

**Grid Code
Modification
Recommendation Form**



Title of Recommended Proposal:

MPID 287 Meteorological Signal Requirements

MPID: 287

Date:	20 January 2021
Recommended at GCRP Meeting No.:	The modification was presented at the Ireland GCRP Meeting dated 03 November 2020. A revised version of the modification was subsequently issued to the members on 16 November 2020. No objections were raised, and the modification was recommended by the members.
Grid Code Version:	8.1 (this modification recommendation is based on the revision of Grid Code version 8.1, that was the version of Grid Code at the time the proposal was presented to the GCRP members. The current Grid Code in effect is Grid Code version 9).
Grid Code Section(s) Impacted by Recommended Proposal:	PPM1.7.1.2.1 PPM1.7.1.6 <i>Time Delays and Data Quality</i>

The Reason for the Recommended Modification:

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.

History of Progression through GCRPs, Working Group and/or Consultation:

On the 03 November 2020 this modification proposal was presented to the GCRP members.

At the meeting William Carr (Pumped Storage) suggested the specification of a timeframe for the calculation of the 97.5% accuracy in clause PPM.1.7.1.6 – over a rolling monthly or a rolling annual period. The TSO agreed to review this as a point of clarity.

On 16 November 2020 the TSO issued a revised version of modification proposal MPID 287 to the GCRP members. This revision included a rolling period of 12 months as was suggested by William Carr. The GCRP members were

given ten working days to review and provide comments and to voice any objections. Within that period no comments or objections were received, and it was agreed to issue a modification recommendation to the CRU based on the revised wording.

Summary Note of any Objections to the Recommended Change from GCRP Members or Consultation Responses:

No objections were raised by the GCRP members in relation to the revised version of the Grid Code Modification MPID 287.

Outcome of any GCRP Meeting Actions Relating to the Recommended Modification:

At the meeting William Carr (Pumped Storage) suggested the specification of a timeframe for the calculation of the 97.5% accuracy in clause PPM.1.7.1.6 – over a rolling monthly or a rolling annual period. The TSO agreed with William Carr’s suggestion and clause PPM1.7.1.6 now includes a time frame for the calculation of the 97.5% accuracy. Please see the green-line and red-line version of the impacted Grid Code clauses.

Red-line Version of Impacted Grid Code Section(s) - show recommended 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 recommended 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 **PPM1.7.1.2**, which shall be updated within 5 seconds and shall be accurate at least 97.5% of the time over a rolling 12-month period.