**Ofgem's Open letter on strategic transmission charging reform**

**Overview**

On September 11, 2023, Ofgem published an open letter on strategic transmission charging reform.

Ofgem intends to engage with stakeholders on this at the next Charging Futures Forum, which will be held on **October 31, 2023**.

Deadline for response – **November 15, 2023.**

## 1. Background for reform

The overarching aim of the proposed reforms is to ensure that the TNUoS regime remains fit for purpose for the system of the future, factoring in some of the changes the transmission network will witness over the next decade.

To help implement changes, Ofgem has established the TNUoS Task Force, which focuses on the potential changes needed to improve the stability and predictability of the **existing** TNUoS framework, such as inputs to the transport model and assumptions about different users' impacts on the network. **The Task Force intends to implement changes between 2025 and 2026.**

**Key policy changes driving the need to consider broader transmission charging reform include:**

- Forthcoming UK Government decisions on the **Review of Electricity Market Arrangements (REMA).**

- **Increasing coordination and planning of infrastructure and accelerating its delivery** - the UK Government and Ofgem are reforming the approach to how new infrastructure is planned and built to enable the transition to net-zero. These reforms could affect the overall benefits of different approaches to TNUoS in the future.

- **Distribution Use of System (DUoS) charging Significant Code Review (SCR)** - DUoS charges recover the costs of operating and maintaining the distribution system. Ofgem has restarted the DUoS Significant Code Review (SCR) that had been paused in 2022. The SCR will consider whether changes to distribution charging arrangements would facilitate more efficient use and development of the distribution network, for the benefit of consumers.

- **Permitted Range for generator transmission charges** - there are several requirements for transmission charging that have been retained from EU legislation. Annual average transmission charges paid by generators (subject to certain exceptions) must be within the range of €0-2.50/MWh ('the Permitted Range'). Under the current framework, a generation adjustment is used to ensure average generation tariffs are within this range. This adjustment is funded through a corresponding increase to the demand residual charge, which is paid by consumers.

- The UK Government's proposed introduction of a **Strategy and Policy Statement** for energy policy (SPS) - approving the design of network charges is a core regulatory function for the Authority[1] and TNUoS charges may be integral to future system and network planning. Ofgem is trying to balance several competing principles. A number of these are reflected in the draft SPS for energy policy in GB: cost-reflectivity, enabling net-zero (which, if the Energy Bill comes into force, will include Ofgem's updated principal objective), fairness, predictability, and transparency.

## 2. Objectives of transmission charging

[1] gas and electricity markets authority (GEMA)

In theory, network charges could be designed to provide operational signals to influence how the network is used in real time. To be effective, these charges would have to be:

(i) cost-reflective, to enable participants to make efficient decisions about how to respond to them in real time, and
(ii) able to operate coherently with other markets and signals, including wholesale and balancing arrangements, distribution network charges and flexibility markets.

Ofgem's view is that there are more effective ways to send operational signals that are under consideration through the REMA work programme and that, in the long-term, signals sent through TNUoS should solely seek to influence the investment decisions of system users and not real time operation.

**3. Framework for transmission charge design**

Network charge design is a complex process. Charges that are recovered from a particular network user are the result of many distinct, interlinked design elements. The open letter provides a framework for understanding how reform options could be developed, through a series of sequential design decisions. It also provides a preview of the types of charge design decisions that may emerge from a reform process.

Ofgem's initial view is that use of system charges should aim to reflect the forecasted future planned network. Ofgem will also publish a **joint Connections Action Plan with the government**, seeking to improve the current connections process. As part of the longer-term work, it will consider whether changes to access and connection charges are required to better enable faster connections; this will be considered closely with future charging reform work, which seeks to improve the current connections process.

**4. Key questions for transmission charge design**

The questions in the open letter mainly concern the treatment of different network user types in the context of their changing characteristics and impacts on the network. They also cover alignment of investment signals at different voltages as well as the potential use of transmission charges to signal constraints. Specifically, focus is given to;

(i) Investment signals to generation
(ii) Investment signals to storage
(iii) Investment signals to demand
(iv) Investment signals at different connection voltages
(v) Transmission access rights and constraint costs

**5. Implications of different market and policy reforms for transmission charging**

Ofgem needs to develop transmission charging reforms in parallel with REMA and the evolving planning framework to ensure coherence and to minimise unintended implementation challenges, considering;

<u>Implications of Locational Wholesale Market Reform</u>

REMA is considering whether GB's national wholesale market should be changed in the future, for example, by transitioning to zonal or nodal pricing.

<u>Zonal pricing</u>

With zonal pricing, the electricity network is split into clearly defined geographical zones that typically reflect major recurring transmission network constraints, with wholesale electricity prices (£/MWh) calculated for individual zones. While the cost of managing physical constraints between zones is reflected in wholesale prices (typically leading to price variation between zones), constraints within the zones are not. Ofgem believes that TNUoS could be designed to deliver additional benefits in the form of intra-zonal locational price signals to incentivise capacity to locate more efficiently within zones, thereby potentially reducing network costs and intra-zonal constraint management costs (which could remain significant).

Nodal pricing

Nodal pricing uses a more granular spatial model of the transmission network than zonal pricing to increase the number of defined points, or 'nodes', on the network where individual wholesale prices (£/MWh) are formed. With nodal pricing, the physical constraints of the network (and transmission losses) are reflected in the market clearing process and these costs are fed through to the wholesale price so that the price at each node would reflect the locational value of energy at that node.

Implications of greater locational specificity in planning and government support schemes

Transmission charges may support efficiency by indicating the transmission network cost implications of different connection locations. However, many factors and policy levers influence the costs and benefits to investors of different locational options for energy assets.

Where policy interventions become highly prescriptive with respect to location, these may not support efficient outcomes in this way. This may be relevant for:

- **Future system planning approaches:** The scale of changes to system planning and the level of future policy intervention in generation and storage connections (if any) is still being worked through. For example, among the recommendations from the UK's Electricity Networks Commissioner, Nick Winser is an expanded role for the Future System Operator (FSO) to develop a Strategic Spatial Energy Plan, combining ongoing strategic network planning exercises with forecasts of generation and demand and aligning planning with National Policy Statements issued by the government and Crown Estate/Crown Estate Scotland decisions.

- **Future of government support schemes for low carbon generation:** Reforms are being considered which would introduce locational limitations in the Contracts for Difference (CfD) regime. The CfD is a key mechanism to drive investment decisions for renewables and therefore the introduction of a locational factor to the CfD allocation process could drive different investment outcomes than would be expected in a national CfD allocation round.

**6. Next steps**

• A further UK Government consultation on REMA, expected in late 2023, and
• A UK Government response to the Electricity Networks Commissioner, Nick Winser's recommendations, which is expected to take the form of an action plan published by the end of the year.