

To interested parties

Akshay Kaul

Director General, Infrastructure

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Email: tnuosreform@ofgem.gov.uk

Open Letter: Reforming network charging signals to align with the Government's decision on the future design of Great Britain's electricity system.

On 10 July 2025, the UK Government announced its decision to retain a single national Great Britain (GB)-wide wholesale electricity market and introduce reform to improve the efficiency of our future power system¹. This open letter sets out our initial thinking on how network charging signals could be reformed to improve alignment with spatial energy and network planning in a reformed national wholesale electricity market.

Background

On 11 September 2023, we published an Open Letter on the future role of transmission network charging². This letter set out our initial thinking on reforms needed to network charging, including Transmission Network Use of System (TNUoS) and associated connection charges. We highlighted the relevance in this context of the Government's Review of Electricity Market Arrangements ("REMA").

Since then, the energy policy landscape has changed significantly. Clean Power 2030 sets out a clear plan to accelerate the transition to a clean power system by 2030. Strategic energy and network planning at both national³ and regional⁴ levels will set out where energy and network assets should be located. These spatial and network plans will directly guide Ofgem's decisions on anticipatory network investment. A reformed connections regime will

¹ <https://www.gov.uk/government/publications/review-of-electricity-market-arrangements-rema-summer-update-2025/review-of-electricity-market-arrangements-rema-summer-update-2025-accessible-webpage>

² <https://www.ofgem.gov.uk/publications/open-letter-strategic-transmission-charging-reform>

³ Strategic Spatial Energy Plan and Centralised Strategic Network Plan respectively, due in 2026 and 2027.

⁴ Regional Energy Strategic Plans.

curate the connections queue, so it is aligned with spatial plans, starting with identifying projects that are both ready and needed for Clean Power 2030.

The Government has announced its decision to reform the national wholesale market for electricity in GB. An important element of this is to reform network and connection charges so that they guide demand and supply sources to locations where grid capacity is likely to be available at the time they are likely to connect. Taken with the steps above, this approach is intended to improve co-ordination of generation, storage, network and demand and reduce costs for consumers by reducing congestion.

Network charging signals can play an important role in guiding most efficient use of the upgraded grid capacity. This letter sets out our initial thinking on how network charges (including use of system and connection charges) could send an effective locational signal that drives generation investment in line with future spatial energy and network plans.

1. Reducing constraint costs by incentivising generation assets to locate based on planned network spare capacity

The Strategic Spatial Energy Plan (SSEP)⁵ and the linked Centralised Strategic Network Plan (CSNP)⁶ will map out a future optimised energy system that reflects the future expected state of the network and generation and demand patterns. A reformed TNUoS methodology could enable TNUoS to better reflect where generation and storage is needed according to strategic plans, so long-term constraint volumes are reduced. This contrasts with the situation today where charges for generation TNUoS vary year-on-year based on the current configuration of the network, demand and the generation mix.

The NESO will, in formulating the SSEP, propose optimised and costed pathways to decarbonise the energy system through to 2050. From these, the Secretary of State will make a selection. The selected SSEP pathway will be the key input to the CSNP, which will be Ofgem's basis for approving anticipatory investment in transmission network capacity.

We consider that charging methodologies could evolve to better reflect the expected state of the network and the energy system over time. Specifically, in the context of sending locational signals to guide investment, network charges could reflect the availability of grid capacity in the year in which generation customers want to connect to the grid. They could do so by encouraging assets to site in areas where spare capacity is expected so constraints volumes can be reduced.

⁵ <https://www.neso.energy/what-we-do/strategic-planning/strategic-spatial-energy-planning-ssep>

⁶ <https://www.neso.energy/what-we-do/strategic-planning/centralised-strategic-network-plan-csnp>

The SSEP by itself creates a blueprint. The extent to which generation projects actually locate according to it depends on the strength of locational signals that guide investment in these assets. Some of these locational signals can be price-based (such as Contracts for Differences (CfD) auctions or network charges); and some may not be price-based (such as planning and consenting rules, seabed leasing and connections policies).

Transmission network charges can be a powerful tool to guide investment to make best use of the network capacity being created through the spatial and network plans. The reformed connections process could complement network charges in basing connection offers 'on need' as defined by strategic plans such as the SSEP (currently aligned with the Clean Power 2030 Action Plan). Similarly, CfD and Capacity Market auctions could also incorporate locational factors such as minima and maxima for specific locations, should Government consider this desirable to improve alignment of investment with the SSEP.

Ultimately a balance will need to be struck between maximising competition (where price signals guide freer locational choices of generation assets across a large number of competing projects) and maximising co-ordination (where the location of generation assets needs to be closely aligned with grid capacity to avoid inefficient levels of grid congestion). We will work closely with Government and NESO to explore the best combination of locational levers that can achieve an appropriate balance between coordination and competition. This will help us to determine the appropriate weight between price and non-price levers in guiding locational investment decisions.

2. Improving investability by making network charges more predictable

We recognise that there are challenges with the existing TNUoS methodology, in particular that charges can be viewed as unpredictable and volatile. This can hinder investment decisions and increase risk and cost to consumers. We propose to make network charges more predictable, so they provide more effective signals to investors at the point of making investment decisions.

This could be achieved by fixing TNUoS at the point of investment for a defined period of time (potentially over the expected life of the investment). Alternatively, the locational signal could be sent through connection charges to achieve a similar effect (effectively by making them "deeper"). These charges are set at the point of investment and stay stable. Both approaches would enable investors in future projects to more easily factor-in the expected life-time cost of charges when making an investment decision.

In the next stages, there would be multiple design elements to consider with respect to the charging methodology. This includes, among others, the choice of signals between use of

system and connection charges, the timing of fixing charges, the duration of the fix, and how often charges are calculated as strategic plans are updated over time and the pipeline for investments evolves.

On 30 September 2024, we published an open letter calling on industry to develop a temporary cap and floor on TNUoS charges. National Energy System Operator (NESO) raised CMP444 on 21 October. After careful consideration, we published our minded to decision to reject the proposals on 10 July⁷. We do not consider that a cap and floor on network charges is an enduring solution to improving the predictability and effectiveness of network charges.

3. Encouraging more efficient siting of demand and storage projects

There could be benefits to sending effective locational signals to transmission-connected demand and storage projects, so that the expanded grid capacity over time is used as efficiently as possible. We will need to give some further thought to where and how we could encourage efficient siting for demand and storage projects, as (a) demand and storage are unlikely to be spatially planned in the same way as generation; and (b) their impact on the network is not the same as that of generation. Under some conditions, it may be desirable to create strong incentives for demand and storage projects to locate closer to generation to minimise the need for future grid upgrades. For instance, hydrogen electrolyzers, batteries and data centres could be rewarded for locating in Scotland (where they can soak up excess wind power) rather than in the south of England. This could be done for instance through a system of transmission or connection charge premia and discounts depending on connection location.

4. Transition to a reformed charging regime for existing assets

For existing assets where investment and siting decisions have already been made, and existing forecasts of network charges already factored into business cases, we would need to carefully consider the transition to a new network charging regime. For existing assets, we could explore options to phase reformed charges over several years, to allow market participants to transition to a new charging regime. Other options include fixing the charges so that existing assets face a certain level post the implementation of reformed charges. However, the nature of those and the duration of phasing or levels of fixing charges would depend on the estimated values of network charges under the new methodology and how these differ to existing forecasts amongst other things.

⁷ <https://www.ofgem.gov.uk/consultation/minded-decision-cmp444-introducing-cap-and-floor-wider-generation-tnuos-charges>

5. Plan for delivering change

The Government plans to publish a Reformed National Pricing Delivery Plan later this year, including a timeline with key activities for implementing reformed national pricing, with TNUoS reform to be delivered by 2029. Government is seeking to introduce primary legislation at the earliest opportunity to expedite implementation of these reforms.

Given the significance of the changes required to electricity network charging signals, Ofgem will lead on the design and delivery of reforms, while working closely with Government and NESO and drawing on the considerable expertise within the sector, to ensure reforms to network charges remain co-ordinated with wider reforms under the reformed national market.



Akshay Kaul
Director General, Infrastructure