## Grid Code Modification Recommendation Form



## **Title of Recommended Proposal:**

MPID 312 Removal of Indicative Outage Programme requirements, Capacity Shortfall Warning Definition and System Capacity Shortfall Warning Definition

| Date:   | 01/08/2023                    |  |
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| Recommended at GCRP Meeting No.: The modification was presented at the Ireland GCRP Meeting dated 28 June 2023. |                               |  |
| Grid Code Version:  | 12                            |  |
| Grid Code Section(s) Impacted by Recommended Proposal:  | OC.2.4, Definitions, Acronyms |  |

## The Reason for the Recommended Modification:

One of the main recommendations of this modification is to remove the references to the Indicative Outage Programme from the Grid Code. The reason being, there is no requirement for Generators to submit outage information beyond Year 3 as there is no useful analysis that the TSO can carry out. Also, due to the increasing levels of variable renewables on the Transmission System, it is increasingly difficult for Generators to predict their run hours. As a result, the TSO cannot carry out useful analysis beyond year 3, rendering the Indicative Outage Programme unnecessary.

This modification proposes removing the requirement for Generators, Generator Aggregators and Demand Side Unit Operators to submit estimates of the Forced Outage Probabilities for their units. Custom and practice has been that Generators, Generator Aggregators and Demand Side Unit Operators are not required to submit this information. The TSO makes estimates for units based on historical data. We are proposing to only carry out security analysis for Year 1. Given the volume of change to outage requests we see between years and even within year, we trust there is little to no benefit in completing security analysis beyond Year 1. We will continue to publish the Provisional Outage Programme (POP) for Years 2 and 3 with the requested dates from Generators.

Regarding clause OC.2.4.7, these are only the initial requested outages prior to any discussions. As such, we believe that it is only necessary or appropriate to inform the relevant Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators. This is covered by OC.2.4.8.

| Regarding OC.2.4.9, the TSO would not like to be prevented from commencing this phase of the process until after the end of June. We are also proposing the removal of the requirement to issue a System Capacity Shortfall Warning. Given the volume of variable renewables, interconnection and energy storage as well as the wide range of forced outage rates on the system, this is extremely difficult to predict with any level of accuracy a year in advance. There are other more appropriate channels and engagements on capacity adequacy. |
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| Regarding OC.2.4.10, for transparency purposes the Generation Outage Programme should be published for all market participants to see and not just Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators whose units have outages scheduled within the outage programme.   |
| We are also proposing removing the Capacity Shortfall Warning and System Capacity Shortfall Warning definitions from the Glossary as the definitions are not used within the text of the Grid Code itself.  |
| History of Progression through GCRPs, Working Group and/or Consultation:  |
| On the 28 June 2023 this modification proposal was presented to the EirGrid GCRP members.   |
| Summary Note of any Objections to the Recommended Change from GCRP Members or Consultation Responses:   |
| No objections were raised by the GCRP members.  |
| Outcome of any GCRP Meeting Actions Relating to the Recommended Modification:   |
| No actions were raised at the meeting.  |

## A Table Outlining the Proposed Changes:

| Section  | Red Line Version Text  Deleted text in strike-through red font and new text highlighted in blue font   | Green Line Version Text   |
|----------|--|---|
| OC.2.2   | (b) the procedures by which the Indicative, Provisional and Committed Outage Programmes are reviewed by the TSO, in consultation with Generators, Interconnector Operators, Generator Aggregators or Demand Side Unit Operators;   | (b) the procedures by which the Provisional and Committed Outage Programmes are reviewed by the TSO, in consultation with Generators, Interconnector Operators, Generator Aggregators or Demand Side Unit Operators;  |
| OC.2.4.3 | By the end of March in year 0, Generators, Generator Aggregators and Demand Side Unit Operators shall submit to the TSO, for each Generation Unit, Aggregated Generating Unit or Demand Side Unit, details of Outages and estimates of the Forced Outage Probabilities for inclusion in:  (a) the Committed Outage Programme (COP) for year 1. Other than in the first year after the planning process has commenced, this will be based on the previous year's Provisional Outage Programme for year 2, which period through the passage of time has now become year 1, and any changes may only reflect the Generator's, Interconnector Operator's, Generator Aggregator's, and Demand Side Unit Operator's reasonable response to changed circumstances;  (b) the Provisional Outage Programme (POP) for years 2 and 3. | By the end of March in year 0, Generators, Generator Aggregators and Demand Side Unit Operators shall submit to the TSO, for each Generation Unit, Aggregated Generating Unit or Demand Side Unit, details of Outages for inclusion in:  (a) the Committed Outage Programme (COP) for year 1. Other than in the first year after the planning process has commenced, this will be based on the previous year's Provisional Outage Programme for year 2, which period through the passage of time has now become year 1, and any changes may only reflect the Generator's, Interconnector Operator's, Generator Aggregator's, and Demand Side Unit Operator's reasonable response to changed circumstances;  (b) the Provisional Outage Programme (POP) for years 2 and 3. |
|          | In the case of Aggregated Generating Units, and Demand Side Units which consist of Aggregated Demand Sites, the Generator Aggregator or Demand Side Unit Operator shall provide the aggregated Outages, and upon request from the TSO the Generator Aggregator or Demand Side Unit Operator shall provide the Outage for each individual site, in a reasonable time period.  Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators shall specify with regard to each of their Generation Units, Interconnector, Aggregated Generating Units or  | In the case of Aggregated Generating Units, and Demand Side Units which consist of Aggregated Demand Sites, the Generator Aggregator or Demand Side Unit Operator shall provide the aggregated Outages, and upon request from the TSO the Generator Aggregator or Demand Side Unit Operator shall provide the Outage for each individual site, in a reasonable time period.  Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators shall specify with regard to each of their Generation Units, Interconnector, Aggregated Generating Units or   |

|          | Demand Side Units, the start date and time and the duration of each Outage.  | Demand Side Units, the start date and time and the duration of each Outage.   |
|----------|--|---|
| OC.2.4.5 | <ul> <li>When submitting proposed Outages for inclusion in the COP and, POP and IOP, Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators shall, unless they reasonably substantiate that an Outage is inflexible, specify: <ul> <li>(a) an alternative preferred window, or alternative preferred windows, of opportunity within each year for any Outage;</li> <li>(b) the minimum Outage duration which would be acceptable, if less than the scheduled Outage duration;</li> <li>(c) situations where the paralleling of Outages of two or more of its Generation Units, Interconnectors, Aggregated Generating Units, Demand Side Units or Aggregated Demand Side Units may be required, desirable, undesirable or not possible;</li> <li>(d) a priority order associated with the various Outages scheduled by the Generator, Interconnectors, Generator Aggregators and Demand Side Unit Operator;</li> <li>(e) any Outages where it is particularly desirable that they should take place within the year scheduled; or</li> <li>(f) any Outage where its timing is dependent on Generation Unit run hours, equivalent run hours or starts.</li> </ul> </li> </ul> | <ul> <li>When submitting proposed Outages for inclusion in the COP and POP, Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators shall, unless they reasonably substantiate that an Outage is inflexible, specify: <ul> <li>(a) an alternative preferred window, or alternative preferred windows, of opportunity within each year for any Outage;</li> <li>(b) the minimum Outage duration which would be acceptable, if less than the scheduled Outage duration;</li> <li>(c) situations where the paralleling of Outages of two or more of its Generation Units, Interconnectors, Aggregated Generating Units, Demand Side Units or Aggregated Demand Side Units may be required, desirable, undesirable or not possible;</li> <li>(d) a priority order associated with the various Outages scheduled by the Generator, Interconnectors, Generator Aggregators and Demand Side Unit Operator;</li> <li>(e) any Outages where it is particularly desirable that they should take place within the year scheduled; or</li> <li>(f) any Outage where its timing is dependent on Generation Unit run hours, equivalent run hours or starts.</li> </ul> </li> </ul> |
| OC.2.4.7 | Between March and June of year 0, the TSO shall carry out a security analysis of years 1 to 7 in light of proposed Outages and other relevant matters including:  (a) Outages of other Generation Units, Aggregated Generating Units and Demand Side Units;  (b) Outages of Generation Units, Aggregated Generating Units and Demand Side Units on the Other Transmission System;  (c) Interconnectors and Inter-jurisdictional Tie Line; and  (d) Transmission outages, Load growth and fuel security.  In the event that a proposed Generator's, Interconnector Operator's and Generator Aggregator's, Demand Side Unit Operator's Outage has a detrimental effect on Capacity Adequacy or system security either in the Transmission System or in the Other Transmission  | Between March and June of year 0, the TSO shall carry out a security analysis of year 1 in light of proposed Outages and other relevant matters including:  (a) Outages of other Generation Units, Aggregated Generating Units and Demand Side Units;  (b) Outages of Generation Units, Aggregated Generating Units and Demand Side Units on the Other Transmission System;  (c) Interconnectors and Inter-jurisdictional Tie Line; and  (d) Transmission outages, Load growth and fuel security.   |

|   | System, the relevant TSO will highlight the shortfall to all Generators, Interconnector Operators, Generator Aggregators, Demand Side Unit Operators and Suppliers.   |  |
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| OC.2.4.8  | Any concerns which the TSO may have with the Committed Generation Outage Programme for Year 1 must be notified to all relevant Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators by the end of June in year 0.   | Any concerns which the TSO may have with the Committed Outage Programme for Year 1 must be notified to all relevant Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators by the end of June in year 0.   |
| OC.2.4.9  | Prior to the Between the end of June in year 0 and the end of September in year 0 any concerns raised by the TSO shall be notified to relevant Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators. The TSO will enter into discussions with Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators to find a resolution. If by the end of September in year 0 no resolution has been agreed and in the opinion of the TSO there is a capacity shortfall in year 1, the TSOs will jointly issue a System Capacity Shortfall Warning. | Prior to the end of September in year 0 any concerns raised by the TSO shall be notified to relevant Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators. The TSO will enter into discussions with Generators, Interconnector Operators, Generator Aggregators and Demand Side Unit Operators to find a resolution. |
| OC.2.4.10   | The TSO shall publish the Generation Outage Programme for years 1 to 3 to the TSO's website issue to each Generator, Interconnector Operator, Generator Aggregator and Demand Side Unit Operator a Generation Outage Programme for that Generator, Interconnector, Generator Aggregator, Demand Side Unit Operator for years 1 to 3 by the last Business Day of September in year 0, including the COP for year 1.  | The TSO shall publish the Generation Outage Programme for years 1 to 3 to the TSO's website by the last Business Day of September in year 0.   |
| Definition –<br>Generation<br>Outage<br>Programme | Any or all of the Indicative Outage Programme, the Provisional Outage Programme and the Committed Outage Programme.   | Any or all of the Provisional Outage Programme and the Committed Outage Programme.   |
| Definition – Indicative Outage Programme          | A programme of Outages of the Generator's Generation Units or Interconnectors prepared by the TSO pursuant to OC2 and covering years 4-7 ahead.   |  |
| Definition –  Capacity  Shortfall  Warning        | A warning issued by the TSO that based on Availability and Demand forecasts there is insufficient Generation Capacity to meet the peak Demand.  |  |

| Definition –      | A warning issued by the TSO if, the Availability forecast and Demand |
|-------------------|--|
| <del>System</del> | forecast indicate that there will be a deficit in any week,          |
| <b>Capacity</b>   |  |
| Shortfall         |  |
| Warning           |  |
| Acronym –         | Indicative Outage Programme  |
| IOP               |  |
|                   |  |