

August 2025

Glen Earrach Energy Pumped Storage Hydro Development

Additional Information

Glen Earrach Energy Ltd



Glen
Earrach

AECOM

Quality information

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Issue History

Issue	Issue date	Details	Authorised	Name	Position
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Appendices

Note, appendices are provided as separate documents.

Chapter 1: Introduction

1.1 Background

In March 2025, Glen Earrach Energy Limited ("the Applicant") submitted an application for consent under Section 36 of the Electricity Act 1989 and deemed planning permission under Section 57(2) of the Town and Country Planning (Scotland) Act 1997 (the "Section 36 Application") to the Energy Consents Unit (ECU) of the Scottish Government.

The Section 36 Application sought consent for the construction and operation of a new pumped storage hydro scheme on the Balmacaan Estate, to be known as the Glen Earrach PSH (the "Proposed Development"). The Proposed Development will have a storage capacity of approximately 34,000 megawatt hours (MWh) subject to the final configuration of the Headpond, Loch nam Breac Dearga. It would have approximately 2,000 megawatts (MW) of installed electrical pumping capacity and 1,800 MW of installed electrical generating capacity (both subject to final pump-turbine selection).

An Environmental Impact Assessment Report (EIAR) was provided with the application, detailing the results of a series of environmental studies undertaken to determine the likely significant effects of the Proposed Development on the environment under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the "EIA Regulations").

Further to this, the Applicant submitted Additional Information in June 2025, pertaining to Landscape and Visual impacts, Water Resources, Corrections to the original application and Peat Management.

1.2 Purpose and Scope of This Additional Information

Further queries have now been raised by The Highland Council (THC), NatureScot, Scottish Environment Protection Agency (SEPA) and other non-statutory consultees, which has resulted in the provision of this Additional Information to support the assessment process.

This document provides comprehensive responses to the consultee queries received to date, structured to address specific technical areas where clarification or additional data has been requested. The Additional Information supplements the original EIAR without materially altering the environmental assessment conclusions.

The Additional Information comprises five chapters as follows:

1.3 Overview of Chapter 1 (Introduction)

Chapter 1 is the current chapter, which introduces the context and contents of the Additional Information submission.

1.4 Overview of Chapter 2 (Ness Woods SAC and Urquhart Bay Wood SAC)

Chapter 2 contains information relevant to the **EIAR Appendix 7.2: Statement to Inform HRA (Volume 5: Appendices)** specifically relating to the woodland Special Areas of Conservation (SAC). The information is provided in response to a NatureScot consultation request received on 1 August 2025 and subsequent queries relating to the modelling of water level changes in Loch Ness during the Operational Phase of the Proposed Development.

NatureScot noted that there are a number of designated European Sites discussed in **Appendix 7.2 Statement to Inform HRA**, and advised that it would assist them to more

readily review this if the Applicant could provide a separate standalone document relevant to Ness Woods SAC and Urquhart Bay Wood SAC.

Subsequently, NatureScot raised queries relating to how the Proposed Development could impact on the qualifying habitats of these SACs.

Chapter 2 therefore contains the following documents in response to the NatureScot requests:

2a. Statement to Inform HRA Update (Ness Woods SAC and Urquhart Bay Wood SAC)

This document extracts relevant woodland SAC content from the existing EIAR Appendix 7.2. It does not provide any new information, assessment or change the conclusions contained in the EIAR, it only reorganises existing content from Appendix 7.2 for easier review. It is therefore not considered Additional Information, however, it is included in this document package for completeness.

2b. Addendum Memo (Ness Woods SAC and Urquhart Bay Wood SAC) Water Levels

This addendum provides supplementary assessment of how Loch Ness water level changes during operation could impact the qualifying habitats of both SACs. This Additional Information was not included in the original EIAR and addresses NatureScot's specific water level queries. The assessment concludes that there will be no adverse effect on the integrity of either SAC from the Proposed Development, and does not change the overall conclusions as presented in the EIAR.

1.5 Overview of Chapter 3 (Water Environment)

On 9 July 2025 the Ness District Salmon Fishery Board (NDSFB) in a consultation response to the ECU requested Additional Information regarding water resource modelling. Specifically, NDSFB requested modelling showing river levels in the River Ness under various scenarios (including historical years 2017, 2020, 2021 and 2023), with outputs presented as graphs showing river levels, for the Proposed Development alone, and also cumulative impacts of all proposed pumped storage schemes on the River Ness.

Chapter 3 comprises:

3. River Ness Hydrology - Water Level Modelling

This provides Additional Information in this regard and was not contained in the EIAR. The document presents simulation results for the time periods noted by NDSFB showing the modelled water levels at the Ness Side gauge on the River Ness, with water levels derived from modelled flow data using the SEPA gauge rating curve. The information demonstrates water level fluctuations under baseline conditions, both with the Glen Earrach PSH operation only and also with the cumulative impact of all proposed PSHs operational.

1.6 Overview of Chapter 4 (Aquatic Ecology)

This chapter relates to Aquatic Ecology and includes Additional Information provided in response to consultee queries received following submission of the Section 36 Application.

Chapter 4 contains the following documents:

4a. Aquatic Ecology - Atlantic Salmon Assessment for River Ness

This is an assessment of whether the hydrological modelling of the River Ness (contained in Chapter 3 of this document) highlights potential impacts to Atlantic salmon previously not assessed in the EIAR. The assessment was prepared following the provision of river level data to the NDSFB, to ensure that any implications for this internationally significant species were properly considered. The assessment evaluates impacts across all life stages of Atlantic salmon (spawning, egg incubation, juvenile development, smolt migration, and adult migration) in response to modelled river level fluctuations between October and April, with baseline flow conditions maintained during May-September through variable weir operation. The assessment demonstrates that the modelled hydrological changes in the River Ness would result in no significant effects to Atlantic salmon, and does not change the overall

conclusions for aquatic ecology as presented in **Chapter 9: Aquatic and Marine Ecology** of the EIAR.

4b. Aquatic Ecology - Loch Ness Macroinvertebrate Survey Update

This document is in response to a query raised by Buglife Scotland with regard to the adequacy of sampling locations at Loch Ness. The originating query is contained in the Buglife Scotland consultation response to the ECU of 13 May 2025. The Additional Information clarifies the survey work undertaken and reported in the EIAR. It also provides Additional Information on further survey works that took place at the time of the Application, that were not included in the EIAR. The results of these further surveys do not change the overall conclusions for aquatic ecology as presented in **Chapter 9: Aquatic and Marine Ecology** of the EIAR.

1.7 Overview of Chapter 5 (Ornithology and Ramsar Sites)

*Please note that Chapter 5 contains **Confidential Information** and where marked as confidential is not proposed for general publication. Those documents are only for confidential use by the ECU and for issue to NatureScot and RSPB Scotland as relevant consultees.*

Chapter 5 contains Additional Information relevant to the EIAR **Appendix 7.2: Statement to Inform HRA (Volume 5: Appendices)** specifically relating to ornithological interests and Ramsar sites. The information is provided in response to multiple post-application consultations and policy updates, as follows:

NatureScot Consultation Request - On 1 August 2025 the Applicant received a request from NatureScot with regards the information contained in EIAR **Appendix 7.2: Statement to Inform HRA (Volume 5: Appendices)**. NatureScot noted that there are a number of designated European Sites discussed in Appendix 7.2, and advised that it would assist them to more readily review this if the Applicant could provide a separate standalone document relevant to European sites designated for ornithological interest (particularly Slavonian Grebe but also including Red Throated Diver).

RSPB Scotland Consultation Response - RSPB Scotland provided a consultation response to the ECU on 23 July 2025 noting an objection to the Application on the grounds of potential impacts of the Proposed Development on Slavonian Grebe and concern over adequacy of mitigation measures proposed. The Applicant has since had further consultation with RSPB Scotland (meeting of 6 August 2025) to discuss the items raised.

Policy Position Update on Ramsar Sites - An updated policy position on the protection of Ramsar sites in Scotland was published by Scottish Ministers on 9 July 2025, requiring listed Ramsar sites in Scotland to be treated as if they were European sites for HRA purposes.

Chapter 5 therefore contains the following documents:

5a. Statement to Inform HRA Update (Ornithology)

This document extracts ornithological content (Slavonian Grebe and Red Throated Diver) from the original EIAR Appendix 7.2. It does not provide any new information, assessment or change the conclusions contained in the EIAR, it only extracts relevant content from the existing Appendix 7.2 for easier review.

5b. Confidential Addendum to Statement to Inform HRA (Consideration of Ramsar sites)

This document addresses the updated Scottish Government policy requiring Ramsar sites to be treated as European sites for HRA purposes. The Application and EIAR were submitted prior to this policy update taking effect.

5c. Confidential Addendum (Ornithology) Slavonian Grebe Mitigation and Survey Updates (including Annex A - Slavonian Grebe Management Plan)

*This document responds to RSPB Scotland's consultation comments and includes updated 2025 breeding survey results, enhanced mitigation measures, and a detailed **Slavonian Grebe Management Plan (SGMP)** as Annex A. The SGMP develops further the management and mitigation measures already contained in the EIAR and forms part of the Bird Protection*

Plan. It should be noted that the SGMP is a live document and will be subject to updates prior to commencement of the Proposed Development.

1.8 Overview of Chapter 6 (Rights of Way Update)

The Highland Council (THC) Access Officer reviewed the submitted EIAR and provided comments on items to be clarified to THC Planning Officer by way of internal memo of 3 June 2025. The Access Officer has requested clarification on consideration of the following catalogue of routes (HI53, HI48, HI52, HI67) that were not included in the baseline assessment of **Chapter 16: Socioeconomics, Tourism and Recreation** of the EIAR.

Chapter 6 comprises:

6. Rights of Way Update

This document provides Additional Information in regard to the above identified routes and was not contained in the EIAR. The Additional Information does not change the overall conclusions as presented in the EIAR.

1.9 Status and Context

The Additional Information contained within this document package supplements the original EIAR and does not materially alter the conclusions of the environmental assessment. The information is provided to assist statutory consultees in their technical assessment of the Section 36 Application and/or previously submitted Additional Information. It demonstrates the Applicant's commitment to addressing all queries raised during the consultation process.

All technical assessments and responses contained herein have been prepared by suitably qualified professionals.

Chapter 2: Ness Woods SAC and Urquhart Bay Wood SAC

Chapter 3: Water Environment

Chapter 4: Aquatic Ecology

Chapter 5: Ornithology and Ramsar Sites

*“Sections marked **Confidential** are provided solely to the ECU and, as relevant consultees, to NatureScot and RSPB Scotland. They are not for wider publication.”*

Chapter 6: Rights of Way Update



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