Approved 2022/2023

Generator Transmission Use of System (GTUoS) Tariffs

V1.0

23 August 2022

Introduction

This document accompanies the Approved Generator Transmission Use of System (GTUoS) charges for both Northern Ireland[1] and Ireland[2] as calculated by the Transmission System Operators (TSOs) for the 2022/2023 tariff year and published on the SONI and EirGrid websites on 19 August 2022.

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

The methodology used to calculate the 2022/2023 tariffs is the same as that used for the calculation of the 2021/2022 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 2022/2023 Imperfections Revenue Requirement Forecast[3].

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 2022/23 GTUoS tariffs are based on a revenue requirement of €102,742,892. The overall revenue requirement for GTUoS has increased by 16.4% relative to the revenue requirement for 2021/2022 tariffs. However, the revenue requirement for 2021/22 was lower in comparison to previous years. The network costs in calendar year 2022 are an outlier and this is the main driver of the change from 2020/21 to 2021/22 and from 2021/22 to 2022/23. The depressed 2022 value is predominantly as a result of the reduced TAO allowance in that period. The breakdown of the approved revenues for recovery in 2022/23 and 2021/22 are summarised in Table 1 below.

[1] https://www.soni.ltd.uk/media/documents/2223-Approved-GTUoS-Tariffs-SONI-v2.pdf
[2] https://www.eirgridgroup.com/site-files/library/EirGrid/2223-Approved-GTUoS-Tariffs-EirGrid-v2.pdf
[3] https://www.semcommittee.com/publications/sem-22-038-imperfections-charge-202223-consultation-paper

Allowed Revenue	2022/23	2021/22	% Change from 2021/22
NI	£17,395,150	£15,095,580	+15.2%
	€20,416,843	€17,624,729[4]	+15.8%
IE	€82,326,049	€70,628,433	+16.6%
All-Island	€102,742,892	**€88,253,162**	**+16.4%**

Table 1: Revenue Requirement

In terms of the Northern Ireland revenue, the TUoS reflected in the NI amount for 2022/2023 as set out above is as per the Utility Regulator G-TUoS Revenue Allocation Decision Paper.[5]

Approved 2022/23 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;

[4] The current exchange rate employed is €1=£0.8520
[5] https://www.uregni.gov.uk/news-centre/g-tuos-revenue-allocation-decision-paper

- The assets included in the cost file including the Planned Network development and associated costs; and
- Interconnector flows.

Specific Influencing Factors for 2021/2022 GTUoS Model

On average the 2022/2023 tariffs are higher than the 2021/2022 tariffs. A key factor influencing the majority of the tariff reductions is the increased revenue requirement.

The 2022/2023 GTUoS tariffs show similar trends to the 2021/2022 tariffs, however, the increase is greater in Ireland than NI.

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 2015 until September 2028. 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 those used in planning studies:

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

The methodology considers these four scenarios, assuming the Median Transmission Peak Demand for 2022, as published in the Generation Capacity Statement 2022-2031. There are five network file study years, covering from Winter 2023 until Summer 2028.

In terms of the 2022/2023 tariffs, the Northern Ireland tariffs are primarily influenced by the Winter Peak Zero Wind scenario, while the Ireland tariffs are predominantly influenced by the Summer Minimum High Wind scenario.

A significant influencing factor is the Turleenan-Woodland circuit. In the past Northern Ireland nodes were contributing to flows on this circuit. From 2021/22 onwards, due to the easing of the Moyle Interconnector Export Constraint, the base case direction of flow on this circuit for the Summer Minimum dispatch has reversed, meaning that NI nodes are now offsetting flows on this expensive circuit. This results in a reduction in GTUoS tariffs for Generators in NI. The circuit has not been delayed this year, and as such has been assumed in the model for three out of the five years for the 2022/23 GTUoS tariff calculations, whereas it was included in the model for two out of the five years for the 2021/22 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.

Moy-Glenree 110 kV Circuit Uprate is new in the cost file this year, in addition to the previously planned Moy-Tonroe 110 kV new circuit and Flagford-Tonroe 110 kV circuit uprate. This reinforces the Transmission System in Mayo and has the effect of increasing GTUoS tariffs at nodes in and around that area. Cathaleens Fall-Srananagh 110 kV uprates are also no longer in the cost window, which also contributes to increased tariffs in this area as Moy nodes were offsetting flows on these circuits.

Some nodes in the south east have experienced increased costs due to the Crane-Wexford 110 kV uprate, as well as the effect of the reversal of base case flows on Great Island-Rosspile 110 kV circuit. The introduction of the new Dunstown-Woodland 380 kV cable circuit into the network and cost file has also influenced tariffs in several parts of the network, including the south east.

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).

	22/23 Tariffs €/kW/year	21/22 Tariffs €/kW/year
Postage stamp	€5.1848	€4.6150
Max tariff	€17.3760	€16.1305
Minimum tariff	€3.9219	€4.2871
Range	€13.4541	€11.8434

Table 2: Analysis of Tariffs

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

	22/23 €/kW/year	21/22 €/kW/year	% difference
All-Island average	€7.4069	€6.5929	+12.3%
Ireland average	€8.0435	€7.1155	+13.0%
Northern Ireland average	€5.1917	€4.7667	+8.9%

Table 3: Average Tariffs

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

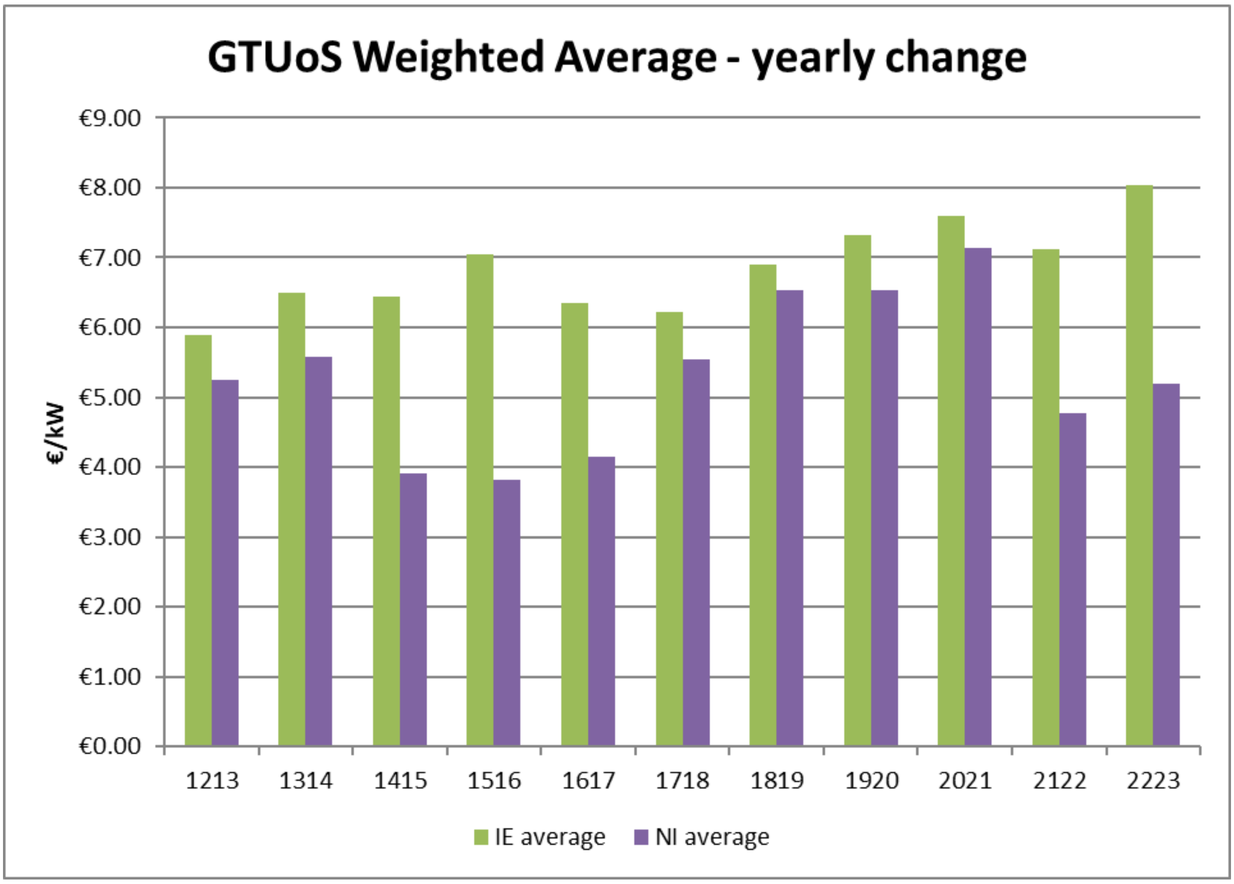

Figure 1: GTUoS Average - yearly change

Contact

If you have any queries relating to these Approved GTUoS tariffs for 2022/2023 please E-mail: Tariffs@soni.ltd.uk or Tariffs@EirGrid.com