



4th February 2019

Andrew Self
Ofgem

Dear Andrew

Ofgem's Targeted Charging Review (TCR) Consultation – British Hydropower Association [BHA] response and answers to questions

The BHA is the leading trade membership association solely representing the interests of the UK hydropower industry (from micro to large scale) and its associated stakeholders in the wider community, both in the UK and overseas.

This is the formal response to the Ofgem Targeted Charging Review on behalf of our c250 members in which we answer each of the questions posed and as well we address how Ofgem's TCR proposals will affect hydropower generators.

Most significant concern

The most significant concern that the BHA has relates to the issue of Embedded Benefits where the BHA fundamentally disagrees with Ofgem's proposed reform to remove Embedded Benefits. Ofgem have clearly underestimated the impact on existing hydropower generators.

Ofgem have admitted that removing the BSUoS Embedded Benefits will reduce revenues and increase costs for smaller embedded generators. As stated in our answer to Q10, this will negatively impact on generators' income streams and economic value, for which they have not been previously planned.

The pre-construction generators' business model will be significantly affected by changing the revenue streams and this very worrying risk was not anticipated by lenders and investors.

The BHA would like Ofgem to confirm that existing hydropower generators will be granted "grandfather" rights for their Embedded Benefits.

Hydropower generators especially in Wales and Scotland have recently experienced sharp increases in non-domestic business rates, which has further increased overall operating costs. The economic value of the generator largely depends on the price the project can sell the electricity for, less any costs. These elements are mainly fixed by third parties that are not under the generators' control and they have no other forms of income to offset these types of losses.

A SCR has just been launched to review Access and Forward-Looking charges. This may increase network charges for existing generators especially for small distributed generators. Again, this will reduce revenues and increase costs, adding to the changes proposed by the TCR

Environmental legislation has been an important driver in reducing the UK's carbon emissions. The UK is committed to several targets most of which stem from the Climate Change Act 2008. The EU has a target of renewable energy to make up at least 27% of energy consumption by 2030. The Scottish Government has a target for renewable sources to generate the equivalent of 100% gross annual electricity consumption by 2020. We think that the proposed reform to remove Embedded Benefits will have a negative impact on these and other targets

Residual Charges

Ofgem's preferred option on setting the transmission and distribution residual charges is by using a fixed charge which will be payable for each demand meter and not charge them to generation. The fixed charge would be set by each DNO to account for the different residual charge requirements, so the charges will vary across GB. The fixed charge will also vary on the level of demand or "segments", splitting consumers into groups.

The TCR gives an example on how the charge would affect sites with on site generation and significant demand but not stand-alone generators such as hydropower.

Distribution connected generator sites normally have an import/export meter. (Sites > 10MW may have a second check meter.) The import and export capacities are stated in the Embedded Generation Connection Agreement (EGCA). The maximum import capacity (or demand) for these sites is typically 10kva which is for the generator's auxiliary equipment, powerhouse supplies and for 11kv and 33kv connections which normally have a separate DNO switch room, the DNO's auxiliary supplies.

Currently the BHA thinks that residual charges are only levied on some generators (transmission connected, larger embedded generators and EHV (33kv) distribution connected generators), so it is difficult to assess the impact of the change to final demand only. The suppliers may have a better idea of the existing arrangements. If this is the case, then only these generators would benefit from the change to a fixed charge, if all generators are exempt from the charge. We have tried to clarify this in Q5.

Embedded Benefits

Ofgem are proposing to remove Embedded Benefits which result from transmission generation residual charges and those which are due to the way in which balancing services are charged. This will significantly affect all generators below 100 MW connected to the distribution network (embedded), i.e. LV, 11kv and 33kv connected generators.

Ofgem have considered 2 reform options:

1. TGR and partial BSUoS reform – TGR reform and removing the ability of embedded generators to receive payments from reducing suppliers' contributions to BSUoS charges.
2. TGR and full BSUoS reform – TGR reform, removing the BSUoS payments and requiring smaller embedded generators to pay BSUoS charges.

Ofgem are proposing TGR and full BSUoS reform which is the very worst-case scenario for hydropower generators. Smaller generators don't receive TGR payments so are not affected by this change. However, Ofgem are going to wait for the recommendations from the BSUoS task force alongside the responses to this TCR consultation before making the final decisions on their proposals.

Ofgem admit that removing the BSUoS Embedded Benefits would reduce revenues and increase costs for smaller embedded generators but will benefit customers from reduced payments and improved system efficiencies over time.

Ofgem realise that hydro generators will be affected, particularly in the short to medium term. However, Ofgem state they have set a clear expectation that the remaining Embedded Benefits would be reviewed. (They issued an open letter in 2016 which set out their concerns with Embedded Benefits.)

Ofgem don't believe that Embedded Benefits have been factored into business models for historic investment decisions. Ofgem also don't think that grandfathering of Embedded Benefits is appropriate as this would impose significant extra costs on customers.

Ofgem also admit that these exorbitant changes may well lead to the cancellation of some future hydropower projects. We have opposed these changes in our responses to the questions.

If there are any queries regarding this submission, or you would like to discuss any aspects in greater detail, please do not hesitate in contacting me.

Kind regards

Simon Hamlyn

**Chief Executive Officer
British Hydropower Association**

The BHA responses to Ofgem's questions are in bold

OFGEM Questions in Italics,

Residual Charges

1. Do you agree that residual charges should be levied on final demand only?

Q1 – We agree that residual charges should be levied on final demand only

2. Do you agree with how we have assessed the impacts of the changes we have considered against the principles? If you disagree with our assessment, please provide evidence for your reasoning.

Q2 – We agree with how you have assessed the impacts of the changes

3. For each user, residual charges are currently based on the costs of the voltage level of the network to which a user is connected and the higher voltage levels of the network, but not from lower voltage levels below the user's connection. At this stage, we are not proposing changes to this aspect of the current arrangements. Are there other approaches that would better meet our TCR principles reducing harmful distortions, fairness and proportionality and practical considerations?

Q3 – No comment

4. As explained in paragraphs 4.41, 4.43, 4.46, 4.49, 4.80, we think we should prioritise equality within charging segments and equity across all segments. Do you agree that it is fair for all users in the same segment to pay the same charge, and the manner in which we have set the segments? If not, do you know of another approach with available data which would address this issue? Please provide evidence to support your answer.

Q4 – Yes

5. Do you agree that similar customers with and without on-site generation should pay the same residual charges? Should both types of users face the same residual charge for their Line Loss Factor Class (LLFC)?

Q5 – The BHA firmly believe that all renewable generators, both transmission and distribution connected, should pay no residual charges. These generation sites have a very small demand which only occurs when the generator is not exporting to the grid

The demand is measured through an import/export meter. This demand is for supplies to the powerhouse including the generator auxiliary supplies and for HV and EHV connections, the auxiliary supplies to the DNO's switch room. These supplies are essential for both the safe operation of the generator and the connection to the DNO's network

6. Do you know of any reasons why the expected consumer benefits from our leading options might not materialise?

Q6 – No

7. Do you agree that our leading options will be more practical to implement than other options?

Q7 – Yes

8. Do you agree with the approaches set out for banding (either LLFC or deeming for agreed capacity)? If not please provide evidence as why different approaches to banding would better facilitate the TCR principles.

Q8 – Yes

9. Do you agree that LLFCs are a sensible way to segment residual charges? If not, are there other existing classifications that should be considered in more detail?

Q9 – Yes

10. Do you agree with the conclusions we have drawn from our assessment of the following? a) distributional modelling b) the distributional impacts of the options c) our wider system modelling d) how we have interpreted the wider system modelling? Please be specific which assessment you agree/disagree with.

Q10 – b) The BHA needs to see more information on the distributional impact on directly connected renewable generators including hydro. The changes have been applied to on site generation but don't seem to include directly connected generators

Q10 - d) Ofgem state that they do not expect there to be any increase in risk across the industry. The distributional impact on directly connected generators is not clear. Any reduction in revenues and increase in costs to existing generators will impact significantly on income streams and the economic value of hydro generators

Embedded Benefits

11. Do you agree with our proposed approach to the reform of the remaining non-locational Embedded Benefits?

12. Do you agree with our proposal not to address any other remaining Embedded Benefits at this stage? Which of the embedded benefits do you think should be removed as outlined in xx? Please state your reasoning and provide evidence to support your answer.

13. Are there any reasons we have not included that mean that the remaining Embedded Benefits should be maintained?

Q11 & 13– We do not agree to Ofgem's proposed reform to remove Embedded Benefits. The BHA believes that Ofgem have clearly underestimated the impact on existing renewable generators, especially hydropower

Ofgem have stated that removing the BSUoS Embedded Benefits would reduce revenues and increase costs for smaller embedded generators. As stated in our answer to Q10, this will negatively impact on generators' income streams and economic value, for which they have not been previously planned

The pre-construction generators' business model will be affected by changing the revenue streams and this is a significant and worrying risk that wasn't anticipated by lenders and investors

The BHA believes that existing hydropower generators should be granted "grandfather" rights for their Embedded Benefits

Hydropower generators have also experienced a sharp increase in non-domestic business rates, especially in Wales and Scotland, which has further increased operating costs. The economic value of the generator largely depends on the price the project can sell the electricity for, less any costs. These elements are mainly fixed by third parties that are not under the generators' control and they have no other forms of income to offset these types of losses

A SCR has just been launched to review Access and Forward-Looking charges. This may increase network charges for existing generators especially for small distributed generators. Again, this will reduce revenues and increase costs, adding to the changes proposed by the TCR

Environmental legislation has been an important driver in reducing the UK's carbon emissions. The UK is committed to several targets most of which stem from the Climate Change Act 2008. The EU has a target of renewable energy to make up at least 27% of energy consumption by 2030. The Scottish Government has a target for renewable sources to generate the equivalent of 100% gross annual electricity consumption by 2020. We think that the proposed reform to remove Embedded Benefits will have a negative impact on these and other targets

Q12 – We agree with your proposal not to address any other remaining benefits at this stage

Transitional Arrangements

14. Do you agree with our proposed approach to transitional arrangements for reforms to: a) transmission and distribution residual charges b) non-locational Embedded Benefits? Please provide evidence to indicate why different arrangements would be more appropriate.

Q14 – a) We agree with the proposed approach to transitional arrangements for reforms to the transmission and distribution residual charges

b) Because we disagree with your proposed reform to remove Embedded Benefits, we disagree with the proposed approach to the transitional arrangements

"Minded to" Position

15. Do you agree with our minded to decision set out? If not please state your reasoning and provide evidence to support your answer.

Q15 – If directly connected generators are to pay no residual charges through fixed charges, then we agree to your minded decision. However, we disagree with your minded for Embedded Benefits. Our reasoning is described in Q11 and 13 above.

16. For our preferred option do you think there are practical consideration or difficulties that we have not taken account of? Please provide evidence to support your answer.

Q16 – If directly connected generators pay no fixed charges, then implementation from April 2021 is most appropriate. We disagree with the removal of Embedded Benefits as described above.