Sloy Pumped Hydro Storage Scheme

EIA Report: Non-Technical Summary

November 2024

sse Renewables

Non-Technical Summary - Contents

Figures

Appendices

There are no appendices associated with this Chapter.

1. Introduction and Overview

1.1. Overview

This Non-Technical Summary (NTS) forms part of the Environmental Impact Assessment Report ("EIA Report") prepared by ASH design+assessment Limited (ASH) and SSE Renewables Services (UK) Limited (SSER Ltd.) ("the Developer") as agent for SSE Generation Limited ("the Applicant"). For the purposes of this Environmental Impact Assessment (EIA) both entities will hereafter be referred to as SSE.

The EIA Report has been prepared to accompany an application for consent under Section 36 of the Electricity Act 1989 ("the 1989 Act"). The application seeks consent to convert the existing Sloy Hydroelectric Power Station into a pumped hydro storage scheme, the proposals are referred to throughout this document as the "Proposed Development".

The purpose of the scheme will be to enable water to be pumped through existing pipelines and tunnels from Loch Lomond to Loch Sloy during times of low electricity demand, ready for use during periods of higher demand. It would also help to reduce the likelihood of renewable energy from other sources being constrained during times of low demand (see **Figure 2: Proposed Development**).

The Scottish Ministers previously granted consent for a pumping station at Sloy in September 2010, however, due to a perceived lack of market, the scheme was never built and consent lapsed in 2018. In recent years there has been an increase in the development of flexible renewable schemes (principally wind farms) to assist the UK in attaining its commitment to increase the proportion of electricity generated using renewable resources. As a result, there is now a recognised, clear, and urgent need for the development of pumped hydro storage, to enable a greater balance between electricity supply and demand.

The permanent components of the Proposed Development would be within the grounds of the existing Sloy Hydroelectric Power Station which is located opposite the Inveruglas Visitor Centre on the A82, and within the Loch Lomond and The Trossachs National Park (LLTNP) (see **Figure 1: Site Location**). The Proposed Development would consist of an extension to the existing tailrace, new intake structure, new underground pump(s), a new above ground building, a new anchor block around existing pipelines, extension of hard standing area and an area of landscape reinstatement to the north. During the construction phase temporary site establishment areas would be created within the grounds of the existing Sloy Hydroelectric Power Station and in the overflow car park at the Inveruglas Visitor Centre (owned by SSE). In addition, the existing 32.5MW G4 turbine will be upgraded to 40MW to match its sister units in order to maximise the generation potential of the site.

An EIA has been undertaken for the Proposed Development in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 to assess the likely significant effects of the Proposed Development. The findings of the EIA are presented in an EIA Report, including the measures which would be taken to prevent, reduce and, where possible, offset predicted likely significant adverse effects. The purpose of this document is to provide a summary of the EIA Report findings in non-technical language.

1.2. Project Need

Pumped hydro storage uses excess electricity during off-peak hours to pump water from a lower reservoir to an upper reservoir. Water is then released during peak demand periods, flowing from the upper reservoir, downhill. As it moves, it passes through turbines to generate electricity.

One of the key advantages of pumped hydro storage is its large-scale storage capacity. Long duration electricity storage is critical in our journey to achieve net zero. Energy storage is needed to complement variable renewable energy sources such as wind and solar while providing grid stability and flexibility. When the wind doesn't blow and the sun doesn't shine, we will increasingly need to rely on storage technologies like pumped hydro storage to allow us to meet demand and transition towards a cleaner and more sustainable energy system.

The Draft Energy Strategy and Just Transition Plan (Scottish Government, January 2023) recognises the crucial role that pumped hydro storage has, together with other storage technologies, in Scotland's energy system, as well as the National Planning Framework 4 (NPF4) (2023) which also recognises the need for pumped hydro storage and includes it as a development of national importance.

1.3. EIA Report Structure

The EIA Report prepared to accompany the Section 36 application consists of a **Non-Technical Summary** (this document) and the following four volumes:

- Volume 1: Main Report
- Volume 2: Figures
- Volume 3: Visualisations
- Volume 4: Technical Appendices

Volume 1 of the EIA Report describes the project and the legal and policy framework within which the application will be determined. Details of how the design has evolved, are also included. The volume also includes the individual assessments undertaken under each of the specialist environmental topics identified, providing an assessment of the likely significant effects of the Proposed Development.

Volume 1 of the EIA report includes the following Chapters:

- Chapter 1: Introduction
- Chapter 2: The Existing Hydroelectric Scheme
- Chapter 3: Site Selection and Design Evolution
- Chapter 4: Description of Development
- Chapter 5: EIA Process and Methodology
- Chapter 6: Scoping and Consultation
- Chapter 7: Planning Policy and Context
- Chapter 8: Aquatic Ecology and Fish
- Chapter 9: Terrestrial Ecology
- Chapter 10: Ornithology
- Chapter 11: Soils, Geology and Water Environment
- Chapter 12: Landscape and Visual Impact Assessment
- Chapter 13: Traffic and Transport
- Chapter 14: Noise and Vibration
- Chapter 15: Cultural Heritage
- Chapter 16: Recreation

Volume 2 includes the accompanying figures referred to in Volume 1: Main Report.

Volume 3 includes visualisations of the Proposed Development according to NatureScot Standards.

Volume 4 comprises supporting appendices to Volume 1 of the EIA Report, such as the Design Statement (**Volume 4, Appendix 4.1**), and further detailed reporting or information to support the EIA Report and technical assessments contained therein.

1.4. Supporting Documents

A **Planning Statement** which considers the acceptability of the Proposed Development in the context of climate change and renewable energy targets, as well as energy and planning policies is included with the application.

1.5. Notifications

In accordance with Regulation 4 of the Electricity (Applications for Consent) Regulations 1990, and Regulation 14 of the EIA Regulations, the application and the EIA Report will be advertised in the Edinburgh Gazette, a national newspaper (The Scotsman), and a local newspaper (the Helensburgh Advertiser and the Dumbarton and Vale of Leven Reporter).

In accordance with Regulation 18 of the EIA regulations, copies of the EIA report will be available to view on the application website at: https://www.sserenewables.com/hydro/sloy-awe/sloy-power-station-redevelopment-plans/. Hard copies of the EIA Report will also be available to view at the following locations:

- LLTNP Authority Offices (Carrochan Road, Balloch, G83 8EG);
- Other locations to be agreed with ECU; and
- Additional copies will be made available subject to a reasonable fee when requested.

2. The Existing Hydroelectric Scheme

The existing Sloy Hydroelectric Power Station came into operation in 1950, generating electricity by passing water from Loch Sloy to Loch Lomond. From Loch Sloy the water is carried by a tunnel through Ben Vorlich to four steel pipelines (penstocks) which carry it to the power station at Inveruglas Bay.

Sloy is the UK's largest conventional hydroelectric scheme, inside the power station there are four turbines with a combined generating capacity of 152.5MW. Energy is exported to the grid via overhead lines connected to the nearby Sloy Substation. Sloy Dam has a spillway crest level at 285m above sea level. When full, Loch Sloy holds 36 million cubic metres of water translating to a useful storage capacity of approximately 15GWh.

Sloy Hydroelectric Power Station generates around 130GWh per year of average rainfall. With a rated capacity of 152.5MW this gives a load factor of approximately 10%. This means that for the equivalent of 90% of the time there is inadequate water in Loch Sloy to generate, the power station is therefore generally run only at times of peak demand.

The Proposed Development would enable water to be pumped up to Loch Sloy at times of low demand or oversupply enabling the load factor at the existing power station to increase from 10% to (up to) 20%, minimising the likelihood of renewable energy from other sources being constrained off the grid during times of low demand.

3. Site Selection and Design Evolution

3.1. Introduction and Site Selection

SSE carried out a review of potential greenfield pumped storage schemes and assessed the feasibility of converting existing operational assets to pumped hydro storage, taking into account environmental, planning and technical considerations. Sloy Hydroelectric Power Station was identified as being a well-suited site, given that the existing power station has a low load factor and Loch Sloy has a large storage capacity. It also has the advantage of an existing connection to the grid and good local road network connections. While it is acknowledged that the scheme is located within the LLTNP, a highly valued, sensitive and popular area with visitors, if designed sympathetically and to a high standard, it is considered that significant adverse effects can be avoided, as was demonstrated by the previously consented scheme.

3.2. Design Evolution

In order to convert the existing Sloy Hydroelectric Power Station into a pumped hydro storage scheme, a new pumphouse building, new pumps and associated infrastructure would be constructed adjacent to the northern end of the existing power station.

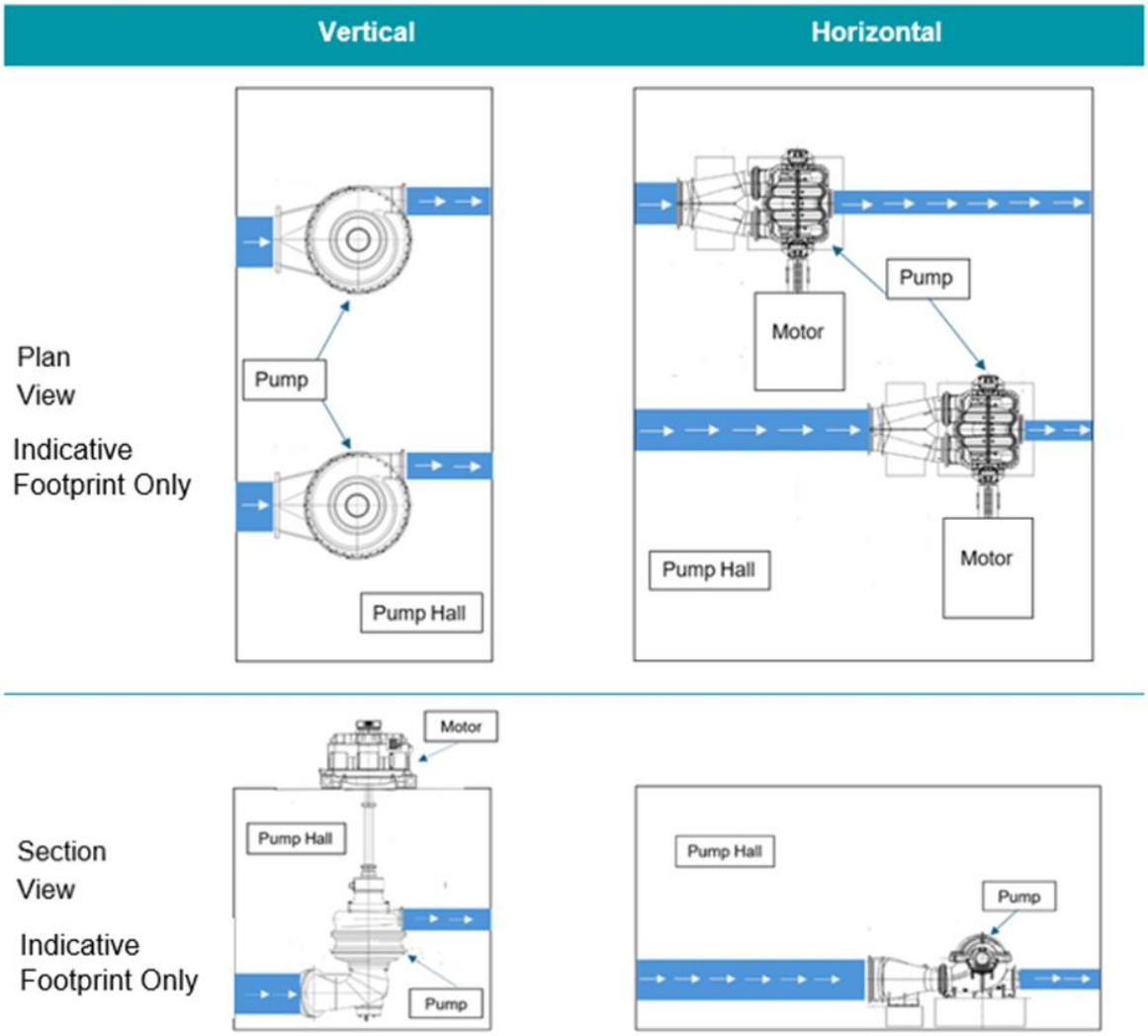
3.2.1. PUMP OPTIONEERING

An optioneering exercise was undertaken with pump manufacturers and design engineers, to explore the potential configurations of pumps that would be possible given the specific requirements of the site. The type and configuration of the pumps would have a direct impact on the dimensions of both the above and below ground structures which would house them. This would influence the amount of excavation required and was therefore a key driver of the design development.

Two possible pump configurations and technology types presented themselves as feasible options; vertically oriented multistage pumps, and horizontally oriented multistage pumps (see **Plate 1**).

Both options would result in trade-offs, vertical pumps would require less excavation but a greater building height. In contrast, horizontal pumps would require greater excavation, but a lower building height. A ‘worst-case’ option was taken forward for assessment in the EIA. This would comprise the considerably larger excavation volume required for the horizontal pumps and the taller building required for the vertical pumps.

Plate 1: Typical General Arrangement Drawings of Horizontally Oriented Multistage Pumps and Vertically Oriented Multistage Pumps (Indicative) (Image Credit: Andritz AG).



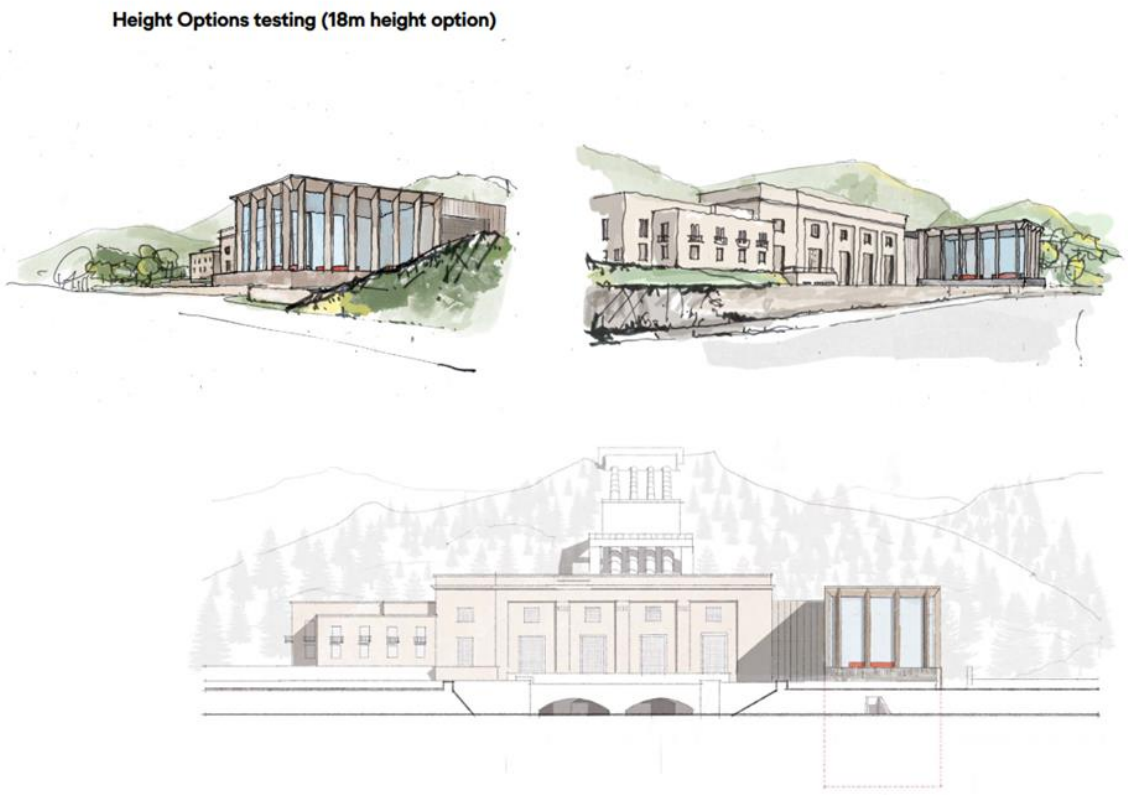
3.2.2. BUILDING DESIGN

The design of the building, in terms of location and footprint, is largely constrained by engineering and technical requirements. The materials, aesthetics and building height have been carefully considered and consulted on with LLTNP Authority (LLTNPA) and Historic Environment Scotland (HES).

Concept designs were presented to both LLTNPA and HES with feedback recorded noting the positive impact that the proposed extension could have to draw attention to the existing building and increase its prominence. There was notable support for maximising the visibility of the internal machinery and an acknowledgement of the need to balance exposing the function of the building and contributing to cultural heritage, while not dominating the existing Category A listed building and setting. Further to this, a key consideration was the balance required between the height of the building and the required excavation depth.

The preferred design approach, developed in liaison with LLTNPA and HES, has been further refined, and forms the basis of the Proposed Development which has been assessed (see **Plate 2** for indicative concept sketch).

Plate 2: Higher Height Option (18m) Concept Drawing.



3.2.3. SPOIL MANAGEMENT

Based on the evolution of the pump configuration and building concept design, the maximum volume of spoil from excavation of the "worst-case" building envelope was calculated to be 40,000m^3. The final decision on the type of pumps cannot be made at this stage, however, SSE will endeavour to reduce the spoil volume as much as possible regardless of the final pump configuration.

Where possible spoil will be reused onsite for the construction of the Proposed Development. However, it is expected that there will still be an excess of spoil to be managed. As the Proposed Development is within the LLTNP and is located close to popular tourist and recreational areas it is an important that construction related traffic on the road network is kept to a minimum. This is further highlighted by the constrained access to the Proposed Development from the A82 trunk road, which is a single carriage way utilised by a relatively high volume of traffic.

A review was undertaken to assess if there were any suitable temporary or permanent spoil storage locations within SSE's landholdings in close proximity to the site, however no suitable alternative sites were identified.

Through ongoing consultation with LLTNPA, two spoil management strategies have been assessed as part of the EIA, depending on the worst-case scenario for each environmental discipline. One scenario

considers approximately 40,000m^3 of spoil being kept on site in the wooded area to the north of the existing power station. The second scenario considers approximately 12,000m^3 of spoil being kept on site in the wooded area to the north of the existing power station. Approximately 28,000m^3 of spoil would be transported off site along the A82 to the north and / or south to be used on Forestry and Land Scotland (FLS) projects, RTS Forestry projects or other similar projects in the area.

In addition to the two reasonable 'worst-case' scenarios that have been assessed as part of the EIA, SSE is committed to achieving a 'best-case' scenario for spoil management.

4. Description of Development

4.1. Description of Development

The Proposed Development would be constructed entirely on land owned by SSE within the grounds of the existing Sloy Hydroelectric Power Station. Two areas would be used for site establishment. One located within the northern wooded area adjacent to the existing Power Station and the other located in the overflow car park of Inveruglas Visitor Centre (owned by SSE) (see **Figure 2: Proposed Development**).

The principal components of the Proposed Development would comprise of:

4.1.1. BUILDINGS

A new surface building would be required to house electrical switchgear, pump infrastructure and a gantry crane to enable removal of heavy components for maintenance and repair. SSE commissioned the services of award-winning, Glasgow based architects, Page \ Park to undertake the design concepts of the proposed above ground elements. A high-quality contemporary building is proposed, which would be positioned perpendicularly to the existing Sloy Hydroelectric Power Station.

4.1.2. UNDERGROUND PUMP HALL

An underground pump hall would be required to house the pumps. This would connect to the new intake structure and would extend to a depth of approximately 18m below existing ground level with some localised areas up to 20m in depth. The underground pump hall would be constructed from reinforced concrete.

4.1.3. PUMPS AND PUMP MOTORS

The pumping plant would comprise of pumps installed below ground level adjacent to the northern tailrace with pump motors located within a large open plan hall. The power demand of each pump motor would be 40-50MW. Power supply for the pumps would be taken from the grid at point of connection to the rear of the existing power station building. A small transformer compound would be required close to the pumphouse building containing the switchgear and transformers needed to operate the pumps This would be connected to the pumphouse via buried cables.

4.1.4. INTAKE STRUCTURE AND TAILRACE

The purpose of the intake structure would be to provide a water passage from Loch Lomond to the new pumps. This would connect through the northern wall of the existing tailrace which would be partly removed to enable construction of the new intake structure and screens. Permanently installed trash and fish screening with an automated cleaning system, designed in accordance with the Scottish Environment Protection Agency (SEPA) guidance, would be required across the new pump intake.

4.1.5. BURIED PIPELINE + PENSTOCK CONNECTION

New buried pipelines would be required to connect the pumps into the existing pipelines to enable water to be transferred to Loch Sloy. The pipelines would exit the pump hall underground and would emerge from the ground approximately 40m to the rear of the power station, this connection point would be encased in a new concrete anchor block. A small section of the listed drystone wall that surrounds the

penstocks would need to be removed in order to make this connection and construct the new anchor block.

4.1.6. EXCAVATED MATERIALS

The proposed construction activities would result in a maximum of 40,000m^3 of excavated rock . While this is the volume considered in the EIA Report, this is the worst-case scenario and the final volume would be dependent on the type of pump selected during the detailed design stage.

Environmental surveys confirmed that the preferred area on-site for the storage of rock spoil would be to the north of the existing Sloy Hydroelectric Power Station in an area of generally poor condition woodland (see **Plate 3**). Much of this area was previously cleared and used during the construction of the existing Sloy Hydroelectric Power Station (see **Plate 4** and **5**). In addition to this, LLTNPA has highlighted that the larch within the area will require felling in the near future to limit the spread of Larch disease which is a problem nationwide.

SSE has undertaken a review of the woodland to determine the extent of felling that would be required to accommodate the spoil storage area and remove the larch while maintaining a windfirm edge for the remaining woodland. The review confirmed that the existing buffer of broadleaved trees along the A82 could be retained to maintain a visual screen, but that a large part of the existing woodland would need to be felled.

Upon completion of the construction works, the area would be reprofiled, covered in suitable soil, seeded and planted to ensure an improved habitat would be established, in order to achieve SSE's Biodiversity Net Gain (BNG) targets of a minimum 10% net gain. It would also be fenced to protect the area of new woodland from grazing. This strategy would help to eradicate invasive non-native species (INNS) and reduce the need for rock spoil to be transported off site via the public road network.

Plate 3: Plan showing selection of worst-case Indicative Spoil Management Area.

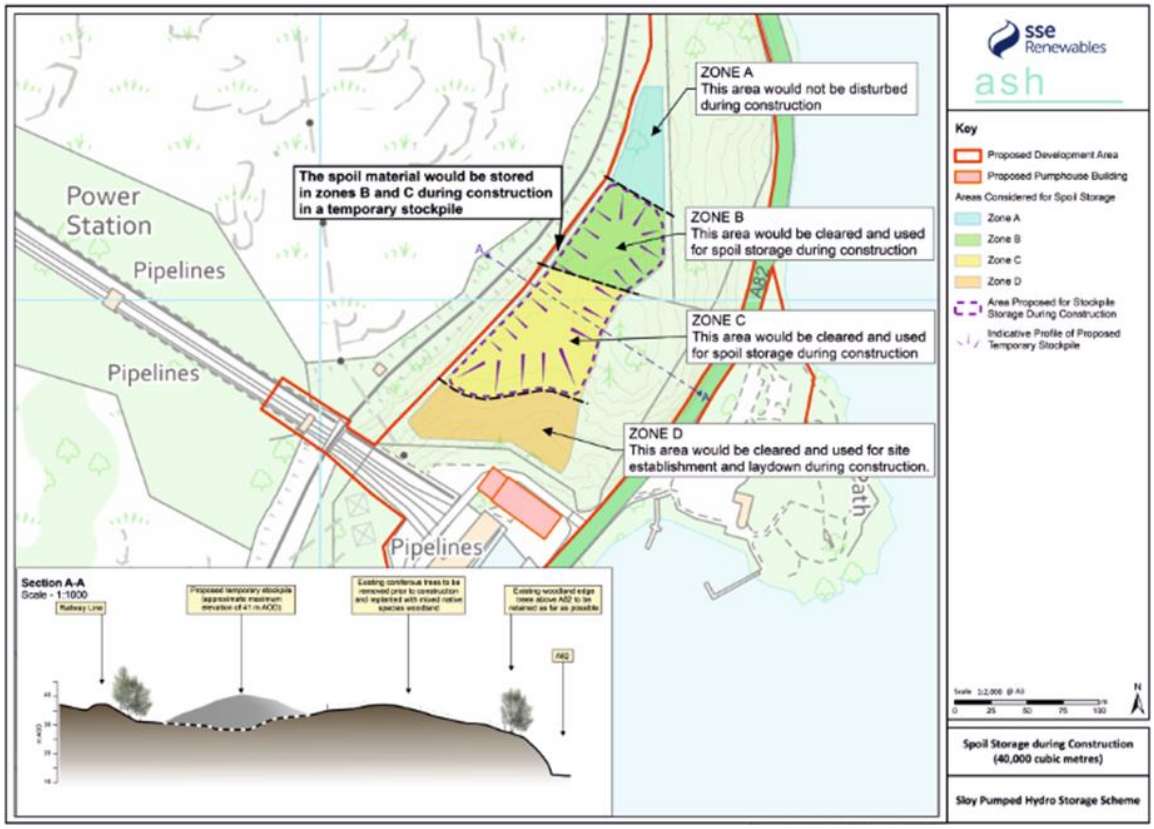


Plate 4: View of Sloy Hydroelectric Power Station during construction circa 1950 (Photo Credit: SSE Renewables).

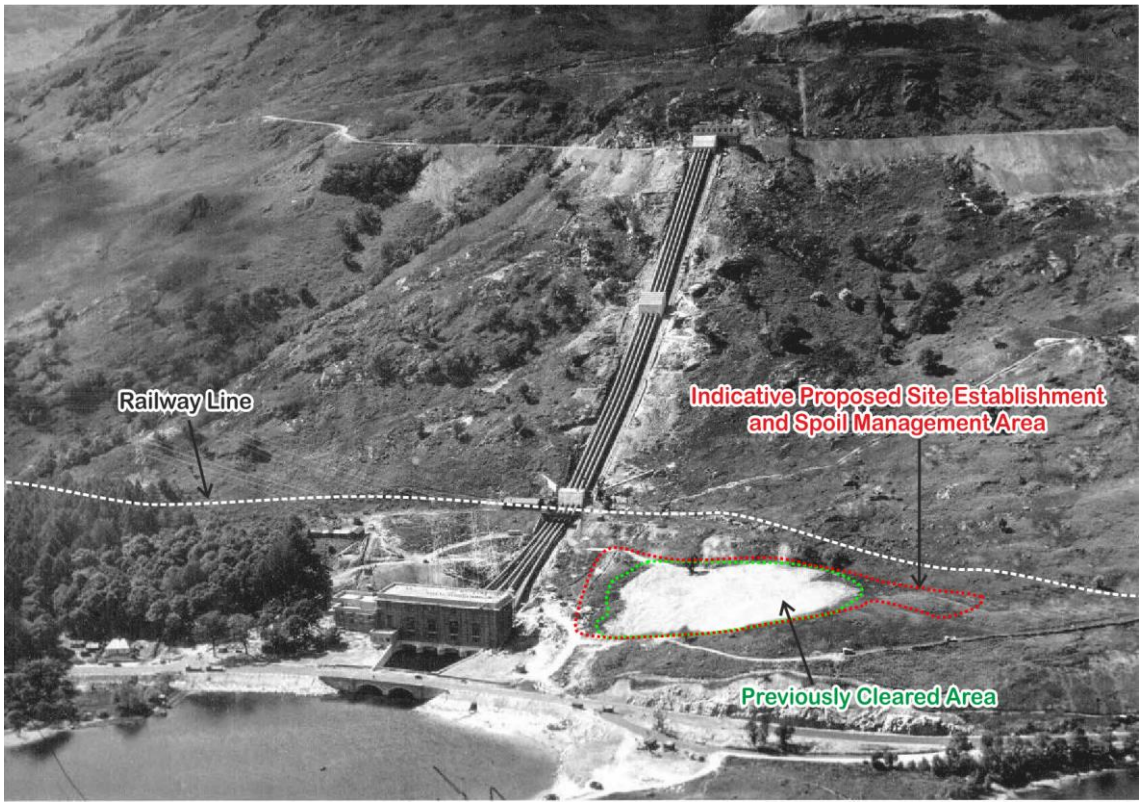
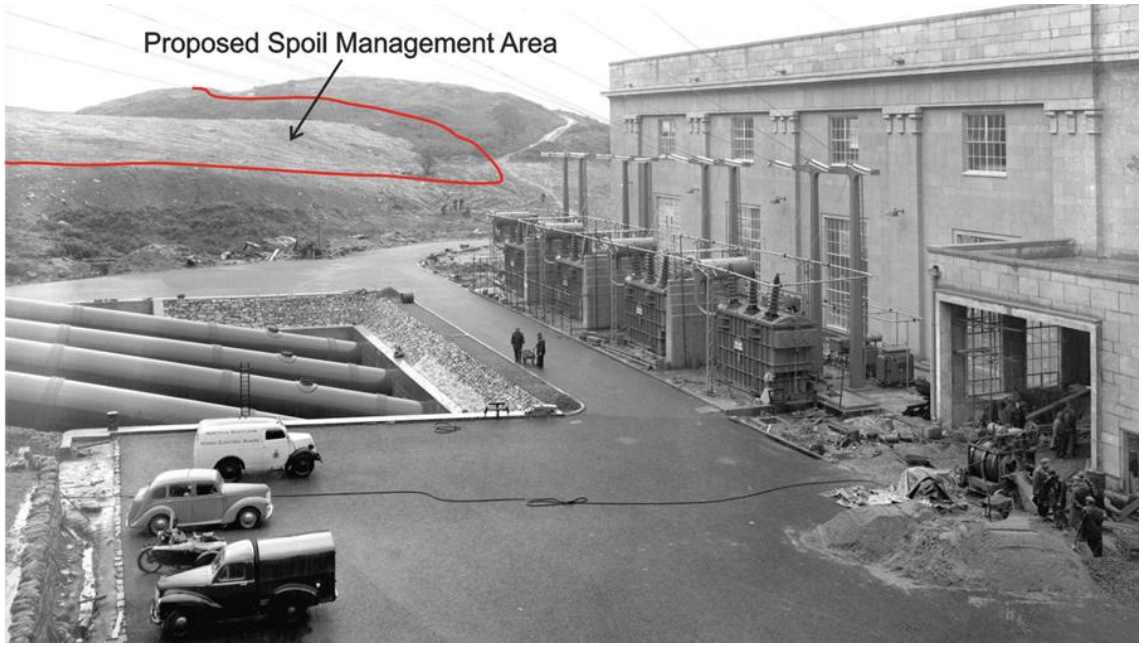


Plate 5: View of the rear of Sloy Hydroelectric Power Station during construction circa 1950 (Photo Credit: SSE Renewables).



4.1.7. TEMPORARY CONSTRUCTION COMPOUND AND SITE ESTABLISHMENT AREA

A main construction compound / site establishment area would be created to the north of the existing power station. The use of this area would require the clearance of an area of woodland prior to commencement of construction activities.

It is anticipated that a secondary construction compound / site establishment area and vehicle holding area, would be constructed in the overflow car park to the north of the Inveruglas Visitor Centre car park which is owned by SSE. This would remain in place for the duration of the construction activities. It is proposed that this area would be completely segregated from the public car park to the south during the construction of the scheme and accessed via the junction to the north, which is not currently in-use. Improvement works would be required to enable safe access and egress to the A82.

Following completion of the construction works, the improved road junction would remain, and the area would be reinstated, including the replanting of appropriate native species.

4.1.8. ACCESS

There are two existing bellmouth junctions off the A82 at Sloy Hydroelectric Power Station. The southern junction is used for day-to-day operations, the northern junction acts as a secondary access and the gates are normally locked. It is anticipated that the northern junction would be used exclusively by construction vehicles during the construction of the Proposed Development. This would separate day-to-day operations from construction traffic while utilising an existing access junction. The internal road alignment to the north of the existing power station would need to be reconfigured to accommodate the footprint of the Proposed Development. During the operational phase, access to both the existing generating and new pumping stations would be via the existing southern junction with very occasional use of the northern junction.

To facilitate construction of the Proposed Development and to enable safe access for delivery vehicles, the existing northern gates, gate posts and a short section of walling (which are all part of the Category A listed Sloy Hydroelectric Power Station) would be carefully dismantled and stored prior to construction. The junction would be fully reinstated in its current location upon completion of construction. This work would require Listed Building Consent (as it was for the previously consented scheme) and would be subject to further discussion with LLTNPA and HES.

4.2. Construction Programme and Working Hours

It is anticipated that construction of the project would take place over an approximately 36-month period, following the granting of consents. Detailed programming works would be the responsibility of the Principal Contractor in agreement with SSE.

It is anticipated that the standard working hours would generally be between 07.00 and 19.00 Monday to Saturday, and 07.00 to 16.00 on Sunday with some key periods within the programme requiring 24 hour working. In the event of work being required outwith standard hours, these would be confirmed with, the Local Authority, key stakeholders, and local residents, wherever possible.

During the winter, work areas across the site would have temporary construction lighting at the start and end of the working day to ensure a safe working environment for the construction teams. In the event of work being required outside of the proposed working hours, temporary lighting would also be required and would be agreed with the Local Authority in advance.

Ongoing engagement with the local community during the construction of the Proposed Development would be an important consideration for SSE and the Principal Contractor. A community liaison group would be set up to provide the local community with information about the timing of key construction activities and a mechanism by which feedback and concerns from within the local community could be shared and discussed.

4.3. Environmental Management During Construction

4.3.1. SENSITIVE LOCATIONS

Prior to the commencement of construction works, sensitive ecological areas, and other specific sensitive locations (e.g. cultural heritage assets and watercourses) would be marked out by specialist advisers (e.g. the Environmental Clerk of Works (ECoW)) in order to avoid unnecessary encroachment and protect sensitive areas during construction. An Architect and Landscape Clerk of Works would also be involved during the detailed design and construction phases where required, to ensure the key principles of the design and mitigation are realised. The Principal Contractor would ensure that no vehicle movements or other activities take place outwith the approved working area without prior approval.

4.3.2. CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

It is proposed that method statements for the construction of the Proposed Development would include the requirements of the Construction Environmental Management Plan (CEMP) which would apply to all construction activities required as part of the proposals. In particular, the CEMP would specify conditions relating to protection of habitats and species, pollution prevention and the means by which site monitoring would occur. The CEMP would be secured by a condition of consent and would be prepared by SSE in conjunction with the Principal Contractor, and in consultation and agreement with the LLTNPA, Scottish Environment Protection Agency (SEPA), and NatureScot.

4.3.3. WASTE MANAGEMENT

It is anticipated that any excavated material generated during the works, would be re-used on site where possible, as described within the EIA Report. Any materials to be removed from site (packaging etc.) would be segregated on site and removed to suitable recycling facilities or disposed of to a suitably licensed waste management facility, in accordance with current waste management regulations.

A Waste Management Plan would be provided by the Principal Contractor as part of the construction phase CEMP.

4.3.4. SITE REINSTATEMENT

Reinstatement works would generally be undertaken during construction (and during the immediate post-construction phase) and would aim to restore areas of ground disturbance and changes to the landscape as part of the construction works. Reinstatement would be undertaken as soon as practical following the construction works. A Site Reinstatement Plan would be provided by the Principal Contractor as part of the final site-specific CEMP.

Outline Landscape Proposals have been included within the EIA Report and would be updated and implemented as part of the Proposed Development. These would ensure an improved habitat would be established in the woodland area to the north once it has been reprofiled, covered in suitable soil, seeded and planted and fenced to protect the area from grazing.

All construction equipment and other temporary infrastructure would be removed from site and the temporary storage areas would be reinstated including the Inveruglas Visitor Centre overflow car park.

4.4. Mitigation

A schedule of mitigation is included in the EIA Report which consolidates and cross references all of the suggested mitigation measures documented within the EIA Report, to minimise or offset potential environmental effects.

4.5. Operation and Maintenance

The existing Sloy Hydroelectric Power Station is used by the Sloy/Awe Hydro Group as a local operational base. The station is not currently manned 24 hours a day and this would continue to be the case, with the operation of the Proposed Development being controlled via a remote link to SSE Hydro Operations Control Centre in Perth. However, regular visits would be made to the Proposed Development, to inspect and maintain structures along the following lines:

- Daily visits to carry out routine maintenance and inspection works;
- Monthly, six monthly and annual maintenance tasks would be carried out to the electrical and mechanical equipment; and
- Periodic inspection of the inside surface of the pipeline. This is not expected to be more frequent than once every six years; and would be undertaken in co-ordination with planned outages of the power station and the existing penstock pipelines.

Once operational, internal lighting would be required in the pumphouse building, predominantly during working hours, unless essential operational and maintenance activities were required outwith these hours. Any external lighting required at the pumphouse building would be designed to be discrete and minimise light pollution in keeping with the lighting of the existing power station.

4.6. Decommissioning

The existing Sloy Hydroelectric Power Station was opened in 1950 and there are no plans for decommissioning in the future. With proper maintenance, the Proposed Development should remain functional indefinitely. If decommissioning was required in the future, full details of the decommissioning plan would be agreed with the appropriate authorities prior to any works taking place. Therefore, decommissioning has been scoped out of this assessment.

4.7. Socio-Economic Benefit

SSE has a long-standing, demonstrable commitment to sharing socio-economic value with its communities. The delivery of a major programme of capital investment provides the opportunity to share socio-economic benefits with local communities and the wider region, thereby also maximising the support of local communities.

During the design, development and construction phases the Proposed Development would:

- Generate local and national positive economic impact;
- Support approximately 70 FTE (full time equivalent) jobs at peak of construction;
- Promote fair and inclusive work as a Real Living Wage Employer;
- Support apprentices and traineeships through collaboration with the Principal Contractor;
- Facilitate community engagement during construction with a community engagement plan;

- Commit to a Community Benefit Fund; and
- Endeavour to report on the overall socio-economic impact upon completion of construction.

During operation the Proposed Development would:

- Support skills development and continued secure employment for local workforce; and
- Continue to support apprenticeships and traineeships.

5. EIA Approach, Scope and Consultation

5.1. EIA Approach

Environmental Impact Assessment (EIA) is a process that considers how a proposed development is predicted to change existing environmental conditions and what the consequences of such changes will be. It therefore informs both the project design and decision-making processes related to the granting of consents.

The approach to the assessment of each specialist topic within the EIA Report is broadly the same. For each topic, the baseline environment is identified and described, prior to an assessment of significance being undertaken to identify and predict the likely significant effects of the Proposed Development. The assessment of significance typically considers the sensitivity of receptors relevant to a particular topic, and the magnitude of impact the Proposed Development would have on such receptors. Cumulative effects with other developments are also considered.

5.1.1. APPROACH TO MITIGATION

Mitigation measures are identified to prevent, reduce or remedy any potentially significant adverse environmental effects identified in the EIA Report, beyond those already considered as normal good practise (i.e. embedded mitigation). Such measures would be implemented during detailed design, construction and / or operation of the Proposed Development. Any remaining predicted effects after taking into account available mitigation measures are known as ‘residual effects’. This assessment takes into account the mitigation as specified in the EIA Report to identify the residual effects, based on the assumption that the identified mitigation is implemented. The residual predicted effects are discussed for each potential effect that has not been scoped out of assessment and a significance level identified.

5.2. Scoping

In general, the EIA Regulations require that an EIA should describe the likely significant effects of a proposed development on the environment. Scoping of potential likely significant effects while having regard to the physical impacts of a proposed development provides a basis for ensuring that the assessment of environmental effects is appropriately limited to the issues of genuine potential significance. This ensures a proportionate approach to EIA that is focused on likely significant effects to be considered and assessed. Consultation and engagement with stakeholders early in the process, with advice input from key consultees being sought, helps greatly to inform decisions about the design and the EIA work for a proposed development.

In June 2023, a Scoping Report was submitted to the ECU which sought input from statutory and non-statutory consultees regarding the information to be provided within the EIA Report. In December 2023, the ECU issued its Scoping Opinion for the Proposed Development. The responses, contained within the Scoping Opinion, were considered in detail during the EIA process and were used to inform the scope of the EIA.

5.3. Pre-Application Consultation

The Applicant has undertaken extensive consultation with key stakeholders throughout the pre-application process, in particular with the LLTNPA, to discuss options to minimise any potential effects of the Proposed Development on the LLTNP, as well as HES, SEPA, ECU and other interested stakeholders through a variety of meetings, workshops, virtual calls and emails.

The Applicant has sought to maintain an open dialogue with local communities to keep them informed about the Proposed Development and seek feedback as the design has evolved. Two face-to-face public exhibitions were held locally at Scoping Stage, at the Three Villages Hall in Arrochar, on Tuesday 25 July 2023 between 15:00-19:00; and Wednesday 1 November 2023 between 15:00-19:00.

6. Planning Policy and Context

6.1. Overview

A review of climate change and renewable energy targets, energy policies and planning policies that are relevant material considerations to the determination of the Proposed Development has been carried out. A standalone Planning Statement has been prepared which assesses the Proposed Development against planning and energy policy and accompanies the Section 36 application.

6.2. National Planning Policy

Both UK and Scottish Government legislation and energy policy have for some considerable time provided a strong commitment to renewable energy and a reduction in greenhouse gas emissions, to seek to tackle climate change. However, there is now growing consensus on the severity of climate change, including the impacts that climate change is already having both here in Scotland, the UK and across the world. Amendments to the Climate Change (Scotland) Act 2009 have been made by the Scottish Government, which recognise the urgent response that is required. These amendments commit Scotland to a new target of net zero emissions of all greenhouse gases by 2045.

Within national energy and planning policy, there is therefore now increased support for significant deployment of renewable energy development and for storage projects that help to maximise renewable energy capabilities by maintaining security of supply and a resilient system.

National Planning Framework 4 (NPF4), which represents the national spatial strategy for Scotland and forms part of the statutory development plan, gives support for developments that address the climate emergency and nature crises. It also directs decision makers to give the climate emergency and nature crises significant weight in all decisions.

6.3. Local Development Plan

The LLTNP Local Development Plan (LDP) was adopted in 2017. The key ‘lead’ policy in relation to the Proposed Development is ‘Renewable Energy Policy 1: Renewable Energy within the National Park’, which supports renewable energy development within the park where the siting, design, access and scale of the proposal will not have a significant impact either individually or cumulatively on: landscape, or visual amenity, woodlands/forestry, biodiversity, the water environment, cultural heritage, air quality, traffic and transport, recreation and access, and residential amenity.

7. Aquatic Ecology and Fish

An Ecological Impact Assessment (EcIA) has been undertaken to consider the effects of the Proposed Development on aquatic Important Ecological Features (IEFs) including Statutory Designated Sites, Non-Statutory Designated Sites, and notable and protected fish species / species groups. The EcIA has been undertaken according to the latest guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) and informed by comments and information supplied by LLTNPA), Scottish Government Marine Directorate, SEPA, and Scottish Centre for Ecology and the Natural Environment (SCENE).

The assessment considered the potential significant effects of the project and its associated activities on IEFs present within the Proposed Development Area (PDA), and for the Zone of Influence (ZoI) of the IEFs which were scoped in for assessment.

No statutory or non-statutory designated sites with qualifying features relating to aquatic ecology were identified within the PDA, or within 10km of the site during the desk study, and these IEFs were scoped out of the assessment. Aquatic ecological receptors that were identified as being susceptible to impacts as a result of the Proposed Development and scoped into the assessment include Atlantic salmon, brown / sea trout, European eel, and powan, as these species are known to naturally occur within Loch Lomond. Powan and brown trout are recorded as present within Loch Sloy; however, they have been introduced through translocation and historic stocking, respectively.

The potential impacts of aquatic invasive non-native plant species (INNS) Canadian pondweed, Nuttall's pondweed, and New Zealand pygmyweed were assessed due to their presence within the southern basin of Loch Lomond. The absence of these INNS from Loch Sloy and Inveruglas Bay was confirmed by monitoring in 2024. Ruffe, a fish INNS, was included in the assessment due to their presence in Inveruglas Bay and the negative impact ruffe have on powan populations through egg predation. Ruffe are considered absent from Loch Sloy.

Potential significant effects relating to aquatic plant INNS may arise from the movement of water from Loch Lomond to Loch Sloy. However, given the oligotrophic status of the northern basin of Loch Lomond, it is considered unlikely that Nuttall's pondweed, Canadian pondweed, and New Zealand pigmyweed would flourish in Inveruglas Bay, reducing the probability of transfer via pumping operations.

Without appropriate mitigation during the construction period, potential effects on native fish include: noise and vibration caused by rock excavation for the pump house and intake, accidental damage and pollution of Inveruglas Bay through construction activities, and disruption to natural behaviour caused by construction lighting.

Without appropriate mitigation during the operational period, potential effects on native fish include: impingement on screens or entrainment into the pump mechanisms during pumping, changes to hydrological conditions in Loch Sloy through transfer of water from Loch Lomond, and introduction of ruffe to Loch Sloy leading to a reduction in the powan population.

The hydrological conditions in Loch Sloy are not expected to change during operation as both Loch Sloy and the northern basin of Loch Lomond are oligotrophic. The powan population in Loch Sloy currently cope with seasonal drawdown of the water level from operation of the existing hydro station, and the operational range is not expected to change as a result of the Proposed Development.

It is considered that the combination of change in pressure and moving parts within the pump system would likely result in mortality of entrained ruffe. Generation flows would prevent ruffe from entering the tailrace, further limiting the risk of transfer to Loch Sloy. Overall, the predicted impacts of the Proposed Development on the powan population in Loch Sloy are assessed to be non-significant.

Providing that mitigation measures detailed in the EIA Report are in place, it is considered that the Proposed Development would have a non-significant impact on native fish species.

Mitigation measures include:

- Pollution prevention measures in line with best practice;
- Fish rescue to remove fish from the working area;
- Production of a CEMP to minimise impacts during the construction phase; and
- Sensitive design of the intake screen with additional fish behavioural deterrents within the tailrace to minimise impacts during the operational phase.

It is anticipated that monitoring during construction and operation would allow for mitigation to be adapted if necessary. Inveruglas Bay and Loch Sloy would be routinely monitored for signs of plant INNS establishment and appropriate control and design measures would be enacted if required.

The cumulative effects of the Proposed Development with other developments in the vicinity are considered to be not significant.

8. Terrestrial Ecology

An EcIA has been undertaken to consider the effects of the Proposed Development on terrestrial IEFs including Statutory Designated Sites, Non-Statutory Designated Sites, Ancient Woodland, and protected / notable floral and faunal species / species groups. The EcIA has been undertaken according to the latest guidance from CIEEM and informed by comments and information supplied by LLTNPA, SEPA, SCENE, and NatureScot.

The assessment considered the potential significant effects of the project and its associated activities on IEFs present within the PDA, and for the ZoI of the IEFs which were scoped in for assessment.

Terrestrial ecological receptors that were identified as being susceptible to impacts as a result of the Proposed Development include the qualifying features of the Loch Lomond Special Area of Conservation (otter); Scottish Biodiversity List (SBL) Priority Habitats Upland Birchwood and Wet Woodland; non-priority habitats conifer and mixed planation woodland; and faunal species and species groups, bats, badger, beaver, red squirrel, pine marten, reptiles, amphibians, and invertebrates. Terrestrial non-native invasive plant species rhododendron, Japanese knotweed, and white butterbur were also considered due to their presence within and directly adjacent to the PDA.

The PDA and surrounding area were identified as providing suitable habitat for the above faunal IEFs during preliminary ecological assessment. Beaver was later scoped in at the request of NatureScot. Following targeted species survey, the woodland to the north of the PDA was assessed as providing moderate suitable foraging and commuting habitat for a bat assemblage of regional significance, and that the woodland habitat surrounding the site was of high suitability. Potential red squirrel resting sites (dreys) were identified within conifer plantation located to the east of the spoil management area, but within the wider woodland clearance area. No field signs of other scoped in faunal IEFs were identified within the site or surrounding area; however, the habitat was considered to be optimal to support these species / species groups

Habitat loss to accommodate the spoil management area would result in a temporary reduction of woodland cover to the north. Existing conifer plantation, mixed plantation, and semi-natural broadleaved woodland (Upland Birchwood and Wet Woodlands) would be cleared, and the spoil management area would remain unvegetated during the construction phase. Conifer plantation will be cleared beyond the spoil management area in accordance with LLTNPA's instruction to remove larch and rhododendron as they are potentially infected by the Phytophthora ramorum and P. kernoviae diseases. This would result in a temporary loss of foraging and commuting habitat for bats, otter, badger, red squirrel, pine marten, amphibians, reptiles, and invertebrates until compensatory woodland is planted and allowed time to re-established. Removal of woodland would also result in the removal of potential red squirrel drey sites and of one tree which has potential roost features for bats.

There is a possibility that a small number of individual bats, otter, badger, red squirrel, pine marten, amphibians, reptiles, and / or invertebrates would experience disturbance or be displaced from a small area of their habitat due to forestry operations, increased lighting, noise, presence of plant machinery and people during the construction phase. However, this is not considered likely to affect the conservation status of populations in a local, national or international context. Furthermore, although, there would be an increase in the types of hazards which could potentially harm otter, badger, red squirrel, pine marten, amphibians, and reptiles such as open trenches and active plant during construction, no significant effects on faunal IEFs are predicted after mitigation measures are taken into consideration.

Rhododendron and other terrestrial INNS would undergo control and eradication during the construction and operational phase and would be routinely monitored during the creation and establishment of compensatory habitat. Biosecurity measures would be employed if plant material is to be moved for disposal within site or off-site. The control and eradication of terrestrial INNS is considered to be a site-level positive impact.

Providing the compensatory habitat creation measures detailed in the EIA Report are progressed at the onset of the operational phase, the residual effects on Priority Habitats Upland Birchwood and Wet Woodland are assessed to be non-significant.

Providing the general mitigation measures attributed to fauna, and the targeted mitigation and compensation measures detailed in the EIA Report and in the supporting Species Protection Plans are in place prior and during the construction phase, the residual effects on terrestrial faunal species (bats, badger, otter, red squirrel, pine marten, beaver, reptiles, amphibians, and invertebrates) are considered to be non-significant. Monitoring during construction and operation would allow for mitigation measures to be adapted if necessary.

The cumulative effects of the Proposed Development, combined with other developments in the vicinity, are not considered significant.

A licence may be required for the destruction of a potential bat roosting habitat and/or red squirrel dreys if these species are confirmed to be roosting or nesting within 50m of the PDA during the pre-construction checks.

Proposed biodiversity enhancements would benefit local biodiversity by creating habitats suitable for a variety of flora and fauna. SSE are committed to achieving a minimum 10% Biodiversity Net Gain post construction.

9. Ornithology

An EcIA has been undertaken to consider the effects of the Proposed Development on ornithological IEFs. The EcIA has been undertaken according to the latest guidance from CIEEM and informed by comments and information supplied by LLTNPA and SEPA.
The assessment considered the potential significant effects of the project and its associated activities on IEFs present within the PDA, and for the ZoI of the IEFs which were scoped in for assessment.

The PDA and surrounding area were recorded as providing suitable habitat for thirty-five bird species, twelve of which are listed as Priority Species in the SBL, and / or as Amber or Red List species in the Birds of Conservation Concern (BoCC) listing. Of the thirty-five species recorded during the surveys, twenty-two of these were suspected of breeding within the survey area locale. Four species had confirmed or probable breeding territories within the PDA. All terrestrial habitats within the PDA supported breeding species. None of the species were present in numbers or had population sizes that would represent importance at national, regional, or local levels.

Assuming no avoidance mitigation or compensatory strategies are applied:

- Habitat loss to accommodate the spoil management area could result in injury and / or death of nesting birds during the clearance of existing conifer plantation, mixed plantation, birch woodland, and rhododendron scrub.
- Removal of habitats within the PDA during the construction phase to facilitate the spoil management area would result in the loss of a small area of habitat which currently supports one confirmed Wood Warbler territory, and probable and / or possible Wren (1), Blackcap (1), Blue Tit (1), Coal Tit (1), Goldcrest (1), Song Thrush (1), Willow Warbler (1), and Wren (1) territories. These habitats are abundant in the wider landscape.
- Auditory and visual disturbance during the construction and operational phases could disrupt territorial and breeding behaviours, interfere with the ability of birds recorded on site to hold territories during the nesting season, and permanently affect local bird populations.

Vegetation clearance or tree removal would not be completed during the nesting bird season, unless no active nests were identified during a nesting bird survey within 48 hours prior to works. Should any nesting birds be identified, an appropriate buffer zone would be maintained and works suspended until all dependent young have left the nest. No activity may take place within this exclusion zone until the Environmental Clerk of Works (ECoW) confirms that either the young have fledged, the brood has failed, or nest has become inactive. Fencing or signage would delineate these restricted zones.

Noise reduction measures would be implemented during the construction phase in working areas adjacent to retained habitat, including no machinery idling and sensitive scheduling of noisy activities. A sensitive lighting strategy would be implemented during the construction and operational phase to minimise disturbance as a result of artificial lighting. Compensatory bird boxes suitable for the bird species confirmed or suspected of breeding within the survey area would be provisioned within existing adjacent woodland and mature trees during the construction phase and in the compensatory planting area during the operational phase.

Providing that the mitigation and compensation measures detailed are in place during the construction and operational phases, the residual effects on birds are assessed to be non-significant. The cumulative effects of the Proposed Development in combination with other cumulative developments in the vicinity are also not considered to be significant.

Biodiversity enhancements would provide benefits to the local biodiversity, creating habitats suitable for a variety of flora and fauna that frequent the site and locale.

10. Soils, Geology and Water Environment

An assessment has been undertaken of the potential effects on soils, geology and the water environment during the construction and operational phases of the Proposed Development. The basis of the assessment was formed by scoping responses received from statutory and non-statutory consultees.

Information for the study area was compiled using baseline information from a desk study which was verified by a site visit. The results of previous site investigations have also been reviewed. The assessment was undertaken considering the sensitivity of receptors identified during the baseline study and considering mitigation measures incorporated in the development design. It has also considered potential future changes to baseline conditions.

The assessment considered designated sites where these are water dependent and have a potential hydrological connection to the Proposed Development.

Subject to the adoption of best practice construction techniques and a project specific Construction Environmental Management Plan (CEMP), no significant adverse effects on the soils, geology and the water environment have been identified. The final project specific CEMP will be agreed with the relevant statutory consultees including SEPA and Nature Scot.

Given the nature of the Proposed Development there will be a high emphasis on water quality throughout the construction and operational period. SSER have committed to undertaking a water quality assessment and ongoing monitoring in consultation with Scottish Water as they have water treatment works in proximity to the Proposed Development. The monitoring programme would also be used to ensure private water supplies within 500m of the PDA, Drinking Water Protected Areas, and water dependent designated sites are safeguarded. The monitoring programme would be agreed with statutory consultees as part of the detailed design stage of the project.

11. Landscape and Visual Amenity

11.1. Landscape Effects

An assessment has been undertaken of the potential effects on landscape and visual amenity during the construction and operational phases of the Proposed Development.

The majority of landscape effects arising from the Proposed Development within the study area are predicted to be not significant and only during the construction phase. Construction works would be perceived as a potential minor distraction within the wider context.

This predicted temporary effect, due to the extent of works occurring, could lead to a noticeable change from the current recreational landscape to one more characterised by construction activities. Upon completion of the works the area will be reinstated largely reversing the predicted temporary effect. . The high standard of design proposed for the new pumphouse is predicted to lead to the building being a generally positive addition within the wider setting.

No significant effects are predicted to the presence of the Special Landscape Qualities of the LLTNP.

11.2. Visual Effects

The majority of visual effects arising from the Proposed Development would be not significant during both construction and operation. Significant effects are predicted during the construction phase only for people visiting the Inveruglas Visitor Centre, carpark and terrace, and those using a localised part of two long distance walking routes; The Three Lochs Way and Cowal Way. These effects would reduce following the completion of the Proposed Development with visual effects for all receptors within the study area predicted to reduce to a negligible level after 10 years.

11.3. Cumulative Landscape and Visual Effects

The cumulative assessment has considered the temporary effects of the Proposed Development in addition to other proposed activities relating to two other developments:

- Sloy Transformer Replacement Project; and
- Cruach Tairbeirt Forestry Works.

11.3.1. CUMULATIVE LANDSCAPE EFFECTS

The cumulative landscape assessment has identified that there would be a significant landscape effect within a localised area around the Proposed Development affecting the area of Inveruglas, where the Proposed Development in addition to the Sloy Transformers would lead to an extended area of construction affecting a wider part of the local landscape area.

Whilst a greater area of development associated with the cumulative sites would be perceptible within other areas, including landscape areas on the opposite shore of Loch Lomond, this is not predicted to be significant, because the Proposed Development would be perceived as a very small addition in relation to the other developments and the separation between these landscapes and the works created by the loch would lead to the overriding characteristics of these areas being maintained.

The cumulative effects identified are not predicted to be significant in the context of the LLTNP as a whole or any of the Special Landscape Qualities.

11.3.2. CUMULATIVE VISUAL EFFECTS

Significant cumulative effects are predicted for a small number of visual receptors during construction, comprising the same receptors that would experience, non-cumulative significant effects: recreational visitors to the Inveruglas Visitor Centre, carpark and terrace where the Proposed Development would be seen within the context of the forestry works at Cruach Tairbeirt, and walkers on the Three Lochs Way and Cowal Way who would pass both construction sites. None of the other visual cumulative effects are predicted to be significant because, where seen in the context of the other developments, the Proposed Development would be a very small addition to views already featuring a noticeable degree of construction works or activities.

All identified cumulative effects would be temporary, occurring during the construction phase of the Proposed Development only.

12. Traffic and Transport

An assessment has been undertaken of the potential effects on traffic and transport during the construction and operational phases of the Proposed Development.

The Proposed Development will lead to increased traffic volumes on the study area road network during the construction phase. Traffic volumes would fall considerably outside the peak period of construction which is anticipated to be in months 14 to 16 of the programme. During these peak months, a total of 3,332 vehicle movements are predicted, comprising 1,320 Car / LGV movements and 2,012 HGV movements. This equates to an average of the following vehicle movements per day:

- Cars / LGV:60 vehicle movements (30 inbound trips and 30 outbound trips); and
- HGV: 92 vehicle movements (46 inbound trips and 46 outbound trips).

This increase will be temporary and will only occur during the construction phase.

An assessment of likely significant effects associated with increased traffic during construction using Institute of Environmental Management and Assessment (IEMA) guidelines has been undertaken. Prior to the implementation of mitigation, significant effect is predicted on users of the paths / Core Paths in the vicinity of the site.

With the implementation of a comprehensive Construction Traffic Management Plan (CTMP), together with appropriate signage and path management plan (if required). The traffic effects would be transitory in nature and appropriate mitigation measures are proposed to reduce the potential impacts. No long-term detrimental transport or access issues would be associated with the construction phase of the Proposed Development.

No capacity issues are expected on any of the roads within the study area due to the additional construction traffic movements associated with the Proposed Development, as background traffic movements are low, the links are of a good standard and appropriate mitigation is proposed. The effects of construction traffic would be temporary in nature and would be transitory.

Traffic levels during the operational phase of the Proposed Development would be low, with two to three vehicles per day for maintenance purposes, which is comparable with the operational requirements of the existing Sloy Hydroelectric Power Station.

13. Noise and Vibration

An assessment has been undertaken of the potential effects on noise and vibration during the construction and operational phases of the Proposed Development.

Six Noise Sensitive Receptors (NSRs) have been identified within 1,500m of the Proposed Development, all of which have been assessed for potential impacts during the construction and operational phases.

An assessment of construction noise effects has been undertaken against the criteria outlined in Section E.3 of *BS 5228: Part 1 2009+A1:2014*. The assessment indicates that construction noise levels will not exceed the guideline threshold levels and no significant effects are anticipated.

An assessment of operational noise effects has been undertaken in accordance with *BS 4142:2014+A1:2019*. The assessment indicates that operational noise levels would remain below the indicators for an adverse impact and no significant effects are anticipated.

An assessment of construction noise vibration is not possible to undertake at this stage, however a recommendation has been made that appropriate vibration level limits are set at the nearest residential property and that a scheme of vibration monitoring is agreed prior to the commencement of works.

14. Cultural Heritage

An assessment has been undertaken of the potential effects of the Proposed Development on cultural heritage interests (historic environment sites and features, archaeology and built heritage) during the construction and operational phases of the Proposed Development. A desk-based assessment was undertaken, and informed by comments, and information supplied, by HES, the LLTNPA and West of Scotland Archaeology Service (WoSAS).

The assessment considers the potential direct effects on assets within the PDA (Inner Study Area) and also considers the effects of the Proposed Development on the settings of heritage assets within 1km of the Proposed Development (Outer Study Area).

Two heritage assets were identified within the Inner Study Area: Category A Listed Sloy Awe Hydro Scheme, Sloy Power Station including Boundary Walls, Gates and Gate Piers, assessed as being of high sensitivity, and a section of former military road, assessed as being of low sensitivity.

The archaeological potential of the Inner Study Area has been assessed as being low. The Proposed Development lies within the footprint of the Sloy Hydroelectric Power Station grounds and most of the Inner Study Area lies within an area previously disturbed by construction of the existing power station. A small part of the area proposed for site establishment within the wooded area to the north of the existing power station may not have been affected by construction of the existing power station and there is a slightly higher probability that buried remains may be present within part of this area.

There is potential for construction works within the Inner Study Area to result in direct effects on the Category A Listed Gate Piers and Boundary Wall of Sloy Power Station and the section of former military road. Mitigation is proposed to avoid or reduce the effects. Following application of the proposed mitigation, there would be no significant residual direct effects on cultural heritage.

Within 1km of the PDA there is one Scheduled Monument, one Category A Listed Building, one Category B Listed Building and four Category C Listed Buildings. The assessment has identified a minor effect (not significant) on the setting of one Scheduled Monument, Inveruglas Castle (SM 9264) and one Category A Listed Building, Sloy Power Station (LB 43188). All other effects on the settings of heritage assets within the Outer Study Area are assessed as being of no more than negligible significance (not significant).

The cumulative effects of the Proposed Development in combination with other cumulative developments in the vicinity are considered to be not significant.

15. Recreation

An assessment has been undertaken of the potential effects on recreation during the construction and operational phases of the Proposed Development. The assessment has been undertaken within a study area of 2.5km and considers the potential to which recreation activities which currently take place may be affected.

The assessment has concluded that the Proposed Development would result in some temporary significant adverse effects during construction for users of the overflow car-park at Inveruglas, located. The temporary effects are anticipated to be locally significant during construction, however reducing to not significant during operation. Mitigation in the form of an Outdoor Access Management Plan would be developed in agreement with key stakeholders and put in place to minimise temporary effects as far as possible.

All other effects are anticipated to be not significant and no long-term significant effects to recreation are predicted.

16. Summary and Conclusion

16.1. Summary

The Applicant is applying for consent to convert the existing Sloy Hydroelectric Power Station into a pumped hydro storage scheme with a proposed pumping capacity of up to 100MW.

Consultation with statutory and non-statutory consultees was carried out throughout the EIA process, in addition to in person consultation events, to invite comment on the Proposed Development and specific areas of environmental assessment to incorporate into the EIA Report.

The EIA Report incorporates assessment of the Proposed Development's likely significant effects on the following environmental aspects:

- Aquatic Ecology
- Terrestrial Ecology;
- Ornithology;
- Soils, Geology and Water Environment;
- Landscape and Visual Amenity;
- Traffic and Transport;
- Noise and Vibration;
- Cultural Heritage; and
- Recreation

Short–term / temporary significant effects have been identified for the following:

- A temporary significant effect is predicted within a localised landscape area in close proximity to the Proposed Development around Inveruglas.
- Significant effects are predicted during the construction phase for visual receptors at the Inveruglas Visitor Centre, carpark and terrace, and using a localised part of two long distance walking routes, which follow the same route past the existing Sloy Hydroelectric Power Station and the Proposed Development alongside the A82.
- A significant cumulative landscape effect is predicted within a localised area around the Proposed Development affecting the area of Inveruglas, where the Proposed Development in addition to the Sloy Transformers would lead to an extended area of construction affecting a wider part of the local landscape area.
- Significant cumulative visual effects are predicted for a small number of visual receptors during construction, comprising recreational visitors to the Inveruglas Visitor Centre, carpark and terrace where the Proposed Development would be seen within the context of the forestry works at Cruach Tairbeirt, and walkers passing both construction sites.
- In terms of recreation, temporary significant adverse effects are predicted during construction for users of the overflow car-park at Inveruglas Visitor Centre. Mitigation in the form of an Outdoor Access Management Plan would be developed in agreement with key stakeholders and put in place to minimise temporary effects as far as possible.

During operation, after reinstatement has established, all effects on landscape character, visual amenity and recreation would reduce to levels which would be not significant.

16.2. Conclusion

Subject to implementation of the Applicant's good practice and working control measures, as well as the identified site-specific mitigation measures outlined in each technical chapter of the EIA Report, it is considered that the Proposed Development would not give rise to any long-term significant effects.

Figures

sse Renewables

ash

Key

- Site Location
- Proposed Develoment Area

Scale 1:60,000 @ A3

0 0.5 1 1.5 2 Kilometers

N

Figure 1
Site Location

Sloy Pumped Hydro Storage Scheme
Non-Technical Summary

Drawing No.: 122009-D1-NTS-1.0.0 Date: 03/12/2024

sse Renewables

ash

Key

- Proposed Development Area
- Existing Power Station Building
- Existing Transformer Compound
- Proposed Pumphouse Building
- Indicative Permeable Hardstanding
- Indicative New Pumphouse Transformer Compound
- Indicative Anchor Block
- Indicative Spoil Management Area
- Indicative Construction Area
- Main Site Establishment / Construction Compound
- Secondary Site Establishment / Construction Compound
- Sloy Access

Scale 1:2,000 @ A3

0 20 40 80 Meters

N

Figure 2
Proposed Development

Sloy Pumped Hydro Storage Scheme
Non-Technical Summary

Drawing No.: 122009-D2-NTS-1.0.0 Date: 03/12/2024