interface Cabinet** within 1 second of the associated change of state event. Analogue signal changes shall be relayed within 5 seconds and with an error of 0.5% or less, with the exception of the Meteorological Data required as per **PPM1.7.1.2**, which shall be updated within 5 seconds and ~~with an error of 2.5% or less. shall be~~ **accurate at least 97.5% of the time over a rolling 12-month period.**

Green-line Version of Impacted Grid Code Section(s) - show proposed final text:

PPM1.7.1.2.1 **Controllable PPMs** comprising of **Wind Turbine Generators** with a MEC in excess of 10 MW shall make the following meteorological data signals available at the designated **TSO Telecommunication Interface Cabinet** for that **Controllable PPM**:

- a) Wind speed (at hub height or as agreed with the TSO) measurand signal;
- b) Wind direction (at hub height or as agreed with the TSO) - measurand signal;
- c) Air temperature - measurand signal;
- d) Air pressure - measurand signal.

PPM1.7.1.6 Time Delays and Data Quality

Digital signal changes from the **Controllable PPM** shall be relayed to the **TSO Telecommunication Interface Cabinet** within 1 second of the associated change of state event. Analogue signal changes shall be relayed within 5 seconds and with an error of 0.5% or less, with the exception of the Meteorological Data required as per **PPM 1.7.1.2**, which shall be updated within 5 seconds and shall be accurate at least 97.5% of the time over a rolling 12-month period.