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The Scottish Government
Energy Consents Unit

Scoping Opinion On Behalf Of Scottish Ministers Under The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Cruachan Expansion Project
Stantec UK Ltd on behalf of Drax Hydro Ltd.

29 October 2021

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1. Introduction

This scoping opinion is issued on behalf of Scottish Ministers to Stantec UK Ltd , acting for Drax Hydro Ltd. in response to a request dated 30 June 2021 for a scoping opinion under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('The 2017 Regulations').

The request was accompanied by a scoping report, which included project area plans, a description of the project and its components. A series of sections were included detailing the proposed approach to assessing the potentially significant effects of the project on a range of environmental factors, based on the applicant's consultations and information gathered to date. The report set out proposed mitigation where potential adverse effects were identified, and areas which the applicant considers can be scoped out were highlighted for consideration.

2. Context and Background

The proposal known as Cruachan Expansion Project ('Cruachan 2') would be located on land around and to the east of the existing Cruachan Power Station ('Cruachan 1').

The proposed development seeks to optimise use of the existing Cruachan Reservoir and Dam by providing up to 600MW of new generating capacity from Cruachan 2. When combined with Cruachan 1 the project will provide a total of up to 1,040 MW generating capacity. Both power stations will use Loch Awe as the lower reservoir and Cruachan Reservoir as the upper reservoir.

The nearest settlements include villages of Loch Awe (4.5km to the east), Dalmally (8km to the east), Bridge of Awe (6km to the north west) and Taynuilt (8.5km to the north west). The project site lies between the village of Dalmally to the east and the town of Oban to the west, and encompasses the existing Cruachan 1 facilities, including Cruachan reservoir, underground power station and visitor centre. Existing private and public roads which connect the A85 to Cruachan Reservoir (including St Conan's Road), the A85, Falls of Cruachan railway station, part of the Oban to Glasgow railway line, and Loch Awe, also lie within the boundaries of the Site, as shown in the plan at Annex A.

Cruachan Reservoir, which provides the upper reservoir of the existing Cruachan 1 pumped storage facility, is located within a natural coire on the southwest facing slope of Ben Cruachan. The reservoir is impounded by a concrete mixed gravity and buttress dam across the natural outlet to the Cruachan Burn. A path around the reservoir is part of the route used by the public to access the summit of Ben Cruachan.

Potential areas for lower construction compounds include areas of agricultural land located to the north east of the Site at Stronmilchan (near the junction of the A85 and B8077). In addition, it is anticipated that may will be some off-site storage requirement for the storage and transhipment of equipment being prepared for barging to the proposed outlet works.

The proposed development consists of upper control works, underground waterway system, cavern powerhouse, substation, ventilation shaft, lower control works,

quayside, administration building, access tunnels, road upgrades as well as temporary works. Further details are provided in Annex A – Project description and map.

3. The Scoping Opinion

The scoping opinion that follows sets out the scope and level of detail of information to be provided by the applicant in the EIA report to be submitted with the proposed application for this project.

This scoping opinion has been adopted following consultation with Argyll and Bute Council as the planning authority in whose area the proposed development would be situated, NatureScot (also known as SNH), the Scottish Environment Protection Agency ("SEPA") and Historic Environment Scotland ("HES"), all as statutory consultation bodies, and with other bodies which Scottish Ministers consider are likely to have an interest in the proposed development by reason of their specific environmental responsibilities or local and regional competencies.

Scottish Ministers adopt this scoping opinion having taken into account the information provided by the applicant in its request dated 30 June 2021 in respect of the specific characteristics of the proposed development, and representations received in response to the consultation undertaken. In providing this scoping opinion, the Scottish Ministers have had regard to current knowledge and methods of assessment; have taken into account the specific characteristics of the proposed development, the specific characteristics of that type of development and the environmental features likely to be affected.

This scoping opinion is based on information contained in the applicant's written request for a scoping opinion and information available at today's date. The adoption of this scoping opinion by the Scottish Ministers does not preclude the Scottish Ministers from requiring of the applicant information in connection with the Environmental Impact Assessment report ("EIA report") submitted in connection with its application under section 36 of the Act. Nothing in this scoping opinion will prevent the Scottish Ministers from seeking additional information at application stage if they consider it to be necessary.

Where a scoping opinion is adopted by Scottish Ministers, the EIA report must be based on that opinion.

4. EIA Report

Scottish Ministers are prohibited from granting Electricity Act consent for EIA development or directing that planning permission is deemed to be granted in respect of EIA development unless an Environmental Impact Assessment has been carried out.

Regulation 4 of the 2017 Regulations describes the Environmental Impact Assessment process, and Schedule 4 of the 2017 Regulations sets out the minimum requirements of the EIA report for this project.

Scottish Ministers request that a separate annex to the EIA report be provided, setting out briefly in tabular form, and with references to the detailed sections of the EIA report, the likely significant effects of this proposed development on the factors

set out in Regulation 4 (3) of the 2017 Regulations; and the features of the development or measures envisioned in order to avoid, prevent or reduce any such effects, where applicable.

The mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to the chapter on each topic area.

Consultation

Following the request, on 20th July 2021 Scottish Ministers consulted Argyll and Bute Council as Planning Authority, NatureScot, SEPA and HES, and various other bodies whom the Scottish Ministers consider are likely to have an interest in the proposed application.

The purpose of the consultation was to invite representations from each consultee, having regard to their specific competencies, responsibilities or interests, in respect of the scope and level of information proposed by the applicant to be provided in the forthcoming EIA report. All responses received are attached to this scoping opinion at Annex B and each should be read in full for detailed requirements from individual consultees and for comprehensive guidance and advice.

Scottish Ministers adopt the responses given by all consultees as their own scoping opinion; where there is need to contradict, clarify or expand on any given consultation response, the Scottish Ministers' opinion have done so under the topic headings below.

Hydrology

Scottish Ministers and Argyll and Bute Council have recently been made aware of an imminent proposal for a 1.5GW pump storage hydro s. 36 proposal in the locale (currently known as 'Balliemeanoch PSH'). This would also seek to abstract water from Loch Awe. A request for a scoping opinion is imminent, but at the time of writing has not yet been received.

The cumulative impacts on hydrology in this regard will require to be assessed.

Ecology

Ministers are broadly content with the proposed approach to assessing Ecology.

Ministers agree with NatureScot, MSS and the Planning Authority's recommendations regarding additional topics requiring consideration in the EIA (including matters relating to fish populations (including scoping in the River Awe and the consideration of potential cumulative impacts on fish populations as a result of the operation of both Cruachan schemes and the Loch Awe Barrage, and other proposed development on Loch Awe), Peat, Loch Etive Woods SAC, and Ornithology. The applicant should adopt the approaches to these matters as detailed in their responses included in Annex B.

Ministers agree with SEPA recommendations regarding site ecology and the applicant should adopt the approach to disturbance and re-use of excavated peat and other carbon rich soils and groundwater dependant terrestrial ecosystems recommended by SEPA as detailed in their response included in Annex B.

Transport and Access
Please note Transport Scotland's response requesting additional junctions requiring screening, and additional Abnormal Loads Assessment considerations.

Please note Argyll and Bute Council's response requesting consideration of operational effects on traffic and transport in respect of commentary on the relationship with waste generation, storage, transportation and potential impacts on the free flow of traffic on the A85 on the economy of Argyll and Bute. Scottish Minsters consider that the effects of the development on traffic, transport and access, in particular during construction phase, should be assessed in the EIA report.

Landscape and Visual
Ministers agree with the Planning Authority that the applicant should scope in cumulative landscape and visual impacts assessment, taking into account all relevant proposed electricity development in the planning system at the time of the assessment (existing/approved), and adopt the approach recommended by Argyll and Bute Council in respect of these matters as detailed in their response included in Annex B.

Cultural Heritage
Ministers agree with HES and the Planning Authority that the applicant should scope in the Category A listed Ben Cruachan Hydro Electric Scheme, Turbine Hall and adopt the approach recommended by HES and agreed by the Planning Authority in respect of these matters as detailed in their responses included in Annex B.

Topics scoped out of the EIA
Scottish Ministers note that it is proposed to scope air quality, waste management and risk management out of the EIA.

Scottish Ministers agree that air quality should be scoped out of the EIA.

Scottish Ministers agree with SEPA and the Planning Authority that the applicant should scope in Waste Management and adopt the approach recommended in respect of these matters as detailed in their responses included in Annex B.

Scottish Ministers consider that given the scale and nature of the proposal, the applicant should consider where appropriate within the EIA report the risks to human health, cultural heritage or the environment arising, for example, due to the potential for accidents or disasters.

Public and private water supplies
Scottish Water provide information on whether there are any drinking water protected areas or Scottish Water assets on which the development could have any significant effect. Scottish Ministers request that the company contacts Scottish Water (via EIA@scottishwater.co.uk) and makes further enquiries to confirm whether there any Scottish Water assets which may be affected by the development, and includes details in the EIA report of any relevant mitigation measures to be provided.

Scottish Ministers request that the company investigates the presence of any private water supplies which may be impacted by the development. The EIA report should include details of any supplies identified by this investigation, and if any supplies are identified, the company should provide an assessment of the potential impacts, risks, and any mitigation which would be provided.

Peat Landslide Hazard and Risk Assessment

Scottish Ministers consider that where there is a demonstrable requirement for peat landslide hazard risk assessment, one should be carried out. The assessment should provide a clear understanding of whether any risks identified in the assessment are acceptable and capable of being controlled by mitigation measures. The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition), published at http://www.gov.scot/Publications/2017/04/8868, should be followed in the preparation of the EIA report, which should contain such assessment and details of mitigation measures. If one is not provided, clear justification for not carrying out such a risk assessment.

5. Duration of scoping opinion

This Scoping Opinion is based on information contained in the applicant's written request for a scoping opinion and information available at today's date. Nothing in this written scoping opinion will prevent the Scottish Ministers from seeking additional information at application stage, for example to include cumulative impacts of additional developments which enter the planning process after the date of this opinion. Without prejudice to that generality, it is recommended that an additional Scoping Opinion be sought from Scottish Ministers in the event that no application has been submitted within 12 months of the date of this Opinion.

6. Process Going Forward

It is acknowledged that the Environmental Impact Assessment process is iterative and should inform the final layout and design of proposed developments. All applicants are encouraged to engage with officials at the Scottish Government Energy Consents Unit before proposals reach design freeze. This will afford an opportunity for additional comments to be provided on the final proposals at pre-application stage.

When finalising the EIA report, applicants are asked to provide a summary in tabular form of where within the EIA report each of the specific matters raised in this scoping opinion has been addressed.

Rebecca Young
Energy Consents Unit
29 October 2021

ANNEX A

PROJECT DESCRIPTION AND MAP

The proposed Development consists of:

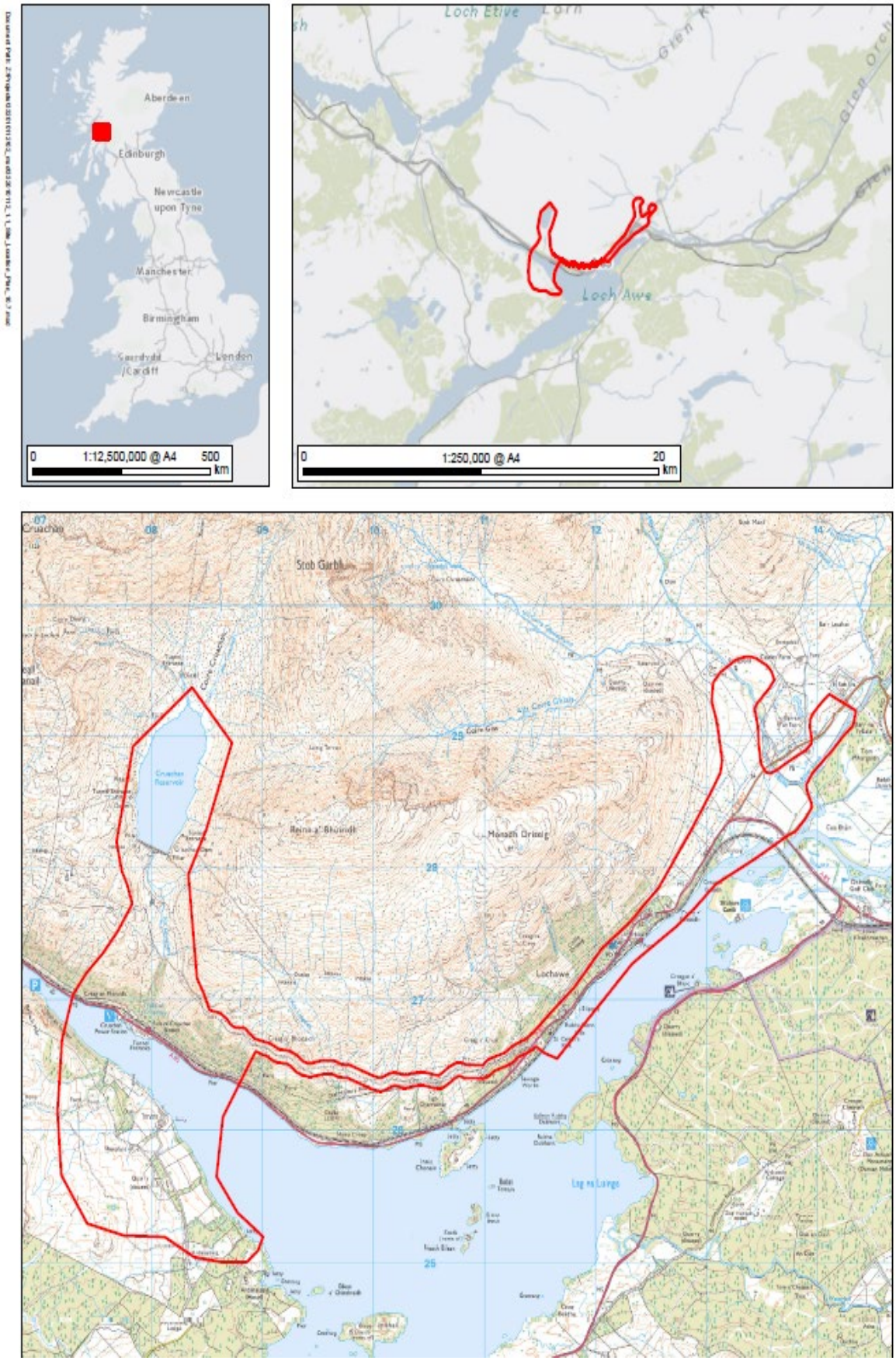
- Upper Control Works – An additional intake structure including tower, screens, gate and gate shaft would be located within or adjacent to Cruachan reservoir to direct water into a new headrace tunnel and surge shaft underground waterway system;
- Underground Waterway System – A series of underground shafts and tunnels carrying water between the upper reservoir and lower reservoir, through the underground cavern powerhouse;
- Cavern Powerhouse - A series of underground caverns containing reversible pump-turbines and motor-generators together with associated equipment such as transformers and switchgear. The construction process will require various interconnecting tunnels to allow construction;
- Substation –an above ground substation to provide the connection to the existing 275KV circuit that connects to Dalmally sub-station;
- Ventilation Shaft – A ventilation shaft will be required to circulate fresh air through the underground access tunnel and cavern power station complex. It is noted that this may also include a cable shaft for the 400kV oil filled cable from the transformers to cable sealing ends/sub-station;
- Lower Control Works – Comprising two screened inlet / outlet structures and stop logs, positioned in Loch Awe at the end of the tailrace tunnel below minimum water level. These structures would channel water in and out of Loch Awe;
- Quayside – Constructed on the shore of Loch Awe to facilitate use of the Loch for the transport of heavy equipment and materials, and the temporary storage of tunnel spoil prior to its off-site removal;
- Administration building - above ground administration and workshop buildings required for day to day operational and maintenance tasks – located close to the upper reservoir;
- Access Tunnels – A main access tunnel would be provided for accessing the underground power plant, close to the shore of Loch Awe. This will cross connect to the existing Cruachan 1 power station to allow personnel to easily move between the plants and provide a further means of access/egress; and
- Existing service roads will be used as far as possible to facilitate the long-term operation of the generation station. Some upgrades of these roads may be required to facilitate access by heavy machinery and the removal of spoil.

The following temporary works will also be required for the Proposed Development:

- An upper site compound would be established in the vicinity of the existing dam. Once construction work for the Upper Control Works and sub-station is complete, this compound would be removed and the land restored;
- A lower site compound including workers welfare and accommodation will be established to the North East of Lochawe village, with access from the Stronmilchan Road. Once construction work is complete, this compound would be removed and the land restored;

- A section of the proposed Quayside may be temporary in nature depending on the final scheme design. If so, any temporary sections of the jetty will be removed following completion of construction works and the loch shore reinstated;
- A temporary diversion of the A85 onto the quayside may be required in order to facilitate construction of the initial sections of the main access tunnel, although work is being undertaken to avoid this need The A85 would revert to its current alignment once the initial access tunnel works at Loch Awe are complete; and
- A railhead or rail sidings may be established in the vicinity of Lochawe Village in order to facilitate removal of spoil by rail. Location and required land take are currently being considered and the temporary or permanent nature of such works would be finalised following discussion with Network Rail.

LOCATION


Aberdeen
Edinburgh
Newcastle upon Tyne
Manchester
Birmingham
Swansea /Cardiff
London
0 1:12,500,000 @ A4 500 km
Loch Etive
Loch Awe
0 1:250,000 @ A4 20 km
Stob Garbh
Meall a' Bhuiridh
Monadh Ormaig
Lochawe

ANNEX B – CONSULTATION RESPONSES RECEIVED

Argyll and Bute Council	B1-B23
Argyll District Salmon Fishery Board	B24
Crown Estate Scotland	B25
Historic Environment Scotland	B26
Marine Scotland	B28
NatureScot	B31-B33
RSPB	B34-B35
SEPA	B36-B42
Scottish Forestry	B43-B46
Scottish Water	B47-B50
Transport Scotland	B51-B53
Glenorchy & Innishail Community Council	B54-B56

B1

Argyll and Bute Council
Comhairle Earra Ghàidheal agus Bhóid

Development and Economic Growth
Acting Director: Kirsty Flanagan

Helensburgh and Lomond Civic Centre, 38East Clyde Street, Helensburgh G84 7PG
Tel: 01546-605-552

19 October 2021

Our Ref.: 21/01612/SCOPE
Your Ref. : ECU00003298

Contact : Mr D Moore
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Scottish Government
Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

FAO

Dear Sirs,

ELECTRICITY ACT 1989

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017, SCOPING OPINION REQUEST FOR PROPOSED NEW UNDERGROUND POWER STATION AND ASSOCIATED INFRASTRUCTURE ADJACENT TO CRUACHAN ONE TO PROVIDE UP TO 600MW NEW GENERATING CAPACITY

I write in reference to your consultation regarding the above and would thank you for agreeing to extend the response period to allow additional time for this response. Please find the Council's consultation response to the scoping request enclosed.

I should point out that the issuing of this scoping consultation advice should not be taken to indicate support for the proposal on the part of Argyll and Bute Council. The Council's recommendation on any future S36 application would rely upon the consideration of the content of any accompanying environmental information, the responses of consultees, the views of third parties and any other material planning considerations which would be reported to Members to obtain their views.

Please note that in terms of the Council's 'Argyll and Bute Local Development Plan' (adopted 2015) the Council will support renewable energy and associated infrastructure developments where these are consistent with the principles of sustainable development and it can be adequately demonstrated that there would be no unacceptable significant adverse effects, whether individual or cumulative, including on local communities, natural and historic environments, landscape character and visual amenity, and that the proposals would be compatible with adjacent land uses and the Planning Policy Objectives of the Statutory Planning Framework in placer at time of submission and determination of the S36 proposals.

It is noted and agreed that:

Having regard to the nature of the Proposed Development and known environmental sensitivities within and surrounding the Site, the Applicant is of the view that it is appropriate for an EIA to be undertaken in relation to consenting applications for the Proposed Development. A prior EIA screening request has therefore not been made, and the Applicant will be undertaking an EIA to accompany the s.36 and associated consenting applications for the Proposed Development in accordance with Regulation 6(b) of the EIA Regulations.

It is noted that the applicants also specify those matters which they consider require to be "scoped in" and addressed by the EIA as follows:

- *Climate change, including carbon balance across construction and operational periods;*
- *Socio-economic effects from the construction workforce, inward investment and the supply chain;*
- *Construction transport effects and logistics;*
- *Effects on hydrological regimes, geomorphology and the water environment;*
- *Disturbance of ornithological and ecological species, habitats and designated sites;*
- *Suitability of tunnel arisings and geomorphology to facilitate land reclamation; and,*
- *Impacts on landscape character, visual amenity and heritage interests.*

It is also noted that at 4.7.3-4.7.5 the applicants have confirmed that:

It is anticipated that a framework Construction Environmental Management Plan (CEMP) will be submitted in support of the consenting applications, which will outline methods to avoid, reduce and mitigate construction effects on the environment. This document will be updated as the Proposed Development progresses to enable the plan to be effective and account for any changes that occur during construction works. The EIA Report will identify mitigation measures for the construction and operation of the Proposed Development to avoid, minimise and reduce adverse environmental effects. Residual environmental effects remaining after mitigation measures have been incorporated will be fully described in the EIA Report. A collated schedule of mitigation would be included in the EIA Report, setting out mitigation to be delivered as part of the Proposed Development and how this will be secured.

A further list of matters the applicant suggests should be "scoped out" of an EIA is set out at 5.1.4 as follows:

- *Effects arising from the decommissioning phase of the Proposed Development;*
- *Effects arising from potential re-powering at the end of the operation lifetime of the Proposed Development, as this would be subject to a separate planning application at the time; Natural watercourses and aqueduct connections draining into Cruachan Reservoir;*
- *Watercourses draining into Loch Awe – River Orchy, River Awe;*
- *Changes to the hydrological regime of Cruachan Reservoir and Loch Awe;*
- *Effects on the following species: wildcat, freshwater pearl mussel, beaver and specially protected amphibians such as great crested newt;*
- *Operational effects on traffic and transport;*
- *Effects on public transport;*

- *Operational noise;*
- *Cumulative Landscape and Visual Impacts Assessment (CLVIA);*
- *Operational effects on heritage assets;*
- *Vulnerability of the Proposed Development due to climate change during construction;*
- *Effects from waste management; and*
- *Risk of Major Accidents and Disasters.*

It is considered by the Planning Authority to be premature at this time to scope out the following matters from the EIA for the reasons set out in this scoping consultation response:

- **Changes to the hydrological regime of Cruachan Reservoir and Loch Awe**. The Council and ECU are aware of an imminent proposal for a 1.5Gw pump storage S36 proposal which would also seek to extract water from Loch Awe. A scoping request is likely to be submitted to ECU by Mid October. Therefore there will almost certainly need to be a need for potential cumulative impacts upon the hydrological regime of Loch Awe to be examined before this matter can be agreed to be scoped in or out of the EIA.

- **Operational effects on traffic and transport;** Comments from the Council's Area Roads Engineer are awaited and shall be forwarded when received. However commentary on the relationship with waste generation, storage, transportation and potential impacts on the free flow of traffic on the A85 on the economy of Argyll and Bute are addressed in this response. It is accepted that the longer term operational characteristics of the proposal are unlikely to have significant impacts, but the construction phase has potential for significant impacts in respect of waste and transportation matters given the locational characteristics of the site.

- **Cumulative Landscape and Visual Impacts Assessment** (CLVIA); Commentary on the potential for additional large scale infrastructure projects to cumulatively impact on the North Argyll APQ is provided and this matter should be addressed in the EIA.

- **Effects from waste management**: There is little detail on what scale of waste material will require to be mitigated, how it will be stored, how it will be transported and to where and for what purpose. In the absence of greater clarity on such fundamental matters, the Planning Authority does not consider that the scoping out of waste matters is appropriate, nor to have details of this as a conditional matter on any consent that may be granted.

- **Operational effects on the setting of heritage assets**: The potential impacts upon the setting of the Category A Listed building remain uncertain at this time. This will be connected to both the extent, scale and length of time construction activities to be undertaken, and the need to ensure any visible structures/plant or machinery to be retained permanently as part of the operation requirements of the extended power station are fully considered given the sensitivity and importance of the setting of the listed building. It will also be necessary to consider carefully the wider LVIA and amenity considerations associated with this. It may be that such operational matters can be scoped out, but at this time there remains uncertainty of exactly what is proposed.

It would appear to the planning Authority that these matters could give rise to potentially significant environmental impacts given the nature of the locale in terms of environmental quality, its sensitivity to major construction operations, the setting of the Category A listed Building, and the potential impacts upon this vital trunk road network essential to the economic wellbeing of the wider area. Given the detail of information currently provided and the uncertainties about the actual scale and environmental consequences of the proposals, it is considered premature to scope these out at this time.

The Council is in agreement that Air Quality and Risk Management can be scoped out of the EIA

In respect of the Local Plan Planning Policy framework the applicant makes reference to the adopted LDP 2015 at para 6.4.14. Your attention is drawn to the emerging LDP 2. Depending upon the date of any future application this may have reached a stage in the adoption process where the weight to be afforded to this will be increased.

A report setting out the Council's Schedule 4 responses to objections to LDP2 was discussed by Full Council at their meeting 24th June 2021. It is currently expected that the adoption of LDP2 will be sometime around October 2022. The full report on schedule 4 responses is available online: Agenda for Argyll and Bute Council on Thursday, 24 June 2021, 10:30 am - Argyll and Bute Council (argyll-bute.gov.uk)

The full pLDP2 written statement, maps and supporting documents are available online: Local Development Plan 2 (argyll-bute.gov.uk)

All planning assessments will now include a dual assessment against the 2015 LDP and any issues raised by any relevant, unopposed elements of LDP 2 at time of consideration of the proposals together with any other material planning considerations.

I trust you find the enclosed information of assistance.

Yours sincerely

David Moore

Senior Planning Officer
Argyll and Bute Council

APPENDIX A
ELECTRICITY ACT 1989

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

SCOPING CONSULTATION RESPONSE ON BEHALF OF ARGYLL & BUTE COUNCIL FOR PROPOSED SECTION 36 APPLICATION.

PROPOSAL: PROPOSED NEW UNDERGROUND POWER STATION AND ASSOCIATED INFRASTRUCTURE ADJACENT TO CRUACHAN ONE TO PROVIDE UP TO 600MW NEW GENERATING CAPACITY

DESCRIPTION OF PROPOSALS

The Proposed Development seeks to optimise use of the existing Cruachan Reservoir and Dam through development of a new underground power station and associated infrastructure adjacent to Cruachan 1 to provide up to 600MW new generating capacity. The Proposed Development may be variously referred to as the Cruachan Expansion Project and will be operated independently of the existing 440 MW Cruachan 1 Power Station. Both power stations will use Loch Awe as the lower reservoir and Cruachan Reservoir as the upper reservoir.

The following additional information has been provided in the scoping submission in respect of currently anticipated maximum development parameters:

- 600MW powerhouse (anticipated to consist of either 4 x 150 MW generating units, 3 x 200 MW generating units or 2 x 300 MW generating units)
- The upper inlet-outlet structure will be located on the south eastern reservoir rim, approximately 200 m upstream of the main dam axis.
- The lower inlet-outlet works will be located immediately to the east of the existing Drax operational area on the Loch Awe foreshore.
- A new lochside structure in Loch Awe to allow access for the development of the inlet outlet structure as well as operational access to the Proposed Development (see below). The quayside is likely to be a maximum size of 300m x 50m.

BUILD ELEMENTS AND PROCESS

The Proposed Development would comprise the following main elements:

- Upper Control Works – An additional intake structure including tower, screens, gate and gate shaft would be located within or adjacent to Cruachan reservoir to direct water into a new headrace tunnel and surge shaft underground waterway system;
- Underground Waterway System – A series of underground shafts and tunnels carrying water between the upper reservoir and lower reservoir through the underground cavern powerhouse;
- Cavern Powerhouse - A series of underground caverns containing reversible pump-turbines and motor-generators together with associated equipment such as transformers and switchgear. The construction process will require various interconnecting tunnels to allow construction;
- Substation –an above ground substation to provide the connection to the existing 275KV

circuit that connects to Dalmally sub-station.

- Ventilation Shaft – A ventilation shaft will be required to circulate fresh air through the underground access tunnel and cavern power station complex. It is noted that this may also include a cable shaft for the 400kV oil filled cable from the transformers to cable sealing ends/sub-station;

- Lower Control Works – Comprising two screened inlet / outlet structures and stop logs, positioned in Loch Awe at the end of the tailrace tunnel below minimum water level. These structures would channel water in and out of Loch Awe;

- Quayside – Constructed on the shore of Loch Awe to facilitate use of the Loch for the transport of heavy equipment and materials, and the temporary storage of tunnel spoil prior to its off-site removal;

- Administration building - above ground administration and workshop buildings required for day today operational and maintenance tasks – located close to the upper reservoir;

- Access Tunnels – A main access tunnel would be provided for accessing the underground power plant, close to the shore of Loch Awe. This will cross connect to the existing Cruachan 1 power station to allow personnel to easily move between the plants and provide a further means of access/egress; and

- Existing service roads will be used as far as possible to facilitate the long-term operation of the generation station. Some upgrades of these roads may be required to facilitate access by heavy machinery and the removal of spoil.

The following temporary works would also be required for the Proposed Development:

- An upper site compound would be established in the vicinity of the existing dam. Once construction work for the Upper Control Works and sub-station is complete, this compound would be removed and the land restored;

- A lower site compound including workers welfare and accommodation will be established to the North East of Loch Awe village, with access from the Stronmilchan Road. Once construction work is complete, this compound would be removed and the land restored;

- A section of the proposed Quayside may be temporary in nature depending on the final scheme design. If so, any temporary sections of the jetty will be removed following completion of construction works and the loch shore reinstated;

- A temporary diversion of the A85 onto the quayside may be required in order to facilitate construction of the initial sections of the main access tunnel, although work is being undertaken to avoid this need The A85 would revert to its current alignment once the initial access tunnel works at Loch Awe are complete;

- A railhead or rail sidings may be established in the vicinity of Lochawe Village in order to facilitate removal of spoil by rail. Location and required land take are currently being considered and the temporary or permanent nature of such works would be finalised following discussion with Network Rail.

In respect of construction process a considerable number of elements have been identified in the Scoping Report as follows:

- Mobilisation, site set up, camps, batching plant and haul roads.

- Construction of a working quayside platform on the foreshore of Loch Awe.

- Temporary diversion of A85 onto temporary quayside platform on Loch Awe.
- Construction of the main access and tunnel, various underground construction and access tunnels, tailrace gate chamber, ventilation tunnel, a tailrace surge shaft, and a tailrace tunnel under A85.
- Construction of the water inlet and outlet structure within loch Awe to connect to the tailrace tunnel, including gates, screens and stoplogs
- Re-divert A85 back onto permanent alignment.
- Drive and support main access tunnel to powerhouse complex.
- Excavation and support of powerhouse complex.
- Excavation and support of the high-pressure tunnel system connecting the Cruachan reservoir and the powerhouse.
- Excavation and construction and installation of a headgate to manage water flow to the powerhouse.
- Construction of the upper control works within the Cruachan reservoir to allow water in and out of the new tunnel system.
- Installation of powerhouse overhead crane.
- Installation of powerhouse electromechanical and hydromechanical equipment.
- Installation of powerhouse balance of plant (mechanical and electrical).
- Dry & Wet commissioning of turbines.

The applicant confirms that the first phase would be to establish two site offices and staging areas – one for the upper reservoir, a second for the underground works and outlet works and a third for where the main works infrastructure will be put together – where the rock disposal is – or where the concrete batching and steel yard will be. An office complex for the contractor and owner's representative would be established, together with parking and lay-down space for equipment and materials at an appropriate location within the site boundary. Initial equipment needed for constructing project site access would be staged at this area. The second phase would establish access to the main construction areas, with access roads to be completed prior to commencing construction.

The main camp and office sites would be decommissioned on completion of the works and the land returned to the owners at the end of the construction phase. Where required, on a temporary basis, land will be restored to a suitable standard in agreement with the relevant landowner(s). ,

All underground works are assumed to use drill and blast methodology. It is assumed that suitable concrete aggregates can be produced from tunnel spoil on the site. The Proposed Development will be designed to be operated 24/7 whenever called upon apart from planned and unplanned outages. It will have a design life of 100 years, after which the need for repowering or decommissioning will be considered at the time. Repowering and decommissioning are not considered in this scoping report.

LANDSCAPE CHARACTER AND VISUAL IMPACT

The proposed development is located within the North Argyll Area of Panoramic Quality (APQ). Although this is not a national designation it is a development plan designation and reflects both

the high quality and sensitivity of the landscape. The qualities of the Loch Awe area and its important gateway function in landscape terms was recognised by the Reporter in dismissing proposals for Upper Sonachan Wind Farm on the southern banks of Loch Awe within the general vicinity of the application site. Although clearly these are differing forms of development and in differing locations, the quality and sensitivity of the area to unacceptable landscape impacts is set out in this S36 decision in general terms and forms a useful reference. Viewpoints from the Cruachan Ridge are important as this is a p popular and important recreational resource in the locality with the proposed development having potentially substantial and lengthy construction impacts upon this valued amenity.

The need to ensure cumulative impacts of future development proposals are considered is acknowledged at 5.2.3 and 5.4.8. This is an area, hich is currently subject to substantial large infrastructure proposals including S37 Power Line proposals by SSEN and large scale substation proposals at the current time. All of these proposals will be subject to future applications and the Planning Authority is concerned that many separate, but related proposals require to be considered to ensure this large scale, renewable related infrastructure development successfully integrates into the landscape and does not define it or unacceptably impact upon it without appropriate mitigation. On this basis, it is not considered appropriate to scope out such matters at this stage as circumstances in respect of major infrastructure proposals in the general area are subject to foreseeable change in terms of the number, scale and extent within the landscape around the Loch Awe Area and the wider APQ within which the current proposals are located. Officers have also only recently been made aware of potential proposals for a large 1.5Gw pump storage hydro scheme within the ZTV of the current proposal. Details are awaited at time of writing.

Given the known S37 and substation proposals within the general vicinity of the development and within the ZTV, and the potential proposal for large pump storage scheme on the opposite banks of Loch Awe, this is a matter which officers consider required to be addressed through the EIA in terms of potential landscape impacts, particularly given the important vantage points such as from the Cruachan Ridge.

On this basis it is considered that landscape impacts, both in respect of the current proposals and associated infrastructure on landscape, together with a cumulative impact analysis in terms of the inter relationship between this proposal and other large infrastructure projects in the APQ area, are properly evaluated and considered in the EIA.

WASTE and TRANSPORT

These are considered to be important and potentially significant matters in respect of the development proposals and their environmental impact over what will unavoidably be a lengthy construction phase. It is accepted that the operation phase of the proposal should not lead to longer term concerns. However the construction phase impacts are considered to be complex, and potentially significant in respect of a range of matters.

In respect of such matters, the applicant states that:

7.7.7 - It is not proposed to undertake a formal Environmental Assessment of the waste arising from the Proposed Project (See Chapter 16). It is therefore not proposed to define the significance of waste impacts, rather an Outline Waste Management Plan (OWMP), focused on bulk Construction and Excavation arisings will be prepared for the planning submission and will form an appendix to the Ground Conditions Chapter (Chapter 7) of the Environmental Assessment Report.

These matters are also referenced at paragraphs 7.7.10 and 7.7.11 of the scoping report.

The Planning Authority is concerned that the significant amounts of “waste” created by the project, the constrained and sensitive characteristics of the locality and the need to clarify how this will be stored, transported (and for what purpose), all remain uncertain at this stage.

These matters are therefore not considered appropriate to scope out of the EIA at this stage. The Planning Authority is not in agreement with this approach given the landscape, cultural heritage and roads infrastructure sensitivities associated with the site and its immediate

surroundings. This is an important trunk road extensively used by residents, businesses and tourists, and the potential impacts and examination of alternative solutions to waste storage, its transportation and usage are in the opinion of the Planning Authority are an important and inter related set of issues. It is the opinion of the Planning Authority that these matters require to be addressed in the EIA to ensure that a range of options have been examined and the most appropriate solution promoted through the application process to balance the numerous and important sensitivities associated with the proposals and the context of the site.

Consideration should be given in the EIA to all potential waste streams, how waste will be reduced, re-used and/or recycled and a site and wider Waste Management Plan should be prepared in respect of formation of compounds and construction methodology for the development and included within the EIA.

In respect of Transportation it is noted that at 10.1.2 it is clarified that:

A supporting Transport Assessment (TA) will be prepared as an appendix to the EIA Report and will be subject to separate a scoping process with Transport Scotland (TS) and ABC.

It is welcomed that there is a commitment to including transportation matters within an EIA appendix, with the detail of this to be informed by a separate scoping exercise with Transport Scotland and Argyll and Bute Council.

It is the opinion of the council that waste production and management will be an important and substantive aspect of transportation matters, and therefore the need to co-ordinate waste production, storage, processing and distribution on the Road/Rail/Water network should all be included within the EIA, and subject to further discussion with Transport Scotland , SEPA and The Planning Authority to provide clarity on alternatives considered and reasons for solutions proposed in a manner which will be transparent to members of the public and other third parties and organisations.

Detailed comments of the Area Roads Engineer are awaited and will be forwarded upon receipt. However it is noted that the primary road network adjacent to the site is a Trunk Road and therefore the Planning Authority will also have regard to any comments by Transport Scotland in respect of such matters.

ECOLOGY AND NATURE CONSERVATION

The views of the Council's Biodiversity advisor and Marine Policy Officer are attached as Appendix B and C respectively.

Biodiversity Officer Comments

In respect of the proposed scoping out of potential impacts on certain protected species the Biodiversity Officer comments:

5.3 Species Surveys specifically have been carried out in 2017 and 2018 for wildcat, freshwater pearl mussel, beaver and specially protected amphibians such as great crested newt, albeit the applicant is aware that these are absent and can be scoped out of the EcIA. .

5.4 Comment: I note that the surveys are out of date but the applicant considers they are robust enough to remain valid except where the works compound is to be located. This gap needs to be addressed along with the new site boundary and those that are known to be present and active within the study area, namely fisheries, freshwater invertebrates, otter, pine marten and red squirrel.

She continues:

5.5 Ornithological interest- surveys have been completed in 2017 and 2018, I note that the applicant is to update the data for breeding golden eagle, vantage point surveys for golden eagle (and indirectly white-tailed eagle), and black grouse and also consult with the Argyll

Raptor Group for their data set for 2019/2020. This is acceptable.

5.6 General Comment- surveys- prior to work commencing (albeit that a full planning application has to be submitted is granted permission) - a pre-start ecological survey on priority construction areas i.e. works compound and the areas following this as the project develops should be carried out prior to opening up these sites by the ECoW along with Tool -box talks (contained within the Construction Environment Management Plan- detail in 6.0) be given to site staff in advance of same.

Further commenting that:

5.6.1 Request: I noted that no invasive non- native species (INNS) have been included in the EIAS, I ask that the applicant confirms that no Rhododendron ponticum or Japanese Knotweed or any INNS on the Wildlife and Country (1981) Act on the Schedule 9 list are on the development site.

6.0 Construction Environment Management Plan (CEMP) - I note that mitigation measures along with licencing contacts for ecological interest are to be embedded in the plan and over seen by the ECoW. I ask that Toolbox Talks are included too and updated as and when required.

As this development is over a number of years, I ask that ecological monitoring reports with images are submitted to the local authority on annual basis.

I would request that these comments and the content of the remainder of her consultation response are noted by The Scottish Ministers in reaching any scoping decision.

Marine Policy Officer Comments

The Council's Marine Policy Officer has also provided comment in respect of Ecological Matters associated with the proposals as follows:

Comments on section 9 - Ecology

- *The Awe catchment is the largest and most diverse freshwater catchment area in Argyll, which sustains a variety of fish species and habitats that are an important part of the region's biodiversity. These freshwater habitats include; streams, rivers and lochs, which is an important fishery for Atlantic salmon (Salmo salar) and brown trout (Salmo trutta). The Atlantic salmon is protected in its freshwater life-cycle stages under Schedule 3 of the Conservation (Natural Habitats, &c.) Regulations 1994, and is a UK Biodiversity Action Plan (BAP) priority species. Brown trout are also a UK BAP priority species. The health of salmonids and other fish populations are dependent on clean freshwater habitats throughout the catchment. The general trends in abundance of fish indicate a decline in natal species with consequences for the performance of the fisheries. Human-derived pressures acting on freshwater habitats include; forestry, agriculture, infrastructure development including the increasing development of renewable energy schemes (Awe Catchment Fishery Management Plan 2014-19).*

- *Loch Awe and River Awe is an important migratory route for salmonids. Changes to water flows can impede successful migration up stream. Correct water flows are essential for allowing access to spawning grounds, including a sufficient water level for the survival of buried eggs. It will therefore be important that throughout the construction and operational phases, the applicant is advised to ensure that all naturally available habitat is accessible to fish, including: sufficient water flows; the hydrology (drainage), underlying geology, and geomorphology is not affected, and to provide mitigation against any habitat loss/damage through a habitat restoration programme. It will be important to note that:*

o *A walkover habitat survey should be undertaken on the main channels of Awe catchment with the aim of quantifying and evaluating the condition of freshwater habitats utilised for recruitment by fish, and in particular salmonids;*

o *The applicant is advised to consult with Argyll Fisheries Trust (AFT), Argyll District Salmon Fishery Board (ADSFB) and the Awe District River Improvement Association (ADRIA)*

in the first instance for further advice.

- *Otters are classed as European Protected Species (EPS) under the Conservation (Natural Habitats, &c.) Regulations 1994. Where there is a high likelihood of otters being present, it is recommended that an otter survey will be required, and an EPS Licence to conduct works may be required from NatureScot.*

- *Under section 9.4.12 Non-avian protected species, it is stated that "species for which survey or data searches have determined are likely to be absent and for which no further work is needed, and they can be scoped out of the Ecological Impact Assessment," including the freshwater pearl mussel, I would disagree on this view as much of the survey data is over 6 months old and is therefore out-dated.*

    - *The Freshwater Pearl Mussel is afforded statutory protection under Schedule 5 of the Wildlife and Countryside Act 1981; listed in Annexes II and V of the EC Habitats Directive and Appendix II of the Bern Convention; it is also listed as a Priority Species under the Argyll and Bute Local Biodiversity Action Plan. I therefore recommend that a Protected Species Survey for the Freshwater Pearl Mussel be undertaken in the vicinity of the proposed development (River Awe).*

I would request that these comments and the content of the remainder of her consultation response are noted by The Scottish Ministers in reaching any scoping decision.

HYDROLOGY, HYDROGEOLOGY AND SOILS

Extracts of the Marine Policy Officer's consultation response to the scoping request are set out below;

Comments on section 5 - Proposed Scope of the EIA

1. Under Table 5-1: Technical Scope, it is stated that Waste Management is proposed to be scoped-out. If Waste Management is scoped-out, I would have concerns at this early stage. A full Site Waste Management Plan (SWMP), with appropriate mitigation measures should be included within the EIA as a supporting document;

2. A Construction Environment Management Plan (CEMP) should also be included as a supporting document to the EIA.

She further comments that:

- *Under the SEPA Loch classification system, Loch Awe is classified as having an overall Moderate ecological status and a chemical status of Pass. The Awe catchment is classified as a Heavily Modified Water Body (HMWB) due to the alterations of the water body for hydroelectricity generation. SEPA should be able to advise if the proposal is likely to further significantly impact the Awe catchment.*

- *The applicant is requested to submit full details of the Surface Water Drainage Strategy, including mitigation measures within their Flood Risk Assessment. It will be important that the proposed development does not attribute to an increase in excess surface and ground water accumulations. It will also be important that the development does not attribute to an increase in pollution and any siltation/spoil entering Loch Awe and Cruachan Reservoir, or groundwater bodies (principally Oban), including private water supplies.*

- *The applicant is advised to adhere to good practice measures for working in and near to watercourses during the construction phase, and should include:*

    - *Installation of silt interception traps to minimise unchecked contaminated run-off;*

- *Appropriate artificial drainage must be designed and installed;*
- *Fuels and other chemicals must be stored securely within the site construction compound;*
- *Appropriate wash-out facilities must be available for vehicles and machinery;*
- *Trenches and excavations must be covered at the end of each working day.*

- *Abstractions are regulated by the Water Environment (Controlled Activities) (Scotland) Regulations 2011, more commonly known as the Controlled Activity Regulations (CAR) licence process. The applicant must apply for a CAR licence. Full details on how to apply for a CAR licence are located at: https://www.sepa.org.uk/regulations/water/abstractions/#one. SEPA will provide specific advice relating to the freshwater abstraction.*

- *The contractor must provide a CEMP including proposed mitigation, and Method Statement. The Method Statement must detail the proposed works. The CEMP and Method Statement should be agreed by the Council in consultation with NatureScot prior to works commencing.*

I would request that these comments and the content of the remainder of her consultation response are noted by The Scottish Ministers in reaching any scoping decision.

ARCHAEOLOGY, BUILT & CULTURAL HERITAGE

In respect of these matters the Council will have regard to the views of other consultees with expertise in such matters. However it is noted that there appears to be the possibility of the construction of infrastructure above ground associated with the proposals within the setting of the Cruachan Dam which is a Category A Listed Building of National Importance. It is also a Listed building which has an extensive setting widely used by recreational walkers both to the dam and on wider walks around the Cruachan Ridge. This is a busy and important recreational asset as well as an iconic and historic listed structure.

In this respect the Council is concerned that all elements of construction, including the timescale and phasing of activity and potential impacts are clearly set out, and in the view of the planning authority should also form part of an EIA submission due to the proximity of significant operations, and currently uncertain impacts at this stage on the setting of this nationally important Listed Building.

The Cruachan Dam, the Cruachan Ridge and the general locale are important amenity assets for the local area which are extremely popular destinations for locals and tourists. Although some impacts are unavoidable, Officers consider there should be a clear strategy of mitigation, or alternative provisions promoted through the application process as part of a wider recreation strategy to ensure that access to the outdoors and recreational usage of the general area is considered properly in respect of the construction and operational phases of the proposals.

SOCIO-ECONOMICS AND RECREATION

The A85 Trunk road is a vital link within Argyll and Bute and reference to diversions and potential impacts upon this are considered to also potentially have impacts upon the operation of the economy of Argyll and Bute if the flow of traffic on the A85 is not maintained in so far as is possible through the proper examination of options associated with construction, waste storage and waste transportation related to the proposals. These matters are considered to be potentially complex and inter related and therefore should form part of the EIA submission.

Tourism and recreational usage of the area are also vital components of the economy of the local area and any potential adverse impacts upon these requires to be fully evaluated and mitigation proposed. Details have yet to be finalised in respect of these matters and therefore the Planning Authority considers that such matters should be included within any submitted EIA to ensure that potential socio economic impacts, both beneficial and potentially harmful, are properly evaluated and presented. This will allow such matters to be weighted in the balance of any

future determination by Ministers through a transparent EIA process which the local community and other third parties will be able to reference.

Officers are aware that any substantial and/or lengthy disruption to the free flow of traffic along the A85 will be a potentially significant matter of great concern to the local politicians, businesses and the wider population who depend on this vital transportation route.

Interaction with other activities which require to be addressed in submission

The Council is required to protect public access rights to and along the foreshore for all non-motorised users. Where there is a pier or breakwater structure that will obstruct access along a foreshore or loch side, a reasonable means of passing by the obstruction should be provided to allow the public to exercise their right of access along the shore, where appropriate.

Officers also consider that if access to the Cruachan Dam or ridge are to be restricted that a wider recreational strategy, to compensate for this should form part of the proposed EIA. The applicant will be aware that in evaluating the qualities of the APQ and any citation evaluation the wider community and recreational value of this asset, not just in Landscape terms requires to be considered. This matter is clarified in the Ministers decision in respect of the Upper Sonachan Wind Farm.

The applicant is advised to consult with the Northern Lighthouse Board to determine what would be the proposed affects to safe navigation or recreational boating during site construction

PUBLIC SAFETY, AIR QUALITY AND NOISE

It is noted from the Scoping Report that an assessment of impacts on air quality from construction traffic emissions is proposed to be scoped out of the EIA but subject to a separate assessment and submission. Argyll and Bute has no identified areas of poor air quality and therefore it is agreed that these matters can be scoped out.

In respect of Noise and the details submitted, comments from the Council's Environmental Protection Department are awaited and will be forwarded when available.

David Moore
Major Applications Team
23 October 2017

Consultation Responses Awaited TO BE FORWARDED WHEN RECEIVED

West of Scotland Archaeology Service

Argyll & Bute Council Area Roads

Argyll & Bute Environmental Protection Officer

Argyll and Bute Council
Comhairle Earra Ghàidheal agus Bhóid

Development and Infrastructure Services

Executive Director: Kirsty Flanagan

Our Ref: 21/01612/SCOPE

Marina Curran-Colthart
Local Biodiversity Officer,
Argyll and Bute Council.
Development and Infrastructure,
Municipal Buildings,
Albany Street,
Oban,
Argyll, PA34 4AW

t: REDACTED
marina.curran-colthart@argyll-bute.gov.uk
w: www.argyll-bute.gov.uk

29 September 2021
Central Applications Team
1A Manse Brae
Lochgilphead
PA31 8RD

Dear Central Validation Team,

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)
PROPOSAL: Section 36 Scoping Opinion consultation for proposed new underground power station and associated infrastructure adjacent to Cruachan 1 to provide up to 600MW new generating capacity
SITE ADDRESS: Land to the East of Cruachan 1 Power Station on the Northern Banks of Lochawe Argyll and Bute
GRID REFERENCE: 207300 727941

Thank you for consulting me on the above scoping opinion for the proposed new underground power station and associated infrastructure adjacent to Cruachan 1 to provide up to 600MW new generating capacity on land to the east of Cruachan 1 Power Station on the northern banks of Lochawe, Argyll and Bute.

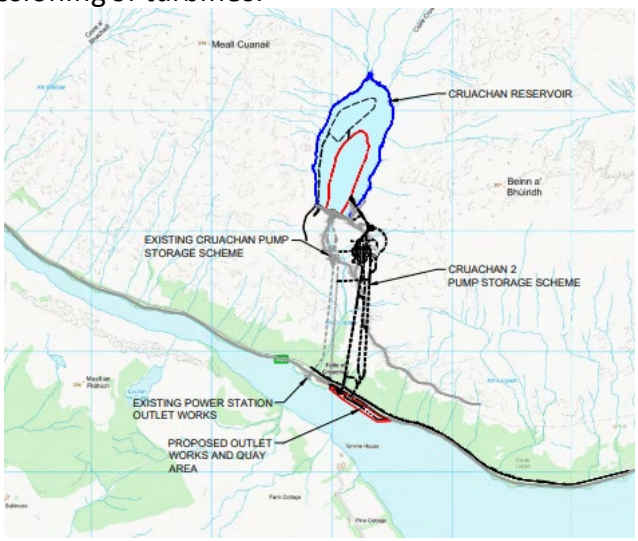
I have reviewed the associated documents in terms of biodiversity interest; the ecological and ornithological surveys that have been undertaken; the proposed mitigation along with provision of a Construction Environment Management Plan and the employment of an Ecological Clerk of Works to oversee the natural environment aspects of the project.
I have provided advice and comments in relation to the above survey work.

1. **Advisory:**

The following Local Development Plan Policies relate to the Supplementary Guidance for the Natural Environment:
SG LDP ENV 1 Development Impact on Habitats, Species and our Biodiversity
SG LDP ENV 2 Development Impact on European Sites
SG LDP ENV 4 Development Impact on Sites of Special Scientific Interest (SSSIs) and National Nature Reserves
SG LDP ENV 5 Development Impact on Local Nature Conservation Sites (LNCS)
SG LDP ENV 6 Development Impact on Trees / Woodland
SG LDP ENV 7 Water Quality and the Environment
SG LDP ENV 9 Development Impact on Areas of Wild Land
SG LDP ENV 10 Geodiversity
SG LDP ENV 11 Protection of Soil and Peat Resource
https://www.argyll-bute.gov.uk/sites/default/files/supplementary_guidance_adopted_march_2016_env_9_added_june_2016_ac2.pdf

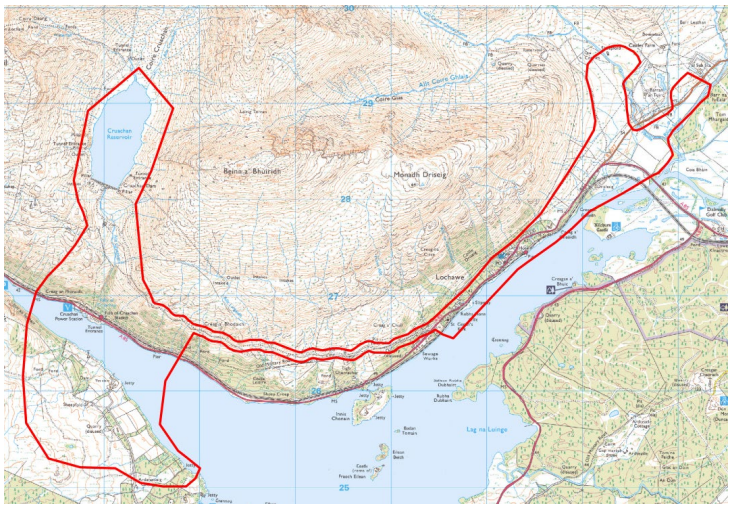
In terms of the project, I note the following key activities:

- Mobilisation, site set up, camps, batching plant and haul roads.
- Construction of a working quayside platform on the foreshore of Loch Awe.
- Temporary diversion of A85 onto temporary quayside platform on Loch Awe.
- Construction of the main access and tunnel, various underground construction and access tunnels, tailrace gate chamber, ventilation tunnel, a tailrace surge shaft, and a tailrace tunnel under A85.
- Construction of the water inlet and outlet structure within loch Awe to connect to the tailrace
- tunnel, including gates, screens and stop logs
- Re-divert A85 back onto permanent alignment.
- Drive and support main access tunnel to powerhouse complex.
- Excavation and support of powerhouse complex.
- Excavation and support of the high-pressure tunnel system connecting the Cruachan reservoir and the powerhouse.
- Excavation and construction and installation of a head gate to manage water flow to the powerhouse.
- Construction of the upper control works within the Cruachan reservoir to allow water in and out of the new tunnel system.
- Installation of powerhouse overhead crane.
- Installation of powerhouse electromechanical and hydromechanical equipment.
- Installation of powerhouse balance of plant (mechanical and electrical).
- Dry & Wet commissioning of turbines.



Project Site.

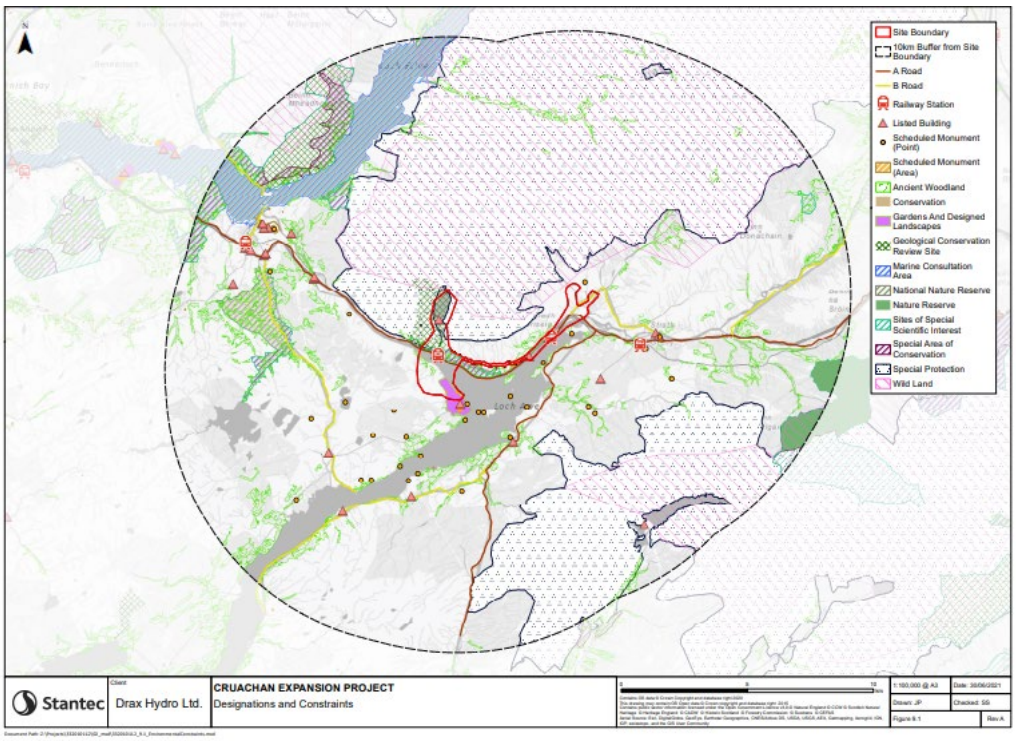
2.0 Site description: The Proposed Development will be focussed on land around and to the east of the existing Cruachan 1 Power Station on the northern banks of Loch Awe in Argyll and Bute (National Grid Reference for Cruachan Reservoir: NN 080 282). The Site is located within the administrative boundary of Argyll and Bute Council



The following habitats have been recorded within the site: unimproved acid grassland, wet heaths, bogs, and marshy grasslands. Woodland habitats are present along the access track corridor.

3.0 Designations: There are two internationally designated sites fall within the Site boundary. These are the Glen Etive and Glen Fyne Special Protection Area (SPA) and part of the Loch Etive Woods Special Area of Conservation (SAC). Ancient woodland, predominantly of semi-natural origin, flanks much of the shore of Loch Awe and the lower slopes of the surrounding hills, including those within the Site. Much of this comprises the Coille Leitire SSSI and the Loch Etive Woods SAC.

The map below shows an environmental constraints plan including designated sites within the vicinity of the site.



4.0 Hydrology: I have reviewed the supporting information in relation to its effect on the woodland designation and adjacent habitats. Whilst I note that mitigation is embedded in the design principles further scoping assessment work is proposed cover the following:

- Increased road runoff and pollution potential associated with the temporary diversion/extension of the A85 and increase in road traffic haulage and plant movements;

- Mobilisation by wind and rainfall-runoff of stockpiled material into Loch Awe
- Potential increases in surface water runoff due to an increase in permanent impermeable surface areas during the operational phase**.**

4.1 Comment: I note that Best Practice during Construction measures will be implemented with the employment of an Ecological Clerk of Works- ECoW to oversee ecological and biodiversity checks and mitigation. This is acceptable.

5.0 Ecological Interest- proposed scoping:

- Sites designated for nature conservation;
- Habitats, including Annex 1 habitats and GWDTEs, and notable flora;
- Protected non-avian species including otter, pine marten, red squirrel, water vole, badger, reptiles, freshwater fisheries and freshwater invertebrates;
- Ornithological features including notable raptors, black grouse and the upland breeding bird assemblage.

The scope of the ecological surveys has been agreed with NatureScot, this is acceptable.

I note that habitat surveys are robust, however, there are *special gaps in terms of the Site boundary for the Proposed Development, and these will need to be infilled. In addition, it is now generally accepted that the Phase 1 Habitat Survey technique is no longer fit for purpose for EcIA, and to that end it is recommended that habitats within the required study area buffers are reclassified using Scottish EUNIS as well as NVC. The updated habitat surveys will incorporate a 250 m buffer of the Site boundary where excavations will be undertaken, to accommodate the zone of influence relevant for groundwater dependent terrestrial ecosystems (GWDTEs). The buffer in other areas will be 100 m.*

5.1 Comment: This approach is acceptable.

5.2 Post-Construction Restoration: Whilst restoration of habitats have been identified in the report, I ask that a Method Statement is included in relation to the treatment and monitoring of the vegetation and excavated materials during the construction phase and re-instatement of same post –construction. The Method Statements need to be included in the Construction Environment Management Plan.

Re. further restoration methods e.g. compensatory planting of trees- I ask that outline details (species and indicate location where most likely) of same should be factored in at this stage.

5.3 Species Surveys specifically have been carried out in 2017 and 2018, albeit the applicant is aware that these are absent and can be *scoped out of the EcIA, namely wildcat, freshwater pearl mussel, beaver and specially protected amphibians such as great crested newt*.

5.4 Comment: I note that the surveys are out of date but the applicant considers they are robust enough to remain valid except where the works where the compound is to be located. This gap needs to be addressed along with the new site boundary and those that are known to be present and active within the study area, namely fisheries, freshwater invertebrates, otter, pine marten and red squirrel.

5.5 Ornithological interest- surveys have been completed in 2017 and 2018, I note that the applicant is to update the data for breeding golden eagle, vantage point surveys for golden eagle (and indirectly white-tailed eagle), and black grouse and also consult with the Argyll Raptor Group for their data set for 2019/2020. This is acceptable.

5.6 General Comment- surveys- prior to work commencing (albeit that a full planning application has to be submitted is granted permission) - a pre-start ecological survey on priority construction areas i.e. works compound and the areas following this as the project develops should be carried out prior to opening up these sites by the ECoW along with Tool -box talks (contained within the Construction Environment Management Plan- detail in 6.0) be given to site staff in advance of same.

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6.0 Construction Environment Management Plan (CEMP) - I note that mitigation measures along with licencing contacts for ecological interest are to be embedded in the plan and over seen by the ECoW. I ask that Toolbox Talks are included too and updated as and when required.

As this development is over a number of years, I ask that ecological monitoring reports with images are submitted to the local authority on annual basis.

If you require clarification, please do not hesitate to contact me.

Yours sincerely,
REDACTED

Marina Curran-Colthart, Local Biodiversity Officer, Argyll and Bute Council.
https://www.argyll-bute.gov.uk/sites/default/files/biodiversity_technical_note_feb_2017_4.pdf
https://www.nature.scot/sites/default/files/2019-09/Pollinators%20in%20Planning%20and%20Construction%20Guide.pdf

Argyll and Bute Council
Comhairle Earra Ghàidheal agus Bhóid

Development And Economic Growth
Director: Kirsty Flanagan

Marine and Coastal Development Unit
Municipal Buildings, Albany Street, Oban, Argyll, PA34 4AW
E-mail: lorraine.holdstock@argyll-bute.gov.uk
www.argyll-bute.gov.uk
Direct Line: REDACTED

Ref: 21/01612/SCOPE

24 September 2021

Argyll and Bute Council
Development Management
Kilmory Castle
Lochgilphead
Argyll
PA31 8RT

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)
PROPOSAL: Section 36 Scoping Opinion consultation for proposed new underground power station and associated infrastructure adjacent to Cruachan 1 to provide up to 600MW new generating capacity

SITE ADDRESS: Land To The East Of Cruachan 1 Power Station On The Northern Banks Of Lochawe Argyll And Bute
GRID REFERENCE: 207300 727941

Thank you for consulting me on the above Section 36 Scoping Opinion. Please find below comments from the Marine and Coastal Development Policy Officer.

Yours faithfully

REDACTED

Lorraine Holdstock
Marine and Coastal Development Policy Officer

Proposal
The proposed development seeks to optimise use of the existing Cruachan Reservoir and Dam through development of a new underground power station and associated infrastructure. The existing Cruachan Power Station pumped storage facility has a maximum generating capacity of the proposal will provide up to 600MW new generating capacity.

Proposed Loch Access Works
The proposed development will comprise the following shoreline elements:

- A quayside construction is proposed on the shore of Loch Awe to facilitate use of the loch for the transport of heavy equipment and materials, and the temporary storage of tunnel spoil prior to its off-site removal.

The following temporary loch access works will also be required for the proposed development:

- A section of the proposed quayside may be temporary depending on the final scheme design. Any temporary sections of the jetty will be removed following completion of construction works and the loch shore reinstated;
- A temporary diversion of the A85 onto the quayside may be required in order to facilitate construction of the initial sections of the main access tunnel.

Design Parameters

- A new loch-side structure in Loch Awe to allow access for the development of the inlet outlet structure as well as operational access to the proposed development. The quayside is likely to be a maximum size of 300m x 50m.

Works Duration

- The developer anticipates that the construction programme would last approximately 65 months.

Overall Scoping Opinion

- It is the Officer's opinion that the proposed development does constitute an Environmental Impact Assessment (EIA) as defined under Schedule 2 of the EIA Regulations. The proposal will also require planning permission for any quayside and or pier/jetty construction, and will need to consider cumulative infrastructure impacts during the works and to ensure continued safe access / egress during this time. I further recommend that a precautionary approach be undertaken for the duration of works.

- The EIA report must provide updated site survey information; all surveys and data sets after six months must be updated.

Local Development Plan (LDP)

- The proposed development must conform to all relevant and general policies of the 2015 LDP, including:

    1. Policy LDP DM1 - Development within the Development Management Zones;
    2. Policy LDP 3 - Supporting the Protection, Conservation and Enhancement of our Environment;
    3. Policy LDP 4 - Supporting the Sustainable Development of our Coastal Zone;
    4. Policy LDP 6 - Supporting the Sustainable Growth of Renewables;
    5. Policy LDP 9 - Development Setting, Layout and Design;
    6. Policy LDP 10 - Maximising our Resources and Reducing Our Consumption;
    7. Policy LDP 11 - Improving our Connectivity and Infrastructure.

- The proposed development must conform to all relevant and general proposed policies of the 2019 LDP Written Statement, including:

1. Policy 30 – The Sustainable Growth of Renewables;
2. Policy 42 – Safeguarding Piers, Ports and Harbours;
3. Policy 55 – Flooding;
4. Policy 56 – Land Erosion;
5. Policy 57 – Risk Appraisals;
6. Policy 59 – Water Quality and the Environment;
7. Policy 61 – Sustainable Drainage Systems (Suds);
8. Policy 62 – Drainage Impact Assessments;
9. Policy 63 – Waste Related Development and Waste Management;
10. Policy 73 – Development Impact on Habitats, Species and Biodiversity.

- The development must be consistent with all associated 2016 Supplementary Guidance, and in particular including:
  1. ENV 1 – Development Impacts on Habitats, Species and Our Biodiversity;
  2. SG LDP TRAN 8 - Piers and Harbours;
  3. SG LDP CST 1 - Coastal Development;
  4. SG LDP SERV 7 - Flooding and Land Erosion – The Risk Framework for Development.

Comments on section 5 - Proposed Scope of the EIA

1. Under Table 5-1: Technical Scope, it is stated that Waste Management is proposed to be scoped-out. If Waste Management is scoped-out, I would have concerns at this early stage. A full Site Waste Management Plan (SWMP), with appropriate mitigation measures should be included within the EIA as a supporting document;
2. A Construction Environment Management Plan (CEMP) should also be included as a supporting document to the EIA.

Comments on section 8 - Hydrology

- Under the SEPA Loch classification system, Loch Awe is classified as having an overall Moderate ecological status and a chemical status of Pass. The Awe catchment is classified as a Heavily Modified Water Body (HMWB) due to the alterations of the water body for hydroelectricity generation. SEPA should be able to advise if the proposal is likely to further significantly impact the Awe catchment.

- The applicant is requested to submit full details of the Surface Water Drainage Strategy, including mitigation measures within their Flood Risk Assessment. It will be important that the proposed development does not attribute to an increase in excess surface and ground water accumulations. It will also be important that the development does not attribute to an increase in pollution and any siltation/spoil entering Loch Awe and Cruachan Reservoir, or groundwater bodies (principally Oban), including private water supplies.

- The applicant is advised to adhere to good practice measures for working in and near to watercourses during the construction phase, and should include:

  - Installation of silt interception traps to minimise unchecked contaminated run-off;
  - Appropriate artificial drainage must be designed and installed;
  - Fuels and other chemicals must be stored securely within the site construction compound;
  - Appropriate wash-out facilities must be available for vehicles and machinery;
  - Trenches and excavations must be covered at the end of each working day.

- Abstractions are regulated by the Water Environment (Controlled Activities) (Scotland) Regulations 2011, more commonly known as the Controlled Activity Regulations (CAR) licence process. The applicant must apply for a CAR licence. Full details on how to apply for a CAR licence are located at:

https://www.sepa.org.uk/regulations/water/abstractions/#one. SEPA will provide specific advice relating to the freshwater abstraction.

- The contractor must provide a CEMP including proposed mitigation, and Method Statement. The Method Statement must detail the proposed works. The CEMP and Method Statement should be agreed by the Council in consultation with NatureScot prior to works commencing.

Comments on section 9 - Ecology

- The Awe catchment is the largest and most diverse freshwater catchment area in Argyll, which sustains a variety of fish species and habitats that are an important part of the region's biodiversity. These freshwater habitats include; streams, rivers and lochs, which is an important fishery for Atlantic salmon (*Salmo salar*) and brown trout (*Salmo trutta*). The Atlantic salmon is protected in its freshwater life-cycle stages under Schedule 3 of the Conservation (Natural Habitats, &c.) Regulations 1994, and is a UK Biodiversity Action Plan (BAP) priority species. Brown trout are also a UK BAP priority species. The health of salmonids and other fish populations are dependent on clean freshwater habitats throughout the catchment. The general trends in abundance of fish indicate a decline in natal species with consequences for the performance of the fisheries. Human-derived pressures acting on freshwater habitats include; forestry, agriculture, infrastructure development including the increasing development of renewable energy schemes (Awe Catchment Fishery Management Plan 2014-19).

- Loch Awe and River Awe is an important migratory route for salmonids. Changes to water flows can impede successful migration up stream. Correct water flows are essential for allowing access to spawning grounds, including a sufficient water level for the survival of buried eggs. It will therefore be important that throughout the construction and operational phases, the applicant is advised to ensure that all naturally available habitat is accessible to fish, including: sufficient water flows; the hydrology (drainage), underlying geology, and geomorphology is not affected, and to provide mitigation against any habitat loss/damage through a habitat restoration programme. It will be important to note that:

    - A walkover habitat survey should be undertaken on the main channels of Awe catchment with the aim of quantifying and evaluating the condition of freshwater habitats utilised for recruitment by fish, and in particular salmonids;

    - The applicant is advised to consult with Argyll Fisheries Trust (AFT), Argyll District Salmon Fishery Board (ADSFB) and the Awe District River Improvement Association (ADRIA) in the first instance for further advice.

- Otters are classed as European Protected Species (EPS) under the Conservation (Natural Habitats, &c.) Regulations 1994. Where there is a high likelihood of otters being present, it is recommended that an otter survey will be required, and an EPS Licence to conduct works may be required from NatureScot.

- Under section 9.4.12 Non-avian protected species, it is stated that "species for which survey or data searches have determined are likely to be absent and for which no further work is needed, and they can be scoped out of the Ecological Impact Assessment," including the freshwater pearl mussel, I would disagree on this view as much of the survey data is over 6 months old and is therefore out-dated.

    - The Freshwater Pearl Mussel is afforded statutory protection under Schedule 5 of the Wildlife and Countryside Act 1981; listed in Annexes II and V of the EC Habitats Directive and Appendix II of the Bern Convention; it is also listed as a Priority Species under the Argyll and Bute Local Biodiversity Action Plan. I therefore recommend that a Protected Species Survey for the Freshwater Pearl Mussel be undertaken in the vicinity of the proposed development (River Awe).

Comments on section 10 – Transport and Access

- Under Policy 42 – Safeguarding Piers, Ports and Harbours; development proposals for a new temporary pier, port or harbour facilities will only be considered where it has been clearly demonstrated how the whole site including any related access and working areas can be restored to the satisfaction of the planning authority once the facilities are no longer required.

- The applicant is to submit a Transport Assessment (TA) together with their EIA in support of the final planning application. The TA must provide complete proposed pier/jetty and wharf construction details. The proposal will need to consider cumulative infrastructure impacts during the works and to ensure continued safe access / egress during this time.

Comments on section 12 – Landscape and Visual

- The proposal is located within the Lorn and Inner Isles Very Sensitive Area and the North Argyll Local Landscape Area (LLA), as identified in the adopted Local Development Plan (LDP) 2015. The development area is within the NatureScot SSSI Coille Leitire designation for semi-natural ancient upland oak woodland.

- Given the proposal is highly likely to have visual impacts and cumulative effects during and after the construction phase, the applicant is requested to submit a full Landscape and Visual Impact Assessment (LVIA) together with a Zone of Theoretical Visibility (ZTV), including schematics and photomontages from key viewpoints in support of their application.

- The development's design and scale should respect the character and appearance of the surrounding area, and be consistent with Policy LDP 9 – Development Setting, Layout and Design, associated Supplementary Guidance and the Argyll and Bute Landscape Capacity Assessment.

General comments

Interaction with other activities

- The Council is required to protect public access rights to and along the foreshore for all non-motorised users. Where there is a pier or breakwater structure that will obstruct access along a foreshore or loch side, a reasonable means of passing by the obstruction should be provided to allow the public to exercise their right of access along the shore, where appropriate.

- Any pier/jetty construction should be marked according to advice from the Northern Lighthouse Board.

- The proposal is a large engineering operation which is likely to have significant interaction with road transportation. However, the proposed development is considered to be consistent with the relevant policies of the Local Development Plan.

Navigation

- The applicant is advised to consult with the Northern Lighthouse Board to determine what would be the proposed affects to safe navigation or recreational boating during site construction.

Noise

- Mitigation measures to abate noise and vibration should be deployed during the construction and operational phase of the development. Predicted noise and vibration levels should be detailed within the CEMP and EIA.

Pre-application discussion

- The applicant should undertake pre-application discussion with relevant stakeholders including SEPA, NatureScot, AFT, ADSFB, ADRIA, and the Northern Lighthouse Board in the first instance. Where appropriate, the applicant should provide a summary of pre-application discussion undertaken with key stakeholders in support of a full planning application.

Magnus Hughson
The Scottish Government
Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

11th August 2021

Dear Energy Consents Unit,

SCOPING REQUEST FOR CRUACHAN EXPANSION PROJECT, LOCH AWE, ARGYLL.

The Argyll District Salmon Fishery Board (Argyll DSFB) is responsible under the Salmon and Freshwater Fisheries (Consolidation)(Scotland) Act 2003 for the protection of salmonids in their District. The Argyll Fisheries Trust acts as scientific advisers to the Board. Our response covers all species of fish and their habitat. We provide the following response to the information given in the EIA Scoping Report:

The report indicates that a fish and fisheries survey (2017) of which we are unaware of the scope of the survey or its findings. We would like to be consulted on the report findings and its relevance to the responsibilities of Argyll DSFB. We would also need to know the proposed monitoring that will occur because of the development.

We are aware that the current scheme abstracts water from several different watercourses in the Awe and neighbouring catchments. It is unclear to us at this time how the expansion will affect these watercourses and if improvements in the compensation flows are to be made to bring them up to current standards for new developments.

We would also require more information on the effects of increased water discharge created by the expansion of the current scheme. The changes to loch level have potential to influence the flows in the River Awe as regulated by Scottish & Southern Energy. We need to be assured of the working arrangements between the two operators considers the potential for exacerbation the discharge of water into the River Awe, particularly during flood flow releases following storm events.

We hope you find these comments useful.

Yours,

Robert Younger
Clerk to the Argyll District Salmon Fishery Board

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Crown Estate Scotland - Consultation Response

From: Olivia Morrad <olivia.morrad@crownestatescotland.com>
Sent: 27 July 2021 14:58
To: Econsents Admin
Cc: Hughson M (Magnus)
Subject: 20210727 Section 36 scoping - Drax Hydro Ltd Cruachan Expansion Project. Email to GovScot

Good afternoon

Thank you for your email.

I write to confirm that the assets of Crown Estate Scotland are not affected by this proposal and we therefore have no comments to make.

Best regards

Olivia Morrad
Assistant Portfolio Co-ordinator
Crown Estate Scotland

t: REDACTED

Our team are currently working from home. Mail is occasionally being collected from our offices (addresses are at www.crownestatescotland.com/contact-us). Where possible, please email or call us rather than post mail.

By email to: econsents_Admin@gov.scot

Magnus Hughson
Case Officer, Energy Consents Unit
Energy Consents Unit
Scottish Government

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131-668-8716
HMConsultations@hes.scot

Our case ID: 300052079
Your ref: ECU00003298
18 August 2021

Dear Magnus Hughson

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Proposed section 36 application for the Cruachan Expansion Project - EIA Scoping
Scoping Report

Thank you for your consultation which we received on 20 July 2021 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

Argyll and Bute Council's archaeological and cultural heritage advisors will also be able to offer advice on the scope of the cultural heritage assessment. This may include heritage assets not covered by our interests, such as unscheduled archaeology, and category B- and C-listed buildings. In this case, you should contact the West of Scotland Archaeology Service at Exchange House, 231 George St, Glasgow G1 1RX or enquiries@wosas.glasgow.gov.uk.

Proposed Development
We understand that the proposed development seeks to optimise use of the existing Cruachan Reservoir and Dam through development of a new underground power station and associated infrastructure adjacent to the existing Cruachan power station to provide up to 600MW new generating capacity.

Scope of assessment
We note the proposed scope of the assessment as set out in section 13.6 of the scoping report. However, we disagree with the intention to scope out an assessment of impacts on the Category A listed Ben Cruachan Hydro Electric Scheme, Turbine Hall. From the information provided to date, we cannot agree with the statement made in paragraph 13.6.3 of the scoping report that there are no likely significant effects as a result of the proposals. We do not have enough information at this stage to understand the likely level of the impact. We also do not have enough information on the proposed embedded mitigation measures which would be put in place which are referred to in section 13.5. On this basis, this asset should be included in the scope of the assessment and reported

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

accordingly in any Environmental Impact Assessment Report produced for this proposed development.

We are content with what is proposed in terms of the sites within our remit that are identified for inclusion in an assessment of impacts on setting in the second bullet point in paragraph 13.6.1 of the scoping report.

Following a meeting with the applicant and their advisors on 27 July 2021, we requested additional information on the likely impact of any changes to water levels on a number of scheduled monuments within Loch Awe. We received this information in an email dated 5 August 2021. We note and welcome the information provided in this assessment and we are content to agree with the conclusions reached in the document that the change in water levels caused by the proposed development would be minimal overall and that this topic should be scoped out of the EIA for further assessment.

Further information
Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes. Further information on Environmental Impact Assessment can be found in our Environmental Impact Assessment Handbook | Hist Env Scotland (historicenvironment.scot). Technical advice is available on our Technical Conservation website at http://conservation.historic-scotland.gov.uk/.
We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Adele Shaw and they can be contacted by phone on REDACTED or by email on Adele.Shaw@hes.scot.

Yours sincerely

Historic Environment Scotland

B28

marinescotland

Scottish Government
Riaghaltas na h-Alba
gov.scot

T: +44 (0)131 2442900
DD: REDACTED e-mail: emily.bridcut@gov.scot

Ms Carolanne Brown
Energy Consents Unit
Scottish Government
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Our ref: FL/37

29 September 2021

Dear Carolanne,

CRUACHAN EXPANSION PROJECT, ARGYLL AND BUTE

Thank you for seeking comment from Marine Scotland Science (MSS) in relation to freshwater and diadromous fish and fisheries on the scoping report for the proposed Cruachan Expansion project, a pumped storage hydro electricity generating station. We have read the report and the responses from NatureScot, SEPA and the Argyll District Salmon Fishery Board.

The proposed development is within the River Awe catchment which supports important Atlantic salmon, brown trout (including Ferox trout and sea trout), Arctic charr, European eel, pike and perch populations and these species support an important recreational fishery on Loch Awe, the River Orchy and the River Awe. Atlantic salmon are listed in the Habitats Directive Annex V and all fish species are listed as priority species for conservation in the Scottish Biodiversity List. NatureScot advise that the Environmental Impact Assessment (EIA) report should include details regarding any potential adverse impact on Arctic charr populations and proposed mitigation measures. MSS agree with this, adding that the potential impacts on all of the above fish species are considered throughout the construction and operation of the proposed development. MSS are content with the proposal for the

developer to scope out impacts arising from the decommissioning phase, as they consider that the development would be permanent.

The proposed development has the potential to directly and indirectly impact the above fish populations. These impacts could include the removal and disturbance of critical habitat (e.g. spawning areas of charr) resulting in fish altering their behaviour including migratory routes through Loch Awe; disturbance, injury or mortality caused by construction noise, effects on water quality (e.g. the release of sediment associated with excavation works, and hydrocarbons associated with potential fuel spillages), changes in water quantity and flow regimes, and entrainment, or impingement on screens (especially of migrating salmon and sea trout smolts). As the developer considers that the proposed development would not have any likely significant effects on the water levels or the hydrological regime of Loch Awe or Cruachan Reservoir, changes to the hydrological regime of Cruachan Reservoir and Loch Awe will be scoped out. MSS agree with SEPA that the rationale and associated background assessment is reported in the EIA report along with information on the change in the proposed abstraction regime.

There are no details provided on the proposed surveys for fisheries and freshwater invertebrates and MSS would welcome further information. These surveys should provide sufficient information to carry out a rigorous assessment of the potential impacts on the fish species, specifically in Allt Cruachan, in the vicinity of the proposed development on Loch Awe and on Cruachan Reservoir. The developer proposes to scope out watercourses draining into Loch Awe which MSS are content with (Section 5.14 of the scoping report); however we advise that the River Awe, which drains out of Loch Awe, should be scoped in. The developer should consider whether salmon smolt acoustic studies will be required in Loch Awe to provide information on the migration of smolts through Loch Awe from the River Orchy and to assess the potential impact on the smolts as they pass the existing take-off at Cruachan. Survey work should also be considered to assess any potential impact on any areas used by Arctic charr for spawning in the vicinity of the proposed take off. The fisheries for each of the above fish species should be described and the likely impact on associated fisheries assessed. Potential cumulative impacts on fish populations as a result of the operation of both Cruachan schemes and the Loch Awe Barrage should also be considered. Full details regarding the proposed surveys including methodology, results from the surveys, proposed mitigation measures and any further monitoring should be presented in the EIA report.

The following are sources of further information:

https://www.sepa.org.uk/media/34332/guide-to-hydropower-construction-phase-good-practice-guidance.pdf
https://www.sepa.org.uk/regulations/water/guidance/
https://www.sepa.org.uk/regulations/water/hydropower/
https://www.sepa.org.uk/media/152049/wat-sg-74.pdf
https://www.sepa.org.uk/media/150984/wat_sg_28.pdf
https://www.sepa.org.uk/media/152075/wat-sg-89.pdf
https://www.gov.scot/publications/hydro-schemes-planning-advice/

MSS recommend that the developer, if they have not already done so, should contact the Argyll District Salmon Fishery Board and Argyll Fisheries Trust for information regarding local fish stocks.

In summary, MSS advise that the developer should carry out surveys and studies to obtain sufficient information to conduct a rigorous assessment of the potential impacts of the proposed development on fish populations and their associated fisheries. Full details regarding the fish surveys/monitoring programmes and mitigation measures, including consideration of our comments outlined above, should be presented in the EIA report.

Kind regards,

Dr Emily E. Bridcut

Energy Consents Unit
Scottish Government

By email only to: econsents_admin@gov.scot

Date: 10th September 2021

Our ref: CEA163862
Your ref: ECU00003298

Dear Mr Hughson,

ELECTRICITY ACT 1989
THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR CRUACHAN EXPANSION PROJECT

Thank you for your consultation dated the 20th July 2021 requesting comments on the scope of the Environmental Impact Assessment (EIA) for the proposed Cruachan Expansion Project and for the additional time granted to NatureScot within which to respond.

1. Summary

The key issues we require to be addressed in detail as part of the EIA process include:

- Impacts on Glen Etive and Glen Fyne Special Protection Area (SPA) for golden eagle.
- Impacts on Loch Etive Woods Special Area of Conservation(SAC) (Coille Leitire SSSI)
- Ornithological impacts on Schedule 1 bird species.
- Landscape and visual impacts.

2. Our Advice

2.1 Landscape and Visual.

2.1.1 We advise that the proposed methodology and scope as laid out in the Scoping Report (section 12) will adequately identify and assess landscape and visual impacts.

2.1.2 The Loch Etive Mountain Wild Land Area lies to the north of the proposal and the northern end/basin of Loch Awe, which is sensitive to some types of large scale developments, lies to the south. However, we do not predict, based on our current understanding of the proposal, that there will be any significant impacts on either of these natural heritage landscape resources.

2.2 Ecology

2.2.1 The proposed scope of surveys, methodologies and assessment of the key ecological receptors identified in the Scoping Report (sections 9.4 to 9.8) will adequately assess the overall ecological impacts, with the addition of the following topics that also need to be considered as part of the EIA:

i. The majority of the development site shown in Fig 1.1 falls within class 3, 4 and 5 as shown on the Carbon and Peatland map 2016 (https://map.environment.gov.scot/Soil_maps/?layer=10), apart from a small area pertaining to class 2 in the north east corner of the site. This class 2 area may or may not be within in the proposed footprint for the offsite laydown/accommodation area. If possible any impact on this class 2 peatland area should be avoided. If this area is proposed to be used then we would welcome the opportunity to advise further on whether surveys are required to determine the presence of, and impacts on, priority habitat natural heritage interests, which are sometimes present in class 2 areas.

ii. There are historical records of Arctic Charr in Cruachan Reservoir. This species has not been referred to in the scoping report. It may be the case that the project will not have any adverse impact on this species but such a conclusion and any mitigation required should be considered and discussed in the EIAR.

2.2.2 The site includes part of Loch Etive Woods SAC (Coille Leitire SSSI component - further details can be found at: https://sitelink.nature.scot/site/8295 and https://sitelink.nature.scot/site/380). As such the Habitat Regs will have to be considered (please follow this link for further details on the associated legislation https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra). The analysis of impacts on this SAC need to be detailed and sufficiently robust to help inform a Habitat Regulations Assessment under the Habitat Regulations, ideally including all the information required to fully inform an Appropriate Assessment (AA) which may have to be undertaken by the competent authority. We will advise on the need for an AA in our response to the consultation on the associated section 36 application.

2.3 Ornithology

2.3.1 The proposed scope of surveys, methodologies and assessment of the key ornithological receptors identified in the Scoping Report (sections 9.4 to 9.8) will adequately assess the overall ornithological impacts. White tail and golden eagle, other Schedule 1 raptors, and black grouse are likely to be the main species of interest on the site. These should be assessed both for onsite impacts and also cumulatively at the relevant Natural Heritage Zone level in addition to any designated site assessments that might be required (see section 2.3.2 below).

2.3.2 The site abuts and covers parts of the Glen Etive and Glen Fyne Special Protection Area (SPA) for golden eagle (further details can be found at: https://sitelink.nature.scot/site/10113). As such the Habitat Regs will have to be considered (please follow this link for further details on the associated legislation https://www.nature.scot/professional-advice/planning-and-development/environmental-

assessment/habitats-regulations-appraisal-hra). The analysis of impacts on this SPA need to be detailed and sufficiently robust to help inform a Habitat Regulations Assessment under the Habitat Regulations, ideally including all the information required to fully inform an Appropriate Assessment (AA) which may have to be undertaken by the competent authority. NatureScot will advise on the need for an AA in our response to the consultation on the associated section 36 application.

2.3.3 The main impacts on the SPA will be likely to come from disturbance due to blasting (and similar activities) and transport flights (use of helicopters). The territory concerned is NA6. Breeding activity is known to take place in the norther half of the territory and, as such, Ben Cruachan and other summits in the range will potentially provide a degree of screening/buffer to disturbance. Even so, there remains potential for eagles to be displaced (due to disturbance) from southern parts of their territory. Vantage point data and modelling will help determine the significance of this displacement. Mitigation measures may be required to compensate for this impact. It should be noted that if modelling is required to help interpret vantage point data, then the Golden Eagle Topography model (GET) should be used as opposed to the PAT model.

2.3.4 Section 5.1.5 of the Scoping Reports proposes that *"Changes to the hydrological regime of Cruachan Reservoir and Loch Awe"* be scoped out of the EIA. It should be noted that marginal zones of Loch Awe are important for some bird species when nesting. If construction or operation of the site is likely to significantly change the existing hydrological regime (levels/speed/seasonal changes) of Loch Awe, then this aspect should be scoped into the EIA, impacts of birds assessed and the topic presented in the EIAR.

3. Conclusion

NatureScot have been a member of the stakeholder group for this project since its inception and, based on our current understanding of the proposal, believe it can be achieved without any major impacts on the natural heritage resource in the area.

Please do not hesitate to contact me should you have any queries.

Yours sincerely,

[by email]

Stephen Austin
Operations Officer
Lorn and North Argyll
NatureScot

Stephen.austin@nature.scot

Magnus Hughson
The Scottish Government
Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

10 September 2021

Dear Magnus Hughson,

Scoping opinion for proposed Cruachan Expansion Project (ECU00003298) a pumped storage electricity generating station. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations') under Regulation 12, land 4.5 km west of the village Loch Awe, Argyll and Bute.

Thank you for consulting RSPB Scotland regarding this scoping opinion for the Cruachan expansion project, by Drax Hydro Ltd. The proposal consists of a pumped storage electricity generating station to increase the capacity of the current Cruachan power station. The proposal will include upper control works, underground waterway system, cavern powerhouse, substation, ventilation shaft, lower control works, quayside administration building, access tunnels and potential road upgrades. There will also be temporary works required - upper site compound, lower site compound, section of the proposed quayside, temporary diversion of the A85 onto the quayside and railhead or rail sidings. A draft scoping report was enclosed with this consultation and will be referenced as required in this response. It is situated within an area to the east of the current Cruachan hydro scheme under Ben Cruachan, grid reference NN080282.

Contents of the EIAR
We advise that the EIA should include an assessment of related projects, especially any grid connection, related transport developments and cumulative impact of other consented and active projects, since these have potential effects and the EIA should take a holistic view of impacts.

Biodiversity and Net Positive
The scoping report states that the impact on the water levels within Loch Awe will be negligible due to the expansion project. We would, however, advise that the installation and long-term management of diver rafts be highly considered by the developers in a way to deliver for biodiversity within the local area surrounding Loch Awe.

This proposal has potential to not just deliver against Scottish Government targets for the country to be net zero by 2045, it can also address the biodiversity crisis through providing net habitat gain, with securing positive effects for biodiversity now one of the outcomes for the National Planning Framework. The Cruachan power station is surrounded by Atlantic Rainforest an important and increasingly rare habitat in Scotland, highlighted in the SNP manifesto as a prime example of a nature-based solution

and we would advise that the developer use this opportunity to expand this habitat and to help offset additional carbon arising from this and other projects. Restored / expanded native woodland would offer a large, long-term forest carbon stock through the regeneration of slow-growing deciduous trees and can also help to stabilise slopes in the face of the predicted increased intensity of rainfall within the area. Atlantic Rainforest are also rich in biodiversity, they provide habitat for well-known species like red squirrels, red listed bird species such as wood warbler and pied flycatcher and are incredibly important for Scotland's lichens and bryophytes, some species of which are found nowhere else in the world. Expansion of this habitat will aid rainforest resilience in response to climate change. The opportunity to offset company generated carbon through this nature based solution is, we hope, an appealing proposition which we would be happy to discuss further.

We hope you find these comments helpful. Should you require clarification of any of the above points please do not hesitate to contact me.

Yours sincerely,

REDACTED

Alasdair Lemon
Conservation Officer

Enc.
Andy Robinson - Senior Conservation Officer
Louise Gunstensen - Senior Conservation Planner

Our Ref: 2175
Your Ref: ECU00003298

Magnus Hughson
Energy Consents Unit
The Scottish Government
5 Atlantic Quay, 150 Broomielaw
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G2 8LU

SEPA email contact:
planning.sw@sepa.org.uk

25 August 2021

By email only to: Econsents_Admin@gov.scot

Dear Magnus

Electricity Works (EIA) (Scotland) Regulations 2017
Scoping Opinion for the Cruachan Expansion Project

Thank you for consulting SEPA for an Environmental Impact Assessment (EIA) scoping opinion for the Cruachan Expansion Project on 20 July 2021.

We understand the proposed development seeks to optimise the use of the existing Cruachan Reservoir and Dam and there are no plans to increase the storage capacity of the existing reservoir. This is to involve the installation of a new intake structure, underground waterway system, tunnels, powerhouse and lower control works in Loch Awe. Above ground works are limited to site access, substation, administration buildings and quayside on Loch Awe for transport of equipment and storage of excavated spoil. Temporary works involving the diversion of the A85, a section of the quayside and compounds are also proposed.

We have reviewed the EIA Scoping Report and do not consider sufficient information has been provided justify scoping waste management out of the EIA. It is estimated the project will generate 1.2 million tonnes of material during the construction phase (peaking at 2,500 tonnes per day). This is a significant volume of spoil which will require an onward use. Schedule 4 of the Electricity Works (EIA) (Scotland) Regulations 2017 requires the EIA Report to include:

- An estimate of '*quantities and types of waste produced during the construction and operation phases*'; and
- A description of the likely significant effects on the environment resulting from the disposal and recovery of waste.

It is our view, given the significant volume of material that will be generated, that this should be assessed in the EIA and include a clear plan of how and where the material will be used.

Beyond this, we can confirm we are satisfied with the scope of the assessment in relation to other issues in our remit. We acknowledge it is intended to scope the following issues out of the EIA:

- Changes to the hydrological regime of Cruachan Reservoir and Loch Awe;
- Natural watercourses and aqueduct connections draining into Cruachan Reservoir; &
- Watercourses draining into Loch Awe – River Orchy, River Awe.

Based on the information provided we have no concerns with this approach although we recommend that the rationale, and supporting assessment, is reported in the EIA.

Our full scoping advice is enclosed in Appendix 1 below. To **avoid delay or potential objection** we request the EIA address these issues.

We acknowledge we have not been able to contribute to the project at the early consultation stages due to the cyber attack. We would therefore welcome engagement with the applicant to discuss any of the issues raised in this letter or comment on draft EIA chapters prior to formal consultation as required.

If you have any queries relating to this letter, please contact us by email at planning.sw@sepa.org.uk.

Yours faithfully

Simon Watt
Senior Planning Officer
Planning Service

ECopy to: magnus.hughson@gov.scot

Disclaimer
This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our website planning pages.

Appendix 1: Detailed Scoping Requirements

Our EIA scoping requirements for the proposed development are set out below. There may be opportunities to scope out some of the issues. If that is intended, evidence should be provided in the EIA to support why an issue is not relevant **to avoid delay and potential objection.**

If there is a delay between scoping and the submission of the application then please refer to our website for our latest information requirements as they are regularly updated; current best practice must be followed. We would welcome the opportunity to comment on the draft submission. As we can process files of a maximum size of only 25MB the submission must be divided into appropriately named sections of less than 25MB each.

1. Waste Management

1.1. Table 5-1 of the Scoping Report indicates waste management is to be scoped out of the assessment. Instead, spoil arisings generated during the construction phase will be managed through the development and implementation an Outline Waste Management Plan (OWMP). This is to be presented as an appendix to the Ground Conditions Chapter of the EIAR. It is reported this will be a desk study and include consultation with parties which may be able to reuse the arisings (e.g. infrastructure developers, quarry and waste management operators). We support the preparation of the OWMP and the intended contents as set out in Section 7.7.7 – 7.7.12. However, it is not clear why it is not proposed to assess environmental effects of waste or to define the significance of waste impacts within the assessment itself.

1.2. Section 16.3 reports bulk wastes generated during construction will comprise an estimated 1.2 million tonnes of spoil from tunnelling and excavation (likely to take the form of inert rock 'chippings'). This is a significant volume of material. Onward use could lead to significant environmental effects and it is therefore fundamental that a use is identified at the earliest possible stage (i.e. prior to construction).

1.3. It is our expectation the EIA includes an assessment of the amount of spoil that will be generated, which should be demonstrated to be minimised as much as possible. This should also be accompanied by detailed proposals either for justifiable re-use on site (e.g. production of suitable concrete aggregates) or use or disposal elsewhere. This should include:

- Appropriate maps showing reuse proposals (volume and depth);
- Maps storage arrangements (including details of the heights and dimensions of each store, how long the material will be stored for etc) and associated temporary and permanent infrastructure; and
- If planned, details of how the material will be processed and suitability of the material any proposed use on site.

1.4. Given the volumes it is not appropriate that this is deferred to the construction phase of the development. There needs to be a clear idea of how and where the material will be used. It is our view this should be assessed in the EIA. Our clear preference is for the materials to be put to local beneficial use (e.g. SG/Transport Scotland funded infrastructure projects).

1.5. Any waste materials will need to be removed from the site and disposed of to a suitably licenced facility or made use of via a suitable waste management exemption. We understand that there may be significant transportation issues with removal of any of the material from the site so, although not an issue directly within our remit, we recommend that the assessment includes information on transport implications.

2. Impacts on the Water Environment

2.1. We are satisfied with the scope of the assessment in relation to impacts on water environment in terms of hydrology, water resources and water quality during the construction and operational phases of the proposed development as described in Section 8 of the Report.

2.2. We understand it is considered the proposed development would not have any likely significant effects on water levels or the hydrological regime of Loch Awe or Cruachan Reservoir. Changes to the hydrological regime of Cruachan Reservoir and Loch Awe is therefore scoped out of the assessment. Impacts on natural watercourses and aqueduct connections draining into Cruachan Reservoir and watercourses draining into Loch Awe have also been scoped out. As the project involves a change to the rate of abstraction rather than overall amount we agree it's unlikely to have a significant impact on surface waters and therefore have no concerns with these issues being scoped out of the EIA. We do suggest this rationale and associated background assessment is reported in the EIAR along with information on the change in abstraction regime proposed.

Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR)

2.3. The proposed scheme will require an authorisation from us under CAR. We therefore welcome the intention to twin track the CAR and Section 36 applications as stated in Section 1.2.2. This will help to ensure that any CAR requirements can be accommodated more easily when proposals are at their most fluid. Should the applications not be twin-tracked then the following details must be included in the submission to allow us to provide an indication of the potential consentability of the proposal under CAR:

a) The location and design of the intakes and outfalls and their impact upon the morphology of the water environment;
b) Compensation flow;
c) Fish Passages (note designing lower inlet with a smolt screen velocity of 0.3 m/s seems reasonable so as not to be attractive to fish);
d) Other relevant CAR or planning applications or consents for abstractions/hydro schemes; &
e) Sensitive water uses, water dependent species (including bryophytes) and ecosystems.

2.4. See Planning guidance on hydropower developments to assist in meeting these information requirements. More detailed guidance on CAR can be found on our hydropower web page.

2.5. The quayside infrastructure is also likely to require an engineering licence for construction of "*in-loch structures with total area of < or >500m^2*" although it may be possible to apply to vary the existing Water Resource licence and include this activity in that, assuming some of that infrastructure is permanent. Full details (including information regarding materials planned to form quay) will be required with the EIA to inform how this will be approached.

Other impacts on the water environment

2.6. Other elements of the scheme must be designed to avoid impacts upon the water environment. Where activities such as watercourse crossings, diversions or other engineering activities in the water environment cannot be avoided then the submission must include a map showing:

a) All proposed temporary or permanent infrastructure overlain with all lochs and watercourses;

b) A buffer of at least 10m drawn around each loch or watercourse. If this minimum buffer cannot be achieved each breach must be numbered on a plan with an associated photograph of the location, dimensions of the loch or watercourse, drawings of what is proposed in terms of engineering works; &
c) Detailed layout of all proposed mitigation including all cut off drains, location, number and size of settlement ponds.

2.7. If water abstractions or dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided. Further advice and our best practice guidance are available within the water engineering section of our website.

Pollution Prevention and Environmental Management

2.8. One of our key interests in relation to developments is pollution prevention measures during the periods of construction, operation, maintenance, demolition and restoration. A schedule of mitigation supported by the above site specific maps and plans must be submitted. These must include reference to best practice pollution prevention and construction techniques (for example, limiting the maximum area to be stripped of soils at any one time) and regulatory requirements. They should set out the daily responsibilities of ECOWs, how site inspections will be recorded and acted upon and proposals for a planning monitoring enforcement officer. Please refer to Guidance for Pollution Prevention (GPPs).

2.9. The applicant should be aware that authorisation may be required for discharges of water run-off from the construction site under CAR. This may be controlled under general binding rules or a construction site licence depending on the final details. Further information is available on our website.

3. Flood Risk

3.1. As there is no plan to build a second reservoir or increase the capacity of the existing Cruachan Reservoir no more water will be passed down to Loch Awe than at present although it is expected that it will be passed/pumped quicker. Section 8.6.3 states "*the overall changes in water level will be insignificant compared to the baseline volumes of water in both water bodies and the natural variability in water levels through rainfall, seasonal variations, run off and river inputs*".

3.2. While we welcome that the water levels will not be any higher in Loch Awe than at present, we recommend this, and the underpinning rationale, is reported in the EIAR so that people who live and work on the shores of the loch understand this more rapid variation in water levels. That said, we acknowledge the magnitude of water level change is stated as being normally negligible albeit the range allowed is up to c.20m.

3.3. We acknowledge Section 8 of the report references the correct legislation and all the correct SEPA guidance, covering flood risk, development management, land use vulnerability, climate change allowances, WEWS, CAR and Reservoirs Act. Therefore, the baseline understanding of issues and requirements seems sound.

3.4. The location of the new outlet works, and quay side on Loch Awe, is next to the existing works. It is noted by the scoping report that this area is at flood risk (according to SEPA maps) from high water levels in Loch Awe. It is stated that the developments here will be situated above the extreme loch level. Loch levels are primarily controlled by the Awe barrage to the west, which is owned and operated by SSE.

3.5. The potential for an increase in surface water runoff, due to temporary construction works and A85 road diversion, are recognised and it is for the Local Authority to be satisfied with such measures.

3.6. A Flood Risk Assessment (FRA) is to be undertaken in line with SPP and SEPA guidance. Whilst we welcome this and recommend (as per above) that loch level rate changes are considered, this development is classed as Essential Infrastructure in our Flood Risk and Land Use Vulnerability Guidance and is thus falls under our Flood Risk Standing Advice. As such, it is not our expectation that we would review any future FRA produced, unless specifically requested to do so by the Local Authority and/or Scottish Government.

4. Impacts on Groundwater

4.1. We note and welcome the intention to scope impacts on groundwater into the assessment.

4.2. Table 7-1 reports that no groundwater abstractions are known within 1km of the proposed infrastructure. Should this be confirmed to be the case then the EIAR can simply state this fact. If not, the EIA should demonstrate all existing groundwater abstractions are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m. Please refer to our Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions for further advice on the minimum information we require to be submitted.

5. Site Ecology

Disturbance and re-use of excavated peat and other carbon rich soils

5.1. We understand it is anticipated that the project will avoid impacts on peat and that a '*peat probing exercise will be carried out to confirm the absence of peat*'. Should this be confirmed then we expect the EIAR to report this. If peat is identified on site, we request the submission include:

a) A detailed map of peat depths (this must be to full depth and follow the survey requirement of the Scottish Government's Guidance on Developments on Peatland - Peatland Survey (2017)) with all the built elements (including peat storage areas) overlain to demonstrate how the development avoids areas of deep peat.
b) A table which details the quantities of acrotelmic, catotelmic and amorphous peat which will be excavated for each element and where it will be re-used during reinstatement. Details of the proposed widths and depths of peat to be re-used and how it will be kept wet permanently must be included.

5.2. Proposals must accord with Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste and our Developments on Peat and Off-Site uses of Waste Peat. Dependent on the volumes of peat encountered applicants must consider whether a full Peat Management Plan is required.

Groundwater Dependent Terrestrial Ecosystems (GWDTE)

5.3. We note updated habitat surveys are planned and that GWDTE are to be assessed in the EIA. Should GWDTE be identified on site the following information must be included in the submission:

a) A map demonstrating that all GWDTE are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m; &
b) If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all GWDTE affected.

5.4. Please refer to our Guidance on Assessing the Impacts of Development Proposals on GWDTE for further advice and the minimum information we require to be submitted.

6. Decommissioning

6.1. We acknowledge the Proposed Development is considered to be permanent and therefore the assessment of effects associated with decommissioning have been scoped out of the EIA.

Scottish Forestry - Consultation Response

From: Jamieson E (Elaine)
Sent: 11 August 2021 17:02
To: Econsents Admin
Subject: RE: Section 36 scoping - Cruachan Expansion Project
Attachments: Scottish Forestry SCOPING OPINION -Cruachan expansion.docx

Please find attached scoping opinion from Scottish Forestry. I will be happy to discuss further with the applicant if that is helpful.

Regards
Elaine

Elaine Jamieson
Operations and Development Officer
Scottish Forestry

Perth & Argyll Conservancy | Upper Battleby, Redgorton | Perth | PH1 3EN
Mobile: REDACTED
elaine.jamieson@forestry.gov.scot

Website: forestry.gov.scot
@scotforestry

Scottish Forestry / Coilltearachd na h-Alba

Scottish Forestry is the Scottish Government agency responsible for forestry policy, support and regulation.

In light of the ongoing public health advice to reduce unnecessary social contact during the outbreak of Covid-19, we have activated our Business Continuity Plan. More information can be found on our website.

BRAVE values are the roots that underpin Scottish Forestry, to create a workplace where our staff, and the people we work with, feel valued, supported and respected.

Be professional, **R**espect others, **A**ct with honesty and integrity, **V**alue teamwork and collaboration and **E**ncourage innovation and creativity.

Scottish Forestry

Scoping Opinion – PROPOSED SECTION 36 APPLICATION FOR CRUACHAN EXPANSION PROJECT

Forestry and Woodlands

Scotland's forests make a substantial contribution to the economy at both national and local levels, they provide considerable environmental benefits and help to improve people's quality of life. The Scottish Government aims to maintain and enhance Scotland's forest and woodland resources for the benefit of current and future generations. To achieve this, we need to prevent inappropriate woodland losses (Scotland's Forestry Strategy, 2019).

The third National Planning Framework also recognises that Scotland's woodlands and forestry are an economic resource, as well as an environmental asset. The Climate Change Plan places emphasis on the fact that Scotland's woodlands deliver a wide range of benefits, including inward investment and jobs, climate change adaptation and mitigation, and the enhancement of the health and well-being of Scotland's communities. The Scottish forestry sector is worth almost £1 billion per year and employs over 25,000 people.

There is therefore a strong presumption in favour of protecting Scotland's woodland resources and the Scottish Government provides policy direction in the policy on control of woodland removal. Woodland removal should be kept to a minimum and where woodland is felled it should be replanted. The policy supports woodland removal only where it would achieve significant and clearly defined additional public benefits. In some cases, including those associated with development, a proposal for compensatory planting may form part of this balance.

The criteria for determining the acceptability of woodland removal is explained in the policy and the applicant should take them into account when preparing the proposal. Beyond this, the applicant should refer to guidance documents issued by Scottish Forestry (and previously by Forestry Commission- FC) in relation to good forestry practice and sustainable forest management.

Woodland Management and tree felling
Where woodland removal is proposed for development, the relevant Environmental Impact Assessment (EIA) regulations will apply and the EIA Report should justify and provide evidence for the need for woodland removal and the associated mitigation measures.

The first consideration for the applicant should be whether the underlying purpose of the proposal can reasonably be met without resorting to woodland removal. Design approaches that reduce the scale of felling required to facilitate the development must be considered and integration of the development with the existing woodland structure is a key part of the consenting process.

Integration of the project into future forest design plans is a key part of the development process. **The removal of large areas of woodland will not be supported.** When a proposed development or infrastructure requires to go through forestry, consideration should be given to forest design guidelines. The EIA Report should include a stand-alone chapter on 'Woodland management and tree felling' (a forest plan) prepared by a suitably qualified professional and supported by existing records, site surveys and aerial photographs. In order to present the relevant information about the forest and to secure compliance with the UK Forestry Standard, the applicant should consider the appropriate scope/scale for such plan.

In certain cases a forest plan of the proposed development area only is not appropriate. The applicant should consider the whole ownership, or multiple ownerships, or expands the scope of the forest plan so that to present the relevant information about that forest. Details of the proposed mitigation measures must be included in the EIA Report, not left to post-consent habitat management plans (or others) to decide and implement.

The chapter should describe and recognise the social, economic and environmental values of the forest and the woodland habitat and take into account the fact that, once mature, the forest would have been managed into a subsequent rotation, often through a restructuring (re-designing) proposal, according to the UK Forestry Standard, that would have increased the diversity of tree species and the landscape design of the forest.

The chapter should describe the baseline conditions of the forest, including its ownership. This will include information on species composition, age class structure, yield class and other relevant crop information. The chapter should describe the changes to the forest structure, the woodland composition and describe the work programme:

- the proposed areas of woodland for felling to accommodate the proposed infrastructures, including access roads, tracks, underground pipes and cables and any ancillary structures. Details of the area to be cleared around those structures should also be provided, along with evidence to support the proposed scale and phasing of felling;

- trees felled must be replanted on-site or compensated for (off-site planting) and these areas must be clearly identified in the plan. On-site replanting must always be considered first. The replanting operations must be appropriately described, including changes to the species composition, age class structure, timber production and traffic movements. Tree/shrub species must be suited to the site and the objectives of management;

- areas of open ground in the forest that are designed for biodiversity or landscape enhancement or for recreation opportunities should not be considered for on-site replanting (to compensate for woodland removal in other parts of the forest).

The applicant should consider the potential cumulative impact of existing and the proposed development on the forest resource in respect to the local and regional context. In particular consideration must be given to the implication of felling operations on such things as habitat connectivity, biodiversity, water management, landscape impact, impact on timber transport network and forestry policies included in the local and regional Forestry and Woodland Strategies and local development plans.

A long term forest plan should be provided as part of the EIA Report (as a technical appendix for context) to give a strategic vision to deliver environmental and social benefits through sustainable forest management and describes the major forest operations over a 20 years period.

UK Forestry Standard

The UK Forestry Standard is the Government's reference standard for sustainable forest management in the UK and provides a basis for regulation and monitoring. The Scottish Government expects all forestry plans and operations in Scotland to comply with the standards. Both felling operations and on and off-site compensatory planting must be carried out in accordance to good forestry practice- the EIA Report must clearly state that the project will be developed and implemented in accordance with the standard. A key component of this is to ensure that even-age woodlands are progressively restructured in a sustainable manner: felling coupes should be phased to meet adjacency requirements and their size should be of a scale which is appropriate in the context of the surrounding woodland environment.

Scottish Forestry

On the 1st of April 2019 Forestry Commission Scotland transferred into a new agency of Scottish Government called Scottish Forestry, responsible for forestry policy, support and regulation.

Scottish Forestry is the main forestry consultee and should be consulted throughout the development of the proposal to ensure that proposed changes to the woodland are appropriate and address the requirements of policy on control of woodland removal and the principles of sustainable forest management.

It is important that pre-application discussions takes place with the local Scottish Forestry Conservancy office, the planning authority and other relevant key agencies, at the earliest possible stage of the project, to ensure all parties have a shared understanding of the nature of the proposed development, information requirements and the likely timescale for determination. This collaborative approach will ensure that all forestry issues are identified and mitigated at the earliest opportunity. The applicant should allow sufficient time in their project plan to accommodate such advice.

Thursday, 22 July 2021

Local Planner
Energy Consents Unit
5 Atlantic Quay
Glasgow
G2 8LU

Development Operations
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
Glasgow
G33 6FB

Development Operations
Freephone Number - 0800 3890379
E-Mail - DevelopmentOperations@scottishwater.co.uk
www.scottishwater.co.uk

Dear Sir/Madam

SITE: Cruachan Expansion Project, Loch Awe, PA33 1AN
PLANNING REF: ECU00003298
OUR REF: DSCAS-0044893-ZL5
PROPOSAL: Hydro Renewable (Generating station increase of >500 MW Capacity)

Please quote our reference in all future correspondence

Audit of Proposal

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced and would advise the following:

Drinking Water Protected Areas

A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.

Surface Water

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system.

There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection

request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- Scottish Water asset plans can be obtained from our appointed asset plan providers:
    - Site Investigation Services (UK) Ltd
    - Tel: 0333 123 1223
    - Email: sw@sisplan.co.uk
    - www.sisplan.co.uk
- Scottish Water's current minimum level of service for water pressure is 1.0 bar or 10m head at the customer's boundary internal outlet. Any property which cannot be adequately serviced from the available pressure may require private pumping arrangements to be installed, subject to compliance with Water Byelaws. If the developer wishes to enquire about Scottish Water's procedure for checking the water pressure in the area, then they should write to the Customer Connections department at the above address.
- If the connection to the public sewer and/or water main requires to be laid through land out-with public ownership, the developer must provide evidence of formal approval from the affected landowner(s) by way of a deed of servitude.
- Scottish Water may only vest new water or waste water infrastructure which is to be laid through land out with public ownership where a Deed of Servitude has been obtained in our favour by the developer.
- The developer should also be aware that Scottish Water requires land title to the area of land where a pumping station and/or SUDS proposed to vest in Scottish Water is constructed.
- Please find information on how to submit application to Scottish Water at our Customer Portal.

Next Steps:

- ### All Proposed Developments

  All proposed developments require to submit a Pre-Development Enquiry (PDE) Form to be submitted directly to Scottish Water via our Customer Portal prior to any formal Technical Application being submitted. This will allow us to fully appraise the proposals.

  Where it is confirmed through the PDE process that mitigation works are necessary to support a development, the cost of these works is to be met by the developer, which Scottish Water can contribute towards through Reasonable Cost Contribution regulations.

- ### Non Domestic/Commercial Property:

Since the introduction of the Water Services (Scotland) Act 2005 in April 2008 the water industry in Scotland has opened to market competition for non-domestic customers. All Non-domestic Household customers now require a Licensed Provider to act on their behalf for new water and waste water connections. Further details can be obtained at www.scotlandontap.gov.uk

Trade Effluent Discharge from Non Dom Property:

- Certain discharges from non-domestic premises may constitute a trade effluent in terms of the Sewerage (Scotland) Act 1968. Trade effluent arises from activities including; manufacturing, production and engineering; vehicle, plant and equipment washing, waste and leachate management. It covers both large and small premises, including activities such as car washing and launderettes. Activities not covered include hotels, caravan sites or restaurants.
- If you are in any doubt as to whether the discharge from your premises is likely to be trade effluent, please contact us on 0800 778 0778 or email TEQ@scottishwater.co.uk using the subject “Is this Trade Effluent?". Discharges that are deemed to be trade effluent need to apply separately for permission to discharge to the sewerage system. The forms and application guidance notes can be found here.
- Trade effluent must never be discharged into surface water drainage systems as these are solely for draining rainfall run off.
- For food services establishments, Scottish Water recommends a suitably sized grease trap is fitted within the food preparation areas, so the development complies with Standard 3.7 a) of the Building Standards Technical Handbook and for best management and housekeeping practices to be followed which prevent food waste, fat oil and grease from being disposed into sinks and drains.
- The Waste (Scotland) Regulations which require all non-rural food businesses, producing more than 50kg of food waste per week, to segregate that waste for separate collection. The regulations also ban the use of food waste disposal units that dispose of food waste to the public sewer. Further information can be found at www.resourceefficientscotland.com

I trust the above is acceptable however if you require any further information regarding this matter please contact me on **0800 389 0379** or via the e-mail address below or at planningconsultations@scottishwater.co.uk.

Yours sincerely,

Pamela Strachan
Development Operations Analyst
Tel: 0800 389 0379
developmentoperations@scottishwater.co.uk

Scottish Water Disclaimer:

“It is important to note that the information on any such plan provided on Scottish Water’s infrastructure, is for indicative purposes only and its accuracy cannot be relied upon. When the exact location and the nature of the infrastructure on the plan is a material requirement then you should undertake an appropriate site investigation to confirm its actual position in the ground and to determine if it is suitable for its intended purpose. By using the plan you agree that Scottish Water will not be liable for any loss, damage or costs caused by relying upon it or from carrying out any such site investigation."

B51

Development Management and Strategic Road Safety
Roads Directorate

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF
Direct Line: REDACTED , Fax: 0141 272 7350
gerard.mcphillips@transport.gov.scot

TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

Magnus Hughson
Energy Consents Unit
The Scottish Government
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Econsents_Admin@gov.scot

Your ref:
ECU00003298

Our ref:
GB01T19K05

Date:
04/08/2021

Dear Sirs,

ELECTRICITY ACT 1989

THE ELECTRICITY (APPLICATIONS FOR CONSENT) REGULATIONS 2017

REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR CRUACHAN EXPANSION PROJECT

With reference to your recent correspondence on the above development, we acknowledge receipt of the EIA Scoping Report (SR) prepared by Stantec UK Ltd in support of the above development.

This information has been passed to SYSTRA Limited for review in their capacity as Term Consultants to Transport Scotland – Roads Directorate. Based on the review undertaken, we would provide the following comments.

Proposed Development

The Cruachan Expansion Project (CEP) comprises the development of a new underground power station and associated infrastructure on land around and to the east of the existing Cruachan 1 Power Station, approximately 8km west of Dalmally in Argyll and Bute. We understand that the site is accessed via a link road to the A85(T).

The existing Cruachan Power Station pumped storage facility has a maximum generating capacity of 440MW and the proposals will provide up to 600MW of new generating capacity, resulting in a combined generating capacity of up to 1,040 MW. The CEP will be operated independently of the existing 440 MW Cruachan 1 Power Station. We note that the construction process will take approximately 65 months to complete and will include a tailrace tunnel under the A85(T) and a temporary diversion of the A85(T) onto a temporary quayside platform on Loch Awe.

Transport Scotland would state that any proposed changes to the trunk road network must be discussed and approved (via a technical approval process) by the appropriate Area Manager. At the application stage, we would advise that 1:500 scale plans of any amendments to the trunk road should be submitted. Given the potential scale of the temporary works to the A85(T), we would recommend early engagement on this item and early submission of concept plans so that the matter can be considered and input provided. It would be helpful to engage with the Area Manager for the A85(T) in this regard who is Neil MacFarlane. Neil can be contacted on neil.macfarlane@transport.gov.scot or REDACTED .

Assessment of Environmental Impacts

Chapter 10 of the SR presents the proposed methodology for the assessment of the impact of the Traffic and Transport associated with the construction of the CEP.

This states that a supporting Transport Assessment (TA) will be prepared as an Appendix to the EIA Report, which will be subject to separate a scoping process with Transport Scotland. Transport Scotland would state that the application will require to be accompanied by a Stage 1 Safety Audit, and that the TA will require to address both capacity and safety issues.

We note that traffic counts were undertaken in 2017 at the following locations:

- A85(T) – West of the power station and visitor centre accesses
- A85(T) – East of dam access road
- A819 – South of A85(T) junction
- A85(T) – East of B8074 Glen Orchy Road
- A82(T) – Between A85(T) junction and north of Tyndrum
- A82(T) – North of A85(T) junction

The SR indicates that peak construction year base traffic flows will be derived from comparing the 2017 surveyed flows with ATC counts derived from the site on the A85(T) to the west of the development. Transport Scotland would state that the use of NRTF low growth factors would be acceptable in this instance.

The SR states that comparisons between baseline traffic flows and estimates of likely traffic flows on potentially affected roads will be made. It will then be established whether significant effects would be derived. It also states that that the thresholds as indicated within the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic are to be used as a screening process for the assessment. These specify that road links should be taken forward for assessment if:

- Traffic flows will increase by more than 30%, or
- The number of HGVs will increase by more than 30%, or
- Traffic flows will increase by 10% or more in sensitive areas.

This screening process should include the A82(T) junctions as well as the A85(T). We note that the assessment will be based upon the worst-case 'all by road' scenario, in terms of the amount of rock to be moved by road. Transport Scotland is in agreement with this approach.

It is noted that any impacts associated with the operational phase of the development are to be scoped out of the EIA. We would consider this to be acceptable in this instance.

Abnormal Loads Assessment

We note that Abnormal Indivisible Loads (AIL) will be required during construction. No mention is made of the potential Port of Entry for such loads, however, Transport Scotland would state that if the Port of Cambeltown is proposed, we would draw specific attention to the known pinch points located on the A83(T) at the Crinan Canal / Ardrishaig Basin (swing bridge), and the mini roundabout junction of the A83(T) with the A816. There are also some significant constraints on the routes from the west which would need to be considered.

Transport Scotland will require to be satisfied that the size of AILs proposed can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path.

A full Abnormal Loads Assessment report should be provided with the EIAR that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken at identified pinch points and details provided with regard to any required changes to street furniture or structures along the route.

I trust that the above is satisfactory and should you wish to discuss any issues raised in greater detail, please do not hesitate to contact myself or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on REDACTED .

Yours faithfully

REDACTED

Gerard McPhillips

Transport Scotland
Roads Directorate

cc Alan DeVenny – SYSTRA Ltd.

Glenorchy & Innishail Community Council - Consultation Response

From: Redacted
Sent: 03 September 2021 11:52
To: Econsents Admin
Cc: Redacted
Subject: Glenorchy & Innishail Community Council: Response to Cruachan II Scoping Report
Attachments: Glenorchy & Innishail Community Council - response to Cruachan II Scoping Report.pdf

Please find attached the response from Glenorchy & Innishail Community Council in relation to the Scoping Report for Cruachan II.

Apologies for the late submission.

Regards

Catriona O'Keeffe

Treasurer & Panel Member of Glenorchy & Innishail Community Council

Catriona O'Keeffe, Treasurer and Panel Member
Glenorchy & Innishail Community Council
Blarghour Farm
By Dalmally
Argyll PA33 1BW

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Cruachan II – G&ICC Response to Scoping Report

There is concern within the Glenorchy & Innishail community about the construction and operation of Cruachan II with regards to:

- control of the water level of Loch Awe and destruction of water margins
- disruption to the Lochawe and Dalmally communities during construction
- Regular energizing of the Scottish Power transmission line over the houses, village shop and school in Glenview, Dalmally

Loch Levels
Over the past 20 to 25 years the shoreline has receded greatly especially in west facing areas with drops of 1ft from surviving grass margins to the pebbly shore in places and trees sitting in water and being undermined as the loch sits at higher artificial levels from 1st March to 1st December (Summer Control Levels).

During the 'Summer Control Level' period, the raised loch also backs further up the River Orchy. Even after a month of dry weather in the spring, Dalmally Golf Club can still be troubled with soggy fairways due to the raised water table. Then when it rains, the Orchy flowing into an already high loch quickly backs up causing flooding in the surrounding crofts and the golf club.

Summer levels are also often a concern for farmers around the loch as silage crops near harvest time. With the loch already lapping the top of grass margins, only a little rain is needed to quickly flood low lying fields.

Summer of 2021 is proving to be the exception and over this dry summer the shore around the loch has been enjoyed by a large number of campers, fields have remained dry and Dalmally Golf Course has never been in better condition.

G&ICC ask that consideration be given to the community around Loch Awe and the impact that the artificially controlled loch level has on the land around the loch. What effect will the operation of another pumped storage scheme have on what to us as a community is Loch Awe, the longest freshwater loch in Scotland, but to DRAX and SSE is the Loch Awe Reservoir.

Disruption during Construction

The scoping report does acknowledge that there will be significant disruption to the local communities of Lochawe and Dalmally. It is hoped that all mitigation measures to minimise disturbance to the community will be implemented and that the community will be supported throughout.

Regular Energising of the Scottish Power Transmission Line over Glenview

The Scottish Power Transmission Line which crosses over Glenview, close to houses, the school and local shop is currently little used, so talk of transmitting electricity through this pylon line on a more regular basis is very worrying.

All the health worries associated with living under pylon cables are very real to Glenview, as many of the early residents succumbed to cancers and died within a few short years of each other. To hear that this line might be used more often, again putting the health of this fragile rural community at risk, is very concerning.