



Environment Agency - Water resources charge proposals from April 2022

Introduction

The British Hydropower Association (BHA) is the leading trade membership association solely representing the interests of the UK hydropower industry (from micro to large scale, including tidal range energy) and its associated stakeholders in the wider community.

Our response to this consultation focuses on three areas:

- The stated premise of 'cost-reflective' regulation underpinning these proposals, and how the information provided cannot credibly correspond with proportionate, targeted regulation nor value for money.
- The staggeringly poor quality and lack of evidence in the Economic Impact Assessment applied to the hydropower sector.
- How these proposals will act in direct opposition to existing government policy, published regulatory standards, and urgent Net Zero ambitions.

The EA must now halt this consultation and engage urgently in discussions with the BHA, in order to gather real evidence on which to base any future decisions.

Overview on proposed charges for hydropower

There are 4 tiers of application charge in the proposal, increasing with annual quantity. These tiers are summarised in the table below alongside the proportion of recent HEP schemes that would have fallen into each tier, based on information provided by the EA (email from Marie of 7/10/21).

No schemes fall into Tiers 1 and 2, only 3% in Tier 3 and 97% in Tier 4.

Tier	Annual quantity	Mean discharge	Application Fee	% of HEP licenses
	ML/year	Litres/sec		
1	<50	<1.6	£1,342	0%
2	50 to 120	1.6 to 3.8	£2,684	0%
3	120 to 1400	3.8 to 44.4	£6,711	3%
4	>1400	>44.4	£13,421	97%

Hence, for 97% of schemes, the proposed minimum charge for a new hydropower permit represents an increase of 895% (from £1,500 to £13,421) since 2014.

'Cost Reflective' Charging and Value for Money

- The consultation seeks to base the new fees on 'Cost Reflective' Charging. But how can an application fee be "Cost-reflective" when (a) 100% has to be paid upfront before any staff member has even considered the specific proposal, (b) it is based on a set of fixed fees, and (c) a flat £100/hour is being applied irrespective of the staff grade?
- The consultation suggests that the minimum application fee for a new high head hydropower scheme (i.e., one that needs to construct a small impoundment) with a mean discharge of over 44 litres/sec, would consist of an application fee of £13.5k (abstraction) plus 10% of £8.9k (impoundment) + £0.1k (advertising) = £14.5k. Charged at the proposed £100/hour, this implies that a staggering 145 professional person-hours would be required by the Environment Agency to determine a hydropower license from 1st April 2022.
- However, between 2004 and 2013, the Environment Agency spent c10 years streamlining its processes and improving its knowledge base to determine hydropower licenses, which included:
 1. a focused pre-application process to ensure new applications provided the correct site-specific information
 2. re-designing the license application forms specifically for hydropower
 3. developing the Good Practice Guide to standardise the approach and assessment of new applications
 4. developing other manuals which complement this Guide (fish screening, fish & eel passage, etc.)
- In this context, it cannot be credible that a hydropower license requires 145 hours (basically 4 working weeks) of trained & experienced professional input to determine and issue the licence. If this is factual, this is a terrible indictment on the inefficiency of staff being charged at £100 per hour and should be referred to the National Audit Office for review.
- This consultation links the cost of the application fee to 'professional time', but with no link to quality or outcome. If the service received is demonstrably slow, poor quality or uses under-qualified staff - and there are many examples of this - the same fee would still be paid; in the professional world, poor quality is not rewarded with high fees or guaranteed repeat work.
- The sad reality is that this proposal is being presented at time when the performance of the Agency's licensing service has dropped off a cliff: new applicants throughout 2021 have been informed that their applications won't even be considered for 4 to 5 months and will then take another 3 to 4 months to determine.

- **A Case Study**

A most recent hydropower license (ref. SW/052/0015/010) took 26 weeks to determine, exactly double the Penfold limit for regulators, and only after a formal complaint had accelerated the process. The applicant requested a refund of the application fee, but the request was refused, although the Agency conceded that their performance had been unacceptably poor. This increases industry fears that applicants do not receive value for money at present, and certainly would not under these future proposals.

The Agency has suggested that in cases where their costs are lower than the proposed new fees there could be rebates, but industry cannot have any confidence that rebates would be forthcoming when no refund has been given in the appalling case of SW/052/0015/010.

Net Zero and Wider Government policy

Net Zero

In the run-up to COP26, the UK Government released its Net Zero Strategy. A principal target of the Strategy is for the UK to be carbon-free on electricity generation by 2035.

A 'Key Commitment' of the Strategy (p25) states that the Government will:

"Ensure the planning system can support the deployment of low carbon energy infrastructure."

This is elaborated on p102, para 31:

"We will also need to streamline the consenting process to ensure that the deployment needed to stay on track for our 2030 and CB6 targets is delivered."

If approved by DEFRA, the EA's charging proposals will place a huge economic barrier opposing new small-scale hydro-electric power development in England and is therefore in **direct contravention to these Net Zero commitments**. This is not joined up government.

Mitigating for Climate Change is cited in this Consultation as a key driver behind the need to increase abstraction charges, and yet there is absolutely no recognition in any of the EA documents referencing the contribution and benefits that additional run-of-river hydropower would bring to decarbonising electricity.

In National Parks and AONBs, where there are often severe grid constraints and substantial wind and solar installations are forbidden, small hydro is the most cost effective and expedient way for many rural communities to transition to Net Zero. In particular, hydroelectricity will also complement the requirement to move from fossil fuels to Heat Pumps and EV charging.

Hence the proposed charging regime will not only deter new Hydro development, but also the ability of communities to move to EVs and Heat Pumps, thereby locking in significant future carbon emissions.

New developments and infrastructure which (a) align directly with government net zero targets and (b) do not consume any water (which applies to both hydropower and heat pumps) should be incentivised with the removal of upfront barriers, not used for profiteering by the regulator.

Regulatory Reform Act 2006: Targeted, Proportionate Regulation

The Legislative and Regulatory Reform Act 2006 imposed a legal duty that "*all regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent*".

- A tiered charging scheme which puts 97% of hydropower schemes into the top-charging bracket is not proportionate.
- Charging for hydropower licensing based on abstraction volumes, rather than kW output, is neither targeted nor proportionate: both SEPA and NRW scale their charges by kW.

Penfold Review

The Environment Agency were included within the 2011 Penfold Review of UK consenting regimes (the move from licenses to Environmental Permits was a Penfold recommendation).

This is a quote from the Penfold Review - "*The measures in this programme will reduce costs and bureaucracy, speed the process up and increase certainty; and ensure the regulatory benefits delivered by development consents are achieved with the minimum of burden*"

A ten-fold fee increase, as is proposed in this consultation, can hardly be called 'reducing costs' or a 'minimum of burden'.

A further quote from the Penfold Review: "*Government's aim is to ensure these agencies contribute to a competitive business environment by considering the impact of their decisions upon sustainable economic growth and the viability of what may be economically significant projects, and swiftly approving consents when it is appropriate to do so. Therefore, Government Ministers will ensure that these agencies (including the EA) have a remit to promote sustainable development*".

A ten-fold fee increase cannot be seen as 'promoting sustainable development', when it directly opposes the future development of low carbon technology in the race to Net Zero.

The Green Book and Managing Public Money

The consultation documents do not follow the Treasury's Green Book guidance, neither substantiating reasons for their proposed increase nor presenting alternative approaches to recovering their costs.

The Green Book (p6) requires "*a process of assessing the costs, benefits and risks of alternative ways to meet government objectives*" in order to "*determine which option provides the best balance of costs, benefits, risks and unmonetizable factors thus optimising value for money*".

No such process has been documented. The only approach taken is a huge fee increase to cover the costs currently deemed necessary.

In addition, Managing Public Money (HM Treasury 2021) states that (para. 6.2.3):

"Organisations supplying public services should always seek to control their costs so that public money is used efficiently and effectively" and requires regular performance monitoring of Charged Public Services to answer the question (para. 6.8.1): "*How can efficiency and effectiveness be improved so that charges can be lower or offer better value?*"

Where is the 'value for money' assessment showing how charges can be minimised and effectiveness improved ?

Economic Impact Assessment

Section 6 of the Economic Impact Assessment ("Application charges for the hydropower sector") is one of the shoddiest and most inadequate pieces of work by any regulator to justify bad decision-making and would be indefensible in any Judicial Review.

No Evidence Base

- The Environment Agency has confirmed that the economic information used for this assessment dates from 2013. Therefore, not only is it 8-years old, but it pre-dates the previous Charging Consultation and subsequent increase in application fee in 2014. It is shocking that economic information used before the last fee calculation, which the industry was also told was 'cost-reflective', has been used again to justify a second 10-fold increase (i.e., a 100-fold increase in just 8 years).
- As a result, any credible evidence base within the Economic Impact Assessment is simply absent. Section 6.3 states that: "*We have calculated the start-up costs of 204 current hydropower operators*". But the resulting Table 12 is not actual cost data – it is no better than back-of-envelope guesstimates.

- And yet these 'numbers' nevertheless lead to the confident assertion that "*for the majority of these operators, the increases in application charge would not have a significant impact on the decision to enter the market*".
- This statement has no evidence to support it and implying that application fees could sensibly be compared alongside build costs simply confirms how ignorant and flawed this assessment is.

In particular, there is absolutely no understanding in this assessment:

- Of what an individual, community group or small business is able and willing to spend entirely at risk before a project can even begin to be realised.
- That this money has to come from capital in the bank because banks themselves will never lend 'risk' money for an application fee, whereas they will lend project finance for the investment costs of a viable project.
- That smaller hydropower schemes will typically have paid less than £15k for all the work required to prepare a license application (surveys, design, drawings, feasibility, environmental assessments) - so this proposal would now mean at least doubling that expenditure in a single transaction just to apply for a license (when the parallel planning application will only cost ~£500).
- That it is likely to take 2 years for a new community 50kW hydropower scheme just to earn back the ~£15k of licensing fees from the net revenue of electricity sales. And it would take over 5 years for a 5kW domestic hydro to earn back £15k by displacing imported electricity.
- The proposed massive increase in application fees will act as a huge disincentive for any hydropower owners who are considering investing in this renewable resource in order to help this country achieve Net Zero. In reality there is a strong likelihood that there wouldn't be any future applications at all at these fee levels.

Erroneous conclusions

- The final paragraph of Section 6.3 of the Impact Assessment states: "For the operators with costs up to £100,000 (19% of the total), we anticipate that the lower application charges will apply, again these are unlikely to represent such a proportion of cost as to be a significant disincentive, and for some applicants, costs could fall".
- This paragraph exposes the shallow understanding of the authors and their complete disconnect from the facts and any type of rigorous analysis. There are 3 factually incorrect statements in the same sentence:

1. "Lower application charges will apply"

The 'lower charges' in Tiers 1 and 2 would apply to no existing schemes at all. So, the statement that "we anticipate that for 19% of schemes, the lower charges will apply" cannot be true. And the 19% figure itself was derived from a 'fag-packet' guesstimate. This is non-evidence-based conjecture with no basis in fact.

2. "... these costs are unlikely to be a significant disincentive..."

How does the author form an opinion on what is 'likely', when there are no such schemes to which these costs even apply? This is more vague, meaningless conjecture aimed at supporting a pre-decided premise.

3. "...and for some applicants costs could fall"

Costs can only fall if a project falls into Tier 1, so abstracting less than 1.6 litres/sec, or roughly the flow in a domestic hosepipe. There never has been, and never will be, a grid-connected hydropower abstraction this small. This final comment neatly summarises the complete lack of understanding of hydropower and its development that has underpinned this derisory contribution on which the Agency is seeking to justify a 'negligible impact' conclusion that was undoubtedly drawn up in advance.

Conclusions

- In conclusion, the information presented in the Economic Impact Assessment shows very little understanding of the hydropower industry or its costs and value to the economy, the rural economy, and any ambition for reaching Net Zero.
- It beggars belief that any Government Minister would be expected sign off a proposal underpinned by an impact assessment that makes assertions and draws conclusions which are not supported by any meaningful, up-to-date facts, any relevant analysis, or even the most basic understanding of how a commercial hydropower project is developed and operated.
- The BHA has very serious concerns that this consultation will now be reviewed by the same individuals and organisation who have demonstrated such a poor understanding of both our industry and the use of proper evidence to justify decisions which could have such grave consequences to the future development of this renewable resource.

10th November 2021