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The Scottish Government Energy Consents Unit
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Glasgow
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Ref: Loch Kemp Storage/ECU00003398

23 February 2024

Dear Sir Madam,

I am writing with regard to the above proposed development. Having reviewed the application documentation we are disappointed that a number of outstanding issues have not been resolved satisfactorily. On that basis, we object to the proposed Loch Kemp Pump Storage Scheme on Loch Ness.

Fisheries Management Scotland is the representative body for the District Salmon Fishery Boards, the River Tweed Commission and the Rivers and Fisheries Trusts in Scotland. We work to promote and ensure the best fisheries management for the protection, preservation, and development of Scotland's wild salmon and freshwater fish, along with their fisheries and the wider environment. District Salmon Fishery Boards have a statutory responsibility to protect and improve salmon and sea trout fisheries in their district, but their remit does not extend to other freshwater species. Rivers and Fisheries Trusts charitable objectives extend to all fish species and the wider aquatic environment.

The Ness District Salmon Fishery Board (DSFB) is a member of Fisheries Management Scotland, and we supported the Board in some of the public engagement that they undertook during the consultation period. We support the detailed response that the Ness DSFB has submitted to the proposed development in full, and we offer the comments below in addition to supporting Board's response.

For a number of years we have been highlighting the wild salmon crisis to the Scottish Government and its agencies. We were therefore delighted to contribute to the development of Scotland's Wild Salmon Strategy, and associated Implementation (IP) plan to 2028. Fisheries Management Scotland is a member of the IP Delivery Group and sits on the Wild Salmon Strategy Science Board. In the Ministerial Foreword, the Cabinet Secretary for Rural Affairs and Islands stated,

“...there is sadly now unequivocal evidence that populations of Atlantic salmon are at crisis point. Although the pattern of decline is repeated across the salmon’s North Atlantic range, likely caused, at least in part, by the effect of climate change on survival during its marine phase, there remains much that we can do in our rivers and coastal waters to build resilience and transform the fortunes of this iconic fish for the better.”

The Scottish Government has also published the Biodiversity Strategy to 2025, which sets out a clear ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.

Most recently, in the latest species reassessment by the IUCN Red List of Threatened Species (11th December 2023), Atlantic salmon have been reclassified from ‘Least Concern’ to ‘Endangered’ in Great Britain (as a result of a 30-50% decline in British populations since 2006 and 50-80% projected between 2010-2025), and from ‘Least Concern’ to ‘Near Threatened’ in terms of global populations (as a result of global populations declines of 23% since 2006).

These are key drivers which have not been properly considered in the EIA submitted in support of the proposed development

1. We have a number of outstanding concerns which we do not believe are adequately addressed by the EIA. It was particularly disappointing to see the developers argue that the cost of a smolt tracking study were *“disproportionate when compared to works undertaken for similar schemes.”* and that *“such research cannot be undertaken in the timeframes of this development project”*. We do not believe that this argument is either logical or acceptable. As set out above, the context has changed due to new information becoming available and in the light of the biodiversity and wild salmon crises.
2. The concerns expressed by the Ness DSFB regarding salmon smolts being attracted to the intake have not been adequately addressed. Again, the response by the Ness DSFB reflects our concerns, but we would emphasise that the mitigations described by the developer do not address the concern. Whilst the proposed fish deterrents may go some way to prevent smolts being drawn into the intake, the developer has not demonstrated that these mitigations would help alleviate the fundamental issue of smolts successfully finding their way out of Loch Ness and into the River Ness without delay. As accepted by the developer, any such delay would increase the chances of smolts suffering predation or missing the migration window. This is a fundamental, unanswered question, which would apply to any pumped storage hydro scheme proposed within a natural loch containing migratory fish populations.
3. The EIA downplays the importance of the designation of the River Moriston as an SAC for Atlantic salmon. Regardless of whether Atlantic salmon is a primary or secondary reason for designation, the protection afforded by the SAC status of the River Moriston is the same.
4. The impacts on the hydrology of Loch Ness, a thermally stratified loch, remain a significant concern. The volumes of water pumped by multiple pump storage schemes on Loch Ness are far greater than any natural water movements, and coupled with potential changes to the temperature regime arising from frictional losses during pumping and generation, have the potential to disrupt the thermocline and affect its stability. This aspect has not been adequately addressed in the EIA. As highlighted by the Ness DSFB, the salmon spawning in the River Ness are the latest in the Highlands, an evolutionary response to the thermal lag caused by the high volume of Loch Ness. One unforeseen side-effect of an increase in the temperature of Loch Ness is that water temperatures in the Ness may not drop low enough, or drop too late in the winter, for successful spawning to occur.
5. Finally, we would highlight the flows in the River Ness, which are highly dependent on the level of Loch Ness. This relationship between flows in the River Ness and the level of Loch Ness/Loch Dochfour is one of the reasons why the sluices were required to mitigate the impact of the flow variation due to the operation of Foyers PSH (at the request of the Fisheries (Electricity) Committee). However, the sluices are not operated according to their intended function, nor are they controlled under the SEPA CAR

licencing scheme. This has resulted in quite random and sudden variations in the flow in the River Ness, in response to changes in the sluice opening. Changes in the level of Loch Ness, arising from cumulative operation of pumped storage hydro schemes will result in rapid variations in flows in the River Ness. No new mitigation measures have been proposed, and the developer instead imply that changes in water levels would be the responsibility of the Foyers Scheme. No consideration appears to have been given to the mechanism by which flows in the River Ness will be regulated in the event that multiple schemes are consented to operate on Loch Ness. We agree with the Ness DSFB that the cumulative impact of multiple pumped storage hydro schemes on Loch Ness on flows in the River Ness is a critical consideration, and it is vital that adverse changes on the river and the salmon populations from river and the upper catchment are properly considered and addressed.

We recognise the need to decarbonise our energy system. We also recognise that energy storage has a vital role to play in this process. However, the consenting of such developments must be framed within a clear understanding of where, and how much storage is required. We would like to emphasise that we are not against pump-storage hydro systems in principle, but in the light of the biodiversity and wild salmon crises, we are strongly of the view that these developments must be placed in appropriate locations and we do not believe that there is currently appropriate guidance or planning policies in place to steer developments towards such locations. Until a number of evidence gaps are filled, as highlighted above, we do not believe that any further developments should be consented in natural lochs containing Scotland's precious wild salmon and sea trout populations. We do not believe that the developers have adequately addressed a number of outstanding issues through the EIA process. On that basis, we object to the proposed Loch Kemp Pump Storage Scheme on Loch Ness.

Yours faithfully,

A handwritten signature in dark ink, reading "Alan Wells". The signature is written in a cursive, flowing style.

Dr Alan Wells
CEO: Fisheries Management Scotland