# Ofgem Access and Forward-looking Charges

## Significant Code Review Consultation on Minded to Positions

ERG welcomes the opportunity to engage with Ofgem on Access and Forward-looking Charges by responding to the consultation on Minded to Positions.

ERG is the leading wind energy business in Italy and among the top ten onshore wind operators in Europe. We have been operating in the energy sector for more than 80 years but in recent years we have transformed ourselves from one of Italy's leading oil and refining companies to one that is wholly focussed on renewable energy.

We are active in nine countries across Europe and we own and operate wind farms with a total installed capacity of around 2GW. We have four projects under construction in the UK for a total installed capacity of 250MW, of which two in Northern Ireland which will come into operation within the end of this year.

Our response will be limited to Section 5: Ofgem proposals for TNUoS charging for Small Distributed Generation

***5a) Do you have any evidence that SDG does not contribute to flows in the same way as large generation and, therefore, should not be charged on a consistent basis?***

1. Bi-directional flows are now seen at the distribution ends of the network. While this is comparable to T-network flows from directly connected large generation, the distribution network cannot yet be managed in the same way as the transmission network. If charges are going to be levied on a consistent basis across T- and D-networks, then consideration of how system management and access to other market products can applied on a consistent basis should be undertaken, else there could likely continue to be other grid or market mechanisms that drive network distortions.

2. This consultation considers the application of TNUoS charging on SDG. However, the TNUoS charging mechanism does not function appropriately to allow for investment in net-zero. It should not be applied to T- or D-connected generation until it has been revised to not disincentivise investment required for reaching net-zero, to provide a cost-reflective, stable, and predictable signal, to be competitive with interconnector charging, to not create a large disparity between CfD Pot technologies based solely on location, to not require annual use of an adjustment factor to stay under the €2.50/MW EU limit, and - if it truly is to be the principle 'user pays' - to have a floor price of, at minimum, £0 rather than 'paying users' credits to connect in certain areas of GB.

***5b) Do you agree with our threshold for applying TNUoS generation charges of 1MW? If not, what would be a better threshold and why?***

3. The charging system is already very complex. Maintaining multiple charging systems (e.g. TNUoS and EET) increases resource use for the regulator, system operator(s) and industry participants. Has the cost of using, managing and regulating two generation charging systems been compared to the potential cost of setting TEC for generation under 1 MW (which Ofgem based on principles sees as a significant amount of work not likely to outweigh the benefit that locational signals might send) and putting all generation on the same charging system? An amalgamation of sub 1MW generators in an area can have a similar impact as a 1MW generator.

4. With the implementation of the DSO role and a predicted increase in widespread consumer interaction with networks, the granularity necessary for managing an efficient network will likely need to increase over time, beyond the 1MW planning study boundary that currently exists. Additionally, there may be unintended consequences – and definitely more complexity – affecting the future uptake of 'virtual power plants' which in turn may affect the progression to net-zero.

5. A goal should be to simplify the system. This would make it easier to manage, to make quick adjustments should distortions arise during the energy transition, and easier for users to understand how changes might impact them.

***5c) Do you have any evidence that distribution connected generation at a grid supply point has a different impact than directly connected generation?***

6. GSP connected generation has a larger potential to be geographically closer to final demand. For T-connected generation the electrons might need to travel farther to reach final demand.

7. The largest difference is in commercial and regulatory arrangements. As stated in para 5 above, a goal should be to simplify the charging system. The more complex the commercial systems are, the more complex the definitions are to dictate charging methodology, the more significant the changes are between connection voltage level and locational charging, the easier it is for distortions to emerge and for unintended consequences to happen as layers of adjustments are added over time.

***5d) Do you have a preference for one of our options for addressing the local charging distortion? If so, please indicate which option and provide your views on pros and cons. Are there any options we have missed?***

8. TNUoS charging mechanism does not function appropriately to allow for investment in a net-zero network which will operate with high levels of decentralised generation. It is our view that TNUoS should not be applied to D-connected generation (and its application to T-connected generation paused) until it has been revised taking into consideration all the points mentioned in para 2 above.

***5e) Do you support our position that we should consider transitional arrangements? If so, do you have a preferred option and evidence to support the benefits or risks associated with each option?***

9. TNUoS could be applied

a. if the locational signal was sufficiently dampened for renewables in the north of GB so they would become competitive against other UK and European produced generation. A change like this would also increase the chances of northern generation being successful in CfD auctions thereby increasing the deployment rate of new capacity required in all net-zero scenarios.

b. following a review of TNUoS fundamentals which could reflect on the points in para 2 above, including:

    i. for a net-zero grid, what locational signals should be sent, to what specific technologies, and how frequently should they change?

    ii. does the current methodology accurately send signals that reflect build out of a least regrets net-zero energy network?

    iii. is there a way to simplify the charging methodology, and if so, does simplification offer benefits?

    iv. should different charging mechanism principles be considered given the increase in bi-directional network flows and granularity of information that will be available on the D-network?

    v. should zero-carbon generation be treated as a 'benefit' to both the consumer and system, and how could this benefit be optimised in balance with information gained from modelled scenarios (which exclude feedback loops, and real world market, political, and social influences on investment decisions)?

    vi. is it appropriate to use UoS charging to recover grid operator's profits and send signals to generation, flex tech, and demand during this energy transition period, and if so, what influence should government policy have on these signals?

10. A clear outcome of the IA is that, as a result of TNUoS principles and methodology, the most significant prohibitive impact of TNUoS is on onshore wind generation in Scotland. It is important existing generators in the north have a route-to-market which allows for the application of these charges. If TNUoS were applied to even more onshore wind generation in Scotland without a route-to-market a worst-case scenario could be closure of operational wind farms in Scotland – despite knowing, when the investment decision was made, that this was a possible outcome – precisely at the time when the UK should be increasing deployment of renewable technologies.

***5f) Have we identified all the options for administering TNUoS generation charges for SDG? If not, what options have we missed, and why would they be preferable to those we have identified? Can you provide any evidence regarding the implications of the different administrative options for your business?***

11. Delay construction of D-connected sites until an acceptable route to market can be obtained. With D-connected sites being uncompetitive in the CfD against sites with similar LOCEs located in the south of GB, and CfD auctions proposed every 2 years, it could be a while before the investment decision can be made given the current barrier to investment the TNUoS charges for onshore renewables in the north.

***5g) Are there any specific issues you think we need to consider, as part of our work on the future role of network charges? Why are these important to consider?***

12. We agree that the benefit of correcting the charging arrangements outweighs any argument against not correcting them due to change fatigue. A significant challenge with charging consultations lies in the industry being able to allocate resource to understand the complex and long, specialist, documents. If Ofgem could create consultation documents where the impacts are laid out in an infographic summary, for example, which would make them quicker and easier to understand, they may be able to gain responses from a wider pool of stakeholders.

13. A review of TNUoS charges and the mechanism for delivery should be prioritized, perhaps as a separate workstream, to the full chain flexibility work because they are currently slowing or stopping deployment of new renewable capacity in Scotland and negatively impacting the GB's ability to work towards net-zero scenarios in which a decentralised, decarbonised energy system is required.

14. A TNUoS review is an opportunity to think creatively about grid charging for the energy transition, as opposed to only plastering over existing shortcomings. If the network charging signals are too strong it creates a need for market fixes, the cost of which are ultimately borne by the consumer. In certain cases, for example onshore wind or tidal, the strongest locational signal to investors is driven by planning policy and resource. As stated in the *Access SCR Impact Assessment Modelling Methodology* document, the modelling may overestimate the extent to which connection charges and DUoS drive locational decision making. We would contend that this overestimation also applies to the role that TNUoS locational signals actually play in terms of real-life investment decisions. This is especially significant for renewable technologies which suffer the impact of TNUoS signals rather than respond to TNUoS signals due to the locational signals mentioned above taking priority. Given that TNUoS represents a significant amount of Opex costs for renewables, it thus becomes a very influential factor on the ability to finance and build out capacity rather than an influential factor in where to locate capacity.

15. Any consumer benefit predication made purely through a networks-modelling lens should be approached cautiously. As noted in the supporting documents to this consultation, the modelling is limited and bounded, not capturing external significant and important factors which influence how the industry can respond given the resource constraints and government policy. These real-world influences, along with the modelling parameters, have a significant impact both on GB's ability to reach net zero but also on the modelling results, hence the modelling results should be approached cautiously.

16. Ofgem notes in its purpose statement on page 1 of the consultation document that *"We are undertaking a package of reforms to enable competition, innovation, and decarbonisation at lowest cost, and to protect consumers in the transition to a smarter, more flexible, and low carbon energy system."* Decreasing connection costs enables competition and decarbonisation as more users will be able to connect on a similar cost basis. Applying a single charging methodology to all generation puts them on the same 'playing field', allowing for increased competition (albeit the playing field is currently heavily sloped in favour of southern generation). However, TNUoS signals as they are 1) present a barrier to the competitiveness of onshore wind – one of the least-cost net-zero compatible technologies that can be deployed – by virtue of its necessary locational restrictions, 2) results in a lower deployment of renewables in the north thereby having the effect of slowing decarbonisation, and 3) are not able to be changed through innovation. TNUoS is contrary to Ofgem's stated purpose and should be reviewed.