

David King
Energy Consents Unit (ECU)
Sent by Email - Econsents_Admin@gov.scot

24 September 2026
Your ref: ECU0005121

Dear David King

**The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Additional Information
Application For Consent Under Section 36 of The Electricity Act 1989 for construction and
operation of Glean Earrach Pump Storage Scheme**

I refer to the above case submitted in 2025, and its Additional Information submitted in 2026.

1. Background

We have provided previous consultation responses dated 11 November 2025 and 19 January 2026. Since these responses we have continued liaison with the Applicant on several complex issues. The Applicant has provided additional information to address information gaps, and we can now provide our response to the outstanding matters. **These matters are in respect to the River Moriston Special Area of Conservation (SAC) and Urquhart Bay Wood SAC.**

The further detail that has been supplied to us over the intervening months has been submitted as Additional Information (AI) by the Applicant.

This letter should be read in conjunction with our previous letter of 11 November 2025 as this includes advice on Ness Woods SAC and Moray Firth SAC that is not repeated here and similarly, our letter of 19 January 2026 as this provides advice on the North Inverness Lochs Special Protection Area (SPA). These are attached for reference.

We also provide advice in respect to the AI grid connection assessment.

2. Summary

As requested, we have undertaken an appraisal which considers the combined effects of the proposal and a seasonal variable weir at Dochfour which is not part of the current application.

We conclude the proposal could be progressed with appropriate changes and mitigation. However, in relation to the River Moriston SAC, because it could affect internationally

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important natural heritage interests, we object to this proposal unless it is amended and made subject to conditions so that the works are done strictly in accordance with the changes and mitigation detailed in our appraisal below.

In relation to the **Urquhart Bay Wood SAC**, there are natural heritage interests of international importance on the site, but our advice is that these will not be adversely affected by the proposal. The Applicant has provided further detail on the potential effects on Urquhart Bay Wood SAC, and we are satisfied that they have demonstrated beyond reasonable scientific doubt that as described the proposal will not adversely affect the integrity of the site.

This advice is based on our understanding that the proposed seasonal variable weir at Dochfour will be located, designed, constructed, operated and mitigated as described in the further information submitted by the applicant to NatureScot between February and August 2026, and submitted as AI¹, and will be operational in advance of the pump storage hydro scheme commencing operations. **If this is not the case, the conclusions of our appraisal would not apply, and you should reconsult us.**

We will provide further advice on effects of the proposed variable weir when we are consulted on that application.

3. Our advice

Appraisal for European sites

At your request, our appraisal is based on the proposal as described in the application, including the off-site seasonal variable weir at Dochfour the applicant proposes as mitigation for significant effects associated with water level variation in Loch Ness and downstream flows in the River Ness. The weir is not part of this application and has not yet been subject to a separate application. We understand it will be applied for by a third party who is yet to be identified. For clarity, we have not assessed the implications of Glen Earrach without the variable weir as described.

As previously advised in our response of 11th November 2025, guidance on Habitats Regulations Appraisal² states that competent authorities must be sure that mitigation will be effective at the time they give their permission and that ‘each mitigation measure must be described in detail, with an explanation based on scientific evidence of how it will eliminate or reduce the adverse impacts which have been identified. Information should also be provided of how, when and by whom they will be implemented, and what arrangements will be put in place to monitor their effectiveness and take corrective measures if necessary’.

Therefore, in order to conduct a Habitats Regulations Appraisal (HRA) of this proposal the competent authority requires sufficient detail on the proposed weir to assess the implications for all the European sites that could be affected and determine whether it can be concluded with certainty and beyond reasonable scientific doubt that there will be no adverse effect on the sites’ integrity. In addition, the competent authority will need to be assured that the necessary legal and stakeholder agreements will be in place, and that the weir is consentable, to provide certainty that the required mitigation will be implemented.

3.1. River Moriston Special Area of Conservation (SAC)

The River Moriston SAC is designated for Atlantic salmon and freshwater pearl mussel and lies approximately 8 km south-west of the proposed outfall/ intake.

¹ Applicant’s 2026 AI submissions relating to Glen Moriston SAC and Urquhart Bay Wood SAC – available on [ECU case](#)

² <https://op.europa.eu/en/publication-detail/-/publication/11e4ee91-2a8a-11e9-8d04-01aa75ed71a1>

The site's status means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the 'Habitats Regulations') apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, Energy Consents Unit is required to consider the effect of the proposal on the SAC before it can be consented (commonly known as Habitats Regulations Appraisal). The NatureScot website has a summary of the legislative requirements (see: <https://www.nature.scot/doc/legislative-requirements-european-sites>).

Our advice is that this proposal is likely to have a significant effect on the Atlantic salmon and freshwater pearl mussel qualifying interests of the River Moriston SAC.

Consequently, Energy Consents Unit, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests. To help you do this, we have worked with the Applicant to ensure there is sufficient detail to inform your Appropriate Assessment, and we have conducted our own appraisal.

Atlantic salmon

In January 2026 we advised that the information submitted at that time did not demonstrate that the proposal could be constructed and operated without undermining the SAC's conservation objective *to restore the population as a viable component of the site*, because of **four impact pathways** which could delay salmon migration and cause additional mortality.

These are repeated below with their original numbering, and we provide an update as to how the Applicant has addressed these and where the full detail can be found within the Applicant's AI documentation.

a. Noise, disturbance and loss of access to fish passes during construction of the proposed Dochfour seasonal variable weir impeding migration.

The Applicant proposes to install two co-located temporary Chevron side baffle fish passes to facilitate upstream passage during the construction period. These are proposed to be installed before the start of works to modify the existing upstream passage route. We agree that the proposed arrangement provides appropriate attraction flows and water velocities to achieve an effective temporary passage solution for salmon migrating upstream.

During construction, smolt and kelt migration downstream is proposed to be facilitated by constructing two of the three proposed permanent downstream smolt passes, located adjacent to the Dochfour Lock gates (Smolt Pass 1) and at the downstream end of the waste weir (Smolt Pass 2), as the first step in the weir construction project. In addition, during installation of the proposed temporary upstream Chevron side baffle fish passes detailed above, two temporary downstream smolt passes adjacent to the temporary upstream fish passes are proposed to be installed, comprising suitably sized pipes with appropriate inlet profiles to control acceleration. The evidence presented shows it is possible in principle to design and operate smolt passes in a manner which will improve downstream passage for smolts, compared to the current situation.

The applicant proposes to avoid significant construction disturbance such that passage will be maintained throughout the construction period by means of the following measures:

- Planning the construction sequencing to ensure effective upstream and downstream passage at all times
- Based on advice on seasonal salmon migration activity at Ness Weir from Ness District Salmon Fishery Board, timing works with the potential to generate underwater noise disturbance (specifically impact piling) during November and December, with potential to extend the period to mid-October to mid-January subject to confirmation by the ECOW of low fish activity
- measures to limit underwater noise from construction activity

- commitment to a fallback response to apply precautionary construction controls should it not be possible to assess whether or not fish are exhibiting a sustained adverse response at the operational passage routes that is consistent with avoidance behaviour attributable to vibro-piling activity

We agree that the proposed sequencing is appropriate to maintain fish passage; and the measures proposed to limit underwater noise and avoid significant disturbance represent best practice and are appropriate.

We conclude that the applicant has demonstrated it is possible in principle to construct the proposed Dochfour seasonal variable weir in a manner which ensures that salmon migration is not impeded during the construction period. Therefore, based on detail submitted by the Applicant³, if the proposed weir is located, designed, constructed and mitigated as described by the applicant the conservation objective *to restore the population as a viable component of the site* would not be undermined by this impact pathway.

b. Changes to water levels in Loch Ness because of the operation of the scheme including the proposed seasonal variable weir

To ensure upstream migration, the applicants propose a vertical slot fish pass in one of two locations at the west end of Ness weir. Our independent hydrologist advisor confirmed that the Applicant's approach was appropriate. We therefore conclude the applicant has demonstrated it is possible in principle to design and operate a new fish pass within the proposed modifications to Ness Weir in a manner that maintains effective passage for upstream migrating Atlantic salmon from the River Moriston SAC.

The applicants propose to improve on current arrangements for downstream passage for Atlantic salmon smolts and kelts by installing three separate smolt passes, located in the canal inlet channel immediately upstream of the Dochgarroch lock gates. Independent tilting gates are proposed on the entrances to each smolt pass to account for the fluctuating water levels controlled by the variable weir. The two existing smolt bywash channels would then be redundant and removed. In addition to these dedicated downstream passage routes, downstream migration would also be feasible via the new vertical slot fish pass described above. We agree with the Applicant's approach and technical detail.

We therefore conclude the applicant has demonstrated it is possible in principle to design and operate new fish passes within the proposed modifications to Ness Weir in a manner that maintains effective passage for downstream migrating Atlantic salmon from the River Moriston SAC.

Monitoring will be required to show whether the new upstream and downstream fish passage opportunities are operating effectively, and thus whether adjustments, for example to control systems, are required. The applicants present a range of monitoring options, which provide reassurance effective monitoring would be possible.

Overall, we conclude that the applicant has demonstrated it is possible in principle to locate, design, operate and mitigate the proposed Dochfour seasonal variable weir in a manner which ensures that salmon migration will not be impeded due to changes to water levels in Loch Ness because of the operation of *the scheme including the proposed seasonal variable weir*.

Therefore, based on the information submitted by the applicant⁴, if the proposed weir is located, designed, operated and mitigated as described by the applicant, and will be

³ ECU00005121 – Additional Information (AI) 3.28 - NatureScot - River Moriston points a and b - March - 2026

⁴ ECU00005121 – Additional Information (AI) 3.28 - NatureScot - River Moriston points a and b - March - 2026

operational in advance of the pump storage hydro scheme commencing operations, the conservation objective *to restore the population as a viable component of the site* would not be undermined by this impact pathway.

c. *Changes to winter flow regime in the River Ness, including an increased rate of water level change, impeding salmon migration up and down river*

The Application submission⁵ provides an assessment of hydropeaking effects on the River Ness based on the approach set out in Bakken et al (2023)⁶. It assesses that operation of the Proposed Development, taking into account the combined influence of Loch na Cathrach and Loch Kemp PSH operations as well as the existing Foyers PSH, falls within the Small (Green) category under the total impact assessment, with a moderate hydropeaking effect and low vulnerability. Having considered this assessment, we agree that changes to the winter flow regime will not significantly impede downstream and upstream migration of salmon from the River Moriston SAC. **We therefore conclude this pathway will not undermine the conservation objective *to restore the population as a viable component of the site*.**

d. *Acoustic fish barrier proposed between weir and canal impeding salmon migration*

The Applicant's submission⁷ confirms that an acoustic barrier is just one of a number of non-physical deterrents under consideration, and that the most appropriate option will be investigated further and selected later in consultation with us and other stakeholders.

We agree that details of non-physical deterrent(s) can be finalised later in consultation with us, provided the new downstream fish passage arrangements at the weir are designed to maintain or improve downstream passage of Atlantic salmon smolts and kelts independently of the addition of any non-physical deterrents.

We therefore conclude it is possible in principle to construct the proposed Dochfour seasonal variable weir in a manner which avoids any acoustic fish barrier proposed between weir and canal impeding salmon migration and thus that the conservation objective *to restore the population as a viable component of the site* would not be undermined by this impact pathway.

In addition, the original application information submitted did not demonstrate that the proposal could operate without undermining the site's conservation objective *to restore the habitats supporting Atlantic salmon within the site and availability of food*, as a result of the following impact pathway:

e. *Changes to the water level regime in Loch Ness affecting salmon spawning habitat in the lower reaches of the River Moriston*

Based on the report of the site visit⁷, we agree that the lower reaches of the River Moriston have very little, or any, spawning potential. **We therefore conclude this pathway will not undermine the conservation objective *to restore the habitats supporting Atlantic salmon within the site and availability of food*.**

⁵ ECU00005121 – Additional Information (AI) 3.15 - NatureScot - River Moriston point c - Feb 2026

⁶ [Bakken, T.H., Harby, A., Forseth, T., Ugedal, O., Sauterleute, J.F., Halleraker, J.H. & Alfredsen, K. \(2023\).](#)

Classification of hydropeaking impacts on Atlantic salmon populations in regulated rivers. River Research and Applications, 39(3), 313–325.

⁷ ECU00005121 – Additional Information (AI) 3.17 - NatureScot - River Moriston points d and e - February - 2026

Conditions and modifications

In our letter of 19 January 2026, we also set out further mitigation and modifications in a table in Annex A. These are required to ensure that the following impact pathways do not undermine the conservation objective *to restore the population as a viable component of the site* and result in adverse effects on the integrity of this SAC. We reiterate these required measures below for completeness. **The following need to be produced and agreed with the consenting authority in consultation with NatureScot:**

- ***Salmon may become trapped during construction and dewatering of the coffer dam at the lower control works.***

A CEMP covering construction and dewatering of the coffer dam at the lower control works, containing adequate measures to minimise the risks of fish capture and loss to ensure salmon from the River Moriston SAC do not become trapped during construction and dewatering of the coffer dam at the lower control works.

- ***Increased sedimentation / turbidity (non-toxic) in areas adjacent to the lower control works during construction***
- ***Risk of contamination (toxic) from fuel / chemical leakages / and concrete spills at the lower control works during construction***
- ***Risk of sedimentation and pollution during construction of the proposed variable weir***

A CEMP and Water Management Plan covering construction of the lower control works, containing adequate measures to minimise the risks of toxic and non-toxic pollution entering Loch Ness to ensure salmon from the River Moriston SAC are not harmed by sedimentation or pollution around the lower control works during construction.

The Applicant has confirmed that pollution prevention measures will be implemented in accordance with SEPA Guidance on Pollution Prevention, including bunded fuel storage at least 50 m from the watercourse and spill kits at all works locations. Whilst full details are not yet available, we agree it would be possible in principle to effectively manage the risks of sedimentation and pollution during construction of the variable weir. We will advise on the CEMP when we are consulted on the application for the variable weir.

- ***Intake flow attracting downstream migrating salmon smolts and/or female kelts***

A condition requiring curtailment of operation of the proposed scheme throughout the duration of the smolt migration period through Loch Ness.

Alternatively, the applicant may wish to consider proposing a physical barrier and demonstrating that velocities towards the intake and outside the barrier will not exceed the lower 95% confidence interval of the mean minimum directional water velocity required to initiate a behavioural response resulting in a direction of orientation change in wild smolts (0.092 m/s) (Kundegorski et. al, 2025)⁸.

- ***Capture of salmon smolts at the intake during periods of abstraction***

The intake screen mesh size must be modified and reduced to 10 mm to avoid the risk that salmon smolts from the River Moriston SAC will be captured at the intake during periods of abstraction.

⁸ Kundegorski, M.E., Honkanen, H.M., Stephen, A., Torney, C.J., Killen, S. and Adams, C.E., (2025) Defining the water flow cues for navigation in migrating Atlantic salmon smolts. Scottish Centre for Ecology and the Natural Environment, SBOHVM, University of Glasgow, Glasgow, UK. <https://doi.org/10.1111/jfb.70004>

Mitigation and modifications are summarised in Annex A.

Freshwater pearl mussels (FWPM)

The FWPM population in this SAC could be affected by impacts on the Atlantic salmon host species. Effects on the Atlantic salmon host species are assessed above.

We conclude that if the proposal is carried out strictly in accordance with the modifications and mitigation outlined above for Atlantic Salmon, based on our understanding that the proposed seasonal variable weir at Dochfour will be located, designed, constructed, operated and mitigated as described in the Additional Information submitted by the applicant, and will be operational in advance of the pump storage hydro scheme commencing operations, the conservation objectives for FWPM will not be undermined.

River Moriston SAC - Conclusion

If the proposed pump storage hydro scheme is carried out strictly in accordance with the modifications and mitigation specified above, our conclusion is that the proposal will not adversely affect the integrity of the River Moriston SAC.

This advice is based on our understanding that the proposed seasonal variable weir at Dochfour will be located, designed, constructed, operated and mitigated as described by the Applicant, and will be operational in advance of the pump storage hydro scheme commencing operations. If this is not the case, the conclusions of our appraisal above would not apply.

We will provide further advice on impacts of the proposed variable weir when we are consulted on that application.

3.2 Urquhart Bay Wood SAC

The SAC is designated for alder woodland on floodplains, and lies approximately 10km downstream from the tailrace.

Our advice is that this proposal is likely to have a significant effect on the alder woodland on floodplains qualifying interest of the SAC. Consequently, Energy Consents Unit, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest.

To help you do this we advise that based on the information provided and appraisal carried out to date, **our conclusion is that the proposal will not adversely affect the integrity of the site.**

We considered many complex factors in discussion with the Applicant, including but not limited to, effects of fluctuating loch levels on the woodland/loch interface and how increased or decreased inundation frequencies and duration might influence the extent of the woodland area, changes to vegetation composition and the processes supporting the woodland habitat. The cumulative in-combination effects have been considered including the proposed development operating in combination with the consented Loch na Cathraich PSH and the proposed Loch Kemp PSH, with the seasonal variable weir at Dochfour, and the existing Foyers PSH incorporated within the hydrological baseline. Our questions on these matters have now been addressed by the Applicant, who has submitted an AI document⁹ that consolidates all the discussions and technical detail that was involved in reaching the conclusion that the SAC's conservation objectives would not be undermined by the proposed development.

⁹ ECU00005121 – Additional Information (AI) 4.01 Urquhart Bay Wood SAC and Ness Woods SAC – Statement to Inform HRA – Consolidated Update dated 20 August 2026.

We would recommend that this consolidated document and the documents referenced therein are adopted by the ECU as their Habitats Regulations Appraisal. The consolidated document provides a most detailed audit trail required for HRA. It is not our intention to duplicate, or replicate, this information as we feel it accurately captures all the detail required to conduct a HRA.

4. Additional Information (AI) 3.33, 3.34¹⁰ and 4.06 – Grid Connection

We provide the following advice based on our current understanding of the grid connection proposal as described in the AI submitted. We recognise that the grid connection may be subject to further design changes and more detailed environmental assessment before a formal application is made. Our advice is therefore given without prejudice to any future advice we may provide if formally consulted on a subsequent grid connection application.

As currently described, the proposed grid connection could affect the Slavonian grebe interest of the North Inverness-shire Lochs SPA and there is currently little detail available on which to base advice on the potential for impacts to the SPA. We would expect the respective Applicant to initiate pre-application consultation and conduct an appropriate level of desk based study and survey work so as to inform an iterative design to minimise potential effects on SPA species and other natural heritage interests such as priority peatland habitats. The applicants are welcome to contact us for further advice on their assessment.

If you require any further information, please contact me or Karen Reid (Karen.Reid@nature.scot).

The advice in this letter is provided by NatureScot, the operating name of Scottish Natural Heritage

Yours sincerely

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cc. William Black, Peter MacDonald, Martin Lacey - Glen Earrach Energy
Susan Haslam, SEPA
Roddy Dowell, The Highland Council

¹⁰ And associated Technical Notes.

Annex A – Summary of mitigation and modification required for River Moriston SAC

The following need to be produced and agreed with the consenting authority in consultation with NatureScot:

MITIGATION	REASON
A CEMP covering construction and dewatering of the coffer dam at the lower control works, containing adequate measures to minimise the risks of fish capture and loss.	To ensure salmon from the River Moriston SAC do not become trapped during construction and dewatering of the coffer dam at the lower control works
A CEMP and Water Management Plan covering construction of the lower control works, containing adequate measures to minimise the risks of toxic and non-toxic pollution entering Loch Ness.	To ensure salmon from the River Moriston SAC are not harmed by sedimentation or pollution around the lower control works during construction
A condition requiring curtailment of operation of the proposed scheme throughout the duration of the smolt migration period through Loch Ness. Alternatively, the applicant may wish to consider proposing a physical barrier and demonstrating that velocities towards the intake and outside the barrier will not exceed the lower 95% confidence interval of the mean minimum directional water velocity required to initiate a behavioural response resulting in a direction of orientation change in wild smolts (0.092 m/s) (Kundegorski et. al, 2025)⁸.	To ensure the intake flow does not attract downstream migrating salmon smolts and/or female kelts from the River Moriston SAC
MODIFICATIONS	
The intake screen mesh size must be reduced to 10 mm.	To avoid the risk that salmon smolts from the River Moriston SAC will be captured at the intake during periods of abstraction