Mr Patrick Cassels,
Head of Electricity Network Access, Access and Charging SCR
Ofgem

19th August 2021

BHA response to the Ofgem consultation: Access and Forward-Looking Charges SCR: Consultation on Minded to Positions

Dear Mr Cassels,

Many thanks for the opportunity to respond to this important consultation.

The British Hydropower Association [BHA] is the only trade membership association solely representing the interests of the UK hydropower industry, from micro to large scale, including tidal range energy, and associated stakeholders in the wider community, both in the UK and overseas.

The BHA raised serious concerns with the proposed SCR review with Mr Jon Parker, from Ofgem at a meeting on 31/03/21. It appears that most of these concerns have come to light, and most of them are repeated here.

This document is non-confidential and can be published on the Ofgem website.

In summary:

1. Distribution Connection Charging Arrangements:

The BHA agree to reducing the reinforcement contribution within the upfront connection charge to generation by amending the voltage rule and only paying for reinforcement at the connection voltage and not the connection voltage and the one above.

However, this rule currently applies in the north of Scotland with 33kv connections where 132kv is classed as transmission. We believe that in these situations, the High-Cost Cap (HCC) should be increased from £200/kw to reduce the generators contribution. For 11kv and LV connections, the HCC should remain at £200/kw.

The changes should be introduced in a way that protects the right existing generators who have made a reinforcement contribution who could otherwise lose out via higher DUoS charges.

Transitional arrangements could include grandfathering. There should also be transitional arrangements for "Second Comer Charges".

2 Definition and Choice of Network Access Rights:

The BHA agree to the introduction of better-defined non-firm and new time profiled access choices at distribution level. A lot of circuits are constrained at distribution level, especially in the north of Scotland, in generation dominated areas. Flexible connections offer a solution but there may be many generators wanting to connect to the same circuit which increases the amount of curtailment which can make projects unviable. Demand is unlikely to increase significantly in these areas and only reinforcement offers a long-term solution.

Hydro generation is unlikely to opt for time profiled access as the generators are normally situated in high rainfall areas with large catchment areas and this may be more suitable for demand customers. This may also depend on long term weather forecasts which can be unreliable.

3 Transmission Charges for Small Distributed Generators:

The BHA strongly disagree with these changes.

As Ofgem admit, introducing TNUoS charges for Small Distributed Generators (SDG) >1MW will result in northern zones a long way from demand facing charges while those in southern zones are likely to see an increase in their credits with **generators in northern Scotland facing charges of up to £54/kw by 2040**. **A 1MW generator will see a charge of £54,000 per annum which unreasonable.** The changes will also affect "micro generators" (< 1MW) by removing the floor on the Embedded Export Tariff (EET.) This means that in Scotland and the north of England, these generators would be liable for TNUoS charges.

4 Interactions with other Ofgem reforms:

The Targeted Charging Review (TCR) has already had a negative effect on distributed generators with the loss of some Embedded Benefits. Any future assessment of the locational, DUoS charges is likely to remove further "Embedded Benefits" by increasing these charges in generation dominated areas, such as the north of Scotland and reducing them in demand dominated areas such as the south of England.

Most hydro generation is situated in the north of Scotland as this is the wettest part of GB and therefore locationally constrained. There's no point in relocating to the south of England. A similar situation occurs with wind generation. Reducing DUoS charges in the south of England will attract solar power generation to the detriment

of hydro and wind generation in the north of Scotland. The TCR reforms, along with the proposed Access SCR reforms, will have a significantly negative impact on distributed hydropower generation, especially in the north of Scotland and will definitely jeopardize mandatory Government net-zero targets.

We think that SDG including hydro has a very important role in supporting Net Zero and should not face charges for locating in areas far from demand. Some of the changes will benefit non-renewable generators such as gas as well as renewable generators and we think this should be considered. These are very important Government targets, and we think the SCR should have a balanced approach with more emphasis on achieving these targets as well as protecting the interests of customers.

We have outlined answers to the questions in the consultation below:

3. 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 to Ofgem's proposals for demand and generation connections. Under the current DUoS arrangements, we think that the current £200/kw HCC should be increased for 33kv connections in the north of Scotland for the reasons as explained above. Ofgem state that the HCC is "rarely triggered" but in our experience 33kv networks in the north of Scotland are running at full capacity and reinforcement is usually required. Any reforms to reduce the customer's contribution will encourage more development.

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?

For hydro generation connections, locational decisions are strongly influenced by the amount of rainfall and topography at each location. The changes to connection and DUoS charges are only one part of a complicated set of factors that would inform these decisions. However, Ofgem's proposed changes, especially to DUoS charges, may have more effect in making these decisions.

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?

We agree that current arrangements contribute to DNO's taking and incremental and reactive approach to reinforcement rather than investing in light of

anticipated wider network needs. We are concerned how strategic investment will work. What evidence is Ofgem is going to require allowing DNO's to spend money on upgrading. At the moment, new customers are given a clear timescale for connection. Will the new process mean connection delays?

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?

We are finding that most distribution networks, especially in the north of Scotland are constrained and some form of non-firm, flexible connection with constraints may be offered in place of expensive reinforcement. Certainty of price is always welcome, but we think that flexible connections offer a solution, albeit not as good as a firm connection, until wider distribution and transmission reinforcement is carried out. Flexible connections such as ANM, should be seen as a temporary arrangement.

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?

See the answer to Q 3a.

Question3f: 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?

We think these costs should be recovered through the ongoing use of system charges which will remove a significant barrier for new connections which trigger this work. This should be considered after review of TNUoS and DUoS charges.

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?

The proposed changes to TNUoS charges to SDG and possible changes to DUoS charges will result in a decrease in investment for hydro generation which will have a knock-on effect in reaching Net Zero. These extra costs could also lead to a decision not to refurbish some projects and prolong their operation. Liabilities and securities should not be introduced for SDG. The existing staged payment system for the connection represents a significant commitment to the project going ahead.

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 connections. What suggestions do you have to make our policy and the ECCRs work together most efficiently?

We think that 2nd comer charges should still apply for 10 years after the first connection is made. This should carry on after the implementation of the connection charging reforms on 1st April 2023.

4. 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 to Ofgem's proposals. Improving the definition of non-firm access will improve certainty for users who are offered flexible connections. The level of curtailment has an impact on the viability of a project. Customers should be protected against the risk of DNOs exceeding the agreed level of curtailment.

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?

It will be difficult for hydro generators to be flexible with their export requirements, especially in generator dominated areas. They tend to export when water is available, up to their maximum export capacity.

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

Due to the remote and isolated nature of hydro generators, we can't see any benefit for shared access rights. Although this may be used where large demand is situated next to a hydro generator and connected to the same network. One DNOs offers a flexible connection consisting of a 3rd Party ANM scheme which is a form of shared access.

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)?

It seems that there may be penalties for breaching access rights on top of paying for the installation of control equipment for both firm and non-firm connections. Generators must be fully consulted before any changes are made.

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?

Most hydro generators are connected to the distribution network. At the moment, we have no view on transmission access choices. Although we would like to point out that fossil fuel generators tend to be transmission connected.

Question 4f: Do you have views on how access rights should be standardised across DNOs?

All customers must be fully consulted before any changes are made. Classification of 132kv as a transmission voltage in Scotland and as a distribution voltage in England and Wales should be considered.

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

It makes sense to introduce these changes on 1st April 2023 at the start of RIIO-ED2. However, we are concerned that this consultation has already been delayed and Ofgem's final decision may also be delayed. This might not leave enough time for any transition arrangements before implementation.

5. 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?

In the consultation, Ofgem class SDG as <100MW. In the north of Scotland, it is <10MW. There is anecdotal evidence that generation flows from the distribution network do not enter the transmission network and are absorbed by demand customers connected to the distribution network. This situation will only improve as electricity demand increases in line with Net Zero targets.

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?

We disagree with the 1MW threshold for applying TNUoS charges on a GB wide basis. This will also affect generators <1MW by removing the floor on the Embedded Export Tariff. We fundamentally disagree with Ofgem's statement that this will support achievement of Net Zero at least cost.

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

We're not sure what Ofgem mean in Q5c. There may be technical reasons why generators are connected to a GSP rather than on a 33kv circuit (or even lower voltage) coming from a GSP. What do Ofgem mean by impact?

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?

We think that DG shouldn't face local charges as they already pay DUoS charges.

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?

We believe Ofgem must consider transition arrangements. The greatest impact will be in Scotland whereas generators in England will face lower charges or even an increase in credits. We think this is unfair and disproportionate and hydro generators in Scotland will be subsidising inefficient solar generators on the South.

These changes should be delayed as long as possible and then grandfathering should be applied for at least 25 years. This will affect existing generators' business models which may lead to schemes being decommissioned, leaving DNOs with stranded assets.

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?

Applying TNUoS charges to SDG will involve setting up agreements and involve administration costs which is another cost which wasn't included in original hydropower business models. We note that Ofgem have taken the extra administrative costs to NGESO and the suppliers into to account but not for the generators.

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?

We note that Ofgem propose to undertake a wider review of TNUoS charges in line with your engagement on the outcomes of Ofgem's full chain flexibility work

(FCF.) Ofgem's proposed review of DUoS charges has also been paused until you have greater clarity of Ofgem's FCF work.

We believe Ofgem's reforms will result in a decrease in investment for distribution connected hydro generators, especially in the north of Scotland which will have a negative effect on mandatary Net Zero targets and also local communities. We realise that Ofgem believe that Net Zero targets should be supported through direct subsidies or other policy interventions, but we believe everyone has a part to play, including Ofgem, in achieving these very important targets.

7. General question

Question 7: Do you have any other information relevant to the subject matter of this consultation that we should consider in developing our proposals?

Looking at Ofgem's impact assessments, we would welcome a more detailed assessment, especially how the changes will affect hydro generators. Ofgem have assessed wind and solar generation but not hydro which accounts for 0.3GW of capacity.

We would like to see how the TCR, and proposed SCR changes would affect connections of different capacities, connected at different voltages and areas of GB. For example, 50kw at LV, 500kw at 11kv and 2MW at 33kv.

The reforms are very complicated and difficult for the layman to understand, and we believe this information would benefit our members considerably.

I trust that this response is clear, but I would be pleased to discuss any points in more detail if that would be helpful.

Yours sincerely

Simon Hamlyn

CEO British Hydropower Association

Cc Dick Allen GHR