Title of Recommended Proposal: Clarification of PPM section with solar

MPID (EirGrid Use Only): 342

Date:	3rd of February 2026
Recommended at GCRP Meeting:	25th of September 2025
Grid Code Version:	15
Grid Code Section(s) Impacted by Recommended Proposal:	PPM1.7.1.2 Signals List #2 PPM1.7.1.3 Signals List #3

The Reason for the Recommended Modification:

The proposed modification aims to improve clarity and consistency in the treatment of solar-powered Controllable PPMs within the PPM section of the Grid Code. Currently, references to solar PPMs are dispersed and sometimes embedded within broader provisions, which can lead to ambiguity and misinterpretation. By consolidating and clearly distinguishing solar-specific requirements, the revised structure enhances transparency, simplifies compliance for Users with solar powered Controllable PPMs' and aligns with the Grid Code's objective of providing technology-specific guidance, in this case wind, solar, ESPS, and other PPMs. This clarification is editorial in nature and does not alter the technical obligations or intent of the existing provisions.

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

This modification proposal was presented at the September 2025 GCRP meeting. The proposal was introduced to improve clarity in the Grid Code regarding solar-powered Controllable PPMs. Feedback was received during the meeting, and a revised version of the proposal is to be circulated incorporating the comments. If no objections are raised, the TSO will proceed to issue a recommendation paper to the CRU.

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

No formal objections were raised during the GCRP meeting. However, several clarifications and editorial suggestions were made:

- A question was raised regarding whether bolded and capitalised headings would now be considered defined terms.
- It was queried whether the changes would need to be reflected in the Distribution Code. It was noted that while not strictly necessary, this could be considered if desired.
- Another question concerned how hybrid connections fit into the proposed categories. It was clarified that this is being addressed in a separate project.

These points were addressed through agreed action items and were reflected in the revised proposal.

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

The following actions were agreed upon during the meeting:

- Unbold undefined terms and underline them to avoid confusion with defined terms.
- Clarify and circulate a revised modification proposal incorporating the above feedback.
- Members were invited to provide feedback on the revised proposal. As there were no objections raised, the TSO will issue this recommendation paper to the CRU.

A Table Outlining the Proposed Changes:

Definition	Red Line Version Text *Deleted text in ~~strike-through red font~~ and new text highlighted in blue font*	Green Line Version Text
	PPM1.7.1.2 ***Signals List #2*** Wind-powered **Controllable PPMs** *PPM1.7.1.2.1* Wind-powered **Controllable PPMs** comprising of **Wind Turbine Generators** with a **MEC** in excess of 10 MW shall make the following meteorological data signals available as specified in the relevant specifications and site-specific signal lists: (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.	*PPM1.7.1.2* ***Signals List #2*** Wind-powered **Controllable PPMs** *PPM1.7.1.2.1* Wind-powered **Controllable PPMs** comprising of **Wind Turbine Generators** with a **MEC** in excess of 10 MW shall make the following meteorological data signals available as specified in the relevant specifications and site-specific signal lists: (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.

	PPM1.7.1.2.2	The above meteorological data signals (ref. PPM1.7.1.2.1) shall be provided by a dedicated **Meteorological Mast** located at the wind-powered **Controllable PPMs** site or, where possible and preferable to do so, data from a means of the same or better accuracy. For wind-powered **Controllable PPMs** where the **WTG** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the wind-powered **Controllable PPM**, the meteorological data shall be provided from a number of individual **Meteorological Masts**, or where possible and preferable to do so, data from a source of the same or better reliability for groups of **WTG** (e.g. 1 set of meteorological data for each group of XX **WTG** within the wind-powered **Controllable PPM**). It is expected that **WTG** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the wind-powered **Controllable PPM's** scheduled **Operational Date.**	*PPM1.7.1.2.2*	The above meteorological data signals (ref. PPM1.7.1.2.1) shall be provided by a dedicated **Meteorological Mast** located at the wind-powered **Controllable PPMs** site or, where possible and preferable to do so, data from a means of the same or better accuracy. For wind-powered **Controllable PPMs** where the **WTG** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the wind-powered **Controllable PPM**, the meteorological data shall be provided from a number of individual **Meteorological Masts**, or where possible and preferable to do so, data from a source of the same or better reliability for groups of **WTG** (e.g. 1 set of meteorological data for each group of XX **WTG** within the wind-powered **Controllable PPM**). It is expected that **WTG** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the wind-powered **Controllable PPM's** scheduled **Operational Date.**

	Solar-powered **Controllable PPMs** ~~*PPM1.7.1.2.2.1*~~ *PPM1.7.1.2.3* Solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following meteorological data signals available as specified in the relevant specifications and site-specific signal lists: (a) Global Horizontal Irradiance (GHI) - measurand signal; (b) Diffused Horizontal Irradiance (DHI) - measurand signal; (c) Direct Normal Irradiance (DNI) (required for solar tracking panels only) - measurand signal; (d) Air temperature - measurand signal; (e) Back panel temperature - measurand signal; (f) Wind speed - measurand signal; (g) Wind direction - measurand signal; (h) Precipitation – measurand signal; (i) Air pressure - measurand signal.	Solar-powered **Controllable PPMs** *PPM1.7.1.2.3* Solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following meteorological data signals available as specified in the relevant specifications and site-specific signal lists: (a) Global Horizontal Irradiance (GHI) - measurand signal; (b) Diffused Horizontal Irradiance (DHI) - measurand signal; (c) Direct Normal Irradiance (DNI) (required for solar tracking panels only) - measurand signal; (d) Air temperature - measurand signal; (e) Back panel temperature - measurand signal; (f) Wind speed - measurand signal; (g) Wind direction - measurand signal; (h) Precipitation – measurand signal; (i) Air pressure - measurand signal.

	~~*PPM1.7.1.2.2.2*~~ PPM1.7.1.2.4 The above meteorological data signals (ref. ~~*PPM1.7.1.2.2.1*~~ PPM1.7.1.2.3) shall be provided by measurement devices located at the solar-powered **Controllable PPMs** site. All meteorological data signals shall at a minimum meet accuracy levels defined by the **TSO**. For solar-powered **Controllable PPMs** where the solar arrays are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the solar-powered **Controllable PPM**, the meteorological data shall be provided from a number of individual measurement devices. It is expected that solar arrays within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the solar-powered **Controllable PPM's** scheduled **Operational Date**. Other **Controllable PPMs** (excluding wind and solar) ~~*PPM1.7.1.2.3*~~	PPM1.7.1.2.4 The above meteorological data signals (ref. PPM1.7.1.2.3) shall be provided by measurement devices located at the solar-powered **Controllable PPMs** site. All meteorological data signals shall at a minimum meet accuracy levels defined by the **TSO**. For solar-powered **Controllable PPMs** where the solar arrays are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the solar-powered **Controllable PPM**, the meteorological data shall be provided from a number of individual measurement devices. It is expected that solar arrays within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the solar-powered **Controllable PPM's** scheduled **Operational Date**. Other **Controllable PPMs** (excluding wind and solar)

	PPM1.7.1.2.5 **Controllable PPMs**, in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs**, shall make relevant meteorological data signals available, which may include but are not limited to solar irradiance and tidal streams, as agreed with the **TSO** and specified in the relevant specifications and site-specific signal lists**.** The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.**	*PPM1.7.1.2.5* **Controllable PPMs**, in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs**, shall make relevant meteorological data signals available, which may include but are not limited to solar irradiance and tidal streams, as agreed with the **TSO** and specified in the relevant specifications and site-specific signal lists**.** The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.**
	~~*PPM1.7.1.2.4*~~ *PPM1.7.1.2.6* The above meteorological data signals (ref. ~~PPM1.7.1.2.3~~ PPM1.7.1.2.5) shall be provided by a measurement device located at the **Controllable PPM** site, the exception of wind-powered and solar-powered **Controllable PPM** sites, as defined by the **TSO.** All meteorological data signals shall at a minimum meet accuracy levels defined by the **TSO**. For **Controllable PPMs**, with the exception of wind-powered and solar-powered **Controllable PPMs,** where the **Generation Units** are widely dispersed over a large	*PPM1.7.1.2.6* The above meteorological data signals (ref. PPM1.7.1.2.5) shall be provided by a measurement device located at the **Controllable PPM** site, the exception of wind-powered and solar-powered **Controllable PPM** sites, as defined by the **TSO.** All meteorological data signals shall at a minimum meet accuracy levels defined by the **TSO**. For **Controllable PPMs**, with the exception of wind-powered and solar-powered **Controllable PPMs,** where the **Generation Units** are widely dispersed over a large geographical area and rather different weather

	geographical area and rather different weather patterns are expected for different sections of the **Controllable PPM**, the meteorological data shall be provided from a number of individual sources. It is expected that **Generation Units** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.**	patterns are expected for different sections of the **Controllable PPM**, the meteorological data shall be provided from a number of individual sources. It is expected that **Generation Units** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.**
	PPM1.7.1.3 Signals List #3 Wind-powered **Controllable PPMs** PPM1.7.1.3.1 Wind-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following signals available as specified in the relevant specifications and site-specific signal lists: a) Wind-powered **Controllable PPM Availability** (0-100 % signal);	***PPM1.7.1.3 Signals List #3*** Wind-powered **Controllable PPMs** PPM1.7.1.3.1 Wind-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following signals available as specified in the relevant specifications and site-specific signal lists: d) Wind-powered **Controllable PPM Availability** (0-100 % signal);

	b) Percentage of **WTG Shutdown** due to high wind-speed conditions (0-100 %); c) Percentage of **WTG** not generating due low wind-speed **Shutdown** (0-100 %).	e) Percentage of **WTG Shutdown** due to high wind-speed conditions (0-100 %); f) Percentage of **WTG** not generating due low wind-speed **Shutdown** (0-100 %).
	PPM1.7.1.3.2 For wind-powered **Controllable PPMs** with a **MEC** in excess of 10 MW, where the **WTG** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the wind-powered **Controllable PPM**, the above data set (ref. PPM1.7.1.3.1) shall be provided for a number of groups of **WTG** (e.g. 1 signal for each group of XX **WTG** within the wind-powered **Controllable PPM**). It is expected that **WTG** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by	PPM1.7.1.3.2 For wind-powered **Controllable PPMs** with a **MEC** in excess of 10 MW, where the **WTG** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the wind-powered **Controllable PPM**, the above data set (ref. PPM1.7.1.3.1) shall be provided for a number of groups of **WTG** (e.g. 1 signal for each group of XX **WTG** within the wind-powered **Controllable PPM**). It is expected that **WTG** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals

	the **TSO** at least 120 **Business Days** prior to the wind-powered **Controllable PPM's** scheduled **Operational Date.**	required shall be specified by the **TSO** at least 120 **Business Days** prior to the wind-powered **Controllable PPM's** scheduled **Operational Date.**
	Solar-powered **Controllable PPMs**	Solar-powered **Controllable PPMs**
	~~PPM1.7.1.3.2.1~~	
	PPM1.7.1.3.3 Solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following signals available as specified in the relevant specifications and site-specific signal lists: (a) Solar-powered **Controllable PPM Availability** (0-100 % signal).	PPM1.7.1.3.3 Solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW shall make the following signals available as specified in the relevant specifications and site-specific signal lists: (b) Solar-powered **Controllable PPM Availability** (0-100 % signal).
	~~PPM1.7.1.3.2.2~~	
	PPM1.7.1.3.4 For solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW, where the solar arrays are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the solar-powered **Controllable PPM**, the above data set (ref. PPM1.7.1.3.1) shall be provided for a number of groups of	PPM1.7.1.3.4 For solar-powered **Controllable PPMs** with a **MEC** in excess of 10 MW, where the solar arrays are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the solar-powered **Controllable PPM**, the above data set (ref. PPM1.7.1.3.1) shall be provided for a number of groups of solar arrays (e.g. 1 signal for each group of

	solar arrays (e.g. 1 signal for each group of XX solar arrays within the solar-powered **Controllable PPM**). It is expected that solar arrays within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the solar-powered **Controllable PPM's** scheduled **Operational Date**. **Energy Storage Power Stations (ESPSs)** PPM1.7.1.3.5 The **Controllable PPM** consisting of **ESPSs** shall make the following signals available as specified in the relevant specifications and site-specific signal lists: a). **ESPS** available export capacity (+MWh) b). **ESPS** available import capacity (-MWh) Other **Controllable PPMs** (excluding wind, solar, and **ESPSs**) ~~PPM1.7.1.3.3~~	XX solar arrays within the solar-powered **Controllable PPM**). It is expected that solar arrays within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the solar-powered **Controllable PPM's** scheduled **Operational Date**. **Energy Storage Power Stations (ESPSs)** PPM1.7.1.3.5 The **Controllable PPM** consisting of **ESPSs** shall make the following signals available as specified in the relevant specifications and site-specific signal lists: a). **ESPS** available export capacity (+MWh) b). **ESPS** available import capacity (-MWh) Other **Controllable PPMs (**excluding wind, solar, and **ESPSs**) PPM1.7.1.3.6 **Controllable PPMs**, with a **MEC** in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs,** shall make the following signals

	PPM1.7.1.3.6 **Controllable PPMs**, with a **MEC** in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs,** shall make the following signals available as specified in the relevant specifications and site-specific signal lists: a) **Controllable PPM Availability** (0-100 % signal); b) Percentage of **Generation Unit** shutdown due to high resource conditions (0-100 %); c) Percentage of **Generation Unit** not generating due to low resource conditions (0-100 %). ~~PPM1.7.1.3.4~~ PPM1.7.1.3.7 For **Controllable PPMs**, with an **MEC** in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs,** where the **Generation Units** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the **Controllable PPM**, the above data set (ref. PPM 1.7.1.3.3) shall be provided for a number of groups of **Generation Units** (e.g. 1 signal for	available as specified in the relevant specifications and site-specific signal lists: d) **Controllable PPM Availability** (0-100 % signal); e) Percentage of **Generation Unit** shutdown due to high resource conditions (0-100 %); f) Percentage of **Generation Unit** not generating due to low resource conditions (0-100 %). PPM1.7.1.3.7 For **Controllable PPMs**, with an **MEC** in excess of 5 MW, with the exception of wind-powered and solar-powered **Controllable PPMs,** where the **Generation Units** are widely dispersed over a large geographical area and rather different weather patterns are expected for different sections of the **Controllable PPM**, the above data set (ref. PPM 1.7.1.3.3) shall be provided for a number of groups of **Generation Units** (e.g. 1 signal for each group of XX **Generation Units** within the **Controllable PPM**). It is expected that **Generation Units** within an individual group shall demonstrate a high degree of correlation in **Active**

	each group of XX **Generation Units** within the **Controllable PPM**). It is expected that **Generation Units** within an individual group shall demonstrate a high degree of correlation in **Active Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.** ~~PPM1.7.3.5 The The **Controllable PPM** consisting of **ESPSs** shall make the following signals available as specified in the relevant specifications and site-specific signal lists:~~ ~~a). **ESPS** available export capacity (+MWh)~~ ~~b). **ESPS** available import capacity (-MWh)~~	**Power** output at any given time. The actual signals required shall be specified by the **TSO** at least 120 **Business Days** prior to the **Controllable PPM's** scheduled **Operational Date.**