

BEIS 2018 Consultation on the Feed-in Tariffs Scheme

Question 1 - *Do you agree or disagree with the proposal to end the export tariff alongside the generation tariff, which would close the scheme in full to new applications after 31 March 2019? Please provide evidence to support your reasoning; for example, around the impact on jobs, deployment, consumer bills and the supply chain.*

The British Hydropower Association (BHA) fundamentally disagrees with the ending of both the generation and export tariffs.

- i. The BHA disagrees with the proposal to end the Feed-in Tariff [export tariff and generation tariff] by 31 March 2019. The measures taken by Government in 2015/16 (i.e. technology-specific deployment caps, queuing and tariff digression) provide a framework to control the cost of Feed-in Tariff to consumers.
- ii. BEIS should use this type of framework to set future, better targeted, deployment caps, which balance the needs of the different Feed-in Tariff technologies with the needs of bill payers.
- iii. The BHA seriously questions whether the forecast cost of keeping the Feed-in Tariff scheme open, <£1 per household (in 2023), is an undue burden on consumer bills. Other technologies have exceeded their deployment caps which indicate an ability to deliver these technologies at or below their current tariffs. By contrast, hydropower has deployed at rates below their caps, strongly implying that tariffs are still needed – at least at current levels - to sustain the associated jobs and supply chains.
- iv. A more effective and proportionate response to concerns about consumer bills would therefore be to close (or further reduce) the Feed-in Tariff for the oversubscribed technologies, whilst setting appropriate deployment caps for hydropower for the years to come.
- v. The BHA notes from table 5 of the Impact Assessment that £85m of the expected £90m additional cost to consumers (in 2023) of keeping the Feed-in Tariff scheme open comes from non-hydropower technologies.

Continuing the Feed-in Tariff for hydropower only would therefore achieve virtually the same saving as closing the scheme altogether without the significant and long-lasting damage to the hydropower sector that will otherwise occur.

- vi. Continuing the Feed-in Tariff for hydropower only would therefore achieve savings of £45m (in 2023) versus “do nothing”, without the significant and long-lasting damage to those industries that will otherwise occur. Specifically in respect of hydropower, just £5m of the expected additional cost to consumers (in 2023) is forecast to come from this technology. Continuing the current Feed-in Tariff for hydropower only would add just <5p to domestic bills (in 2023).

- vii. We disagree with Table 2 of the Impact Assessment, which suggests that 5-10MW of additional hydropower capacity could be deployed each year without Feed-in Tariff support. New hydropower deployment is unviable without support, and the implications of closing the Feed-in Tariff for hydropower must be viewed in that light.
- vii. Maintaining Feed-in Tariff for hydropower only would allow Government to achieve 95% of the savings from complete closure without harming these industries.
- viii. A targeted continuation of the Feed-in Tariff for hydropower only, is a far more proportionate response than the complete closure of the scheme.
- ix. As predicted in the BHA response to the 2015 Feed-in Tariff consultation the level of hydropower deployment has decreased significantly as a result of the subsequent reduction in Feed-in Tariffs. A clear lack of understanding by BEIS regarding hydropower capacity factors resulted in a more significant reduction in tariff than justified.
- x. With the current level of Feed-in Tariff support, a small number of projects are able to achieve a rate of return around 4-7%. Removal of Feed-in Tariff would take returns to c1-2% a level at which no business would seriously invest.
- xi. However there has still been some level of development and it is anticipated that there are currently c45MW-55MWs of planned capacity which is aiming to pre-accredit by end of March 2019.
- xii. The hydropower sector supports 7,400 jobs [Department for Business Innovation and Skills – 2015 – 'Size and Performance of the UK Low Carbon Economy'], generating significant economic activity in many rural locations. With no other support mechanism available for hydropower, the end of the Feed-in Tariff (generation & export tariffs) will effectively halt all job creation related to new hydropower scheme developments.
- xiii. Without the support of the Feed-in Tariff, further hydropower deployment beyond April 2019 will not occur. As a result there will be an immediate loss of direct jobs and the associated supply chain, a significant reduction in local economic activity and the loss of very much needed green energy generation.
- xiv. The Executive Summary of this consultation correctly highlights the Public Attitudes Tracker result of 85% support for the use of renewable energy. Removing support for small-scale renewables is not consistent with the Government's commitments on climate change or public opinion and the BHA believes the Government has not balanced the benefits of Feed-in Tariff scale renewables with the costs accurately or correctly.
- xv. The damaging changes that the Government is announcing in the name of affordability will have the perverse effect of increasing the cost of clean energy by

severely damaging the established industries that have built up over the Feed-in Tariff period, as well as damaging the rural economy and significantly reducing future investment in renewables.

- xvi. Using independent research - the Poyry report [2015], BHA estimates that hydropower developers have spent c£1billion on building Feed-in Tariff schemes and continue to spend c£30M annually on their operation.

The BHA estimates that on average c70% of the cost of a new UK hydropower scheme is in civil construction, and the majority of the hydropower Feed-in Tariff supported schemes have been located in relatively remote rural areas so their development, construction and operation is supporting local jobs, businesses and supply chain.

- xvii. From a community hydropower perspective, as well as providing often much needed community funds which can be used to alleviate fuel poverty, hydropower offers a local, social investment opportunity; it provides an excellent educational resource to communities, and can draw people to the river environment. Good examples of hydropower community support are the Mull and Iona waterfall funds.
- xiii. There is a potential for a further 2GW of capacity technically available in the UK according to *Hydropower and Dams* research [2017], of which some may not be practical, but there are still significant levels of capacity that can be developed.
- xviii. The renewable contribution to the UK energy mix can be very high if it is spread between solar, wind and hydropower rather than just one or two of these technologies. Intermittency is massively reduced with very limited periods of lack of sun, wind or rain. Hydropower is the smallest sector of the three main renewable technologies and therefore the overall value of every MWh of hydropower is very important and is increasing year-by-year.
- xix. Electricity generation during wet, overcast weather is extremely valuable in the current and future energy mix (batteries can fill the hour by hour, but not the week by week). Hydropower cannot catch up with solar and wind (due to site availability) but every MWh more hydropower in the UK network, the less is required of fossil fuels, therefore the subsidy per unit of electricity (MWh) must have this in mind.

Question 2 - *Do you agree or disagree with the administrative closure and exception arrangements? Please explain your reasoning*

The BHA agrees with the closure exception arrangements stated, however believes there should also be more substantial exceptions for hydropower in place.

- i. The closure arrangements relating to pre-accreditation as well as the confirmation of the 2-year pre-accreditation period afforded to hydropower are welcomed by the BHA.

- ii. However the current closure exception arrangements will create a catastrophic 'cliff edge' scenario for hydropower development. This risks a log-jam of applications with regulators, planners, DNOs, Ofgem and others as there will be a chaotic rush to meet the March 2019 pre-accreditation deadline.

This will be followed by a scramble to construct within the pre-accreditation window - causing shortages in the supply chain which will drive costs up rather than down and incentivise developers to rush their work with the associated increase in healthy and safety risk

- iii. The BHA believes a more realistic and smoother glide-path to closure after March 2019 instead of the devastating 'cliff edge' would create a softer landing for the industry.

This could be in the form of the following:-

- a. Allow developers to make use of any unused hydropower capacity after March 2019, permitting new accreditations (for hydro projects) beyond the Feed-in Tariff closure date.
- b. Introduce a pre-accreditation grace period of up to 6 months (after March 2019) where planning and water licence applications were submitted by the developer with sufficient time, but they have not yet been determined due to delays outside the developer's control. This is to reduce the bottleneck in the planning and water regulatory system which could prevent developers being able to pre-accredit before the Feed-in Tariff closure.
- c. Introduce a commissioning grace period of 6 months (after the end of the pre-accreditation period) where a generating station is ready to commission but are subject to grid delays which are out of developer's control.

Question 3 - *Do you agree or disagree with the proposal to levelise net metered export payments? Please explain your reasoning.*

It is important that FiT Licensees who are offering PPAs to generators are not exposed to the risk that the generator may opt for the export tariff when it goes above the market price. Making this change will encourage PPA companies back into the market and provide competition.

Question 4 - *Do you agree or disagree with the use of the average time-weighted System Sell Price to determine the value of metered export to FIT Licensees? Please explain your reasoning*

No response

Question 5 - *Do you agree or disagree with the proposed calculation Ofgem would use to make the necessary adjustments to quarterly and annual levelisation payments? Please explain your reasoning*

The BHA agrees with the calculation

Question 6 - *What would you expect the likely replacement rate for generating plant to be, for each FIT supported technology, if the rules were changed to allow unlimited replacements? To what extent would load factors change? Please provide evidence.*

The BHA believes that the rate of replacement for hydro generation equipment will be very low.

- i. Hydropower replacement rates are expected to be very low as one of the many benefits of hydropower is its reliability and the long-lasting nature of the technology.
- ii. There will however be occasions where equipment is defective or where there has been an accident (such as a flood or fire) which requires partial (or complete) replacement of the generating equipment.
- iii. It will often not be possible to obtain a 'like for like' replacement for the equipment, though generally the efficiencies of hydropower turbines do not vary very much. It is therefore unlikely to have a significant impact on the overall scheme generation.

Question 7 - *What would the impact be of not allowing replacement of generating plant? Please provide evidence*

The BHA believes that this would have a serious impact on the hydropower industry.

- i. Though the likelihood that complete replacement is required is very low, the impact for the affected scheme would be very high, resulting in the closure of the scheme.
- ii. In addition, if a developer would be unable to replace the equipment (without losing the Feed-in Tariff support) it could invalidate insurances and cause unacceptable investment risks.

Question 8 - *How can government ensure that any budgetary impact from allowing the unlimited replacement of plant can be controlled in an administratively practical manner?*

The BHA believes that the budgetary impact from allowing unlimited replacement of plant in the hydropower industry would be insignificant.

- i. The BHA believes that allowing unlimited replacement in the hydropower sector would not cause a significant budgetary risk.
- ii. The failure rate will be very low and there are not expected to be any significant improvements in hydropower turbine efficiencies. It is very unlikely that there will be any wholesale replacement of equipment which would benefit from increased generation on an earlier, more lucrative, tariff.
- iii. We would be very concerned if a system was introduced which tried to restrict efficiencies. This is because it is very difficult, inaccurate, and in some cases impossible to directly measure efficiencies for a hydropower scheme, so such a system would be unenforceable.

- iv. The BHA would also not support a restriction on annual generation for a hydropower scheme to align with a theoretical load factor for 2 reasons –
- The scheme economics are based on average weather conditions and so the developer will expect to benefit from the extra generation in wet years to compensate for the lower generation in drier years.
 - Load factors for hydropower schemes are very variable and are not an indication of 'good scheme siting' in the same way they are for other technologies. For instance a very small scheme on a large river could have 100% load factor, where as a larger scheme in the same place on the same river may use more of the resource but have a much lower load factor. The scheme economics will be based on the actual calculated load factor for the scheme and not the nominal.