

**Grid Code
Modification Proposal Form**

Email to gridcode@eirgrid.com



Title of Modification Proposal:

MPID 305 Incorporation of Offshore PPM Requirements

MPID (EirGrid Use Only): MPID 305

Date:	12/09/2023
Company Name:	EirGrid
Applicant Name:	Miriam Ryan
Email Address:	gridcode@eirgrid.com
Grid Code Version:	Version 12
Grid Code Section(s) Impacted by Modification Proposal:	Various – see document entitled “MPID305_Grid Code Mod locations” for full list of Grid Code Sections impacted by this modification proposal.

Modification Proposal Justification:

The Grid Code is a living document and is constantly evolving. This evolution includes the incorporation of new User types. The purpose of this modification is to incorporate the Grid Code requirements for Offshore PPMs, which is a new subtype of Controllable PPMs.

Background:

The 2020 Programme for Government made a commitment that up to 80% of Ireland's electricity will be produced from renewable sources by 2030. This will be achieved, in part, through the installation of 5 GW of offshore wind generation capacity in Ireland's maritime area over the next 7 years.

This 5 GW of wind generation capacity will be installed in three different phases.

Phase 1 will be developer led and will consist of 4 individual offshore wind farm arrays, each of which will consist of one or more Offshore PPMs. These Offshore PPMs will connect to the Transmission System via an offshore Connection Point on an offshore platform.

This modification details requirements that each Phase 1 Offshore PPM must meet at their offshore Connection Point.

As part of the development of this proposal several key elements were considered. These include but were not limited to:

- Existing Grid Code requirements for PPMs;
- RfG requirements for PPMs; and
- the Offshore PPM Design and Operation Philosophy document,

as well as drawing on the knowledge of key subject matter experts, both internal and external to EirGrid.

The proposed modification was previously circulated to the Offshore PPM developers for comment and was discussed at an industry workshop in April 2023, with the intention of presenting the proposed modification to the June GCRP meeting. However, this was postponed allowing more time for the comments received from the offshore PPM developers.

Between April 2023 and Sept 2023, several meetings and workshops have taken place. A total of over 80 comments were received from the Phase 1 Offshore PPM developers via a comment log and email. To date all but two of these comments have been closed. The outstanding comments are described below:

1. Harmonic Voltage distortion:

A comment was raised regarding the application of the planning standards in the IEC 61000-3-6 planning levels at the Offshore PPM connection point.

It is noted EirGrid is carrying out a review of their harmonic policy. This review will address the received comment by reviewing the application of harmonic limits at the offshore PPM connection point. EirGrid will engage with the Offshore PPM developers over the course of this review.

Once the review of the harmonic policy is completed, any necessary Grid Code modifications will be brought forward to the GCRP.

2. Multiple configurations for the Offshore PPMs within the windfarm array:

This comment has been placed on hold pending the outcome of the ongoing consultation on the Connection Point for Offshore PPMs and does not form part of this proposed modification.

Following the completion of the consultation, EirGrid will review the open comment and will determine if any further Grid Code modifications are required.

Following the detailed engagement with the offshore developers, the TSO trust that the requirements for Offshore PPMs as detailed in this proposed modification are correct, based on the information available to date.

The Grid Code is constantly evolving to ensure that the requirements for all Users are appropriate and fit for purpose, whilst ensuring the ongoing safety and security of the Transmission System. We note that works regarding the future connection of Offshore PPMs are ongoing. These works include but are not limited to the provision of detailed designs and the provision of models, and the completion of studies such as fault clearance studies for 66 kV. If or when, these ongoing works raise any issues with the requirements detailed in this proposal, EirGrid will carry out a review of the requirements, and if necessary, will put forward any required modifications.

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

See the document entitled "MPID 305 Red Line Offshore PPM Incorporation".

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

See the document entitled "MPID 305 Green Line Offshore PPM Incorporation".