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## Charging Futures Forum 31 October 2023 – Questions & Answers Publication

### Purpose

- The Charging Futures Forum brings together users of the electricity network to learn, contribute and shape the future of charging arrangements.
- The forum is chaired by Ofgem<sup>1</sup> and run by the National Grid Electricity System Operator (NGESO) as lead secretariat.
- NGESO hosted the previous Charging Futures Forum on 31 October 2023, where Ofgem provided updates and gathered initial views on several key topics, including strategic transmission charging reforms, near-term transmission charging reforms, and distribution charging reforms.
- The forum also provided attendees with the opportunity to ask questions of Ofgem. This publication addresses the questions submitted on Slido during the session.

## Transmission Network Use of System (TNUoS)

### TNUoS Reform Process & Priorities

***Q. The scope for change is huge and a bit dazzling: can Ofgem adopt a Change Management best practice and lay out what is NOT considered for change in charging?***

We will look to further assess the case for change following views received on our initial thinking at this Charging Futures Forum, as well as stakeholder submissions, particularly on the questions included in our ‘Open letter on strategic transmission charging reform’<sup>2</sup>. As part of our next steps, we propose to develop an analytical framework to support the identification and assessment of potential options for change for long-term transmission charging. We intend to publish an update later in 2024 setting out the scope of any proposed work and what we also believe should not be considered in the context of reform to transmission charging arrangements.

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<sup>1</sup> References to the “Authority”, “Ofgem”, “we” and “our” are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA

<sup>2</sup> [Open letter on strategic transmission charging reform \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/open-letters/open-letter-on-strategic-transmission-charging-reform)

***Q. Will the Task Force work supersede ongoing code mods that are trying to address volatility/predictability? E.g., expansion constant review, rolling 10yr gen tariffs***

The existing work of the workgroups reviewing proposed changes to address volatility and predictability in TNUoS charges through ongoing Connection and Use of System Code (CUSC) Modification Proposals should be concluded through the open governance process. We are confident that the workstreams within the TNUoS Task Force do not replace or in any way supersede the work of any ongoing modifications and can run in parallel. The expectation is that any progress via ongoing modifications is used to support Task Force members in considering further the issue of how to improve predictability in charging arrangements.

***Q. How do we make sure that the Task Force, strategic reforms, live mods all pull in the same direction and Ofgem making the decisions on trade-offs at the right time?***

Ofgem continues to support the government in its consideration of wider strategic reform by providing expert advice on options under consideration and the interdependencies between them, whilst recognising that, separately, work is currently underway through the Task Force which is considering near to medium-term improvements to charging arrangements, as well as any 'live' CUSC Modification Proposals relating to the TNUoS charging methodology currently proceeding through the standard open governance process. To facilitate effective decision making, we are keen to ensure that the cross-cutting issues of the broader trade-offs between the various pieces of work are captured and that there are no gaps between any current workstreams and those longer-term programmes of work. We will also continue to make any relevant decisions in accordance with the established framework, consistent with our Principal Objective and other statutory duties.

***Q. Is the Task Force empowered to make significant changes to the methodology - or is it just looking at issues like predictability?***

The key focus of the Task Force is to look at the issues of predictability and cost-reflectivity in current transmission charging arrangements, whilst considering the balance of, and inherent trade-off between these two elements. The Task Force is currently looking at improvements to today's methodology whilst keeping its core assumptions and modelling approach unchanged. This does not rule out significant or material changes to elements of TNUoS, for example, changes to the 'backgrounds' against which charges are calculated, or the approach to the demand weighted distributed reference node. The connection boundary (i.e., the point at which assets attract Connection Charges vs. TNUoS Charges) is not in scope, nor are market-related changes such as Locational Marginal Pricing (LMP).

***Q. Regional disparities like that are a political issue - not just technical. Where is democracy in this - has new RSP got a role?***

Over recent years the divergence between the locational charges for generators between the North of Great Britain (GB) and the South has been witnessed. We recognise there is a case for reviewing the methodology to ensure it is robust and better reflects the way the transmission system is planned, built and used, and are therefore considering this issue in the context of our work on near to medium-term improvements, but also in the context of supporting government on its longer-term wider reform programme of work.

***Q. Thank you for recognising Scottish impact by TNUoS projection. This is an urgent issue for investment decisions now. What can we do to engage with Ofgem now?***

We recognise there are challenges with the existing methodology, in particular, that charges can be unpredictable, and that this may hinder some investment decisions. We welcome any industry feedback in relation to this – you can get in touch with us directly via [tnuosreform@ofgem.gov.uk](mailto:tnuosreform@ofgem.gov.uk).

## **European Legislation - Generation Cap**

***Q. Is the role of the EU cap under review by DESNZ or Ofgem?***

Under the Retained EU Law (Revocation and Reform) Act 2023, the power to amend, repeal or replace assimilated law, including Commission Regulation (EU) No. 838/2010 (the ITC Regulation) sits with government. This power can be exercised until 2026. We are not aware of this power having been exercised in relation to the ITC Regulation to date. The role of the ITC Regulation and its implications for electricity network charging are a relevant factor in a number of areas of our and DESNZ's work, for example in relation to the Review of Electricity Market Arrangements (REMA).

***Q. Has Ofgem considered that retained EU law, in effect, prohibits LMP? Presumably this would have to be repealed, which may impact our interactions with the IEM.***

There are a number of requirements for transmission charging that have been retained from European Union (EU) legislation and now form part of assimilated law. As noted above, the power to retain, amend, repeal or replace retained EU Law sits with government, rather than Ofgem as the regulator.

***Q. Why is the cap adjustment a flat rate - the purpose of the cap is to smooth costs between generators across EU - so why not across UK?***

The requirement is for *annual average* transmission charges paid by generators (in aggregate) to fall within the range of €0-2.50/MWh (with certain exclusions). The application of a flat-rate adjustment to all charges was developed by industry and is well established. Our understanding is that it reflects that the compliance assessments are made considering all relevant generator charges and outputs,

and therefore, to maintain consistency with this approach, a flat rate adjustment is then applied (if required) rather than the application of multiple rates across multiple users and types.

***Q. 10-year TNUoS forecasts show costs to Scots generators increasing. LMP document shows Scots generator income reducing. Is this consistent with net zero?***

NGESO's ten-year projection shows the general trends that might materialise without any changes being made to the existing charging methodology – we're currently overseeing a reform programme across multiple code modification proposals, the Task Force, and the Review of Electricity Market Arrangements (REMA) related charging work, all of which means that the 10-year view is subject to significant change. As we take decisions on these matters, as well as related charging decisions, we will do so in accordance with our principal objective to protect the interests of current and future consumers, which includes their interest in the Secretary of State's compliance with net zero targets, and our other statutory objectives.

## **TNUoS Charges Forecasting & Unpredictability**

***Q. The projection is being used as a forecast because there are no other options. Is the intent for a 10-year forecast to appear or are there too many unknowns?***

The NGESO projection of the 2029/30 – 2033/34 TNUoS Tariffs, along with the already published 5-year view, provides industry with a view of tariffs for the next 10 years. It has been provided on a one-off basis, with its purpose being to illustrate the future trend of TNUoS tariffs for this period, if the methodology remains unchanged, whilst also recognising the uncertainties during this period as well as current constraints in terms of availability of suitable data etc. NGESO has been open with industry about the significant unknowns it has in respect of specific elements, for example nodal generation data, which make a firm 'forecast' highly challenging to deliver.

***Q. If ESO cannot predict TNUoS for 10 years out - how is TNUoS a useful investment signal for assets which have economic lifespans of over 25 years?***

We acknowledge the challenges with predictability of charging, which is why the TNUoS Task Force has been established. We encourage you to engage with NGESO, us and the Task Force membership to identify where specific improvements can be made.

***Q. Given all the potential reforms, how do we avoid a step change in charges for a particular zone at short notice? This could be extremely damaging to investment.***

We recognise that any potential reforms to transmission charges will have distributional impacts and consider that sufficient notice of any changes may be required. If we consider it appropriate, we will also assess options such as phased implementation of reforms, and, or grandfathering arrangements.

***Q. Do you plan to share the transport model to customers? This will increase transparency and ensure developers can assess the risk on their own.***

NGESO publish a version of the DC Load Flow Investment Cost Related Pricing (DCLF ICRP) Transport Model which allows users to undertake their own sensitivity analysis of generation and demand tariffs under different scenarios. If you'd like a copy of the DCLF ICRP Transport Model, please contact NGESO at [TNUoS.Queries@nationalgrideso.com](mailto:TNUoS.Queries@nationalgrideso.com)

Please note: the full transport model cannot be shared because it contains sensitive information, however, a representative version is available upon request.

***Q. Do Ofgem intend to get a formal statement re the 10year projection difficulty from the ESO?***

We engaged extensively with NGESO prior to publication of the 10-year projection and NGESO were transparent with industry over the course of several months as to the assumptions it was having to make absent of any known data. As such, we do not consider it necessary to obtain a formal statement from NGESO on this matter, but we are happy to discuss with any concerned parties. Please email us at [tunosreform@ofgem.gov.uk](mailto:tunosreform@ofgem.gov.uk)

***Q. Given the challenge to provide a ten-year forecast, but a desire to provide predictability to support investment: Should it be an explicit objective for reform?***

Identifying the root causes of the unpredictability of TNUoS charges and how these might be addressed is a key objective for the TNUoS Task Force reform work, which aims to improve the ability for TNUoS to deliver a stable long-term investment signal to users.

## **Fixing TNUoS Charges**

***Q. Has a £0 floor on TNUoS been considered by the task force?***

The appropriateness and impact of floored at zero on TNUoS charges is being considered by the Task Force as part of the 'Signals' workstream.

***Q. How can a fixed 10-year TNUoS claim to be cost reflective?***

CMP413: 'Rolling 10-year wider TNUoS generation tariffs' seeks to introduce an obligation on NGESO to publish generation tariffs for a rolling 10-year duration with the primary intent of providing clarity and improving predictability to support users and developers when making commercial decisions.

There is an inherent trade-off between cost-reflectivity and predictability which needs to be assessed through all areas of reform.

***Q. Does the need for reform to TNUoS (Slide 23) not significantly weaken the case for ten-year tariffs (CMP413), as changes surely inevitably impact on tariffs?***

We consider that CMP413 and the case for long-term rolling wider TNUoS generation tariffs does not necessarily preclude TNUoS reform. To ensure effective decision making we are keen that the cross-cutting issues of the broader trade-offs between the various pieces of work are captured and will continue to make any relevant decisions (as in the case of live modifications such as CMP413) in accordance with the established framework, consistent with our Principal Objective and other statutory duties.

***Q. Has Ofgem considered a 15-year fix of TNUoS for parties taking on long-term CM/CfD contracts or an adjuster to CM/CfD clearing prices for TNUoS movements?***

As part of the ongoing modification CMP413 a Workgroup Alternative CUSC Modification (WACM) was raised which proposed a longer duration fixed period for TNUoS of 15 years or more. This was intended to match Capacity Market (CM) and CfD periods, with the aim of more closely tracking investment decisions. The proposer has since decided to withdraw this WACM and is now working with the Task Force on this topic, with a view to raising this as a separate code modification proposal.

## **Energy Storage**

***Q. How are you looking at Storage in co-located arrangement?***

We have asked the NGENSO to launch a storage subgroup with a broad range of industry stakeholders. The overall purpose of the subgroup is to consider what costs storage is driving on the network, and to what extent this can be reflected within TNUoS charges.

***Q. Should storage pay £0 TNUoS as the batteries are there to balance the flows, they are not neither demand nor generation customers?***

We believe that currently more evidence is needed in terms of what costs storage is driving on the network and consider that industry and NGENSO (via the subgroup), are well placed to bring forward evidence of storage use of the network and behaviour. We believe that this can then help ensure that storage is treated appropriately in the charging methodology.

## Offshore & Anticipatory Investment

***Q. The AI issue poses Q of who is beneficiary of the AI: should existing G be seen as beneficiaries i.e., is it useful/fair for them to be exposed to the cost?***

Anticipatory Investment (AI) has been introduced to reduce the risk and costs associated with AI for developers and reduce the barriers to coordination. The objective of this policy is to facilitate AI capital expenditure (capex) recovery for developer projects pursuing coordination in the Early Opportunities and Pathway to 2030 workstreams of the Offshore Transmission Network Review (OTNR).

Please see our previous decisions for further information:

[Decision on Anticipatory Investment and Implementation of Policy Changes \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/consult/condocs/ai/ai161616/ai161616.pdf)

[Decision on Pathway to 2030 | Ofgem](#)

***Q. Is the applicability of the OFTO regime being considered for offshore demand? e.g., use of old platforms.***

Work in relation to the electrification of oil and gas platforms is currently at a very early stage and consideration of any appropriate charging regimes will subsequently follow.

## DUoS, IDNOs and residuals

### DUoS SCR Process & Priorities

***Q. Will those areas that have not been included in the near-term DUoS SCR work now fall out of the scope of the SCR?***

No, we do not want to descope that which we are doing in the medium-term. We believe this is important and that the SCR is the right way to do this. We are also aware that there are other areas that require our attention in the meantime.

We do think there is space for industry to have conversations in the vein of subgroups or working with the ENA and INA or similar discussions that are happening of that level.

Our primary concern regarding this is alignment with other work areas, including transmission and REMA. As such, we are looking to pause some of the work in this area in order to promote alignment.

We do not believe that these areas are ready to be descoped and move to code modifications being raised. This is not an option we are considering at this time

These areas will be kept within the SCR scope and worked on as a Phase 2.

***Q. What are the next steps for the DUoS review process? What are the expected timelines, and how does it fit with the completion of other significant work such as the System Operator-Transmission Owner Code (STC) & the Review of Electricity Market Arrangements (REMA)?***

We will provide an update on the next steps of the review process once we have considered responses to the questions we asked at the CFF.

***Q. Will Ofgem be following the House of Lords Select Committee's recommendations to have a meaningful post-implementation review at an appropriate time?***

Since the CFF, we have launched a review of standing charges: [Launch of review into standing charges on energy bills | Ofgem](#)

## **Accessibility of Charges**

***Q. Does Ofgem understand how well network users actually understand/model, and how they respond to, a very complex and confusing set of charging signals?***

We would hope to establish the appropriate evidence from stakeholders as part of any review to inform our decision-making process. This is one of the reasons we consult widely as part of these reviews.

***Q. How about having a major goal of any future charging workstreams as simplifying/streamlining the whole network charging regime, instead of tinkering with details?***

In any charging work we have to balance multiple principles, while ensuring any decision is in line with our principal objective and wider statutory duties. We note that government's draft Strategy and Policy Statement includes predictability and transparency among the network charging principles for Ofgem.

## **Reform to EHV**

***Q. Will the majority of EHV-connected sites be able to claim relief through the Energy-Intensive Industry Scheme?***



The Energy-Intensive Industry scheme's parameter's is set out through the Department of Business and Trade. As a result, there is not a perfect overlap with any electricity network-based parameters that we would be thinking about.

It is fair to say that, in general terms, EIs are the largest demand sites therefore more likely to connect at EHV or transmission. This indicates a likely degree of overlap.

However, there will be EIs at HV-connected sites as well.

## **IDNOs & ITOs**

***Q. Will the scope of the DUoS SCR address the out-of-date CDCM in respect to IDNOs? If not, can this be addressed through normal change processes?***

We do not want to descope specific areas and, as a result, see code modifications raised on the areas that have been discussed. This is not an option we are actively exploring.

Where possible, we are open to engaging with industry on certain areas, such as issues IDNOs are struggling with that are coming out of CDCMs, in order to shape our understanding of these key issues which will inform future discussions.

Looking to the medium-term, cost models and allocation are a consideration. However, these cannot be taken in isolation as there are clear interactions with work already taking place in transmission and market design. We will not introduce another set of moving parts when there are already moving parts in these areas.

***Q. Do any proposed TNUoS and DUoS reforms interact with the questions in the recent Ofgem letter on IDNO regulation in regard to EHV or Transmission connections?***

We appreciate and are aware that industry want to get connected.

The IDNO model uses a relative price control to limit what investment can happen through that model and remain viable. It protects users by ensuring they are always benchmarked against the costs they would be paying under the host DNOs.

In situations where the IDNO model is divorced from this concept, our area of focus is on the costs and benefits of this or any changes that we need to make in respect of this.

For EHV and transmission connections for IDNOs, we are interested in how that IDNO model can protect users from a cost-perspective and from an efficient investment perspective if it does not have the proxy control that comes from the relevant price control.

Where the IDNOs are proposing to connect at the moment, the EHV work that we are proposing will likely not affect them as most of these are bespoke models to those IDNOs.

We are open to feedback on this.

***Q. IDNO profits are determined by host DNO charges (which they match). Where do the profits go? What benefit do consumers get? Does this need bigger review/reform?***

We are considering a review of IDNO regulation, in particular with respect to EHV connections, with the scope of any such review to be informed by responses to our 19 October open letter.

***Q. Is Ofgem considering Independent Transmission Operator (ITO) arrangements for connecting large scale users, such as electrolysers, at the transmission level?***

Parties seeking licences should submit any applications to Ofgem for our consideration.

***Q. Is Ofgem concerned about any of the network charges and policy cost avoidance behaviours we're seeing given such growth in private wires, IDNOs etc?***

As noted in our letter on IDNOs, we are aware that some proposed arrangements (e.g. IDNOs seeking to the transmission network) may mean that fair recovery of shared network costs among all customers may not be possible. We would welcome further evidence on this point in response to our open letter.

## **Cost-reflectivity**

***Q. Do DNOs have enough granularity of flows below the EHV level to be able to judge cost-reflectivity? Full network maps are needed to understand costs and benefit***

This is a point we would consider as part of the proposed longer-term work.

***Q. Could you return to the topic of cost allocation? This is a big one which is hard to separate from the models. It sounds like you are planning to de-prioritise?***

We are not looking to de-prioritise. We believe that cost-allocation is important, and that we will be in a better position to conduct high-quality work on this area when better information comes available soon. It is also noted that we are working within resource constraints with priorities on two specific areas at the moment; but with timelines for these other areas to follow.

With regards to the cost models, we share the view that there is a good case to look around with regards to these; we do not want to spend an inordinate amount of time immediately on those cost models while we are still understanding what the signals are going to look like at transmission and in the market.

We are aware of the industry views that changes could be made to cost allocation which might have some of the benefits of looking into the cost models without having to go into too much detail.

There has been good engagement from ENA on this issue. We are open to suggestions and feedback that about how that could be done in the medium term, however we would like to note that we will not suggest an action that would promote a disjointed regime.

***Q. Is Ofgem reviewing the issue of “forward-looking” charges? i.e., tomorrow/s investment needs shape what today’s network users pay towards yesterday’s sunk costs.***

We would consider the interaction between forward-looking and residual charges as part of the proposed longer-term work.

Residual Charges

***Q. Strategic letter hints at review of residual charges. With increasing costs & many mods seeking residual relief should a review happen sooner rather than later?***

We have begun preliminary work on the post-implementation analysis looking not only at how the residual recovery reforms have gone, but how they may need to change in the light of larger allowed revenues and new technology.

***Q. Do you still stand by the TCR decision and BSUoS decision that it is better for customers that revenue collection is wholly from final demand?***

As noted in the slides, we are proposing to carry out some post-implementation analysis looking not only at how the residual recovery reforms have performed, but how they may need to change in the light of larger allowed revenues and new technology. We will not pre-judge the outcome of this analysis.

## **Glossary**

Strategic Transmission Charging letter: [https://www.ofgem.gov.uk/sites/default/files/2023-09/Open%20letter%20STC\\_110923.pdf](https://www.ofgem.gov.uk/sites/default/files/2023-09/Open%20letter%20STC_110923.pdf)

Open letter on IDNOs <https://www.ofgem.gov.uk/sites/default/files/2023-10/Open%20letter%20on%20IDNOs%20-%20Oct-23-Final.pdf>