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NP5/59/495B

Land between Pont yr Afon Gam & Cwm Farm, Llan Ffestiniog.

Proposed Hydro Electric Scheme up to 600KW on Afon Cynfal, comprising intake weir, buried pipeline (1.2km), turbine house building, outflow, buried grid connection, vehicular access and construction compounds (Revised proposal)

Dear Mr Fitzsimon

This objection comes from the Snowdonia based campaign group Save Our Rivers. Save Our Rivers was formed in December 2013 to run the Save The Conwy campaign in response to the Conwy Falls hydro scheme application. Save Our Rivers campaigns on both river conservation and the importance of National Parks both in Wales and across Europe.

The group consists of, amongst others; local residents, members of the fishing community, kayakers and outdoor / adventure tourism operators and employees. There are also ecologists, engineers and a hydrologist. We feel that Save Our Rivers represents a good cross section of the population who would be affected by the proposed hydro scheme.

The letter below is the work of many within the group representing the concerns of a large number of people and not the view of a single person.

National Park Purposes

The National Park purposes provide a clear statement of the statutory responsibilities and role of National Park Authorities. These are:

- To conserve and enhance the natural beauty, wildlife and cultural heritage of the area,
- To promote opportunities for the understanding and enjoyment of the 'Special Qualities' of the area, by the public.

In addition to these purposes, the Authority has a duty in taking forward these purposes to:

- Seek to foster the economic and social wellbeing of local communities within the National Park.

The National Park purposes and socio-economic duty, supported by the Sandford principle and the Silkin test set a clear statutory framework for development planning within the National Park.

We believe the proposed development fails in respect of the first 2 purposes.

Power produced and benefit to the local area proposed by the scheme.

The proposed development cannot be considered a sustainable use of the landscape. The generation of renewables through small scale hydro schemes and their subsequent impact on the landscape and environment has become inappropriate in the current era of large-scale renewable production. For comparison this scheme would have the installed capacity of 600KW around 1/13th of a modern offshore wind turbine sited within view of the North Wales Coast.

<https://orsted.co.uk/energy-solutions/Offshore-wind/Our-wind-farms>

A lack of strategic planning by SNPA has resulted in a proliferation of tiny hydro schemes, producing insignificant amounts of power, using now outmoded generation techniques. In fact, since the adoption of the LDP in 2011; 90 new hydro schemes have been permitted (a 10-fold increase on what previously existed within the park) and these contribute less power production than 1 single modern wind turbine.

It is felt that for the reasons detailed below the development will impact adversely on landscape, amenity, nature, conservation and heritage interests and so fail LDP guidance on renewable energy.

Renewable Energy

Within the National Park renewable energy schemes will be supported provided they satisfactorily address the planning considerations for different technologies set out in the Supplementary Planning Guidance on Renewable Energy and Low Carbon Developments.

- Microgeneration (under 50kW) and smaller-scale renewable energy schemes will be considered favourably, provided they do not cause harm to landscape, amenity, nature conservation and heritage interests.
- Sub Local Authority scale schemes (up to 5MW) may also offer some potential in Snowdonia and will be permitted subject to the same considerations.

Water Framework Directive

Freshwater ecosystems are the most threatened habitats on Earth, and particularly within the UK. Only 14% of UK rivers meet good ecological status according to Water Framework Directive (WFD) rules.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709493/State_of_the_environment_water_quality_report.pdf

A major reason for this is fragmentation of river connectivity through the building of artificial barriers. Only 1% of all rivers in the UK are currently free from artificial barriers and, thanks to the recent spate of hydro development in Snowdonia, few remain free flowing within the national park.

<https://doi.org/10.1016/j.scitotenv.2019.04.125>

The Cynfal is one of these 1%, a rarity that is worth preserving.

The current status of Afon Cynfal is “Moderate” in terms of Cycle 2 Water Framework Directive assessment. The basis of WFD is that authorities must work towards all rivers (except in exceptional circumstances) achieving “Good” status. As the current “Moderate” status of the Afon Cynfal is not due to any existing barriers to connectivity or hydromorphology. Hence the proposed development is likely to lead to further deterioration under WFD rules.

A recent test case has shown that WFD must be applied to the permitting of individual projects.

Court of Justice of the European Union judgement July 2015, case C-461/13. Paragraph 51 of the Weser judgement provides:

“Article 4(1)(a)(i) to (iii) of Directive 2000/60 must be interpreted as meaning that the Member States are required — unless a derogation is granted — to refuse authorisation for an individual project where it may cause a deterioration of the status of a body of surface water or where it jeopardises the attainment of good surface water status or of good ecological potential and good surface water chemical status by the date laid down by the directive.”

NRW will be responsible for the abstraction and impoundments impact on WFD, however SNPA is responsible for the WFD impact of the built aspects of the weir and outflow. This will predominantly revolve around the geomorphological impact on the downstream river system. There is no assessment of the impact on WFD within the application. It is therefore impossible for SNPA to approve the application without this information.

Landscape Concerns

Cwm Cynfal is one of the wildest and most inspiring landscapes within Snowdonia and indeed the UK. Towering waterfalls cascade from the bleak beauty of the Migneint Special Area of Conservation into the Afon Cynfal Site of Special Scientific Interest. This unique place has a history of inspiring those that visit from the ancient tales of the Mabinogi to the contemporary walkers of the Snowdonia Slate Trail.

The main visible structures of the plan include a river wide intake weir, the route of the pipeline and the compound areas.

Intake Area:

The intake weir is sited on the crest of a waterfall feature, this makes it highly visible from a range of viewpoints including the roadside and the newly completed Snowdonia Slate Trail. This man made feature will greatly devalue the visual amenity of this waterfall.

See attached overlay of the intake in situ:



The tall river left bank requires extensive alteration for the passage of the pipeline:

Cut trench through the rock between the intake and the stilling chamber using mechanical rock pecking machinery and tracked excavators. The trench will be 1.5m wide for installation of a 1.2m diameter spigot and socket concrete pipeline.

The deepest section of trench will require a wider 4m cutting through the rock outcrop to allow machine access to the required depth.

CMS 4.2

A 4m deep cutting at least 3.6m wide through bedrock to enable the machine to then access and then dig a 1.5m wide trench will have a significant and permanent impact on this currently natural landscape.

The machinery required to construct this trench will access by crossing the river via a ford. This creates the certainty of sediment pollution and the risk of oil/diesel pollution of the watercourse and therefore damage to the Cynfal SSSI shortly downstream of the development site.

CYN-3001 rev009 Area1.pdf

The impact of the impound area and access road are considerable, given the soft ground it is unlikely this large area could be fully reinstated.

Overlay showing how the upper compound, access road, intake weir and upper pipeline impact on the surroundings. Also show is the position of the river crossing for the pipeline (5):



Pipeline river crossing:

The most concerning area ecologically is the river crossing of the pipeline. The method of crossing is described in the CMS as:

Excavate river bed and install pipeline. Anchor with concrete and reinstate river bed and banks.

CMS 4.3

This is not standard practice in normal hydropower construction, there are no specific details or working diagrams as to how this is to be achieved. There is significant risk of the pipeline uncovered via erosion after construction or of the river diverting into the pipeline trench creating localised damage and sediment pollution of the water course and downstream SSSI.

Following the river crossing the pipeline is to be laid through an area of bog. Shown below (the wooden stake is the developers marking for the path of the pipeline).



Trenching of this area will cause irreparable damage to the habitat through compression and drainage. Due to the low-lying nature of this land in comparison to the river there is also a considerable risk of diversion of the river into the pipeline trench during construction.

Burial of the pipeline under the Slate Trail:

The CMS describes the next section of pipeline as:

Between feature 16 and 23, any loose rock falls on the existing track will be cleared as necessary to create a 3.6m wide working corridor.

CMS 4.3

What is not described is that this “track” is actually a narrow grass path on a steep hillside and forms the most spectacular section of the newly formed Slate Trail footpath (recently featured on Countryfile). The development will require both the closure of this path during construction and will significantly alter its appearance within the landscape after.

Overlay of the pipeline along the Slate Trail with the location of the turbine house seen in the distance:



The required minimum working corridor is significantly wider than the width of the track requiring a permanent alteration of the landscape.

Below is the 3.6m working corridor measured in relation to the Slate Trail:



This is the minimum working corridor and the CMS describes a 6m working corridor for the preservation of turfs.

There is significant concern over the presence of archaeological remains under the Slate Trail, including the possibility of old copper workings. Disruption of these could have an impact on the stability of the road above.

The Slate Trail crosses several wet sections and 2 larger streams, there is significant risk of these diverting into the pipeline trench during construction and causing sediment pollution to the watercourse and downstream SSSI.

Water running down the pipeline route



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Conclusion:

The proposed development has multiple concerns including the visual impact of the intake structure, the damage to the ecology of the river and bog area around the river crossing and the permanent landscape changes required to underground the pipeline along the Slate Trail.

There are significant risks during construction of damage to the downstream SSSI which are not adequately addressed in the CMS.

It is felt that the proposed development should be rejected as the low level of power produced does little to offset the impact to both the ecology and aesthetic of this culturally important landscape and to compensate for the fragmenting of one of the UKs last remaining free flowing rivers.

In the opinion of Save Our Rivers the proposed development fails to meet the requirements of the latest SNPA LDP listed below:

Development Policy 1: General Development Principles (1)

To conserve and enhance the 'Special Qualities' and purposes of the National Park, development will only be permitted where all the following apply:

i. The nature, location and siting, height, form and scale of the development is compatible with the capacity and character of the site and locality within which it is located.

iii. The development is not unduly prominent in the landscape and will not significantly harm the amenity of neighbouring property.

v. The development will not have an unacceptable adverse impact on the characteristic biodiversity of Snowdonia, particularly habitats and species protected under national and European legislation.

vi. The development does not result in the loss of landscape features, including woodland, and Ancient Semi-Natural woodland in particular, healthy trees, hedgerows, dry stone walls or damage any important open space or public view.

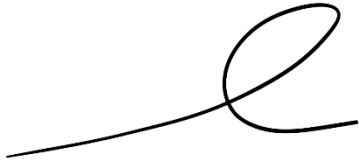
x. Appropriate services and infrastructure can be provided without compromising the quality and character of the landscape and cultural heritage.

xi. The development will not have an unacceptable adverse impact, through increased resource use, discharges or emissions, on public health, surface and ground water (quality, quantity or ecology), air quality, soil and the best and most versatile agricultural land.

xiii. The development will not have an unacceptable adverse impact on the quiet enjoyment of the area by the public.

xiv. The development will not have an unacceptable adverse impact on public rights of way, other recreational routes or open country.

Yours Sincerely

A handwritten signature in black ink, consisting of a long horizontal stroke that loops back to form a large, stylized 'e' shape.

Dan Yates

Director Save Our Rivers