Consultation on the NRW regulatory fees and charges for 2023/2024
Friday 6th January 2023

1 Contents

2 Introduction

The British Hydropower Association (BHA) is the leading trade membership association solely representing the interests of the UK hydropower industry and its associated stakeholders in the wider community.

Our response to this consultation focuses on:

i. How this proposal is at odds with Welsh Government Policy and the stated remit of NRW.
ii. It's failure to deliver targeted and proportionate regulation.
iii. The barrier erected by enormous fee increases and their inevitable negative consequences.
iv. Proactive proposals for a way forward that combines industry knowledge and experience with NRW resources to deliver the Net Zero ambitions of the Welsh Government.

3 Proposed hydropower licensing charges: New applications and Renewals

The proposed fee increases are staggering with in some cases a 21-fold increase on the existing charge. These upfront fees are unaffordable for small schemes – which are usually developed by individuals and communities. The table below summarises the current and future application costs proposed for new hydropower licenses:

Table 1: Proposed new application fees for Hydropower abstraction licence

Capacity	Current Fee (£)	Proposed Fee (£)	Scale of Increase
25kW or less	375	6,327 to 7,877	16.9 to 21.0
>25 to 50kW	750	6,327 to 7,877	8.4 to 10.5
>50 to 100kW	1,125	6,327 to 7,877	5.6 to 7.0
>100kW	1,500	6,327 to 7,877	4.2 to 7.9

Hence a 20kW high head community hydropower scheme, requiring abstraction and impoundment licenses plus a Habitat Risk Assessment, is facing a charge increase of 21 times. The appended case studies of 2 fairly typical Welsh hydro sites illustrate the significant difference between a smaller lower-risk site and a larger higher-risk scheme. We strongly dispute that these 2 projects would have needed 'roughly the same' NRW resources to determine them.

Table 2: Renewal fees for Hydropower abstraction licences

Category	Current Fee (£)	Proposed Fee (£)	Scale of Increase
Same-terms renewal or simple variation	375 - 1500	£1,357	0.9 – 3.6
Variation renewal	375 - 1500	£4,810	3.2 – 12.8

These flat rate renewal fees impose a major cost burden on small/domestic schemes even when the renewal terms are the same (so there is negligible work for NRW to do). This comes across as money-grabbing for the sake of it. These smaller schemes will have a limited revenue when their Feed-in-Tariff comes to an end, and this major, unwarranted cost burden may cause some to close.

In addition, there appears to be only a vague definition of 'Simple' and 'Full' variation which could be open to subjective misinterpretation and confusion.

The BHA suggest all above charges are reworked in close collaboration with Industry. Suggestions are included at the end of this summary.

4 The Climate Crisis and Net Zero

The BHA suggest that in the midst of an Energy Crisis and a Climate Crisis it cannot be the right time to be putting economic barriers in the way of new renewable energy developments.

Hydropower is a key technology for Wales to meet its ambitious renewable energy and carbon reduction targets with the co-benefits of stimulating economic development and job creation; and will do so in a manner that meets the objectives set by the Well-being of Future Generations Act 2015.

Simultaneously, the UK is in the midst of an energy crisis, for which the rapid expansion of domestic generation capacity is stated by UK Government as a key solution.

It is self-evident that the enormous scale of proposed hydropower charge increases will slow or stop new hydropower developments in Wales, just as they have already done in England with their new abstraction charging regime.

Incredibly, despite the fact that these changes will need to be approved by the Welsh Minister for Climate Change, there is no mention of the Climate Crisis or Net Zero in the proposal documents nor in the Hydropower Impact Assessment.

5 Welsh Government Policy

The proposed hydropower charge increases will have consequences which will act in direct contravention to the following Welsh Government policies and ambitions:

Legislation:

- Well-being of future generations (Wales) Act 2015
- The climate change (Wales) regulations 2021
- Environment (Wales) Act 2016 (Amendment of 2050 emission target)
- The Climate Change regulations 2021 (interim emissions targets) (carbon budgets)

Strategy:

- Prosperity for All – A Climate Conscious Wales (2019)
- Net Zero Wales Carbon Budget 2 (2021-2025)
- Programme for Government 2021-2026 (2021)

Ambition:

- 70% of Wales electricity consumption to be renewable by 2030
- 1GW of electricity generated in Wales to be locally owned by 2030
- All new developments by 2030 to have an element of local ownership
- Expand Renewable Energy generation by public bodies and community enterprises by 100MW by 2026
- Net Zero Public Sector by 2030.

6 The Remit of NRW

The proposed hydropower charge increases will directly oppose the remit for NRW set out by the Welsh Government (Lesley Griffiths, Minister for Environment, Energy and Rural Affairs, May 2020), quoted as follows:

"I ask you to consider the longer-term requirements on NRW, particularly as we respond to the climate emergency.

It is imperative NRW continues to respond to our climate emergency and the increased ambition for at least a 95% emission reduction by 2050.

NRW has a pivotal role in supporting the transition to renewable energy. I want to see NRW build on this work to develop a positive approach to both enabling and delivering renewable energy development, on and offshore, in line with the Welsh Government (WG) planning frameworks.

This should also include delivery of our renewable energy targets and policy on increasing local ownership of energy generation which means investing in the skills required for the green economy, to promote growth and inspire innovation.

Area Statements will support energy priorities and NRW has already made progress in developing proportionate consenting of energy applications."

The BHA would like NRW to comment on how their charging Review for Hydropower fits with the above statement, specifically the delivery of renewable energy targets, local ownership, and proportionate consenting.

7 The key benefits of hydropower to Wales

Hydropower is not just another abstraction but offers multiple wider benefits to the Welsh economy and electricity network.

- Hydro is a highly efficient, long-lasting, clean energy technology. Unlike PV and Wind, every hydro scheme built today should still be generating in 2050 (and 2070).
- Hydro-generated output is heavily biased towards the winter months, when energy is most needed, hence helps to drive down high winter energy costs.
- Run-of-river hydro is relatively predictable (i.e. it varies only slowly with river flows), and can be available 24/7, so can be relied on to help with the daily peaks, further reducing costs.
- In particular, the seasonal profile closely matches the demand for heat, so more hydropower will boost the transition to electric heat pumps in rural areas with weak grids.
- Hydropower schemes are typically 60-90% sourced from the UK supply chain and their construction and operation support local manufacture and employment.
- Hydro projects have provided numerous opportunities for community-owned local renewable energy generation - a key aim of the Welsh Government.
- Their grid connections often make a significant contribution to the upgrading of the grid infrastructure in rural areas. Grid constraint is a major barrier to Net Zero. The Welsh Government recognise this and have commissioned work to look at the Future Energy Grids for Wales project.
- In addition, new hydropower schemes can support the planned electrification of the transport network with the co-location of vehicle charging points in areas where grid constraints currently prevent this.
- Small-scale Hydro is virtually invisible, and does not sterilise land that may be needed for future farming or housing needs, nor compromise public amenity. As a result, it has the highest UK public acceptance among all renewables.

8 Hydropower Impact assessment (November 2022)

- The proposed hydro fees were set with no impact assessment in place - the impact assessment for hydropower was composed and issued 7 weeks after the release of the consultation. This implies strongly that NRW gave scant consideration to how these proposals will actually effect their customers.
- The impact assessment is not an 'economic impact assessment', and has not included any analysis on the wider impacts of these proposals on individuals, small businesses, goods & services, or the environment.
- The impact assessment correctly asserts that "*Changes to the application costs will have an impact on the feasibility and consenting phase of a project and will affect an applicant's decision as to whether to proceed.*" This point is critical: It is the up-front cost which is invested totally at risk and, if it is unaffordable, this will kill smaller schemes at the first hurdle.
- The impact on <25kW schemes is therefore predicted to be HIGH – these projects will simply not proceed – and the impacts are still severe up to 100kW. The fair and proportionate solution would be a sliding scale of fees (see below).

9 Targeted and proportionate regulation

All UK regulators are required by law to provide targeted and proportionate regulation. NRW recognised this in the current charging regime, with a sliding scale based on kW output. The EA have also recognised this in their new charging structure, and SEPA and all planning departments also scale their fees based on the size of project.

Given the wide range and scale of hydropower sites, adopting a Flat fee cannot be targeted or proportionate. It is stated in Appendix 8 that "*We propose the same fixed charge for the following applications, as they take a similar amount of time and effort to determine*". This statement is absurd when applied to hydropower abstractions and does not fit with the experiences of the last 10 years. NRW's Hydropower web-pages[1] very clearly lay out the difference between a Low Risk hydropower site – requiring relatively little analysis and information – and a High Risk / Complex site, requiring a series of more detailed surveys. It is obvious, and it is our industry's experience, that much less NRW effort is required to process a low risk site, and this must be reflected in the new charging structure.

Quote: "*Larger hydropower schemes (over 250 kW) which are more complex and at a scale which requires greater technical input from us are charged at the base charge of £1,500 with an additional charge of £125 per hour*[2]*"*

We therefore propose that:

- A sliding scale based on kW output will be more proportionate and will be much less detrimental to individual land-owners & farmers or community schemes.
- There should be additional differentiation between low risk & high risk sites to reflect the scale of work required.
- There should be a mechanism for a rebate to be given if less time is spent than is assumed by the fee, and a record or timesheet to evidence how and what time is spent delivering for each project.
- As with both planning and grid connection deadlines, a refund should be given if NRW goes beyond the statutory time limits for delivery.

10 Unintended consequences

- The consultation document states that: "*We forecast that our proposed changes will address the shortfall, if application numbers remain the same*". Assuming hydropower applications will stay at the same level after raising licensing fees by 5 to 20 times is simply financial illiteracy. As is being demonstrated in England, massive fee increases will lead to an equivalent drop in applications: No new schemes means zero income to NRW.
- After the closure of the Feed-in-Tariff, the Energy & Climate Crises have re-motivated community groups to explore their local mini-hydropower options. Mobilising local action has long been recognised by government as a key component to achieving Net Zero. But the majority of these initiatives will now be at risk when faced with huge upfront fees.
- The knock-on effect of suppressing hydropower activity spreads not only to local economic and employment impacts but also to future limitations on new EV charging points and the roll out of electric heat pumps into rural areas with weak grids, two other technologies which are key to the Welsh Government's decarbonisation strategy.

[1] https://naturalresources.wales/permits-and-permissions/water-abstraction-and-impoundment/hydropower/applying-for-licences-for-hydropower-schemes/?lang=en

[2] https://naturalresources.wales/permits-and-permissions/water-abstraction-and-impoundment/charges-for-abstraction-and-impoundment-licence-applications/?lang=en

11 Positive alternatives

The BHA understands that there needs to be reform in the way hydropower licenses are funded in Wales in order to balance the books. We are willing to work with NRW to find a way forward which least impacts – and preferably encourages – future hydro developments and efficient regulation. But a large, flat fee is not the answer. We have the following suggestions for further discussion:

1. Streamlining

NRW already has in place:

- a focused pre-application process to ensure new applications provided the correct site-specific information
    - license application forms customised specifically for hydropower
    - Good Practice Guidance to standardise the design and assessment of new applications
    - Clear definitions of low risk and high risk sites
    - 10 years' of experience during the Feed-in-Tariff for dealing with a wide range of hydro sites

Quote: *"We can more quickly review an application and issue a licence where a scheme has been designed and application submitted in line with our guidance*[3]*."*

It is therefore not credible that a new, low risk site which follows standard NRW guidance should require the level of NRW input implied by a fee of £6,327. The BHA would like to work with NRW to establish how streamlining of straightforward sites can achieve a more cost-efficient fee.

2. Pre-application

NRW is seeking to limit the pre-application advice provided for no fee. Yet focused pre-application advice is key to providing a robust application and avoiding time-consuming pitfalls. The BHA would like to explore whether a 2-step process involving a funded pre-application followed by a full application which closely follows NRW advice and information requirements can then lead to a lower overall fee and more efficient use of NRW resources (e.g. equivalent to a pre-application fee plus same-terms renewal).

3. Sliding Scale based on kW output

As detailed above, NRW's impact assessment clearly shows that a flat fee has a major detrimental impact on the smallest schemes. This can easily be rectified by introducing a sliding scale so that the cost-per-kW of the license fee stays broadly the same as scheme size increases.

4. Low Risk / High Risk

High Risks sites always absorb much greater resources, and this will easily be established from NRW's records (and was reflected in the previous fee structure). Proportionate, targeted regulation should recognise this in the new fee structure, also acting to guide future developments towards projects with the least environmental risk.

12 Conclusions

The BHA believe that this consultation does not consider the broader remit of NRW especially within the context of the Welsh Government's aspirations for Net Zero, renewable energy targets, and local energy ownership, and the difficulty in achieving these ambitions.

The BHA believe that NRW, as a statutory body, are not offering the delivery of services in a cost-effective and proportionate manner. There are likely to be a wide range of unintended consequences caused by the current proposals which have not been subjected to a proper impact analysis (as required by Government guidance).

[3] Applying for licences for your hydropower scheme, NRW June 2020

The BHA will welcome the opportunity to work on a way forward that combines industry knowledge & experience with NRW resources to maximise future hydropower opportunities and thereby help deliver the Net Zero ambitions of the Welsh Government.

13 Appendix – Case Studies

13.1 Weirglodd Ddu

Owner: Local farmer	Capacity: 6kW on 35m head	Annual gross revenue: £2800 (including 8.5p FiT)	**Payback on £375 fee: 7 weeks**
Watercourse: un-named	Annual generation: 20,000 kWh	NRW License fee paid: £375 (abstraction + impoundment)	**Payback on £6,960 fee: 6 years w/o FiT**

- The site was developed by a farmer on his own land using a small, un-named stream feeding into Lake Bala.
- The turbine and intake screen were manufactured in Wales, and all other materials & equipment sourced in the UK.
- The site had no environmental sensitivities, nor trees, and was assessed by NRW as a routine 'low risk' high-head micro-hydro site.
- The scheme simply required fish screening and a pre-build check for water voles.
- The license application was accepted as valid on 23/6/15 and issued on 26/11/15, a determination time of 22 weeks (9 weeks longer than the statutory target).

13.2 Ynni Ogwen

Owner: Ynni Ogwen	Capacity: 100kW on 20m head	Annual gross revenue: £70,000 (including 8.5p FiT)	**Payback on £1,500 fee: 1.5 weeks**
Watercourse: Afon Ogwen	Annual generation: 450,000 kWh	NRW License fee: £1,500 (abstraction + impoundment)	**Payback on £6,960 fee: 12 weeks w/o FiT**

- The scheme was developed by a local community group and is part of the first 'local energy' trial allowing households in Bethesda to benefit directly from lower tariffs when the hydro is generating.
- The principal contractor was a local civil construction company (near Bala).
- The river is an important salmon route, so this was regarded as a 'high risk' site - expert fisheries and geomorphology surveys were required.
- Detailed design consideration had to be given to ensure the intake works were sited correctly and could provide the seasonal flow-splits to safeguard salmon migration.
- Permission was required to remove selected trees around the powerhouse.
- The license application was submitted on 1/6/2015 and issued on 7/1/16, 31 weeks later.

Ynni Ogwen Cyf is a community benefit company, operating for the environmental and social benefit of Dyffryn Ogwen. The principal objective of the community benefit company is to produce electricity from the hydroelectric plant situated on the Afon Ogwen. Any surplus income generated is transferred to a community fund, which is set up to fund other environmental and community projects within Dyffryn Ogwen. The Community owned Hydro scheme is clearly an asset the community are rightly proud of and is a great tool for educating about energy, climate change and energy efficiency. The scheme hosts regular school trips and other tours.

'Energy Local' is a community project that works with Ynni Ogwen Cyf, where the community benefit company encourage households to sign up to an 'energy club' which helps them match their electricity use with power from a local hydro plant. This enables savings on their electricity bills while supporting local renewable energy. The bar chart below shows the daily energy generation. Energy.

This is a great example of how a community owned hydro plant can bring multiple benefits to a local community with a long term and lasting impact. Ynni Ogwen Cyf offer energy advice to the community and they are also looking at an affordable, community scale, low carbon heating solution which will include hard to treat buildings and households vulnerable to fuel poverty. The community group are trusted messengers within their community. This is key, when we're looking at the whole systems transformation which is required for achieving Net Zero and persuading people to uptake new technologies. These benefits and their multiplier effect are hard to measure and certainly have not been considered in the NRW impact assessment on small scale and community schemes that may not be brought forward due to the high initial at risk, capital outlay that a needs to be submitted for an application and abstraction and/or impoundment licence.