#### Email to:

futurechargingandaccess@ofgem.gov.uk



06 December 2021

Dear lishan Low,

Consultation on the proposal to take forward the reform of Distribution Use of System charges under a separate Significant Code Review on revised timescales

Scottish Renewables is the voice of Scotland's renewable energy industry. The sectors we represent deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change. Our members work across all renewable energy technologies, in Scotland, the UK, Europe and around the world. In representing them, we aim to lead and inform the debate on how the growth of renewable energy can help sustainably heat and power Scotland's homes and businesses.

Scottish Renewables welcomes the opportunity to respond to this Ofgem Consultation on descoping the wide-ranging review of Distribution Use of System (DUoS) charges from the current Electricity Network Access and Forward-Looking Charges Significant Code Review (SCR) and take it forward under a dedicated SCR with a revised timescale.

We have responded to your individual consultation questions further below, but in summary, we would like to draw your attention to the following points:

- Scottish Renewables agrees with separating the wide-ranging review of DUoS from the Access SCR and taking it forward under a dedicated SCR.
- DUoS reform needs to be aligned with government policy priorities to achieve net-zero. This must include the need to facilitate the allocation of increased levels of flexibility and low carbon technologies to decarbonise the power sector by 2035.
- A sensible, albeit optimistic timeline to implement a reform such as this could be 2025, as Ofgem suggest. However, we would welcome that Ofgem provides a roadmap showing dates and the interaction of this reform with other policy priorities from government. This would help the industry to understand the achievable date of this reform.
- Policy proposals from the recent Access SCR linked with DUoS reform must be reviewed carefully
  in order to avoid slowing down the roll-out of low carbon and flexible technologies.
- We think that this new phased approach provides Ofgem the opportunity for reviewing the
  quantitative analysis that assesses the option of applying TNUoS charges to Small Distributor
  Generators (SDG) in the recent Access SCR (subject to outcomes of the recent TNUoS call for
  evidence). We pointed out in our Access SCR consultation response that the quantitative analysis
  had significant flaws that may change the overall net benefit proposed.
- We agree with retaining the scope and governance arrangement of the original SCR in the new DUoS SCR. We would also like to see that Ofgem ensures that any outcomes from the SCR are aligned with the strategic priorities from Government.





Scottish Renewables would be keen to engage further with this agenda and would be happy to discuss our response in more detail.

Yours sincerely,

Angeles Sandoval

Policy Manager | Networks & Markets

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Scottish Renewables

## 1. Do you agree with our proposal to descope DUoS from the Access SCR and take it forward under a dedicated SCR with revised timescales?

Yes, it is Scottish Renewables view that separating DUoS from the Access SCR and taking it forward under a dedicated SCR is a sensible approach. This proposal will allow Ofgem to make a decision on connection boundary, and take a clear decision about what will happen with TNUoS charges for SDG, which has been paused ahead of TNUoS review.

However, we would like to note that it would be important to learn lessons from the recent Access SCR process to avoid further delays. The recent Access SCR included policy decisions about DUoS, connection boundary, access rights and TNUoS charges for SDG because policy outcomes from all of them are linked. Descoping DUoS from the Access SCR will now mean that it is likely that the implementation of some proposals from the recent Access SCR must be implemented post 2023, which is not ideal. Therefore, we would like to see Ofgem developing an agile approach to this process, taking into account the lessons from the past, in a way that does not delay further policy decisions that are important for the industry.

Finally, Ofgem stated that they do not want to further delay the review of DUoS and wish to start reengaging with stakeholders – including Challenge and Delivery Groups – via the new DUoS SCR. On this point, we would like to highlight that our industry feels that this kind of engagement has not been entirely effective in the past, with limited opportunity for stakeholders to challenge Ofgem and have open discussion. We would like Ofgem to ensure that stakeholders' feedback, including from the Challenge and Delivery Groups, is taken into account to a greater extent than has been the case.

# 2. What are your views on timescales for implementation of DUoS reform? How does this interact with wider market developments and what do we need to take into account?

Ofgem suggest that the earliest implementation date for DUoS reform is 2025. This seems a sensible timescale considering that DUoS needs to be aligned with other policy priorities such as the flexibility strategy, transport and heat decarbonisation, and wider market reform. However, we would like to note that the industry needs a proper roadmap to understand the achievable timeline for DUoS reform. Therefore, it would be helpful if Ofgem sets out a clear roadmap with the achievable date of this reform including the interaction with other policy priorities from government.

### 3. What areas of interactions of DUoS with wider developments in policy/industry do we need to consider in our review?

DUoS reform needs to be aligned with government policy priorities to achieve net-zero. In the recent Net Zero Strategy, The UK Government sets out its commitment to fully decarbonise the power sector by 2035<sup>1</sup>. Therefore, policy outcomes from DUoS reform need to facilitate the allocation of increased levels of flexibility and low carbon technologies required to meet this commitment.

In the Smart System and Flexibility Plan 2021, it is recognised that the regulatory framework was not built with electricity storage in mind<sup>2</sup>. We note that Ofgem has made some progress in the way that they are approaching flexibility in the network. For example, in the recent Access SCR some proposals regarding the connection boundary could facilitate the allocation of flexible technologies. Similarly, in the recent call for evidence on TNUoS, Ofgem states that further work in respect of charging arrangements for storage of all sizes may be warranted in the context of its potential to provide solutions to network issues. Additionally, there has been some engagement with stakeholders from the setup of Ofgem's Full Chain Flexibility Forum.

<sup>&</sup>lt;sup>1</sup> UK Government (2021). Net Zero Strategy: Build Back Greener. Available at: <a href="https://www.gov.uk/government/publications/net-zero-strategy">https://www.gov.uk/government/publications/net-zero-strategy</a>

<sup>&</sup>lt;sup>2</sup> UK Government and Ofgem (2021). Transitioning to a net zero energy system: smart systems and flexibility plan 2021. Available at: <a href="https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021">https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021</a>

However, there is still lot of work to do to facilitate the allocation of flexibility sources in the network. It is Scottish Renewables' view that storage of all sizes needs to be treated in a way that reflects the value that these flexibility resources provide to the electricity system, both as demand and generation. We believe that policy outcomes from DUoS reform, as well as the interaction between this reform and recent proposals from the Access SCR, particularly in connection boundary, must be looked at carefully in order to enable the increased level of flexibility required in the network.

We would also like to note that some of the proposals from the recent Access SCR were welcomed by the renewable energy sector, particularly in relation to removing the contribution to reinforcement for demand connections and reducing it for generation. This means lower connection charges for SDG, with locational signal passed on to DUoS. We think that this new arrangement sends an effective signal for network users and may speed up the roll-out of low carbon technologies. However, changes from DUoS reform could create an undesirable outcome if these two proposals are not reviewed all together. We suggest that Ofgem carefully assess any changes on DUoS reform that could end up slowing down the roll out of low carbon technologies, which would be an extremely undesirable outcome.

We also agree with the need for alignment of DUoS with other priority areas such as the electricity market reform, transport and heat decarbonisation. In the recent Heat and Building Strategy, Government committed to 'ensuring that the electricity system can accommodate increased electricity demand and heat pumps can be quickly and affordable connected to the network'. In the same document Government states that they have been engaging with distribution network operators (DNOs) and the Energy Networks Association to understand the potential scale of the need for local network reinforcement and preparations for electrification of heat. It is also pointed out that Ofgem has confirmed commitment in the RIIO-ED2 plan to support strategic investment to deliver net zero<sup>3</sup>. Scottish Renewables believe that DUoS has a strong link with what will happen with the final RIIO-ED2 plan, specifically in relation to reinforcement, an area that is also linked with proposals on connection boundary from the recent Access SCR. As mentioned previously, these areas need to be considered very careful in the Ofgem review as any wrong decision could end up delaying the roll out of low carbon technologies.

### 4. Have we considered all the impacts of a phased approach to delivering the original scope Access SCR?

Understanding that a phased approach will mean:

**Phase 1:** Connection boundary and access rights (2023 implementation), and focused review of transmission network charges (where progression is subject to the Call for Evidence and relevant next steps which Ofgem expect to announce over the winter)

**Phase 2:** Wide ranging review of DUoS (post-2023 implementation)

We think there is an important impact that must be considered concerning Phase 1. When we responded to the recent Access SCR consultation, we highlighted that the quantitative analysis that assessed the option of applying TNUoS charges to SDG had significant flaws, which we felt needed to be addressed to gain comfort that there was an overall net benefit. We noted that in the analysis, Ofgem ignored many variables that a renewable planning system needs. Consequently, the proposal was based on a cost analysis that did not reflect the complexity of the energy planning network. The detail of this information can be seen in Annex 1.

We think that in light of this new phased approach and the review of TNUoS charges, Ofgem needs to review the quantitative analysis of the recent Access SCR and update it before confirming the

<sup>&</sup>lt;sup>3</sup> UK Government (2021). Heat and Building Strategy. Available at: <a href="https://www.gov.uk/government/publications/heat-and-buildings-strategy">https://www.gov.uk/government/publications/heat-and-buildings-strategy</a>

implementation of TNUoS charges for SDG. We think there is a strong case to review the net benefit impact of the Access SCR which may change the overall outcome of the proposal.

# 5. Do you have any views on our proposal to retain the scope and governance arrangements of the original Access SCR?

If this question refers to retaining the scope and governance arrangement of the original SCR in the new DUoS SCR, our answer is yes, we agree with that proposal. However, as mentioned previously we would also like to see that Ofgem ensures that any outcomes from the SCR are aligned with the strategic priorities from Government.

6. Do you have any other information relevant to the subject matter of this consultation that we should consider?

No comments.

Continued on the following page.

#### **ANNEX 1**

Material flaws in the Quantitative Analysis when TNUoS is applied to SDG - Access and Forward-looking Charges Significant Code Review: Consultation on Minded to Positions

The accompanying CEPA-TNEI quantitative analysis has a number of serious flaws which in our view provide misleading conclusions. We know that members wrote to Ofgem seeking clarification of the modelling detail, but that to date these concerns have not been addressed; we hope that these can usefully improve the analysis, notably in the case that the analysis needs to be repeated in light of a wider TNUoS review.

It is welcome that a number of the flaws have been acknowledged in the report – such as the unrealistic assumptions around planning consent and the unknown pipeline for replacement projects in other regions – but there are further issues which call into question the resulting conclusions. In our view a subsequent analysis which would take consideration of the issues which we have outlined below could well show that the minded-to position results in a net disbenefit to consumers and more certainly an increase in carbon emissions.

#### Key flaws include:

- Misapplication of TNUoS credits
- Misapplication of revenue-replacement support costs
- Assumptions of sufficient and timely delivery pipeline in southern regions
- No adjustment of nameplate capacity to compensate for lower average load factor generation
- No recognition of geographic diversity benefits of variable renewables
- No adjustment of flexibility requirements to meet the less diverse and lower load factor generation mix.
- · Assumptions of zero early closures

TNUoS credits have been misapplied in the modelling, mistakenly removing a signal to support triad generation by SDG. The sharper signal of TNUoS rather than the EET applied to southern generation would more likely see carbon emissions rise as a result of the proposed change. Quantitative Analysis p28 states "the reforms remove the operational incentive on embedded generators in the southern zones to export over expected Triad periods", whereas ESO pays TNUoS credits based on the average output during triad, retaining the triad signal. A smaller but similar-direction effect comes from applying Ofgem's TCR decision to floor demand locational charges at zero; even if un-floored, this would remove any corresponding EET charge applied to eligible (Northern) SDG, mitigating the perverse signal to turn-off during triad, but also mitigating the claimed carbon emissions reduction.

Government support costs are mistakenly assumed to be tailored precisely to each region and separately to each generator technology (and without any delay which might impact deployment decisions). This is not representative of the CfD process, which has a single clearance price for all GB for a given 'pot' of technologies. The result in excess support for southern generation (which has the clearance price unduly lifted by the imperfect TNUoS locational signal). The resulting inefficiency will lead to a 'support costs' impact much larger than has been modelled.

It is also an optimistic assumption that the revenue 'loss' through TNUoS change will be perfectly offset in time and that there will be no investment delay and no risk premium adjustment as a result of the changes. The timing element has only downside risk for the quantitative analysis. On a related point, we would point out that it is optimistic to assume a seamless transition of pipeline projects from one region to another.

We note that geographic diversity of variable renewables has not been fully accounted for in the modelling. The TNUoS signal to focus these renewables in closer proximity, in the centre and south of GB, corresponds to greater volatility of output, leading to extremes of pricing and greater requirements for balancing actions (increased balancing costs to consumers) and greater requirements for flexibility (more nameplate capacity of battery storage or similar for each MW of variable renewables). When correctly factored in this will act against the claimed benefit.

Among the acknowledged modelling flaws, a few are worth drawing out as the implications are very material to the possibility of any benefit or disbenefit coming from the proposed change.

We acknowledge that investment in the energy sector is not risk-free, and that investors should anticipate a certain level of variation in network charges over the life of the project. However, the introduction of transmission charges on generators whom, if investing prior to 2016, would have seen TNUoS as a benefit (if they had factored it at all), represents a substantive change in the framework under which they invested.

According to the 2021 FES report, in the consumer transformation scenario (the main scenario taken by Ofgem in its analysis) we will need 44GW of onshore wind by 2050, which in terms of resource is mostly expected to be deployed in Scotland. The modelling acknowledges the limitations of pipeline and consent for this technology to be located in southern areas, and that most of the resource is in the north. Setting aside the considerable planning barriers, more southerly onshore wind is acknowledged to have lower capacity factors on average; to maintain the energy output for net zero pathways more nameplate capacity would be required, with corresponding increase in land use and support costs (typically paid per MW). We note in Ofgem's podcast on the minded-to position the view that reduced onshore wind may see an increase in English solar generation. Noting the roughly four times lower load factor of solar, this means significantly more nameplate capacity will be needed – which brings questions for total embodied carbon, of increased support costs and increased land requirements. We suggest it would be appropriate to quantify these outcomes to seriously test whether the changes can provide an overall net benefit.

Another significant element is the risk of early closure of operational renewables in Scotland as a result of the changes. Projects exiting previous support schemes (such as the RO) or ending their CfD agreement when faced with such tariffs as shown in table 5.3 of the quantitative analysis (page 29 of the CEPA-TNEI report) will see a challenging, and in a number of instances negative, cost-benefit for future maintenance and repairs, resulting in early closures. Both the unused local grid infrastructure and the negative effect on total deployment are missing from the quantitative analysis, which assumes existing renewables remain on the system without additional cost.

We conclude that a corrected quantitative analysis would show a reduced, likely negative net benefit, and that carbon emissions are more likely to rise than fall under the proposed changes. We are in full agreement that wider TNUoS needs to be reconsidered in terms of alignment with the UK's objectives for net zero and Ofgem's overall strategic direction. We agree that it would be appropriate to pause application of wider TNUoS to SDG while such reform is considered, mitigating change fatigue and undue volatility. We believe updated quantitative analysis would need to be done in light of the proposed review and the points raised above before confirming the implementation of this charge for SDG.