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Feed-in Tariff Review Team  
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23<sup>rd</sup> October 2015

Dear Sir or Madam

## **DECC Consultation on a review of the Feed-in Tariffs Scheme**

### **1. Background**

The British Hydropower Association [BHA] is an influential UK trade membership association with 188 members, focusing solely on the demands of the hydropower sector. Membership of the association is diverse, covering all sizes and types of hydropower and it is open to all commercial organisations, in particular UK manufacturers and developers, academia, charities, community groups and individuals involved with or having an interest in hydropower.

This consultation response has been drawn together by an Industry Working Group formed from within BHA membership, including manufacturers, developers, consultants and other experts representing all aspects of the industry, from micro to large scale hydropower.

### **2. Benefits of hydro**

Hydropower is an important and valuable contributor to the UK renewables mix and to achieving the UK's low carbon targets. Hydropower is the world's leading renewable energy source and the oldest method of harnessing clean power.

Hydro offers the following specific benefits -

**Jobs** - The hydropower industry is committed to helping to tackle climate change. It simultaneously supports thousands of jobs 7,400 (Department for Business Innovation and Skills – 2015 – 'Size and Performance of the UK Low Carbon Economy), and adds over £700M to the wider UK economy every year and in the majority of cases, in remote and often fragile rural communities.

As a result there is now a world leading industry base in the UK. This could not have been achieved without projects being supported by the Feed-in Tariff [FIT].

**Reliable** - Hydropower is a reliable and proven technology, improved and refined over many years which offers long-term generation way beyond the subsidy period. Hydro also contributes more to peak winter base load and can have storage capability making it dispatchable.

**Lower long term cost** - The cost per kW of clean energy produced by hydro is the lowest of all the renewable technologies when taken over the full lifetime of the installation because it offers long-term generation beyond the subsidy period. While 35 years has been assumed for the economic analysis, many schemes will last between 50 and 100 years, and sometimes beyond.

**UK content** – Well over 50% of the cost of a new UK hydropower scheme is in civil construction which is procured locally. In addition, BHA research suggests that UK based turbine manufacturing companies have more than 60% of the market share for supply of the generating equipment. The majority of all new schemes are in remote rural areas, providing valuable energy and income in a way which is environmentally sensitive, and has strong community support and involvement.

**Community** - Both Community Energy England [CEE] and Community Energy Scotland [CES] are very supportive of hydro. CEE has said that there are many additional benefits to community-owned hydropower schemes. As well as providing often much needed community funds which may be used to alleviate fuel poverty, they offer a local, social investment opportunity; provide an excellent educational resource to communities, increase amenity value for rivers and draw people to the river environment. They also stated that in addition to the challenges posed to commercial schemes, community schemes face longer timeframes due to their higher level of volunteer and part time group involvement. Raising finance often involves community share issues. In addition, the time to achieve abstraction, planning and Distribution Network Operator agreements is also necessarily longer.

**Export** - A significant benefit of sustaining a UK hydropower industry is that manufacturers, consultants, developers and others can use this as a base to develop opportunities overseas. In order to be credible in an export market, there needs to be a flourishing home market.

### **3. Our concerns**

Whilst the BHA recognises the need for government to ensure effective cost controls, the association believes there is the need to increase the proposed level of support for the renewables sector

The BHA acknowledges the need for a FiT review, but has many concerns about the impact of this proposal, as well as the recent removal of pre-accreditation, on the hydro sector. Hydro is different to other technologies. It takes around 18 months to develop and 2 years to build a typical hydro scheme.

In this consultation response three key areas of concern are addressed:-

**Investment** - Hydro has 8 quarters of potential 10% depressions between financial close and commissioning. Without some form of pre-accreditation very few investment committees, or bank providing debt financing, could reach a decision to fund a project on this basis.

**Economics** - The proposed tariffs are now too low to support future hydro development as very few projects will be economic.

**Timing** - The FiT proposal covers 13 quarters to March 2019, whereas the development and construction cycle for a hydro scheme is 14 quarters. Only those schemes currently in development will be able to deliver in the proposed timescales.

As a result of this further new development in the UK hydro industry would reduce to a very low level with the associated loss of jobs and rural development opportunities.

#### **4. BHA proposal**

In order to address these concerns, the following changes are proposed, the details of which are included within our response:-

- **Tariffs** – are generally returned to a level which will stimulate further hydro development
- **Managed pre-accreditation** – is introduced for hydro up to 80% of the quarterly cap.
- **Quarterly caps** - Unused budget is carried forward between quarters.
- **Contingent depression** – is to be technology specific and removed or reduced for hydro.

#### **5. Consultation response**

The BHA has provided responses to the 32 questions contained in the consultation document and, as there is no question on pre-accreditation, there is a specific BHA proposal in our submission for the introduction of 'Managed preaccreditation' [Appendix A], aspects of which are included in the answers to the consultation questions where appropriate.

The BHA welcomes the opportunity to provide further clarification to DECC on any aspects of our submission.

Yours sincerely

**Simon Hamlyn BA Hons - Chief Executive Officer**

## **CONSULTATION QUESTION RESPONSES**

### **Section 2 – Securing value for money**

**Question 1** - Do you agree or disagree with the proposed generation tariff rates set out above? Please provide reasons to support your answer.

**The BHA disagree with the proposed generation tariffs for hydro as they are insufficient to support the significant level of hydro development expected by DECC in the remaining period of FiTs.**

The BHA outlined in their submission of 28<sup>th</sup> April 2015, that in order to sustain the long-term future development of hydropower the tariffs needed to be revised upwards. A study commissioned by the BHA with independent consultants, Pöyry [Appendix B], broadly supports this view, demonstrating that in order to maintain a 9% return the tariffs should be increased to levels at or above the September 2015 levels.

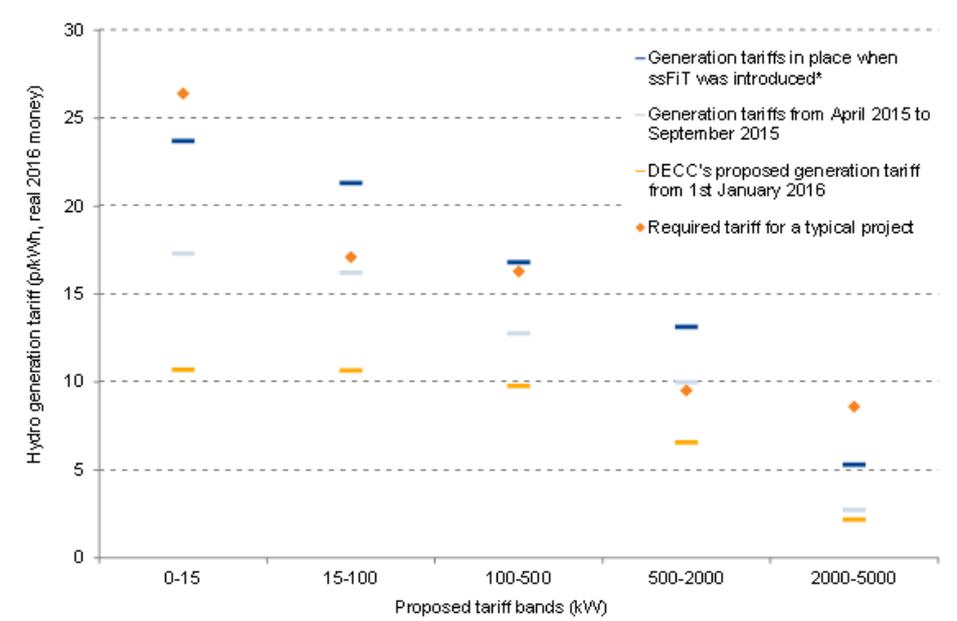
Table 1 – Comparison of historical and proposed hydro tariffs

Installation size (kW)	Generation tariffs in place when ssFiT was introduced*	Generation tariffs from April 2015 to September 2015	DECC's proposed generation tariff from 1st January 2016	Required tariff for a typical project
0-15	23.7	17.3	10.7	26.4
15-100	21.3	16.2	10.7	17.1
100-500	16.8*	12.8	9.8	16.3
500-2000	13.1	10.0	6.6	9.5
2000-5000	5.3	2.7	2.2	8.6

\*The tariff shown for the 100-500kW band is the tariff that was introduced following the 2012 comprehensive ssFiT review.

Source – Pöyry report

Fig 1 – Comparison of historical and proposed hydro tariffs



Source – Pöyry report

The report suggests:-

- **Tariff increase** - tariffs need to be increased across the board to a level above both DECCs proposal and above the September 2015 levels in order to maintain a sustainable hydro industry.
- **0-15kW band** – this should be reinstated as the more extensive Pöyry data set demonstrates that the capital costs of this scale are significantly higher than PB suggested. However the fact that there has been significant deployment at this scale, at lower than our proposed tariffs, may suggest that the economic drivers are different for this scale.
- **2000-5000kW** band – as these bands have been insufficient to support any direct deployment (all have been extensions) any rate adjustment should reflect actual costs.

While hydro is apparently a higher cost than some of the other renewable technologies, hydro offers better value because of its significantly longer life. While 35 years has been assumed for the economic analysis many schemes will last between 50 and 100 years, and sometimes beyond.

Tariffs for hydro have significantly decreased since the start of the scheme tariffs and, while our proposal does not in general propose a return to these levels, it is believed that a significant increase above those proposed in the consultation would be necessary in order for the industry to make a significant and long-lasting contribution to the sector.

The evidence of this is now apparent. While hydro FiT deployment increased from 2012 to 2014, this has already slowed or reversed for some capacity bands and critically, there was a significant drop in the hydro consents in Scotland, for example, in 2015 when compared to the same period last year. (See table 2)

Table 2 – Comparison of hydro consents 2014 v 2015

	Jan – Sep 2014	Jan – Sep 2015
0-15kW	4	7
15-100kW	28	25
100-500kW	18	11
500kW – 2MW	14	10
>2MW	0	0
<b>total</b>	<b>64</b>	<b>53</b>

Source - Scottish Local Authority websites

As these consents would mostly have been submitted before the 2014 & 2015 depressions, and certainly before the FiT consultation, the reduced tariffs may well result in these schemes now being uneconomical to build.

If the budget is not available for the required tariff increases, then this will necessarily need to be at the expense of the total capacity in order to remain cost neutral.

**Question 2** - Do you agree or disagree that the updated assumptions produced by Parsons Brinckerhoff are reflective of the current costs of deployment for UK projects in your sector? If you disagree, please set out how they differ and provide documented evidence, such as invoices and/or contractual agreements to support this evidence. Please also mark this evidence as commercially sensitive where appropriate.

**The BHA disagree that the updated assumptions produced by Parsons Brinckerhoff (PB) are reflective of the current costs of deployment for UK projects in the hydro sector.**

Because of concerns about the validity of the PB report, independent consultants, Pöyry, were commissioned by the BHA to review the PB assumptions, as well as to collate and analyse new evidence.

The key differences in the Pöyry analysis;

- The Pöyry sample size is 3 times the size compared to PB. 154 v 53 separate data sets.
- Pöyry included other development costs including environmental surveys, planning and licence applications additional overheads including insurance costs, licence charges, monitoring fees, fish surveys, bank charges, audit and accountancy fees, property and business rates, tax costs and community benefit payments
- The differing assumptions vs PB are in the table below;

Assumptions	Model 1 - DECC/PB approach	Model 2 - BHA/Pöyry approach
Cost source data	PB survey	BHA survey
Costs included	PB definition	All costs
Load factor	40%	Survey data
Hurdle Rate	9%	9%
Commissioning time	1 year	1 year
Project Lifetime	35 years	35 years
DECC's export fraction	PB survey	BHA survey
Outlier upper limit	75% of the median	75% of the median
Outlier lower limit	25% of the median	25% of the median
Cost outliers limits are applied to	Capex and opex separately	Capex and opex jointly
Treatment of other costs if one is an outlier	These costs can be considered	Whole project excluded
Tariff calculation approach	Calculated from average parameters	Average of project specific tariffs

- The main difference in Pöyry methodology was that they were able to calculate all tariffs based on sample data due to the larger size, rather than it being necessary to infer results from changes in other size bands.
- Pöyry sought to improve internal consistency within the calculation by calculating a required tariff for each project and then averaging across projects in the band. This contrasts with the PB/DECC approach of first averaging input assumptions (such as capex and opex) and performing a single tariff calculation for each band. The Pöyry approach meant that the characteristics of a particular project remain linked – for example some projects may have a higher capex but lower

opex or vice versa, or some projects may have high capex and opex costs but also relatively high load factors.

The key findings were:-

a) Tariffs

That the tariffs calculated from survey data as being required by a 'typical hydro project' in each size band are significantly higher than those proposed in the consultation from 1 January 2016.

b) CAPEX/OPEX

The difference in reported capex and opex costs is the main driver of differences in the required tariffs calculated by DECC/PB and Pöyry.

Installation size (kW)	Capex (£/kW)			Opex (£/kW/year)			LCOE (£/MWh)	
	DECC	PB	BHA	DECC	PB	BHA	DECC	BHA
0-15	5,200	3,700	12,400	50	40	190	155	337
15-50	5,200	5,700	7,000	50	70	60	155	238
50-100	5,200	5,300	7,500	50	100	170	155	176
100-500	4,600	4,300	5,300	50	50	160	139	190
500-1000	3,700	3,400	3,100	20	20	130	106	141
1000-2000	3,700	2,600	4,300	20	10	120	106	137
2000-5000	2,500	2,200	4,000	10	10	70	70	123

c) Load factors

These were generally higher for installations below 100kW averaging 52%. Installations above 100kW had load factors just above 40%. Load factors from schemes which are already operational averaged 40%.

d) Hurdle Rates

We agree that a hurdle rate of 9% for hydro is considered realistic given the much higher risk associated with these projects and the higher development costs over a long period which are not all capitalised.

**Question 3** - Do you consider the proposed default degression pathways fairly reflect future cost and bill savings assumptions in your sector? Please provide your reasoning, supported by appropriate evidence where possible.

**The BHA agrees with the proposed minimal default degression for the hydro sector (as shown in Figure 4 in the Consultation document) and support PB in their acknowledge that reductions in the cost of new-build hydro are unlikely given its state of maturity.**

**Question 4** - Do you consider it appropriate to harmonise the triggers for contingent degression across all technologies, and do you consider the proposed triggers will ensure tariffs reflect falling deployment costs? Please provide your reasoning, supported by appropriate evidence where possible.

**The BHA does not support the harmonisation of contingent depression triggers across technologies and do not consider the proposed triggers reflect falling deployment costs for hydro.**

As stated by PB, it is unlikely that there will be any significant fall in hydro deployment costs and therefore the proposed levels of contingent depression would close down the hydro industry very quickly – a single 10% depression could have a devastating impact.

It takes around 18 months to develop and 2 years to build a typical hydro scheme. Because of this a hydro installation would risk 8 quarters of potential 10% depressions between financial close and commissioning. Very few investment committees, or banks providing debt financing, could reach a decision to fund the project on this basis.

However if contingent depression is unavoidable then measures which would reduce the impact on the industry are:-

- **‘Managed pre-accreditation’ is introduced for hydro** – this would allow developers to have sufficient tariff certainty for financial close while preventing pre-accreditations from inadvertently driving depression.
- **Depression trigger capacity carried forward** – this would allow the unused budget from one quarter to be carried forward into the next, providing a simple self-correcting mechanism to prevent seasonable variations in deployment triggering depression..
- **Contingent depression levels reduced** – to a lower level for hydro so the reduction in tariff is less severe.

***Question 5** - Which of the options for changing the export tariff outlined above would best incentivise renewable electricity deployment while controlling costs and enabling the development of the PPA market? How should we account for the additional and avoided costs to suppliers associated with exports in setting the export tariff? Please provide reasons to support your answer.*

**The BHA supports the second option to rebase the export tariff to a lower level.**

This is because the export tariff supports debt funding for projects by effectively providing a floor price for electricity that a debt provider can rely upon.

***Question 6** - Do you agree or disagree with the proposed changes to the indexation link under the FiTs scheme? Please provide reasons to support your answer.*

**The BHA disagree with the proposal to change the indexation from RPI to CPI**

RPI includes mortgage interest and building insurance costs, therefore this correlates far better with the cost-base for hydro schemes, as during the operational phase there will be significant financing and insurance costs.

**Question 7** - Do you agree or disagree with the proposal not to include any additional technologies in the FiTs scheme? Please provide reasons for your response.

**The BHA agrees that additional technologies should not be included in the FiT scheme.**

With the FiT budget already stretched and allocated as part of the new capped proposal the inclusion of other technologies at this stage could have a detrimental impact on the budget available for the technologies already included.

### **Section 3 – cost control measures**

**Question 8** - Do you agree or disagree with the proposal to introduce deployment caps under the FiTs scheme? Please provide your reasoning.

**The BHA agrees with the proposal to introduce deployment caps under the FiTs scheme.**

Deployment caps at the right level will be an effective means to control overall scheme costs and the separate technology caps will ensure that one technology cannot impact on the available budgets for other technologies.

**Question 9** - Do you agree or disagree with the proposed design of the system of caps (i.e. quarterly deployment caps broken down by technology and depression band)? If you disagree, are there any alternative approaches? Please provide your reasoning, making clear your answer is different for different technologies or sectors.

**The BHA agrees generally with the proposed design of the system caps (i.e. quarterly deployment caps broken down by technology and depression band) provided account can be taken of seasonal variations.**

Quarterly caps (combined with the re-introduction of pre-accreditation) could enable hydro deployment to be better spread between now and the end of the FiTs scheme.

However there are a number of issues with the details of the proposal,

- We understand that schemes which have already been pre-accredited will not be counted towards the future caps. In 2014 more than 80% of all hydro schemes deployed were pre-accredited and so the majority of the hydro schemes to be commissioned within the next 18 months have already been pre-accredited. As a result there would be a significant shortfall in deployment during this period unless pre-accreditation is re-introduced.
- The FiT proposal covers 13 quarters to March 2019 whereas the typical development and construction cycle for a hydro scheme is 14 quarters. Only those schemes currently in development will be able to deliver in this timescale.
- Seasonal variations – particularly relevant for hydro where construction requires dry weather and commissioning requires wet weather – would result in the winter periods being oversubscribed and the summer underutilised.

However in order for the scheme to work effectively for hydro we propose the following measures:-

- **'Managed pre-accreditation' is reinstated for hydro** – in addition to this allowing developers to have sufficient tariff certainty for investors this would:-
  - o Fill the hydro deployment gap for the first 18 months
  - o By allowing pre-accreditations to take place up until the proposed close of the scheme in March 2019 deployment predictions can be achieved hydro development activity can continue into 2021
- **Cap capacity carried forward** – this would allow the unused budget from one quarter to be carried forward into the next, providing a simple self-correcting mechanism for any seasonal variations in deployment.

**Question 10** - *Do you agree or disagree with the proposed approach to implementing caps? If you disagree, are there any alternative approaches that you'd suggest? Please provide your reasoning, making clear if your answer is different for different technologies or sectors and provide any views on what should happen to applications for FITs installations which miss out on a cap.*

**The BHA agree in general with how the caps would be implemented but suggest a hybrid system of carry over and refusal for deployment which exceeds the cap.**

We propose the following mechanism for managing the caps (the flow chart of this process is in appendix A):-

- If the current period's cap is exceeded but the next period's cap is not, the projects are kept in the queue (and processed by Ofgem) until the start of the next period when they can be accredited.
- If the next period's cap is also exceeded applications are rejected and the applicant will need to apply again.

This will have the benefit of ensuring there are some projects in reserve should an earlier application be found to be inadmissible and also allow a smoother workload for Ofgem who can 'get ahead' at the end of the period on the following period's applications. However it will prevent the entire budget being taken in advance.

If the BHA proposed 'managed pre-accreditation' system were introduced it would follow a similar system, only that the pre-accreditation cap would be 80% of the overall cap to prevent pre-accreditation driving degeneration and ensure there is always some capacity available for schemes which accredit directly (see flow chart of this process is in appendix A).

**Question 11** - *If it is not possible to sufficiently control costs of the scheme at a level that Government considers affordable and sustainable, what would be the impact of ending the provision of a generation tariff for new entrants to the scheme from January 2016, ahead of the 2018-19 timeframe or, alternatively, further reducing the size of the scheme's remaining budget available for the cap? Please consider the immediate and broader economic impacts and provide your reasoning.*

**The BHA believe that if the FiTs scheme is closed to new applicants from January 2016, further new development in the UK hydro industry would reduce to a very low level.**

Small hydro development is entirely dependent on the support it gets from the Generation Tariff and so further new development would disappear very quickly after January 2016 if the scheme were to close early. This is demonstrated by the Pöyry survey which shows the necessity of FiTs support to support the industry in the future. The industry supports 7400 jobs a significant number of which would be lost should this course of action be taken.

It would also have a particularly serious short term impact for projects which were pre-accredited in 2013 and are already in construction but fail – often due to grid connection delays - to commission within their 2 year pre-accreditation window. The closure of the scheme could result in unsustainable losses for these businesses and their supply chain partners who have successfully built up businesses with the support of FiTs and may be needed to meet our future climate change goals. Therefore if the scheme is to close a 6-month grace period must be introduced for these schemes to allow them to apply to accredit under the existing scheme rules to limit their losses.

**Question 12** - *What would be the impact of pausing applications to FiTs for new generators for a short specified period to allow the full implementation of the cost control mechanisms? Please consider the immediate and broader economic impacts and provide your reasoning.*

**The BHA believes that if the FiTs scheme is paused it would have a negative impact on the hydro industry, however provided it is a short pre-defined period it is preferred to the complete closure of the scheme.**

The immediate impact will be on schemes which have already invested and are ready to accredit at the time the scheme is paused – for hydro this will mostly consist of schemes which have either missed their pre-accreditation window or are being extended. These accreditations will be delayed with the associated loss of income.

It would also further increase levels of uncertainty during project development and it would be a sub-optimal way of using Ofgem's FiT accreditation team resources and may create backlogs and delays.

**Question 13** - *What would be the impact if FiTs continued as an export-only tariff for new generators on reaching the cap of £75-100m additional expenditure? Please provide your reasoning.*

**The BHA believe that if the FiTs scheme continued as an export-only tariff for new generators at current export tariff levels, new development within the UK hydro industry would disappear very quickly.**

This would have the same impact on hydropower as closing the scheme.

However, if this were accompanied by a significant increase in the export tariff, to achieve similar levels of support to those being requested from FITs here, then this approach could possibly be made to work.

***Question 14** - Do you have any views on the use of competition to prioritise applications within a system of caps? What do you think are the advantages and disadvantages of this approach? What forms of competition may be appropriate and is this different for different sorts of installations? Please provide your reasoning.*

**The BHA would not support the use of competition to prioritise applications within a system of caps because of the increased complexity and administration this would entail.**

We do not object to competition within the hydro sector; however competition between technologies would not work because they have different qualitative benefits - such as visual impact, intermittency and asset life – which impact on the overall value of the scheme.

In addition, experience from the CfD process suggests that competition can result in a very long and complex process which would take a considerable time to implement and for <5MW installations would likely not be cost effective.

***Question 15** - Should FiTs be focussed on either particular technologies or particular groups (e.g. householders)? Please provide your reasoning.*

**The BHA does not believe that FiTs should be focussed on particular groups or technologies.**

We agree that it is good for communities and house holders to have a direct stake in renewable energy deployment; however businesses also have an important role to play in driving up the standards and driving down the costs of the technologies.

In addition, hydro is highly geographically dependant and complex in engineering and so it is unlikely that a scheme could be realised by many householders or communities. If the government's aim is to secure renewable generation which will last a very long time with low visual and environmental impact, hydro is the best choice.

***Question 16** - Do you agree or disagree with the proposal to remove the ability of new installations to extend their capacity under the FiTs scheme? Please provide your reasoning*

**The BHA disagrees with the proposal to remove the ability for new installations to extend their capacity under the FiTs scheme**

The ability to install supported extensions under the FiTs scheme has enabled a significant number of schemes to maximise site potentials without the down-sizing DECC are keen to avoid.

For many hydro schemes the higher tariff for the smaller capacity scheme is sufficient to cover the significant common civil costs for the construction of a hydro scheme (intake, pipeline, powerhouse, grid connection) with the tariff for the extended capacity sufficient to support the additional cost of the installation of the extension (this is particularly true for the 2-5MW band). In other cases limitations of grid or funding have prevented the installation of the full capacity straight away.

While we acknowledge that this is not how the tariff structure was intended to work (which is based on total installation costs for that capacity) without some system of support for extensions schemes may be permanently down-sized.

However, if supported extensions are removed it is essential not to limit unsupported extensions of FiTs schemes in the future otherwise the future potential for householders, businesses and communities which have been at the forefront of renewable development and already deployed some limited capacity will have sterilised their potential.

The BHA is concerned that the current legislation would not permit unsupported extensions. Article 17 of the current Feed-in Tariff Order permits withdrawal of accreditation if an installation has been extended or otherwise modified in such a way that it would not be entitled to accreditation. Article 7 also prevents installations being extended above the specified maximum capacity. If the extension is unsupported by the FiT scheme then extension above 5MW should also be permitted.

A simple approach to this could be to introduce a specific tariff for extensions (which could be zero if they are to be unsupported) to allow schemes to be extended without impacting on the budgets.

#### **Section 4 - metering**

***Question 17*** - *Given our intention to move to fully metered exports for all generators, do you agree with the proposal that new and existing generators should be obliged to accept the offer of a smart meter (or advanced meter) when it is made by their supplier? Please provide reasoning for your response.*

**The BHA supports the move to smart (or advanced) meters.**

This allows the exact matching of generation requirements to the local demand, and should in theory avoid expensive grid upgrades that are ultimately borne by consumers.

***Question 18*** - *Do you agree or disagree with the alternative proposal that new applicants must have a smart meter (or advanced meter) installed before applying to the FiTs scheme, with existing generators being obliged to accept the offer of a smart meter (or advanced meter) when it is made by their supplier? Please provide reasoning for your response.*

**The BHA disagrees with the requirement that new applicants must have a smart meter.**

The smart meter roll out in the UK is supplier led, and is timetabled to take place over the next 5 years. There are a number of factors that suppliers will be taking into account when deciding their roll out programme, such as penetration of customers, development status of local communication networks etc. To require a new applicant to have to wait for local smart meter availability in their area, when they have no control over any of the factors, will lead to a "postcode lottery" for renewable generation development. The BHA believes that the best solution is to require the fitting of a smart meter when it is offered.

*Question 19 - Do you have any views on possible approaches to introducing remote reading for generation meters? Please provide reasoning for your response.*

**The BHA would approve the recommendation for remote reading facility**

We also and would suggest half-hourly data be acceptable for claims in line with ROCs, REGO and (presumably) CFD claims

**Section 5 – Effects of the Feed-in Tariffs scheme on grid management and costs**

*Question 20 - Do you agree or disagree that recipients of FiTs should be required to notify the relevant DNO of new installations as a condition of the scheme?*

**The BHA disagrees with requirement that recipients of FiTs should be required to notify the relevant DNO of new installations as a condition of the scheme.**

If a scheme isn't required to notify a DNO currently, the requirement to do so creates an additional administration burden on DNOs with no benefit. The BHA is concerned that this burden will have a detrimental impact on the DNOs' ability to deal in a timely fashion with those schemes that need grid offers. The BHA believes that smart meter outputs gives the DNO the information they require on changing network load flows; as these load flows aren't just impacted by local generation but by energy efficiency measures and the electrification of heat and transport.

*Question 21 - Do you agree or disagree the FiTs scheme should be amended to include requirements that help mitigate and limit the impact on grids such as requiring generation to be co-located with demand or storage?*

**The BHA disagrees that the FiTs scheme should include further requirements to mitigate and limit the impact on grids.**

The BHA believes that National Grid and the DNOs are not doing enough with innovative low cost, fast connection solutions. Their licence requires they offer the lowest cost solutions; yet these are still based on capital intensive traditional solutions.

This is despite consumers' money being used to fund projects for innovative new solutions. The BHA urges DECC to hold Ofgem and the network companies to account for the lack of progress towards low cost flexible solutions.

With respect to the co-location with demand storage – the site specific nature of hydro would often preclude hydro from being located with an existing demand and the generally remote locations of the larger schemes make the location of an industrial demand (such as hydrogen storage) uneconomical.

**Question 22** - *Do you agree or disagree that the FiTs scheme or wider networks regime should be amended to ensure generators pick-up the costs they impose on networks?*

**The BHA disagrees that the FiTs scheme should be amended to ensure generators pick-up the costs they impose on networks.**

Grid capacity is already allocated on a first come, first served basis and it is the marginal generator who pays for grid re-enforcement, whether they are a small scale FiTs scheme or a larger scheme.

The current UK rules for how network costs are allocated are well understood, and are consistent for both demand and generation users. There are other models available, however each has its own pros and cons; and ultimately these costs, no matter where they are borne, are recovered through the consumer bill. We do believe that National Grid and DNOs should be doing more with low cost flexible connections that will result in consumers paying less.

## **Section 6 – Ensuring sustainability for anaerobic digestion**

**Question 23** - *Do you agree or disagree that payments to newly accredited AD installations, at all scales, are conditional on meeting the proposed sustainability criteria? Please provide your reasoning.*

**No comments**

**Question 24** - *Do you agree or disagree that the proposed criteria and GHG trajectories set out above would set the necessary bar to meet our objective to incentivise the multiple benefits from waste-fed AD? Can you suggest alternative criteria which would help to achieve this goal? Please provide reasoning and evidence for your answer.*

**No comments**

**Question 25** - *Do you agree or disagree with the proposed reporting system to underpin sustainability criteria? Please provide your reasoning.*

**No comments**

## **Section 7 – Administrative changes to the Feed-in Tariff scheme**

**Question 26-** *Do you agree or disagree that only imported renewable electricity produced by generators in other EU Member States that are under 5MW and commission on or after 1 April 2010 should be used to offset levelisation costs? Please provide your reasoning.*

***The BHA agree that restricting the use and type of imported renewable electricity that can be used to claim an exemption from the FIT costs to renewable electricity generated from EU member states that are <5MW and commissioned on or after 1 April 2010 would be more consistent with aims of the Feed in Tariff.***

However, we do not agree with any proposal that would see this change implemented in January 2016 (alongside the other proposed changes to the scheme). FIT licensees have contractual arrangements in place to deliver renewable energy, which would (in the absence of these proposals) be eligible to claim an exemption from the FIT costs. If this change is to be implemented, it must be done so with sufficient lead time to enable parties to make the necessary commercial changes.

**Question 27 -** *Do you agree or disagree that we should introduce a cap on the amount of overseas generated renewable electricity that can be exempt from the costs of the scheme? Do you agree that the cap for 2015/17 should be calculated based on the number of GoOs recognised in 2013/14, increased by 10% twice to match the cap under the CFD Supplier Obligation?*

***The BHA believe that similar issues (as highlighted in our response to question 26) will impact the proposed change, particularly if suppliers have agreed contracts for the delivery of imported renewable generation.***

There must be sufficient lead time to implement the changes, following a decision regarding imported renewable energy, including the changes anticipated through the market decoupling consultation.

With regards to the whether the cap for 2016/17 should be calculated on the number of GoOs recognised in 2013/14 (increased by 10% twice to match the cap under the CFD Supplier Obligation), we agree that the cap should be consistent with the proposed cap under the CFD.

We would however note that we disagree with the premise that smaller suppliers (with a higher proportion of domestic customers in their customer base) are less able to easily contract with overseas generators. Furthermore, there may historically have been different drivers regarding the purchasing of renewable power facing challenger businesses that did not focus on supplying non-domestic customers (who are liable for CCL) as there would have been less commercial benefit in purchasing the renewable energy and related LECs to provide CCL exempt power to their non-domestic customers.

**Question 28** - Do you agree or disagree with the proposed change to the FITs legislation to refer to specific versions of relevant MCS standards? Please provide your reasoning.

**Hydro is currently exempt from MCS requirements and in order to continue with any deployment of schemes, in particular <50kW, this needs to remain the case.**

**Question 29** - Do you agree or disagree with the Government's proposal to use the interest accrued on the FITs Levelisation Fund to part-fund administrative changes to the scheme which would otherwise be borne through public funding? Please provide your reasoning.

**The BHA believe that any interest accrued should be used to further the generation of renewable electricity.**

### **Section 8 – Energy efficiency criteria**

**Question 30** - Do you agree or disagree with the revision being considered to increase the energy efficiency threshold to EPC band C for anyone with an installation to which the criteria apply? Please provide your reasoning.

#### **No comments**

Hydropower is not linked to a building and therefore building energy efficiency is not applicable to hydro.

**Question 31** - Do you agree or disagree with the revision being considered to remove FITs eligibility from anyone with an installation to which the criteria apply who does not have at least an EPC band C? Please provide your reasoning.

#### **No comments**

Hydro is not linked to a building and therefore building energy efficiency is not applicable to hydro.

**Question 32** - Do you agree or disagree with the exceptions for community groups, schools and fuel poor households to the revision of energy efficiency criteria being considered? Please provide your reasoning.

#### **No comments**

Hydro is not linked to a building and therefore building energy efficiency is not applicable to hydro.

## **APPENDIX A**

### **MANAGED PRE-ACCREDITATION PROPOSAL**

#### **Background**

The BHA believes that the re-introduction of a 'managed' preliminary accreditation system into the FiTs scheme is essential for the future of the UK hydro development industry. This is because the significant upfront investment and long construction period [2 years] make the risks of there being no available capacity at the time of commissioning – or indeed that the FiTs scheme is closed during construction – unacceptable.

The introduction of pre-accreditation in 2012 was welcomed by the hydro industry as it countered the inevitable negative impact of depression on a sector with such a long build time and provided developers with sufficient tariff certainty for financial close. As a result, in 2014 around 80% of the accredited capacity was as pre-accreditations.

The BHA acknowledges there were some significant problems with the previous pre-accreditation system and this proposal provides an opportunity to make improvements to ensure it is robustly managed in the future.

It will take a developer 18 months and considerable expense to be in a position to pre-accredit a typical hydro scheme. So, while it is expected that there will be significant attrition of the current hydro pre-accreditations - this is largely due to falling tariffs encouraging developers to rush to pre-accredit in order to maintain acceptable scheme economics. In addition the resulting 'boom and bust' for the industry is if anything driving up costs and down standards as everyone rushes to progress schemes ahead of tariff depression deadlines. If a system is developed with a more gradual glide path, it is likely that there would be significantly fewer pre-accredited schemes which did not go ahead and the schemes which are pre-accredited could be constructed more efficiently and carefully.

#### **BHA proposal**

The BHA proposes a new 'managed' pre-accreditation which, while in essence is the same as the previous system, has a number of features which should improve its operation and cost management.

#### **Key features**

The key features which define the 'managed' pre-accreditation proposal are:-

**Capacity** - Pre-accreditation applications can only be processed up to a proportion of the available period cap. The BHA suggests this is 80% as it is approximately the proportion of the 2014 uptake in hydro for pre-accreditation. This would:-

- Allow some capacity for those who have chosen to proceed without pre-accreditation (or have missed their pre-accreditation window).
- Ensure that contingent depression (which is first triggered at 90% of the cap) is not driven by pre-accredited capacity alone, some of which many never get built.
- Prevent boom and bust as there will be no incentive to rush to pre-accredit, so fewer developers will submit speculative pre-accreditations.

**Validity** - As a scheme is 'deployed' at the time of pre-accreditation schemes can be pre-accredited up until the close of the scheme in March 2019, despite

commissioning not taking place until March 2021. This will maintain a stable development environment.

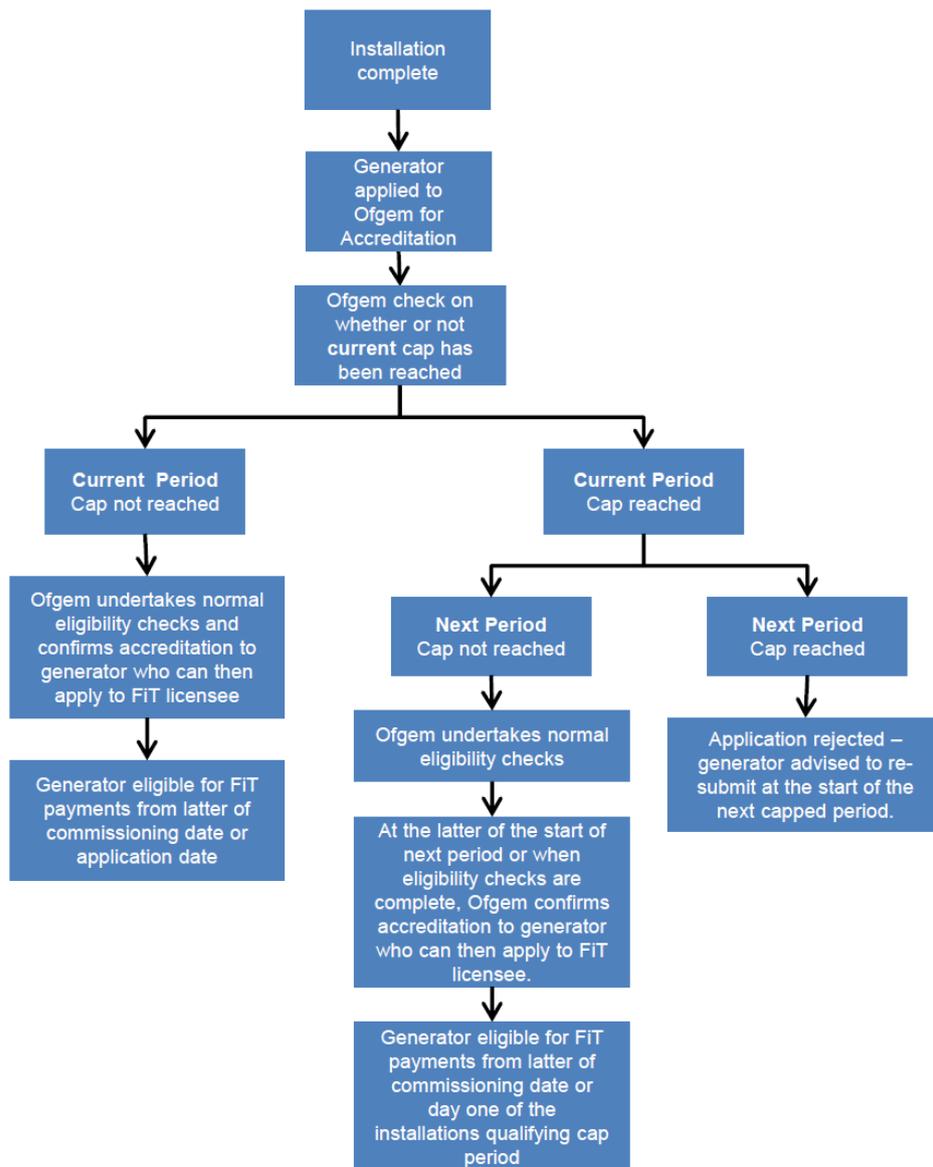
**Pre-accreditation window** – extended or delayed to allow time to reach financial close and grace period added where grid connections are delayed by the Distribution Network Operator [DNO].

### ***Other potential features***

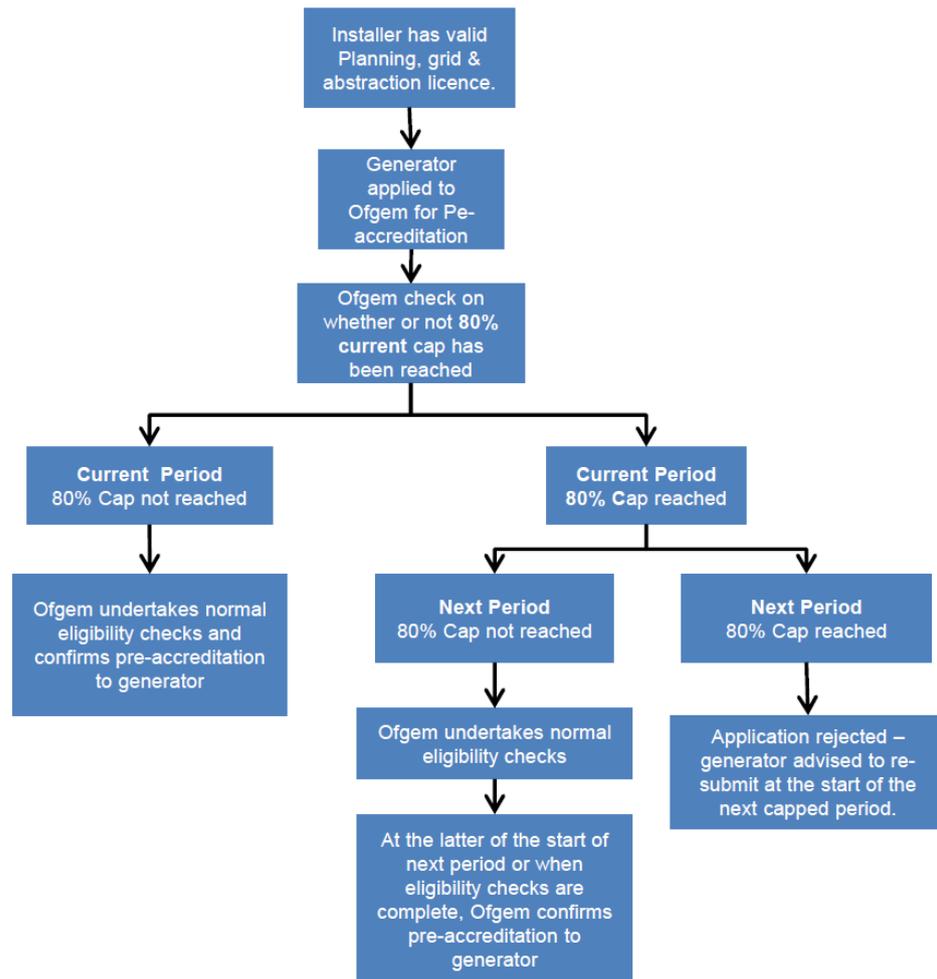
Other details which will enable this new system to run more smoothly are:-

- Introduction of 6-month grid grace period – for genuine DNO delays.
- Until the pre-accreditation cap is reached, pre-accreditation applications are processed in the same queue as the direct accreditations. This will ensure a fair split between pre-accredited and directly accredited capacity.
- Applications (both direct and PA) which exceed the current period's caps, but are below the next period's caps, are queued and processed, but not issued until the start of the following capped period. Applications which exceed the following period's limit are rejected (see flow charts below). This will allow Ofgem the ability to 'get ahead' at the end of a period without schemes being backed up for too long.
- To compensate for seasonal variations, unused caps will be rolled on to the following period – this would mean that the actual caps would also vary but could be 'announced' at the start of each period.
- Unused capacity from withdrawn, cancelled or expired pre-accreditations would be credited back into the budget. This would ensure capacity is not sterilised by pre-accreditations.

## Proposed Accreditation Cap implementation



## Proposed Pre-accreditation Cap implementation



## **APPENDIX B**

See attached report from Pöyry titled:-

ANALYSIS OF THE COSTS OF SMALL-SCALE HYDRO AND IMPLIED FEED-IN TARIFFS,  
A report to British Hydropower Association  
October 2015