Email to:
FutureChargingandAccess@ofgem.gov.uk

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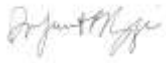
To whom it may concern,

Access and Forward-looking Charges Significant Code Review: Consultation on Minded to Positions

The TNUoS methodology is fundamentally unfit for the present era, and still incentivises centralised fossil-fuel generation in England and Wales, whilst penalising renewable generation in Scotland. This is entirely at odds with our net zero pathway. Hydro schemes, wind turbines, solar panels, tidal and wave turbines are all dependent on the local natural resources. Community-owned renewable energy projects tend to cluster in areas where those resources are found in abundance, and by their nature, cannot locate generation far distant from their communities. The priority for Ofgem in our view, should be to support and encourage a fair, flexible and realistic plan for decarbonising the UK energy resources which includes and supports citizen-led community energy rather than working against it.

Yours sincerely,



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Connection boundary

Question 3a: Do you agree with our proposals to remove the contribution to reinforcement for demand connections and reduce it for generation? Do you think there are any arguments for going further for generation under the current DUoS arrangements? Please explain why.

We agree that removing the contribution to reinforcement for demand connections will reduce the upfront cost of installing low carbon technology in homes and community buildings, and remove key barriers to achieving our net zero targets. However, without a clear position on how reinforcement costs will be recovered we cannot start to understand the full impact this will have on communities.

Question 3b: What evidence do you have on the effectiveness of the current connection charging arrangements in being able to send a signal to users and what do you think will be the effect of our proposed changes? How does this vary between demand and generation connections?

Locational demand for low carbon technology is inelastic. It is unrealistic to follow a methodology that assumes people will or can move house to reduce the cost of connecting to the grid to install low carbon technology in their homes or that natural resources are the same across the UK. The community energy generators that we represent are also unable to locate their projects in the south of England, where the supposed demand is; they are by their nature local to the communities that own them. The locational signals for generation made more sense when generators' output was not dependent on things outside of human control e.g. the weather. Hydro schemes, wind turbines, solar panels, tidal and wave turbines are all dependent on the local natural resources. Rewarding inefficient wind farms in the south with financial incentives while dis-incentivising wind farms in the north that are most efficient is unjustifiable, and indeed not clearly justified or reasoned in the consultation. Meeting our net zero targets will require a given amount of renewable electricity; this would require more generation and more connections if poorly sited relative to the available natural resource. Ultimately, this would require more resources, materials, investment, and therefore higher eventual costs for consumers. The whole system needs to be considered, not just one narrow aspect of consumer costs.

At 3.25, the consultation claims that storage has significant locational flexibility; this is not necessarily the case. For certain applications (such as fast frequency response), batteries could indeed be located almost anywhere on the UK system. However, they will also perform many other roles, including potentially curtailment relief (often in areas of weak grids), grid forming (in areas such as the Scottish Isles, where the networks sometimes operate on an islanded basis during outages), and other forms of grid support, in some cases as an alternative to reinforcement. This will necessitate them being located in certain geographic areas and certain, often weak, parts of the system. Where batteries are actively helping reduce reinforcement costs for consumers, it would be a perverse signal to penalise them geographically.

The same comment at 3.25 also seems to assume that storage means batteries, which isn't necessarily the case, and indeed historically hasn't been. Pumped storage hydro systems offer scope for very high efficiency, inter-seasonal storage, but have to be located in certain steep, wet areas of the country – often in Scotland, which has unfairly faced the highest transmission costs in the UK. Moving to an intermittent renewable-based grid means that Ofgem should be supporting the flexibility and resilience that pumped storage can offer, instead of penalising it arbitrarily.

Question 3c: What are your views on the effectiveness of the current arrangements in facilitating the efficient development and investment in distribution networks? How might this change under our proposals where network companies are required to fund more of this work?

The current approach is entirely marginal and does not allow distribution network operators to plan for increased generation or demand. Subsea cables are replaced with like for like when increasing the capacity would be at marginal extra cost, which has a negative impact on generators that are curtailed without financial reimbursement, and therefore has a negative impact on the amount of renewable generation that is generated.

Question 3d: Do you agree whether the need to provide connection customers with certainty of price reduces the potential for capacity to be provided through other means such as flexibility procurement? How might this change under our proposals?

Not providing certainty of price results in financing renewable generation being extremely difficult. Flexibility procurement is not yet well enough defined for banks to provide the necessary loans. Increased risk could result in increased cost of finance.

Question 3e: What are your views on whether we should retain the High Cost Cap? Is there a case for reviewing its interaction with the voltage rule if customers no longer contribute to reinforcement at the voltage level above the point of connection?

No comments.

Question 3f: What are your views on the recovery of the costs associated with transmission that are triggered by a distribution connection? Does this need to be considered alongside wider charging reforms or could a change be made independently?

Costs associated with transmission that are triggered by a distribution connection today may well not exist in 10 years if the uptake in low carbon technology demand is sufficiently high. The increasing electrification of transport and heat may also mean that GSPs that are 'exporting' at present may not be in the near future; as this was seen as a key justification for imposing TNUoS on embedded generators (where they are effectively exporting up onto the transmission system from these GSPs), this is also a factor which needs to be considered in those determinations; what is happening now is not what will be happening in 2030. A change should not be made independently; it must be considered alongside a wider review of TNUoS, which is fundamentally flawed at present.

Because 132kV is treated as transmission in Scotland, but not in England or Wales, the recovery of costs associated with transmission also unduly disadvantages Scottish generators; at an HV or EHV level, triggering a 132kV substation reinforcement lands Scottish generators with vast upfront costs – but no such cost signal in England or Wales. As the majority of Scottish GSPs are at or near full capacity, this is a significant barrier, which only impacts generators in part of the UK.

Question 3g: What are your views on the likelihood of inefficient investment under our proposals (e.g., an increase in project cancellations after some investment has been made)? Are there good arguments for further considering introducing liabilities and securities to mitigate this risk?

Liabilities and securities are extremely complicated and put all the risk on those wanting to connect rather than sharing the risk with the network operator who is far more likely to be able to recover the costs. The existing security system relating to transmission reinforcements is already a 'show-stopper' barrier to community generators, who don't have other assets or equity to place millions of pounds in security sums;

extending this to distribution reinforcements would add further burdens and costs to address a problem which doesn't exist. In our experience, grid reinforcements take so long to happen that they are inevitably the final step; the turbines will have been built and ready to connect by the time the reinforcement is completed, so there is a low chance of project cancellation or inefficient investment.

Question 3h: What are your views on whether the interactions between our connection reforms and the ECCRs must be resolved before we are able to implement our proposed reforms? How do you factor in the effects of the ECCRs (if at all) into decision making, given the levels of uncertainty around subsequent connectee(s)? What suggestions do you have to make our policy and the ECCRs work together most efficiently?

No comments.

Access rights

Question 4a: Do you agree with our proposal to introduce better defined non-firm access choices at distribution? Do you have comments on their proposed design?

We agree in principle, however we think details of the 'better defined non-firm access choices' must be made available so that the implications can be thought through and consulted on before a full response can be provided. Leaving it to the network operators whether to allow connections of this type creates an unequal locational playing field. It is also necessary to ensure that generators are provided with detailed and accurate curtailment forecasts, provided to a common and agreed standard, and backed up with compensation if the minimum access is not achieved. Historically, curtailment assessments have often not been accurate, and DNOs have not always undertaken promised work which underpinned the assessments. In order to be able to secure finance for these projects, better access and assurances are required.

Question 4b: Do you agree with our proposal to introduce new time-profiled access choices at distribution? Do you have any comments on their proposed design?

Yes, we support this proposal, which is likely to be useful for certain types of generator.

Question 4c: Can you identify any benefits to shared access rights, which would indicate we have underestimated the likely take-up?

We are aware of many situations (existing and planned) where wind and PV can share a connection with minimal curtailment, which could overall help reduce new connection and reinforcement infrastructure, lowering the overall cost of energy. This can also be carried out across multiple sites in the same area, and we are aware of at least one community hydro scheme which was only able to get a connection (and therefore be built) as a result of a similar tripartite agreement between themselves, the DNO, and a neighbouring windfarm.

Question 4d: Do you have any comment on our proposed choice about how to reflect access rights in charges (i.e. connection and/or distribution use of system charges)?

No comment at this stage – further details on DUoS and TNUoS charges are required to fully assess this.

Question 4e: Do you agree with our proposal to not prioritise the introduction of new transmission access choices as part of this Significant Code Review?

No comments.

Question 4f: Do you have views on how access rights should be standardised across DNOs?
We believe that access rights should be standardised and offered across DNOs for all connectees, and that DNOs should make these different access rights known to potential connectees. Differing standards help nobody, and cause confusion and delay. An open book approach on access rights and standardised approaches would evidence fairness, which would be of value to the consumer as well as the connectees.

Question 4g: Do you have any views on our proposed timescale of 1 April 2023 implementation?

Aligning with the start of ED2 makes sense, but grandfathering rights for TNUoS need to be considered.

TNUoS charges for SDG

Question 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?

Locational demand for low carbon technology is inelastic however the TNUoS charges are built on the assumption it is elastic. It is therefore not fit for purpose and applying it to further generators is not helpful in reaching net zero. The locational signals for generation made more sense when generators' output was not dependent on things outside of human control e.g. the weather. Pumped hydro storage, wind turbines, solar panels, tidal and wave turbines are all dependent on the local natural resources and are required for the net zero targets to be met.

As set out in our response to 3f, the increasing electrification of transport and heat may also mean that GSPs that are 'exporting' at present may not be in the near future; flows up onto the transmission network may soon significantly reduce, or in some locations end entirely. A change should not be made independently; it must be considered alongside a wider review of TNUoS, which is fundamentally flawed at present.

Furthermore, the wording of the question implies that it is inconsistent for 'small' Distributed Generators (up to 100MW) to not be charged TNUoS. This premise seems odd, as it ignores several key points;

- Firstly, small distributed generators pay for the upfront cost of their connection, whereas transmission-connected generators do not.
- Secondly, small distributed generators pay DUoS (which may yet increase), whereas transmission connected generators do not.

If SDG had transmission costs imposed as well then transmission connected generators would only pay TNUoS, whilst SDG would pay their connection costs, DUoS and TNUoS – which hardly seems consistent. Yes, some distributed generators do use the transmission system to an extent, but they also reduce the need for transmission by directly supplying loads behind the same GSP (and as noted above, this will likely increase as heat and transport electrify). Transmission connected generators, conversely, also rely on the distribution networks in order for their power to reach their customers, with the exception of the small number of directly transmission-connected industrial loads.

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

Removing the ETT cap will further exacerbate rewarding inefficient wind farms in the south with financial incentives while disincentivising wind farms in the north that are most efficient. We cannot see a justification for charging TNUoS to embedded generators below 50MW. They already pay DUoS and pay for their connections, and will increasingly self-supply demand behind the same GSPs.

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

It absolutely, clearly and self-evidently has a different impact, as detailed in our response to question 5A. At many times embedded generation will self-supply demand behind the same GSP, actively reducing flows on the transmission system. This will likely increase as heat and transport are electrified.

Question 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 reasons. Are there any options we have missed?

No comment.

Question 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?

Yes, we support this; it is important to set out the strategic direction and to address the wider review of TNUoS in particular. We also feel that it would be important and fair to provide grandfathering rights to existing generators, which have invested in good faith based on a stable charging regime. Imposing potentially very high TNUoS costs on existing small embedded generators, particularly low FiT rate or subsidy-free sites, will almost certainly lead some to bankruptcy, and will significantly harm investor confidence, just when we need to ramp-up deployment to meet our net zero commitments.

The TNUoS methodology is fundamentally unfit for the present era, and still incentivises centralised fossil-fuel generation in England and Wales, whilst penalising renewable generation in Scotland. This is entirely at odds with our net zero pathway.

Question 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?

No comments.

Question 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?

No comments.

Community Energy Scotland
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General question

Do you have any other information relevant to the subject matter of this consultation that we should consider in developing our proposals?

No comments.