Approved 2023/2024 Generator Use of System Charges (GTUoS)

Accompanying Note

V2.0

6 September 2023

Contents

Revision	Date	Description
v1.0	29/08/2023	Approved 2023/34 GTUoS Charges – Accompanying Note
V2.0	06/09/2023	Table 1 Revenue Requirement Updated

1. Introduction

This document accompanies the Approved Generator Transmission Use of System (GTUoS) charges for both Ireland[1] and Northern Ireland[2] as calculated by the Transmission System Operators (TSOs) for the 2023/2024 tariff year and published on the EirGrid and SONI websites on 29 August 2023.

The approved charges are based upon the methodology as consulted on and approved by the Regulatory Authorities (RAs); the Commission for Regulation of Utilities (CRU) in Ireland and the Utility Regulator in Northern Ireland (UR).

The methodology used to calculate the 2023/2024 tariffs is the same as that used for the calculation of the 2022/2023 tariffs. The assumptions used in the GTUoS calculation are based on publicly available information on connected and contracted generation and associated transmission reinforcements. Interconnector flows and conventional generation fuel prices are based on the 2023/2024 Imperfections Revenue Requirement Forecast[3].

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[1] https://www.eirgridgroup.com/site-files/library/EirGrid/2324-Approved-GTUoS-Tariffs-for-Approval-IE-v1.0.pdf

[2] https://www.soni.ltd.uk/media/documents/2324-Approved-GTUoS-Tariffs-for-Approval-SONI-v1.0.pdf

[3] https://www.semcommittee.com/publications/sem-23-049-constraints-costs-imperfections-charges-202324-consultation-paper

2. Total Revenue Requirement and GTUoS

The revenue requirement is approved annually by the respective regulators in order to ensure recovery of costs associated with the operation, development and planning of the transmission network in a particular tariff year.

The 2023/24 GTUoS tariffs are based on a revenue requirement of €123,394,356. The overall revenue requirement for GTUoS has increased by 20.1% relative to the revenue requirement for 2022/2023 tariffs. The breakdown of the approved revenues for recovery in 2023/24 and 2022/23 are summarised in Table 1 below.

Allowed Revenue	2023/24	2022/23	% Change from 2022/23
IE	€96,080,756	€82,326,049	+16.7%
NI	£18,065,518	£17,395,150	+36.4%
	€27,313,600	€20,416,843[4]	+33.8%
All-Island	€123,394,356	€102,742,892	**+20.1%**

Table 1: Revenue Requirement

In terms of the Northern Ireland revenue, the TUoS reflected in the NI amount for 2023/2024 as set out above is as per the Utility Regulator G-TUoS Revenue Allocation Decision Paper.[5]

[4] The current exchange rate employed is €1=£0.869

[5] https://www.uregni.gov.uk/news-centre/g-tuos-revenue-allocation-decision-paper

3. Approved 2023/24 Tariffs

There is an on-going need to develop the electricity network on the island of Ireland to ensure security of supply now and into the future. There is an associated cost with this transmission investment which is levied on users of the transmission system via transmission use of system charges for demand and generator customers.

The regulatory approved methodology for GTUoS charging arrangements has been designed to link system usage with the transmission investment costs for different parts of the network. Each Generator’s TUoS charge should then be reflective of transmission investment costs linked to its own use of the system.

GTUoS is made up of a postage stamp and locational component. The postage stamp portion is intended to recover a minimum of 70% of the total GTUoS revenue and is applied evenly across all generators, while the locational element is intended to provide for recovery of a maximum of 30%.

The following factors that vary year on year have a major impact on the locational aspect of the tariffs:

- The Overall Revenue Requirement to be recovered via the GTUoS tariffs;
- Power flows (which depend on network configuration and dispatch);
- Levels of generation and the contribution of each generator to the direction of flows on each network reinforcement;
- The assets included in the cost file including the Planned Network development and associated costs; and
- Interconnector flows.

4. Specific Influencing Factors for 2023/2024 GTUoS Model

On average the 2023/2024 tariffs are higher than the 2022/2023 tariffs. A key factor influencing the majority of the tariff reductions is the increased revenue requirement. The increase is significantly greater in NI than Ireland, due to a change in base case flows on the North-South Interconnector.

There are some locational variances, which arise from power flow changes and how these flows are using the assets, which are included in the cost file, in the model.

As provided for in the methodology there is a 13 year window for inclusion of developments in the model, i.e. October 2016 until September 2029. Some of these changes have had a notable effect on the tariffs in certain areas.

There are four dispatch scenarios considered in the GTUoS model, consistent with the approved methodology:

1. Winter Peak demand, Merit Order dispatch, 0% Wind, 0% Solar
2. Summer Peak demand, Merit Order dispatch, 0% Wind, High Solar
3. Summer Peak demand, Merit Order dispatch, High Wind, High Solar
4. Summer Minimum demand, Merit Order dispatch, High Wind, 0% Solar

The methodology considers these four scenarios, assuming the Median Transmission Peak Demand for 2023, as published in the Generation Capacity Statement 2023-2032. There are five network file study years, covering from Winter 2024 until Summer 2029.

In terms of the 2023/2024 tariffs; The Ireland tariffs are predominantly influenced by the Summer Peak High Wind scenario, while the Northern Ireland tariffs are primarily influenced by the Winter Minimum High Wind scenario.

A significant influencing factor is the Turleenan-Woodland circuit. Since 2021/22, Northern Ireland nodes had been offsetting to flows on this circuit. However, largely due to changes in the pattern of flows on Moyle and EWIC, the base case direction of flow on this circuit for the Summer Minimum dispatch has reversed, meaning that NI nodes are once again contributing to flows on this expensive circuit. This results in a increase in GTUoS tariffs for Generators in NI. The circuit has been delayed by 6 months since last year, and as such has been assumed in the model for four out of the five years for the 2023/24 GTUoS tariff calculations (Summer only in Year 2), whereas it was included in the model for three out of the five years for the 2023/24 GTUoS tariff calculations.

GTUoS tariffs tend to be higher in regions which are remote from large demand centres, and in parts of the network which have a large amount of developments built or planned, namely in the North West and the South West of Ireland. GTUoS Tariffs tend to be lower around the East, the North-East of Ireland and Northern Ireland.

Garrow-Ballyvouskil uprates & Ballyvouskil transformers are no longer in the cost window. This has the effect of significantly reducing GTUoS tariffs at nodes in and around that area. Cunghill-Sligo 110 kV uprate is no longer in the cost window, offsetting the increase in revenue. Some other nodes in Donegal have small net increases if they were previously offsetting flows on this circuit.

All NI Nodes have increased from between 36% and 95%. This is due to a combination of reversal of base case flows on Turleenan-Woodland and the increase in required revenue.

Rosebank in NI has increased by 95%. Previously this was the lowest tariff on the system and was an outlier, it is still one of the lowest tariffs in NI.

5. Analysis of Tariffs

In this section we look at the overall trends of the approved GTUoS tariffs.

The maximum, minimum and overall range of tariffs is shown in Table 2 below. The postage stamp part of the tariff has increased (due to increase in revenue to be recovered).

	23/24 Tariffs €/kW/year	22/23 Tariffs €/kW/year
Postage stamp	€5.9233	€5.1848
Max tariff	€13.0759	€17.3760
Minimum tariff	€5.9233	€3.9219
Range	€7.1526	€13.4541

Table 2: Analysis of Tariffs

The change in the average tariff from last year's tariffs is shown in Table 3 below.

	23/24 €/kW/year	22/23 €/kW/year	% difference
All-Island average	€8.4619	€7.4069	14.2%
Ireland average	€8.5551	€8.0435	6.4%
Northern Ireland average	€8.1455	€5.1917	56.9%

Table 3: Average Tariffs

The change in the average tariff over the last 5 years is shown in Figure 1.

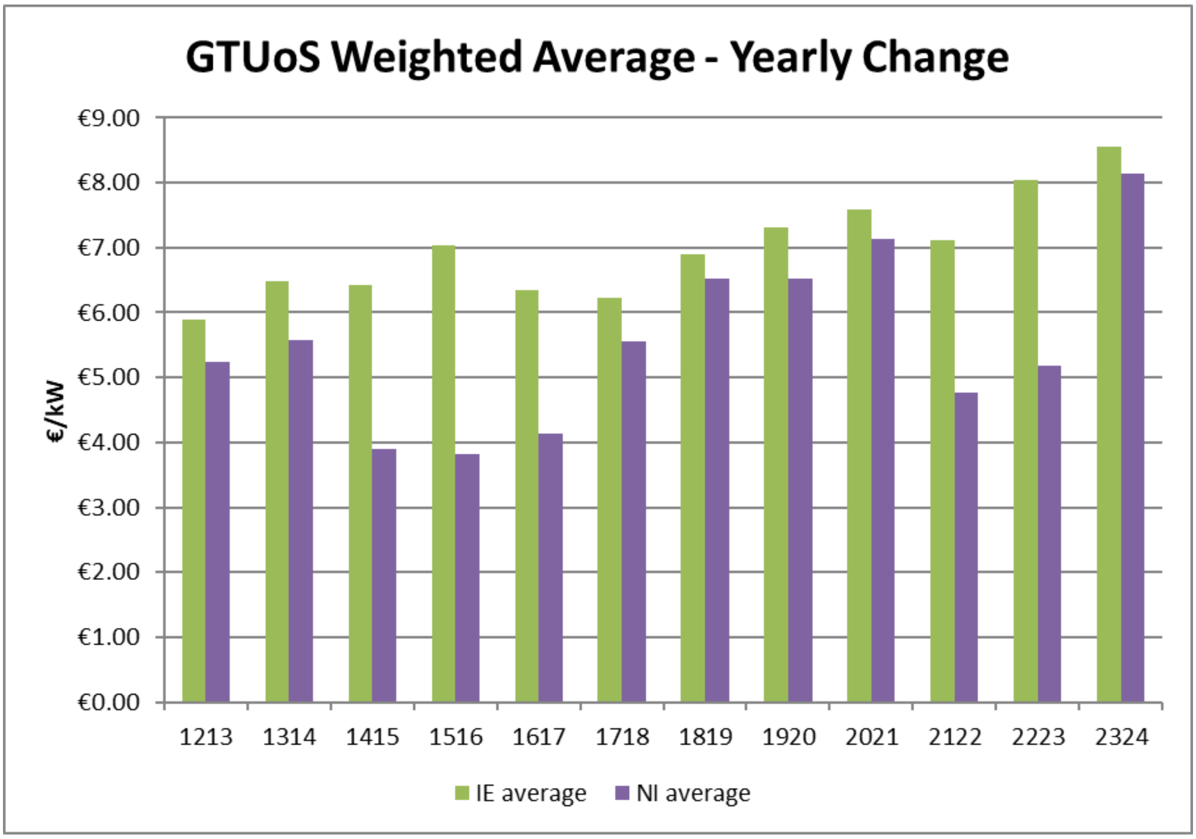

Figure 1: GTUoS Average - yearly change

6. Contact

If you have any queries relating to these Approved GTUoS Tariffs for 2023/2024 please E-mail: Tariffs@EirGrid.com or Tariffs@soni.ltd.uk.