

Hydrology Supplementary Information

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| Project name Balliemeanoch Pumped Storage Hydro | Client ILI Pump Storage Hydro PLC | Subject CAR Application Request for Further Information | Date 27 February 2026 |
| Prepared by [REDACTED] | Checked by [REDACTED] | Verified by [REDACTED] | Approved by [REDACTED] |

1. Introduction

An application for the discharge and abstraction of water for the Balliemeanoch Pumped Storage Hydro Scheme (the Proposed Development), under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) (the Application), was submitted to the Scottish Environment Protection Agency (SEPA) in June 2025. Following an initial review of the application submitted by AECOM on behalf of Intelligent Land Investments Ltd (the Applicant), SEPA have formally written to the Applicant dated 17 December 2025, detailing their Request for Further Information.

Subsequently, a meeting was held between SEPA, AECOM and the Applicant on 22nd January 2026. In this meeting, it was concluded that much of the information requested by SEPA was presented as part of the Environmental Impact Assessment Report (EIAR) and would be provided to SEPA via a supplementary submission.

This technical note (TN) sets out the Applicant's response to SEPA's queries raised in relation to hydrology and signposts where this information can be found in the EIAR and, for ease of review, provides this information as per the following appendices.

- Appendix A Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 2: Main Report Chapter 12: Water Resources and Flood Risk
- Appendix B Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 5: Appendices Appendix 12.1 Water Resources Assessment.
- Appendix C Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 5: Appendices Appendix 12.2: Flood Risk Assessment.
- Appendix D Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 3: Figures

2. SEPA Request – Hydrology

Table 1, below, details the Applicant's response to SEPA's response to the CAR application, specifically relating to hydrology. Information relation to request 1.9 is contained in **Section 3** below. The relevant documents (excluding the CAR License Supporting Document) cross referenced within AECOM responses can be found in the Appendices included with this Technical Note.

Table 1. Hydrology Response to 'Request for Further Information'

| Ref. | SEPA Comment | AECOM Response | Relevant Document Cross Reference | Actions / Notes |
|------|--|--|---|--|
| 1.1 | When available, the proposed 12 months of flow data for the Allt Beochlich should be provided and the subsequent long term flow duration curve used to set final compensation flow values. Data should be collected in line with: SEPA annex-a-hydrological-information.pdf. 12 months of raw 15min stage data should be submitted along with spot gauging's, supporting information on gauging station location and any assumptions, limitations or adjustments made to the data. | The applicant is committed to undertaking 12 months of flow modelling for Allt Beochlich prior to construction, with the information provided to SEPA as noted in their response. This should be included as a condition of the CAR License for the Proposed Development. | - | This was deemed acceptable by SEPA in the meeting of 22/01/26, but SEPA note that the CAR will be based on information provided, and most likely need to be varied following completion of monitoring. |
| 1.2 | Please provide further clarification on proposed compensation flows to Allt Beochlich. | Preliminary details of proposed compensation flow to Allt Beochlich are set out in the CAR License Supporting Documentation . Additionally, as set out in Section 5.6 of the CAR License Supporting Documentation "Prior to any filling, an agreement would be reached with the operator of microhydro run of river station at Allt Beochlich, to continue to provide the necessary flow to this station" As such, final details of the compensation flow to Allt Beochlich will be confirmed following completion of the 12-month flow modelling noted in 1.1 and therefore should be included as a condition of the CAR License for the Proposed Development. | CAR License Supporting Document (Rev B September 2025) <ul style="list-style-type: none"> Section 5.6: Details of the Controlled Activity – Construction Section 5.7: Details of the Controlled Activity – During Operation. Table 5-8: Monthly Average Compensation Flows | |
| 1.3 | Please confirm if you are proposing ongoing background monitoring to enable natural flow patterns to be mimicked for compensation flows? | The flow monitoring will not continue past the 12-month monitoring as agreed to in 1.1. | | |
| 1.4 | Please confirm how existing downstream users of the waterbody are to be protected (existing licensed hydro scheme, please note this scheme has an RBMP measure against it, any compensation flow regime provided by the proposed Balliemeanoch scheme should ensure that the RBMP improvement objective being met is not compromised). | As set out in Section 5.6 of the CAR License Supporting Documentation "Prior to any filling, an agreement would be reached with the operator of microhydro run of river station at Allt Beochlich, to continue to provide the necessary flow to this station". As such, final details of the compensation flow downstream will be confirmed following completion of the 12-month flow modelling and will support any RBMP measures that the existing station have against it. AECOM have engaged with the operator of the existing hydro scheme to understand the RBMP commitments that are in place. This should be included as a condition of the CAR License for the Proposed Development. | CAR License Supporting Document (Rev B September 2025) <ul style="list-style-type: none"> Section 5.6: Details of the Controlled Activity – Construction | |
| 1.5 | In addition to the current operation and proposed operations model, a natural baseline model is also required. Full justification of the data used, operational scenarios(s) tested, and any limitations should be provided. In | The baseline hydrology for Loch Awe is set out in the CAR License Supporting Documentation , which states "The outflow from Loch Awe based on the | CAR License Supporting Document | |

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|------|---|--|--|--|
| | particular, clarification on how the change in storage volume is derived should be submitted. | change in volume of stored water together with inflows will take into account all outflows, including abstraction and discharges from the Cruachan PSH, the Awe Barrage hydro scheme and any compensation flows. The baseline scenario therefore captures existing hydro electric and pump storage operations linked with Loch Awe.” The baseline scenario therefore captures existing hydro electric and pump storage operations linked with Loch Awe.” It is therefore assumed that the baseline scenario consists of natural in-flows to Loch Awe, the existing hydro assets on the loch, including Cruachan PSH, and the Awe Barrage. | (Rev B September 2025) <ul style="list-style-type: none"> Section 5.4: Hydrology, sub-section Baseline Conditions Appendix B: BM EIA Appendix 12.1 Water Resources Assessment: <ul style="list-style-type: none"> Section 2: Baseline Conditions Section 3: Assessment Methodology | |
| 1.6 | The proposed operations model should reflect best understanding of the likely operation of the scheme rather than a uniform operation scenario as currently presented. Please amend and re submit the model to demonstrate this. | The model reflects the worst-case operational scenario. | | SEPA indicated that they were satisfied with the worst-case model scenario approach and confirmed that no additional modelling is required. However, information has been requested around what AECOM/ILI view the likely operational regime to look like, and clarification on operating hours is needed. |
| 1.7 | The current operational model should include the cumulative impact of all licensed pressures i.e. also include the influence from the Cruachan PSH and compensation requirements for Awe barrage. | The current operational model includes both Cruachan and Awe Barrage | | SEPA indicated that they were happy this was the case during the call on 22/01/26. |
| 1.8 | All input data used for modelling should be submitted along with model outputs and the model itself where practicable. | This will be shared once modelling is completed | | |
| 1.9 | Currently submitted modelling appears to only cover 11 years 2014 to 2025. A timeseries of at least 30 years should be modelled to determine the natural and current flow/level statistics. Please re-run and submit updated modelling to cover a minimum 30-year period. | This will be shared once modelling is completed. It is not anticipated that the extremes will be affected by the large modelling duration, due to the upper and lower hands-off levels on Loch Awe. (refer also Section 3.1) | | This will take longer to develop, but no substantial change is foreseen compared with current results. |
| 1.10 | Information is required to demonstrate how proposed operational levels in Loch Awe will mitigate against any impact to existing users of the water environment. | This has been provided in the EIA documents appended to this TN. | | |

3. Hydrology Supporting Information Requirements

3.1 Supporting Information SEPA Request 1.9

AECOM are in the process of preparing the 30-year model and will submit to SEPA when it is developed. AECOM do not anticipate that the additional 19 years of data will affect the extremes of the model (flooding and droughts), as the project is subject to upper and lower hands-off levels on Loch Awe.

Appendix A Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 2: Main Report Chapter 12: Water Resources and Flood Risk

Please see accompanying document / folder.

**Appendix B Balliemeanoch Pumped Storage Hydro
Environmental Impact Assessment Report Volume 5:
Appendices Appendix 12.1 Water Resources Assessment.**

Please see accompanying document / folder.

**Appendix C Balliemeanoch Pumped Storage Hydro
Environmental Impact Assessment Report Volume 5:
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Please see accompanying document / folder.

Appendix D Balliemeanoch Pumped Storage Hydro Environmental Impact Assessment Report Volume 3: Figures

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