

20/03/2024

EirGrid GCRP Meeting

20 March 2024



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EirGrid GCRP Agenda

INTRODUCTION: 10 mins

- a. Welcome to Members.
- b. Member round-table introductions.
- c. Minutes and Actions from [Previous Meeting](#) (06 December 2023).

PROPOSALS: 50 mins

- a. MPID318 - Incorporation of Energy Storage Power Stations Phase 2.
- b. MPID320 - Non-priority dispatch of Renewables.
- c. MPID317 - Signals and indications required from Users (formerly Digital Signal Lists).
- d. MPID321 - Indicative Operations Schedule.
- e. MPID322 - RfG/Non-RfG, DCC/Non-DCC and HVDC/Non-HVDC Definitions.

DISCUSSIONS: 10 mins

- a. Housekeeping Modification Process.

UPDATES: 15 mins

- a. Grid Code Derogations.
- b. CRU and
- c. MPID293 and MPID299 DSU / TSO Working Group.

AOB. 5 mins



20/03/2024

MPID318

Incorporation of ESPSs Phase II



MPID318 ESPS Phase 2

As this modification contains changes to the SDC1 and SDC2 sections, it was discussed at the JGCRP.

We will now seek agreement on whether members are happy for it to be submitted to the CRU.



20/03/2024

MPID320

Non-priority Dispatch of Renewables



MPID320 Non-priority Dispatch of Renewables

As this modification contains changes to the SDC1 and SDC2 sections, it was discussed at the JGCRP.

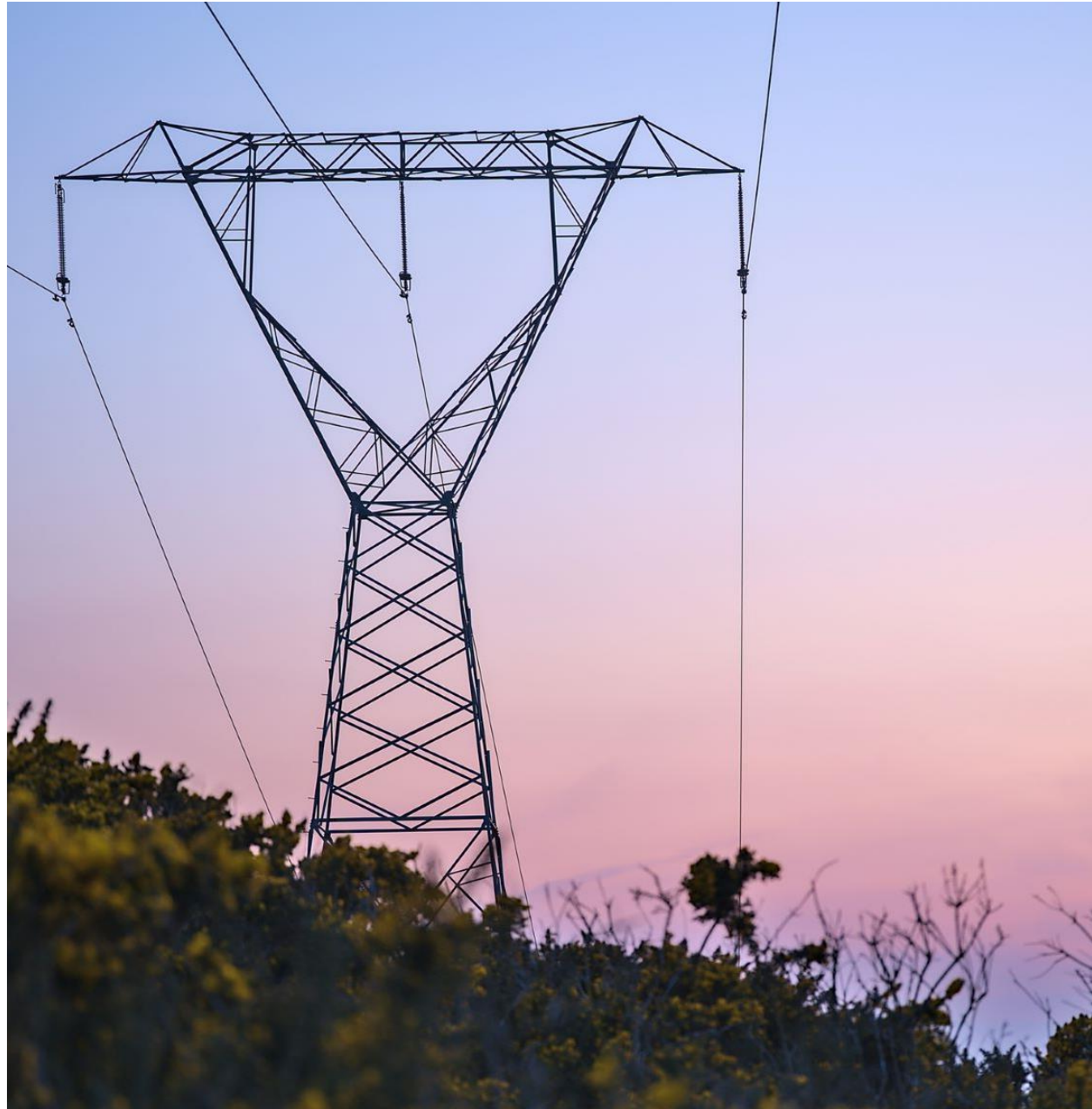
We will now seek agreement on whether members are happy for it to be submitted to the CRU.



20/03/2024

MPID317

Signals and indications
required from Users (formerly
Digital Signal Lists)



Signals and indications required from Users (formerly Digital Signal Lists)

- ❖ Traditionally, signals and indications required to be provided by Transmission System Users were in analogue format. However, digital interface has now come into use in some User locations, with the intention to roll out digital interface to more locations pending successful commissioning.
- ❖ Accordingly, this modification proposal suggests removing or modifying text in Grid Code clauses that specify how and where certain signals and indications are to be provided.
- ❖ Where the Grid Code is best placed to capture the requirements around what signals and indications are to be provided by Users, there are relevant functional specifications and site-specific signal lists that are best placed to capture the nuances regarding how and where such signals and indications are to be provided.



Signals and indications required from Users (formerly Digital Signal Lists)

Clause	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
CC.12.2	<p>Signals and indications required to be provided by Users will include but shall not be limited to the following:</p> <ul style="list-style-type: none"> (a) LV switchgear positions pertinent to the status of each Grid Connected Transformer through a set of two potential free auxiliary contacts (one contact normally open and one contact normally closed when circuit breaker is open) for each circuit breaker; (b) kV at transformer low Voltage terminals; and (c) a minimum of four sets of normally open potential free auxiliary contacts in each transformer LV bay for fault indication. Fault indication in each transformer LV bay. <p>[...]</p>	<p>Signals and indications required to be provided by Users will include but shall not be limited to the following:</p> <ul style="list-style-type: none"> (a) LV switchgear positions pertinent to the status of each Grid Connected Transformer; (b) kV at transformer low Voltage terminals; and (c) Fault indication in each transformer LV bay. <p>[...]</p>
CC.12.6	<p>Demand Side Unit Operators and Generator Aggregators shall provide the TSO the specification of the method of aggregation of SCADA from multiple sites. The minimum specifications shall be agreed with the TSO in advance and shall include:</p> <ul style="list-style-type: none"> (a) signals from Demand Side Unit Operators shall be relayed to the TSO, as specified in the relevant functional specifications and site-specific signal lists, Telecommunication Interface Cabinet which reflect the Demand Side Unit MW Response to an accuracy of within 1 MW of the actual Demand Side Unit MW Response within 15 seconds of change occurring to the Demand Side Unit MW Response; and <p>[...]</p>	<p>Demand Side Unit Operators and Generator Aggregators shall provide the TSO the specification of the method of aggregation of SCADA from multiple sites. The minimum specifications shall be agreed with the TSO in advance and shall include:</p> <ul style="list-style-type: none"> (a) signals from Demand Side Unit Operators shall be relayed to the TSO, as specified in the relevant functional specifications and site-specific signal lists, which reflect the Demand Side Unit MW Response to an accuracy of within 1 MW of the actual Demand Side Unit MW Response within 15 seconds of change occurring to the Demand Side Unit MW Response; and <p>[...]</p>



Signals and indications required from Users (formerly Digital Signal Lists)

Clause	Red Line Version Text	Green Line Version Text
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PPM1.7.1.1	<p>Signals List #1</p> <p>The Controllable PPM shall make the following signals available at the designated TSO Telecommunication Interface Cabinet for that Controllable PPM: to the TSO as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none">(a) Active Power output (MW) at the lower voltage side of the Grid Connected Transformer;(b) Reactive Power output/demand (+/-Mvar) at the lower voltage side of the Grid Connected Transformer;(c) Voltage (in kV) at the lower voltage side of the Grid Connected Transformer;(d) Available Active Power (MW) at the lower voltage side of the Grid Connected Transformer (including separate signals for export and import from Controllable PPMs consisting of ESPSs);(e) Grid Connected Transformer tap positions;(f)<ul style="list-style-type: none">i. Power Factor control mode status feedback (ON/OFF);ii. Power Factor set-point feedback (degrees)iii. Reactive Power control code status feedback (ON/OFF);iv. Reactive Power set-point feedback (Mvar);v. Voltage Regulation control mode status feedback (ON/OFF)vi. Voltage Regulation Set-point feedback (kV);(g) On/off status indications for all Reactive Power devices exceeding 5 Mvar¹;	<p>Signals List #1</p> <p>The Controllable PPM shall make the following signals available to the TSO as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none">(a) Active Power output (MW) at the lower voltage side of the Grid Connected Transformer;(b) Reactive Power output/demand (+/-Mvar) at the lower voltage side of the Grid Connected Transformer;(c) Voltage (in kV) at the lower voltage side of the Grid Connected Transformer;(d) Available Active Power (MW) at the lower voltage side of the Grid Connected Transformer (including separate signals for export and import from Controllable PPMs consisting of ESPSs);(e) Grid Connected Transformer tap positions;(f)<ul style="list-style-type: none">i. Power Factor control mode status feedback (ON/OFF);ii. Power Factor set-point feedback (degrees)iii. Reactive Power control code status feedback (ON/OFF);iv. Reactive Power set-point feedback (Mvar);v. Voltage Regulation control mode status feedback (ON/OFF)vi. Voltage Regulation Set-point feedback (kV);(g) On/off status indications for all Reactive Power devices exceeding 5 Mvar¹;(h) Circuit-breaker and disconnect position indication shall be required. These may include indications from circuit-breakers on individual
	<ul style="list-style-type: none">(h) Circuit-breaker and disconnect position indication shall be required. These may include indications from circuit-breakers on individual Generation Unit circuits. Signals from individual Generation Unit circuit-breakers shall not be required. The actual circuit-breaker and disconnect signals required shall be specified by the TSO at least 120 Business Days prior to the Controllable PPM's scheduled Operational Date;(i) A minimum of four sets of normally open potential free auxiliary contacts in each Grid Connected Transformer lower voltage bay for fault indications; Fault indication in each Grid Connected Transformer lower voltage bay; and(j) On/off status of TSO remote control enable switch, which disables the ability of the TSO to send commands to the Controllable PPM. <p>For the Controllable PPM's where the Connection Point is at the HV side of the Grid Connected Transformer, signals a), b) and c) above will also be required from the HV side of the Grid Connected Transformer.]</p>	<p>Generation Unit circuits. Signals from individual Generation Unit circuit-breakers shall not be required. The actual circuit-breaker and disconnect signals required shall be specified by the TSO at least 120 Business Days prior to the Controllable PPM's scheduled Operational Date;</p> <ul style="list-style-type: none">(i) Fault indication in each Grid Connected Transformer lower voltage bay; and(j) On/off status of TSO remote control enable switch, which disables the ability of the TSO to send commands to the Controllable PPM. <p>For the Controllable PPM's where the Connection Point is at the HV side of the Grid Connected Transformer, signals a), b) and c) above will also be required from the HV side of the Grid Connected Transformer.</p>



Signals and indications required from Users (formerly Digital Signal Lists)

Clause	Red Line Version Text	Green Line Version Text
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PPM1.7.1.2.1	<p>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 at the designated TSO Telecommunication Interface Cabinet for that Controllable PPM as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> (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. 	<p>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 functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> (e) Wind speed (at hub height or as agreed with the TSO) - measurand signal; (f) Wind direction (at hub height or as agreed with the TSO) - measurand signal; (g) Air temperature- measurand signal; (h) Air pressure- measurand signal.
PPM1.7.1.2.2.1	<p>Solar-powered Controllable PPMs 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 as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> (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. 	<p>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 functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> (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.



Signals and indications required from Users (formerly Digital Signal Lists)

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PPM1.7.1.2.3	<p>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, at the designated TSO Telecommunication Interface Cabinet for that Controllable PPM as agreed with the TSO and specified in the relevant functional specifications and site-specific signal lists.</p> <p>The actual signals required shall be specified by the TSO at least 120 Business Days prior to the Controllable PPM's scheduled Operational Date.</p>	<p>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 functional specifications and site-specific signal lists.</p> <p>The actual signals required shall be specified by the TSO at least 120 Business Days prior to the Controllable PPM's scheduled Operational Date.</p>
PPM1.7.1.3.1	<p>Wind-powered Controllable PPMs with a MEC in excess of 10 MW shall make the following signals available at the designated TSO Telecommunication Interface Cabinet for that Controllable PPM as specified in the relevant functional specifications and site-specific signal lists:</p> <p>a) 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 %).</p>	<p>Wind-powered Controllable PPMs with a MEC in excess of 10 MW shall make the following signals available specified in the relevant functional specifications and site-specific signal lists:</p> <p>a) 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 %).</p>



Signals and indications required from Users (formerly Digital Signal Lists)

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PPM1.7.1.3.2.1	Solar-powered Controllable PPMs with a MEC in excess of 10 MW shall make the following signals available at the designated ISO Telecommunication Interface Cabinet for that Controllable PPM as specified in the relevant functional specifications and site-specific signal lists: (a) Solar-powered Controllable PPM Availability (0-100 % signal).	Solar-powered Controllable PPMs with a MEC in excess of 10 MW shall make the following signals available specified in the relevant functional specifications and site-specific signal lists: (a) Solar-powered Controllable PPM Availability (0-100 % signal).
PPM1.7.1.3.3	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 at the designated ISO Telecommunication Interface Cabinet for that wind-powered Controllable PPM as specified in the relevant functional 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 %).	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 functional 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 %).
PPM1.7.1.4	Signals List #4 The Controllable PPM shall make the following signals available at the designated ISO Telecommunication Interface Cabinet for that Controllable PPM as specified in the relevant functional specifications and site-specific signal lists: a) Active Power Control Set-point feedback (MW); b) Active Power Control status feedback (ON/OFF).	Signals List #4 The Controllable PPM shall make the following signals available as specified in the relevant functional specifications and site-specific signal lists: c) Active Power Control Set-point feedback (MW); d) Active Power Control status feedback (ON/OFF).



Signals and indications required from Users (formerly Digital Signal Lists)

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PPM1.7.1.5	<p>Signals List #5</p> <p>The Controllable PPM shall make the following signals available at the designated TSO Telecommunication Interface Cabinet for that Controllable PPM as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> a) Frequency Response Curve (i.e. <i>Power-Frequency Response Curve 1 or 2 or Mode (1 to 5)</i>); b) Frequency Response System status feedback (ON/OFF); c) Frequency Response System Governor Droop feedback (%) (for a Controllable PPM consisting of ESPs, c) is not applicable). 	<p>Signals List #5</p> <p>The Controllable PPM shall make the following signals available as specified in the relevant functional specifications and site-specific signal lists:</p> <ul style="list-style-type: none"> a) Frequency Response Curve (i.e. <i>Power-Frequency Response Curve 1 or 2 or Mode (1 to 5)</i>); b) Frequency Response System status feedback (ON/OFF); c) Frequency Response System Governor Droop feedback (%) (for a Controllable PPM consisting of ESPs, c) is not applicable).
PPM1.7.1.6	<p>Time Delays and Data Quality</p> <p>Digital signal changes from the Controllable PPM shall be relayed to the TSO Telecommunication Interface Cabinet, as per the relevant functional specifications and site-specific signal lists, 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.</p>	<p>Time Delays and Data Quality</p> <p>Digital signal changes from the Controllable PPM shall be relayed to the TSO, as per the relevant functional specifications and site-specific signal lists, 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.</p>
PPM1.7.2.2	<p>Active Power Control</p> <p>An Active Power Control Set-point signal shall be sent by the TSO to the PPM Control System. This set-point shall define the maximum Active Power output permitted from the Controllable PPM. The PPM Control System shall be capable of receiving this signal and acting accordingly to achieve the desired change in Active Power output. This signal shall be in the form of a single analogue value and a strobe pulse to enable, as specified in the relevant functional specifications and site-specific signal lists.</p> <p>The Controllable PPM is required to make it possible for the TSO to remotely enable/ disable the Active Power Control function in the PPM Control System. The associated status indication is described in PPM1.7.1.4.</p>	<p>Active Power Control</p> <p>An Active Power Control Set-point signal shall be sent by the TSO to the PPM Control System. This set-point shall define the maximum Active Power output permitted from the Controllable PPM. The PPM Control System shall be capable of receiving this signal and acting accordingly to achieve the desired change in Active Power output. This signal shall be in the form as specified in the relevant functional specifications and site-specific signal lists.</p> <p>The Controllable PPM is required to make it possible for the TSO to remotely enable/ disable the Active Power Control function in the PPM Control System. The associated status indication is described in PPM1.7.1.4.</p>



Signals and indications required from Users (formerly Digital Signal Lists)

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PPM1.7.2.4	<p>Voltage Regulation</p> <p>The following signals shall allow the TSO to select Reactive Power control mode and send Reactive Power control set-points to the Voltage Regulation System. Set-point signals shall be in the form of a single analogue value and a strobe pulse to enable, as specified in the relevant functional specifications and site-specific signal lists.</p> <ul style="list-style-type: none"> • Power Factor control mode with Power Factor set-point (PF set-point) • Reactive Power control mode with Reactive Power set-point (Q set-point) • Automatic Voltage Regulation control mode with Voltage Regulation Set-point (kV set-point) 	<p>Voltage Regulation</p> <p>The following signals shall allow the TSO to select Reactive Power control mode and send Reactive Power control set-points to the Voltage Regulation System. Set-point signals shall be in the form as specified in the relevant functional specifications and site-specific signal lists.</p> <ul style="list-style-type: none"> • Power Factor control mode with Power Factor set-point (PF set-point) • Reactive Power control mode with Reactive Power set-point (Q set-point) • Automatic Voltage Regulation control mode with Voltage Regulation Set-point (kV set-point)
PPM1.7.2.6.1	Digital output commands from the TSO Telecommunication Interface Cabinet shall be relayed to the Controllable PPM equipment within 1 second. Set-point output signals shall be relayed within 5 seconds and with an error of 0.5% or less.	Digital output commands from the TSO shall be relayed to the Controllable PPM equipment within 1 second. Set-point output signals shall be relayed within 5 seconds and with an error of 0.5% or less.
PPM1.7.4.1	The location of the TSO Telecommunication Interface Cabinet telecommunication interface equipment shall be agreed between the TSO and the Controllable PPM at least 120 Business Days prior to the Controllable PPM's scheduled Operational Date early in the design stage post connection offer acceptance . A standard interface for signals will be made available to the Controllable PPM by the TSO.	The location of the TSO telecommunication interface equipment shall be agreed between the TSO and the Controllable PPM early in the design stage post connection offer acceptance. A standard interface for signals will be made available to the Controllable PPM by the TSO.
Definition: TSO Telecommunication Interface Cabinet	The physical interface point between the TSO's telecommunications equipment and the Controllable PPM's control equipment.	



Thank you!

Questions?



20/03/2024

MPID321

Indicative Operations Schedule



MPID321 - Indicative Operating Schedule Reference

The definition of “Indicative Operations Schedule” refers to an incorrect clause.

This definition currently refers to “SDC1.4.8.1” which does not exist within the EirGrid Grid Code. The reference should be to section “SDC1.4.7.1”.

A schedule prepared by the **TSO** in conjunction with the **Other TSO** pursuant to ~~SDC1.4.8.1~~
SDC1.4.7.1.

SDC1.4.7 Compilation of Indicative Operations Schedules

SDC1.4.7.1 **Indicative Operations Schedules** will be compiled by the **TSO** in conjunction with the **Other TSO** as further provided in this SDC1.4.7 as a statement of which **CDGUs** and/or **Controllable PPM** and/or transfers across any **Interconnector** and/or **Demand Side Units** and/or **Pumped Storage Plant Demand**, **Energy Storage Power Station Demand** and/or **Aggregated Generating Units** and equivalent units in *Northern Ireland* may be



MPID321 - Indicative Operating Schedule Reference

Thank you!

Questions?



20/03/2024

MPID322

RfG/Non-RfG, DCC/Non-DCC
and HVDC/Non-HVDC
Definitions



Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units

- ❖ On 25th September 2020, EirGrid and ESB Networks jointly published the guideline document EirGrid and ESB Networks' Guideline for the Application to Existing Users of Commission Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators (RfG), Commission Regulation (EU) 2016/1388 establishing a Network Code on Demand Connection (DCC) and Commission Regulation (EU) 2016/1447 establishing a network code on requirements for grid connection of high voltage direct current systems and direct current connected power park modules (HVDC).
- ❖ The purpose of this guideline document was to “detail criteria which will be used by EirGrid and ESB Networks in relation to modernisation, refurbishment or equipment replacement for existing users which would require a user to comply in part or fully with the requirements of...” the EU Connection Network Codes (CNCs) RfG, DCC and HVDC.



Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units

❖ The CNCs:

- apply to new Users who connect to the Transmission and Distribution Systems on or after the respective effective dates of each network code.
- Do not retrospectively apply to existing users of those Systems unless the user's plant is modified to such an extent that its connection agreement must be substantially revised in accordance with the procedure detailed in the each of the CNCs.
- Are not prescriptive in terms of:
 - What constitutes the “modernisation” or “refurbishment” of an existing User's plant;
 - If the replacement of faulted plant, such a circuit breaker, requires the User to comply with the requirements of the relevant CNCs;
 - If the CNCs will only be applied where the equipment is being replaced as part of a scheduled or planned project.



Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units

- ❖ As part of the CNCs implementation, the TSO and DSO agreed to only apply the CNCs to an existing User when a modernisation of an existing User's plant is characterised by a change in the capabilities of that User's plant, and that only the requirements of the CNCs which are relevant to the capabilities of the User's plant that are changing shall be applicable.
- ❖ This is essentially a proportional application of the CNCs based on the works being carried out by the User with an aim to ensuring that the CNCs are applied to all Users in a fair and equitable manner.
- ❖ This modification proposal suggests updating specific Grid Code definitions and clauses to better reflect the criteria detailed in EirGrid and ESB Networks' guideline document, aligning them with current custom and practice.



Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units



Definition	Red Line Version Text	Green Line Version Text
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CC.15.16	<p>The Interconnector Owner shall demonstrate to the TSO that it has complied with Interconnector requirements by successfully completing the Operational Notification Procedure for connection of each Interconnector.</p> <p>Where HVDC Units are comprised of:</p> <ul style="list-style-type: none"> a) embedded Interconnectors within one control area and connected to the Transmission System, and/or b) embedded Interconnectors within one control area and connected to the Distribution System when a cross-border impact is demonstrated to the TSO, <p>the relevant TSO shall consider the long-term development of the network. In this assessment, the above units shall not be subject to this clause if one or more of the following conditions apply:</p> <ul style="list-style-type: none"> 1) the Interconnector has at least one Interconnector Converter Station owned by the TSO; 2) the Interconnector is owned by an entity which exercises control over the TSO; or 3) the Interconnector is owned by an entity directly or indirectly controlled by an entity which also exercises control over the TSO. 	<p>The Interconnector Owner shall demonstrate to the TSO that it has complied with Interconnector requirements by successfully completing the Operational Notification Procedure for connection of each Interconnector.</p> <p>Where HVDC Units are comprised of:</p> <ul style="list-style-type: none"> a) embedded Interconnectors within one control area and connected to the Transmission System, and/or b) embedded Interconnectors within one control area and connected to the Distribution System when a cross-border impact is demonstrated to the TSO, <p>the relevant TSO shall consider the long-term development of the network. In this assessment, the above units shall not be subject to this clause if one or more of the following conditions apply:</p> <ul style="list-style-type: none"> 1) the Interconnector has at least one Interconnector Converter Station owned by the TSO; 2) the Interconnector is owned by an entity which exercises control over the TSO; or 3) the Interconnector is owned by an entity directly or indirectly controlled by an entity which also exercises control over the TSO.

Definition	Red Line Version Text	Green Line Version Text
	<i>Deleted text in strike-through-red font and new text highlighted in blue font</i>	
CC.15.19.6	<p>If the TSO does not grant an extension of the period of validity of the LON in accordance with CC.15.19.4 or if it refuses to allow the operation of the Interconnector once the LON is no longer valid in accordance with CC.15.19.5, the Interconnector Owner may refer the issue for decision to the CRU within six months after the notification of the decision of the TSO.</p> <p>Where HVDC Units are comprised of:</p> <ul style="list-style-type: none"> a) embedded Interconnectors within one control area and connected to the Transmission System, and/or b) embedded Interconnectors within one control area and connected to the Distribution System when a cross-border impact is demonstrated to the TSO, <p>the relevant TSO shall consider the long-term development of the network. In this assessment, the above units shall not be subject to this clause if one or more of the following conditions apply:</p> <ul style="list-style-type: none"> 1) the Interconnector has at least one Interconnector Converter Station owned by the TSO; 2) the Interconnector is owned by an entity which exercises control over the TSO; or 3) the Interconnector is owned by an entity directly or indirectly controlled by an entity which also exercises control over the TSO. 	<p>If the TSO does not grant an extension of the period of validity of the LON in accordance with CC.15.19.4 or if it refuses to allow the operation of the Interconnector once the LON is no longer valid in accordance with CC.15.19.5, the Interconnector Owner may refer the issue for decision to the CRU within six months after the notification of the decision of the TSO.</p> <p>Where HVDC Units are comprised of:</p> <ul style="list-style-type: none"> a) embedded Interconnectors within one control area and connected to the Transmission System, and/or b) embedded Interconnectors within one control area and connected to the Distribution System when a cross-border impact is demonstrated to the TSO, <p>the relevant TSO shall consider the long-term development of the network. In this assessment, the above units shall not be subject to this clause if one or more of the following conditions apply:</p> <ul style="list-style-type: none"> 1) the Interconnector has at least one Interconnector Converter Station owned by the TSO; 2) the Interconnector is owned by an entity which exercises control over the TSO; or 3) the Interconnector is owned by an entity directly or indirectly controlled by an entity which also exercises control over the TSO.

Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units



Definition	Red Line Version Text <i>Deleted text in strike-through-red font and new text highlighted in blue font</i>	Green Line Version Text
HVDC Unit	<p>An Interconnector or DC-connected PPM that is not a Non-HVDC Unit, with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a) Connected to the Network after the 15th September 2018; or b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 15th September 2018; or c) Is <u>not</u> a Non-HVDC Unit. <p><i>In addition, HVDC Units, which are comprised of:</i></p> <ul style="list-style-type: none"> a) embedded Interconnectors within one control area and connected to the Transmission System, and/or b) embedded Interconnectors within one control area and connected to the Distribution System when a cross-border impact is demonstrated to the TSO. The relevant TSO shall consider the long-term development of the network in this assessment <p><i>shall not be subject to Grid Code clauses CC.15.16 to CC.15.19.6, if one or more of the following conditions apply:</i></p> <ul style="list-style-type: none"> 1) the Interconnector has at least one Interconnector Converter Station owned by the TSO; 2) the Interconnector is owned by an entity which exercises control over the TSO; or 3) the Interconnector is owned by an entity directly or indirectly controlled by an entity which also exercises control over the TSO. 	<p>An Interconnector or DC-connected PPM with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a) Connected to the Network after the 15th September 2018; or b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 15th September 2018; or c) Is <u>not</u> a Non-HVDC Unit.

Definition	Red Line Version Text <i>Deleted text in strike-through-red font and new text highlighted in blue font</i>	Green Line Version Text
Non-HVDC Unit	<p>An Interconnector or DC-connected PPM with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a) Connected to the Network on or before the 15th September 2018; or b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 15th September 2018 and provides evidence of same, as acknowledged by the TSO, on or before 15th of March 2019. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased. <p>A Non-HVDC Unit that under goes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and had concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 15th September 2018, will be deemed a HVDC Unit, may have some or all of the relevant HVDC requirements applied to the Plant and/or Apparatus being modified. Where all HVDC requirements are to be applied, the Interconnector or DC-connected PPM will be considered a HVDC Unit.</p>	<p>An Interconnector or DC-connected PPM with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a) Connected to the Network on or before the 15th September 2018; or b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 15th September 2018 and provides evidence of same, as acknowledged by the TSO, on or before 15th of March 2019. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased. <p>A Non-HVDC Unit that under goes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and had concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 15th September 2018 may have some or all of the relevant HVDC requirements applied to the Plant and/or Apparatus being modified. Where all HVDC requirements are to be applied, the Interconnector or DC-connected PPM will be considered a HVDC Unit.</p>

Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units



Definition	Red Line Version Text <i>Deleted text in strike-through-red font and new text highlighted in blue font</i>	Green Line Version Text
RfG Generation Unit	<p>A Generation Unit that is not a Non-RfG Generation Unit with a signed Connection Agreement:</p> <p>a) Connected to the Network after the 30th November 2018; or</p> <p>b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 30th November 2018; or</p> <p>c) Is <u>not</u> one of the exceptions to the applicability of the RfG Generation Unit requirements and is <u>not</u> a Generation Unit as follows:</p> <p>(i) Installed to provide back-up power and operate in parallel with the Network for less than five minutes per calendar month while the system is in normal system state; or</p> <p>(ii) No permanent Connection Point and is used by the TSO to temporarily provide power when normal system capacity is partly or completely unavailable; or</p> <p>(iii) Energy Storage Units except for Pumped Storage Plant; or</p> <p>d) Is <u>not</u> a Non-RfG Generation Unit.</p>	<p>A Generation Unit with a signed Connection Agreement:</p> <p>a) Connected to the Network after the 30th November 2018; or</p> <p>b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 30th November 2018; or</p> <p>c) Is <u>not</u> one of the exceptions to the applicability of the RfG Generation Unit requirements and is <u>not</u> a Generation Unit as follows:</p> <p>(i) Installed to provide back-up power and operate in parallel with the Network for less than five minutes per calendar month while the system is in normal system state; or</p> <p>(ii) No permanent Connection Point and is used by the TSO to temporarily provide power when normal system capacity is partly or completely unavailable; or</p> <p>(iii) Energy Storage Units except for Pumped Storage Plant.</p> <p>d) Is <u>not</u> a Non-RfG Generation Unit.</p>



Definition	Red Line Version Text <i>Deleted text in strike-through-red font and new text highlighted in blue font</i>	Green Line Version Text
Non-RfG Generation Unit	<p>A Generation Unit with a signed Connection Agreement:</p> <p>a) Connected to the Network on or before the 30th November 2018; or</p> <p>b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 30th November 2018 and provides evidence of same, as acknowledged by the TSO, on or before the 31st May 2019. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased; or</p> <p>c) Is one of the exceptions to the applicability of the RfG Generation Unit requirements and is a Generation Unit as follows:</p> <p>(i) Installed to provide back-up power and operate in parallel with the Network for less than five minutes per calendar month while the system is in normal system state; or</p> <p>(ii) No permanent Connection Point and is used by the TSO to temporarily provide power when normal system capacity is partly or completely unavailable; or</p> <p>(iii) Energy Storage Units except for Pumped Storage Plant.</p> <p>A Non-RfG Generation Unit that undergoes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and had concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 30th November 2018, will be deemed an RfG Generation Unit may have some or all of the relevant RfG requirements applied to the Plant and/or Apparatus being modified, unless the Plant and/or Apparatus being modified is one of the exceptions listed in c) above. Where all RfG requirements are to be applied, the Generation Unit will be considered an RfG Generation Unit.</p>	<p>A Generation Unit with a signed Connection Agreement:</p> <p>a) Connected to the Network on or before the 30th November 2018; or</p> <p>b) Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 30th November 2018 and provides evidence of same, as acknowledged by the TSO, on or before the 31st May 2019. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased; or</p> <p>c) Is one of the exceptions to the applicability of the RfG Generation Unit requirements and is a Generation Unit as follows:</p> <p>(i) Installed to provide back-up power and operate in parallel with the Network for less than five minutes per calendar month while the system is in normal system state; or</p> <p>(ii) No permanent Connection Point and is used by the TSO to temporarily provide power when normal system capacity is partly or completely unavailable; or</p> <p>(iii) Energy Storage Units except for Pumped Storage Plant.</p> <p>A Non-RfG Generation Unit that undergoes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and had concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 30th November 2018, may have some or all of the relevant RfG requirements applied to the Plant and/or Apparatus being modified, unless the Plant and/or Apparatus being modified is one of the exceptions listed in c) above. Where all RfG requirements are to be applied, the Generation Unit will be considered an RfG Generation Unit.</p>

Update of definitions and relevant clauses for RfG/Non-RfG, HVDC/Non-HVDC and DCC/Non-DCC Units



Definition	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
DCC Unit	<p>A Demand Facility, Closed Distribution System or Distribution System that is not a Non-DCC Unit, with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a. Connected to the Network after the 7th September 2019; or b. Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 7th September 2019; or c. Is <u>not</u> an exception to the applicability of the DCC Unit requirements and is <u>not</u> a Non-DCC Unit such as a Pumped Storage Unit that has both generating and pumping operation mode. A Pumped Storage Unit which only operates as Pumped Storage Plant Demand, and does not meet Non-DCC Unit criteria, is classified as a DCC Unit. 	<p>A Demand Facility, Closed Distribution System or Distribution System with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a. Connected to the Network after the 7th September 2019; or b. Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus after the 7th September 2019; or c. Is <u>not</u> an exception to the applicability of the DCC Unit requirements and is <u>not</u> a Non-DCC Unit such as a Pumped Storage Unit that has both generating and pumping operation mode. A Pumped Storage Unit which only operates as Pumped Storage Plant Demand, and does not meet Non-DCC Unit criteria, is classified as a DCC Unit.

Definition	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
Non-DCC Unit	<p>A Demand Facility, Closed Distribution System or Distribution System with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a. Connected to the Network on or before the 7th September 2019; or b. Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 7th September 2019 and provides evidence of same, as acknowledged by the TSO, on or before the 7th March 2020. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased; or c. Is an exception to the applicability of the DCC Unit requirements and is a Non-DCC Unit such as a Pumped Storage Unit that has both generating and pumping operation mode. <p>An existing Demand Facility, Closed Distribution System or Distribution System that undergoes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and has concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 7th September 2019, will be deemed a DCC Unit may have some or all of the relevant DCC requirements applied to the Plant and/or Apparatus being modified, unless the Plant and/or Apparatus being modified is one of the exceptions listed referenced in c) above. Where all DCC requirements are to be applied, the Demand Facility, Closed Distribution System or Distribution will be considered a DCC Unit.</p> <p>If an existing Demand Facility undergoes modernisation, refurbishment or replacement of equipment, part or all of the DCC requirements will apply to the appropriate item of Plant or Apparatus.</p> <p>If an existing Closed Distribution System or Distribution System undergoes modernisation, refurbishment or replacement of equipment, part or all of the DCC requirements will apply to the appropriate item of Plant or Apparatus at the Facility.</p>	<p>A Demand Facility, Closed Distribution System or Distribution System with a signed Connection Agreement:</p> <ul style="list-style-type: none"> a. Connected to the Network on or before the 7th September 2019; or b. Whose owner has concluded a final and binding contract for the purchase of the main Plant and/or Apparatus on or before the 7th September 2019 and provides evidence of same, as acknowledged by the TSO, on or before the 7th March 2020. Such evidence shall at least contain the contract title, its date of signature and date of entry into force, and the specifications of the main Plant and/or Apparatus to be constructed, assembled, or purchased; or c. Is an exception to the applicability of the DCC Unit requirements and is a Non-DCC Unit such as a Pumped Storage Unit that has both generating and pumping operation mode. <p>An existing Demand Facility, Closed Distribution System or Distribution System that undergoes modernisation, refurbishment or replacement of equipment which drives a modification to its Connection Agreement, and has concluded a final and binding contract for the purchase of the Plant and/or Apparatus being modified after the 7th September 2019, may have some or all of the relevant DCC requirements applied to the Plant and/or Apparatus being modified, unless the Plant and/or Apparatus being modified is one of the exceptions referenced in c) above. Where all DCC requirements are to be applied, the Demand Facility, Closed Distribution System or Distribution will be considered a DCC Unit.</p>

Thank you!

Questions?



20/03/2024

Discussion

Housekeeping Modification Process



Background

- ❖ The Grid Code needs to be adaptable and responsive - it is a living document that is constantly evolving, and so requires consistent maintenance in the form of housekeeping modifications.
- ❖ A Grid Code housekeeping modification is a modification that:
 - Does not add or remove a requirement from any user of the Grid Code;
 - Does not make a material change or impact to the existing compliance of any user under the Grid Code;
 - Aims to ensure that the Grid Code is as accessible as possible, and that the form of each clause is well-structured and conveys the correct meaning.
- ❖ As housekeeping of the Grid Code is an ongoing process, EirGrid, as TSO, is proposing a change to how housekeeping modifications are reviewed and approved to support the ongoing maintenance of the Grid Code.



Housekeeping vs other Grid Code Modifications

Considered a housekeeping modification	<u>Not</u> considered a housekeeping modification
Bolding and capitalising defined terms Unbolding and uncapitalising undefined terms	Changes to the definitions of defined terms and their use cases
Changes to the format, grammar, syntax, etc. of clauses and definitions for clarity and accuracy which would not change a user's requirement(s) or compliance under the Grid Code	Changes to the wording of clauses or definitions for clarity and accuracy which would change a user's requirement(s) or compliance under the Grid Code
Replacing undefined terms with defined terms where it would not change a user's requirement(s) or compliance under the Grid Code	Replacing undefined terms with defined terms where it would change a user's requirement(s) or compliance under the Grid Code
Correction of numbering of sections or clauses	Addition of new sections/clauses/definitions to the Grid Code
Correction of references or broken hyperlinks	
Correction of typographical errors	
Changes to formatting or structure to improve user experience	
Removal of stranded definitions	



Examples of Housekeeping Modifications

Defined terms under the Grid Code should appear bolded and capitalised

- ❖ Terms that have a specific definition under the Grid Code appear bolded and capitalised within the code. This indicates to users that this term has a specific definition in the context of the Grid Code, and that this definition can be found in the definitions table of the Grid Code.
- ❖ Without bolding and capitalising these terms, the user could misinterpret the meaning of this clause. The meaning of the clause remains the same but is better communicated with this modification in place.
- ❖ No change to user’s requirements or compliance under the Grid Code



Clause/ Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
PPM1.5.3.12 (f)	(f) Controllable PPMs capable of acting as a load Load shall be capable of disconnecting Disconnecting their load Load. This requirement does not extend to auxiliary Auxiliary supplies Supplies.	(f) Controllable PPMs capable of acting as a Load shall be capable of Disconnecting their Load . This requirement does not extend to Auxiliary Supplies.

Examples of Housekeeping Modifications

Terms that are not defined under the Grid Code should not appear bolded, and may not appear capitalised

- ❖ Terms that are not specifically defined under the Grid Code should not appear bolded within the text. This is so users are aware that the relevant dictionary definition applies and so can interpret the clause correctly. Such terms may also need to be uncapitalised.

Such modifications provides clarity without making any change to users’ requirements under the Grid Code or making a material impact on an existing user’s compliance.

Clause/ Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.8.11.2	At the conclusion of the Operational Test , the Test Proposer shall be responsible for preparing a written report on the Operational Test (the " Final Report Final Report ") which shall be available within three months of the conclusion of the Operational Test to the TSO, Operationally Affected Users and the CRU on request.	At the conclusion of the Operational Test , the Test Proposer shall be responsible for preparing a written report on the Operational Test (the "Final Report") which shall be available within three months of the conclusion of the Operational Test to the TSO, Operationally Affected Users and the CRU on request.



Examples of Housekeeping Modifications

Terms that are not defined under the Grid Code should not appear bolded, and may not appear capitalised

Clause	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.8.4.2	<p>Operational Tests required by the TSO from time to time shall include, but shall not be limited to the following:</p> <ul style="list-style-type: none">(i) Tests involving the controlled application of Frequency and/or Voltage variations aimed at gathering information on Power System behaviour;(ii) Power System Restoration Tests tests;(iii) Testing of standing procedures for System Emergency Conditions and Alert conditions(iv) Testing or monitoring of Power Quality under various Power System conditions and Dispatch configurations.	<p>Operational Tests required by the TSO from time to time shall include, but shall not be limited to the following:</p> <ul style="list-style-type: none">(i) Tests involving the controlled application of Frequency and/or Voltage variations aimed at gathering information on Power System behaviour;(ii) Power System Restoration tests;(iii) Testing of standing procedures for System Emergency Conditions and Alert conditions(iv) Testing or monitoring of Power Quality under various Power System conditions and Dispatch configurations.



Examples of Housekeeping Modifications

Replacing undefined terms with defined terms

- ❖ Where an undefined term is used in the Grid Code but there is an existing defined term that is best used in that case, the undefined term should be replaced with the appropriate defined term.
- ❖ This would only be considered a housekeeping modification if changing to the defined term does not impact a user’s requirements or compliance.



Clause/Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.10.7.6.1	A Black Start Station shall fail a Black Start Test if the Black Start Test shows that it does not have a Black Start Capability (i.e. if the relevant Generating Unit fails to be Synchronised to the System within two hours of the Auxiliary Gas Turbine (s) Unit(s) or Auxiliary Diesel Engine(s) being required to start).	A Black Start Station shall fail a Black Start Test if the Black Start Test shows that it does not have a Black Start Capability (i.e. if the relevant Generating Unit fails to be Synchronised to the System within two hours of the Auxiliary Gas Turbine Unit(s) or Auxiliary Diesel Engine(s) being required to start).



Examples of Housekeeping Modifications

Correction of grammar

Clause/Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.8.4.1	The TSO as operator of the Transmission System shall, in accordance with Prudent Utility Practice, needs to carry out Operational Tests in order to maintain and develop operational procedures, to train staff, and to acquire information in respect of Power System behaviour under abnormal System conditions. The TSO will endeavour to limit the frequency of occurrence, scope, extent of effects and type of Operational Tests to those that are required by Prudent Utility Practice.	The TSO as operator of the Transmission System shall, in accordance with Prudent Utility Practice, carry out Operational Tests in order to maintain and develop operational procedures, to train staff, and to acquire information in respect of Power System behaviour under abnormal System conditions. The TSO will endeavour to limit the frequency of occurrence, scope, extent of effects and type of Operational Tests to those that are required by Prudent Utility Practice.



Correction of typos

Clause/Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.11.5.5	Adequate means of isolation / disconnection (from all sources of Energy) shall be provided at the interface between the Transmission System and the User System to allow work to be carried out safely at, or either side of this point, by the TSO and each User.	Adequate means of isolation / disconnection (from all sources of Energy) shall be provided at the interface between the Transmission System and the User System to allow work to be carried out safely at, or either side of this point, by the TSO and each User.



Examples of Housekeeping Modifications

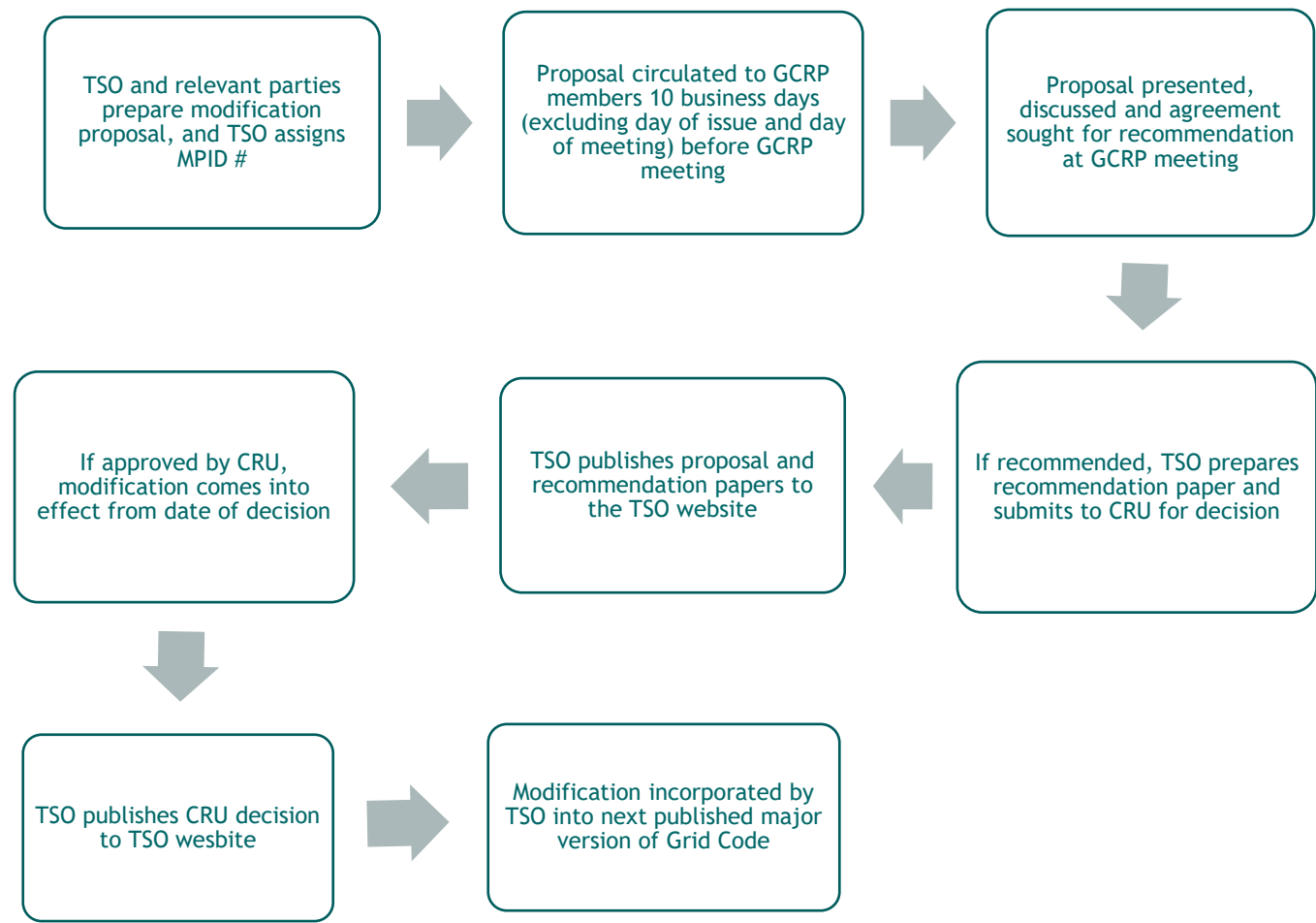
Correction of numbering of sections/clauses/pages etc.

Clause/Section	Red Line Version Text <i>Deleted text in strike-through red font and new text highlighted in blue font</i>	Green Line Version Text
OC.5 (formerly OC.4)	<p>OC.45 Demand Control</p> <p>OC.5.1 Introduction</p> <p>OC.5.1.1 OC5 is concerned with the provisions to be made by the DSO and, by the TSO in relation to Demand Customers, to permit the reduction of Demand in the event of available Generating Plant and transfers</p>	<p>OC.5 Demand Control</p> <p>OC.5.1 Introduction</p> <p>OC.5.1.1 OC5 is concerned with the provisions to be made by the DSO and, by the TSO in relation to Demand Customers, to permit the reduction of Demand in the event of available Generating Plant and transfers</p>



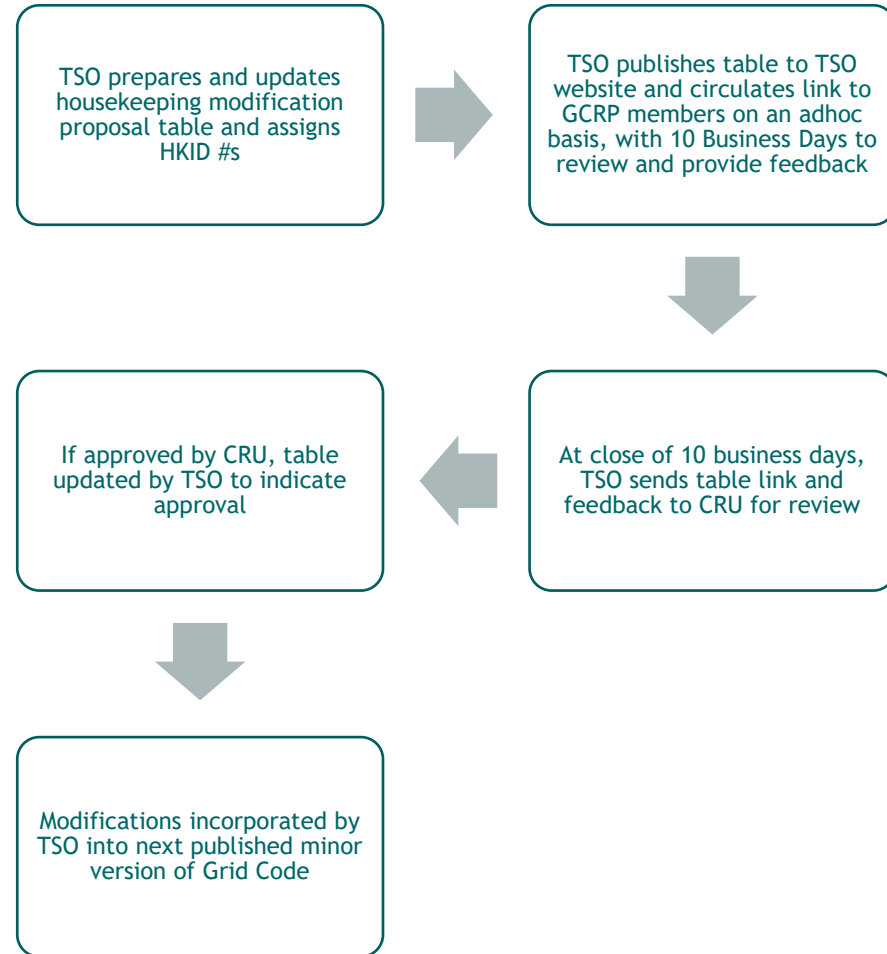
Correction of references and hyperlinks

Current governance process for Grid Code modifications



Current applies to all proposed Grid Code modifications irrespective of whether they fall under the definition of a housekeeping modification, or whether they are a significant modification such as the implementation of a new user type into the Grid Code.

Proposed governance process for housekeeping modifications



Next Steps

- ❖ The proposed governance process for housekeeping modifications will be presented to the EirGrid GCRP on 20th March 2024 as a discussion item.
- ❖ If members are amenable to the proposed process, EirGrid will submit a modification proposal for the next GCRP meeting that incorporates proposed changes to relevant areas of the Grid Code and the GCRP Constitution that refer to the governance of Grid Code modifications. This would allow for the proposed process for housekeeping modifications to be implemented.
- ❖ If approved for recommendation by the GCRP, the modification proposal will be submitted to the CRU for decision. If approved by the CRU, the new proposed process will come into effect from the date specified in the decision.



Thank you!

Questions?



20/03/2024

Derogations

Update



Current Derogations Stats for GCRP March 2024

Under TSO Assessment	186
Approved by CRU	487
Approved Still Valid	46
With CRU	151

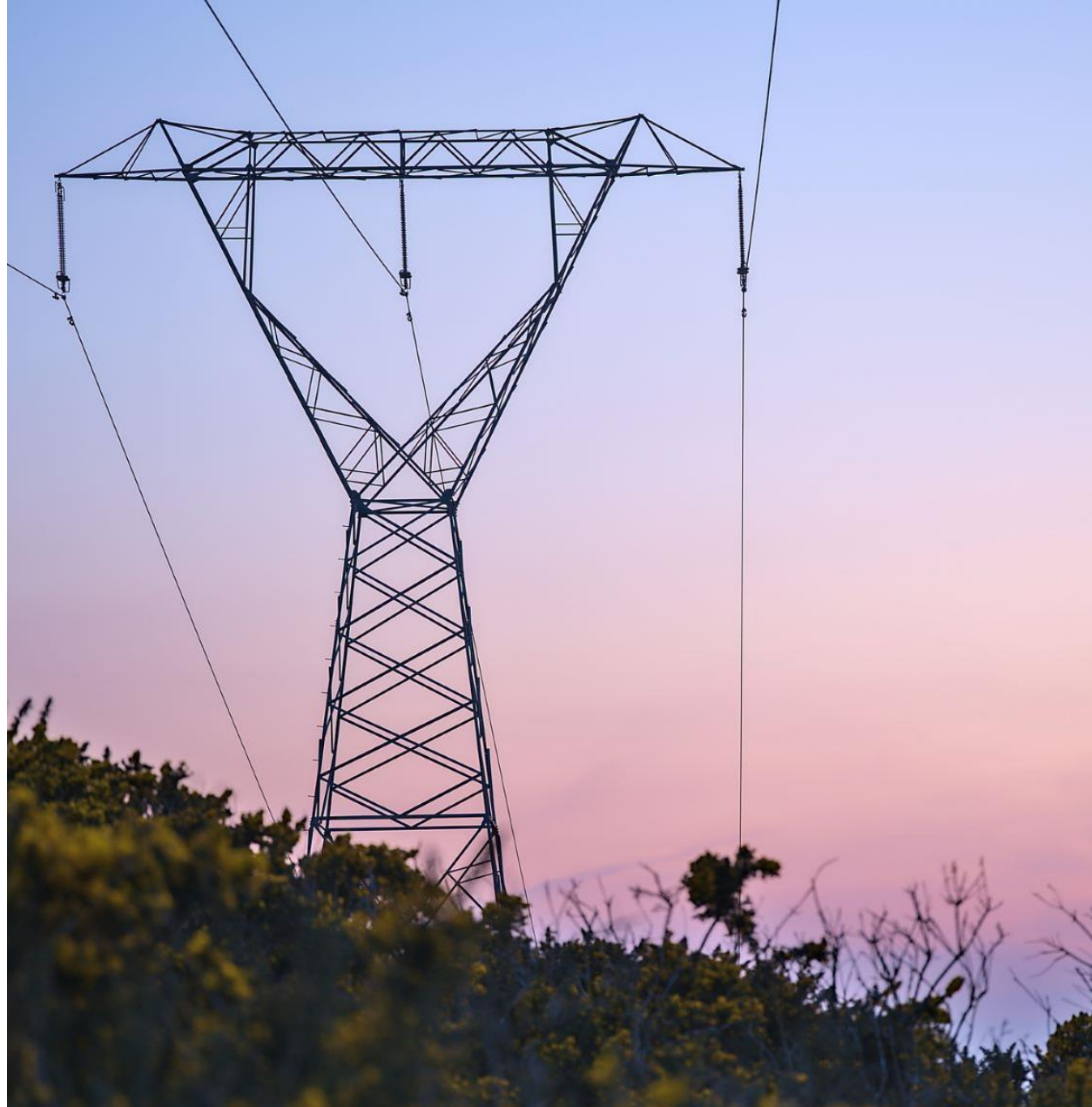
<u>Under TSO Assessment</u>	
Type	
Windfarms	75
Conventional	48
TEG	10
BESS	26
DSU	22
Categories	
Active Power/Frequency	71
Reactive Power	32
FRT	31
RoCoF	2

<u>Since December 2023</u>	
Submitted	17
Forwarded to CRU	9
Approved by CRU	10

20/03/2024

Modifications

Update



Modification Update

Modification	#
Decisions made by CRU since 06 December 2023	4
Recommendation papers with CRU for decision	2
Proposals being put forward at GCRP 20 March 2024 (today)	5

- MPID 293 and MPID 299 are both under review by a TSO/DSO Working Group, formed under the direction of the CRU.
- MPID 312 Removal of IOP with CRU for decision.
- All information on modifications can be found on the EirGrid website [here](#).
- Grid Code version 13 issued 30/01/2024.

20/03/2024

Update

MPID293 and MPID299 DSU TSO
Working Group.



MPID293 and MPID299 DSU TSO Working Group

- As per the CRU decision, a working group has been established to review MPID293 (removal of Maximum Down Time) and MPID299 (reduction of DSU de-minimis to 1 MW).
- The working group consists of:
 - 4 DSU members (2 from DRAI and 2 from FERA);
 - 4 TSO members
- The working group has met 4 times since being established and initially focused on MPID293.
- The working group has proposed a new user type to address MPID293, which would provide a subset of System Services only, e.g. POR, SOR, TOR1 and TOR2 only.
- EirGrid are now gathering internal feedback on this proposal.
- At the most recent meeting, DRAI and FERA proposed withdrawing MPID299 to allow the working group to focus on MPID293.



20/03/2024

CRU Update



AOB

Meeting Minutes will be issued by COB 05 April 2024