## Proposed Uninstructed Imbalance Parameters For Calendar Year 2022

19/08/2021

This Uninstructed Imbalance Parameters Proposal, for calendar year 2022, is being submitted by EirGrid and SONI, in their roles as the Transmission System Operators (TSOs) for Ireland and Northern Ireland, to the Commission for Regulation of Utilities (CRU) & the Utility Regulator for Northern Ireland (UR), collectively known as the Regulatory Authorities (RAs).

In accordance with Trading and Settlement Code F.9.1.2:

- F.9.1.2 If requested by the Regulatory Authorities, the System Operators shall report to the Regulatory Authorities at least four months before the start of the Year, proposing values for the following parameters to be used in the calculation of Uninstructed Imbalances for that Year:
  - (a) The Engineering Tolerance (TOLENG) (where  $0 \le TOLENG \le 1$ );
  - (b) The MW Tolerance (TOLMWt) (where 0 ≤ TOLMWt) for each Trading Day, t;
  - (c) The System per Unit Regulation Factor (FUREG);
  - (d) The Discount for Over Generation Factor (FDOGuγ) for each Generator Unit, u, in each Imbalance Settlement Period, γ, such that 0 ≤ FDOGuγ ≤ 1; and
  - (e) The Premium for Under Generation Factor (FPUGu<sub>γ</sub>) for each Generator Unit, u, in each Imbalance Settlement Period,  $\gamma$ , such that  $0 \leq$  FPUGu<sub>γ</sub>  $\leq 1$ .

Uninstructed Imbalances apply in the Single Electricity Market (SEM) when the Actual Output of a Generator Unit deviates from its Dispatch Quantity in a Trading Period.

The proposed values for the parameters used in the calculation of Uninstructed Imbalances for the calendar year 2022 remain unchanged to those of 2021, and are set out in the table below:

Parameter	SEM Variable/Term	Proposed Value
Engineering Tolerance, TOLENG	TOLENG	0.01
MW Tolerance for each Trading Day, t, TOLMWt	TOLMW	1
System per Unit Regulation Factor, FUREG	FUREG	0.04
Discount for Over Generation Factor for each Generator Unit, u, except for Interconnector Error Units, FDOGuγ	FDOG	0.2
Discount for Over Generation Factor for each Interconnector Error Unit, u, FDOGuγ	FDOG	0
Premium for Under Generation Factor for each Generator Unit, u, except for Interconnector Error Units, FPUGuγ	FPUG	0.2
Premium for Under Generation Factor for each Interconnector Error Unit, u, FPUGuγ	FPUG	0

In proposing these parameters, the TSOs have considered their effectiveness by looking at historic uninstructed imbalances at a unit level, to get a view of:

• Any upward or downward trends in uninstructed imbalances as a whole

- Any units having large uninstructed imbalances with little actual running
- Any units who appear to show annual improvements in reducing uninstructed imbalances, in proportion to their dispatch quantities
- Conversely, any units which appear to be increasing uninstructed imbalances in proportion to their dispatch quantities

The more a unit is run, the higher the possibility is for uninstructed imbalances to occur, which was also taken into account when determining perfromance.

It is apparent that the vast majority of units appear to show consistent levels of minimal uninstructed imbalances in relation to their dispatch quantities. There is a reasonable subset of units, around 15% of units, who have demonstrated year on year reductions in uninstructed imbalances in proportion to their dispatch quantities. There is a smaller subset, only around 5%, who have shown year on year increases in uninstructed imbalances.

Annual Uninstructed Imbalances totals appear to be in a reasonable range, and current data for the 2021 calendar year seems to be following this.

On this basis, the TSOs believe that the current parameters will continue to be effective at providing adequate economic signals.