

**This report is a recommended response to the Scottish Government's Energy Consents and Deployment Unit (ECDU) Section 36 consultation regarding the proposed expansion of Cruachan Hydro Pump Storage Power Station**

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**Reference No:** 22/01221/S36 (ECU REF:00004492)

**Applicant:** The Scottish Government on behalf of Drax Cruachan Expansion Limited

**Proposal:** Electricity Act Section 36 consultation relevant to construction and operation of new underground power station and associated infrastructure adjacent to Cruachan 1 to provide up to 600 megawatts (MW) of additional new generating capacity

**Site Address:** Cruachan Power Station, Lochawe, Dalmally

Members are requested to note that as the Planning Authority are only a Consultee in respect of S36 Electricity Act proposals. The website containing all application documents, external consultee responses and third party representations can be found on the Energy Consents Unit website, operated on behalf of the Scottish Ministers at the link below:

[Scottish Government - Energy Consents Unit - Application Details](#)

Clicking the documents tab will open a page where the application documents, consultation responses and third party representations/objections can be viewed.

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**(A) Section 36 application made up of the following elements:**

The Proposed Development will comprise the following main elements:

- Upper Control Works – A new intake structure would be located within and adjacent to the Cruachan Reservoir to direct water into a new tunnel and underground waterway system;
- Underground Waterway System – A series of underground shafts and tunnels carrying water between the upper reservoir and lower reservoir, directed through the underground powerhouse cavern;
- Powerhouse Cavern - A series of underground caverns containing turbines and generators which will use water to produce electricity;
- Substation – The existing substation compound requires to be extended in order to provide a suitable connection to the existing overhead circuits that connects to Dalmally sub-station, located some 7km to the east.
- Ventilation Shaft – A ventilation shaft will be required to circulate fresh air through the underground access tunnel and cavern power station complex.
- Tailrace Tunnel – A concrete-lined low-pressure tunnel will conduct water between the turbines and Loch Awe, the lower reservoir.
- Lower Control Works – Comprising screened inlet / outlet structure, positioned in Loch Awe at the end of the tailrace tunnel below the water level. These structures would channel water in and out of Loch Awe;

- Quayside – Constructed on the northern shore of Loch Awe to facilitate the construction of the underground access tunnels, waterway system and powerhouse cavern, and the temporary storage of spoil prior to its off-site removal; The quayside would also house a canopy structure, covering the stockpiles of spoil. The canopy structure would be enclosed on 3 sides by brick / concrete walls and have a corrugated roof. The primary purpose of this structure would be to prevent silt from stockpiles mobilised by wind /rainfall from entering Loch Awe and the surrounding landscape.
- Administration building - above ground administration and workshop buildings required for day to day operational and maintenance tasks – located on the quayside;
- Storage Buildings - above ground buildings required for storage and plant and equipment required for regular plant maintenance – located on the quayside
- Access Tunnels – A main access tunnel of some 1450m in length would be constructed to provide access to the underground power plant, close to the shore of Loch Awe. This will cross connect to the existing Cruachan 1 to allow personnel to easily move between the plants and provide a further means of access/egress.

(ii) Other specified operations

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

- An upper site compound to be used for construction laydown and concrete batching plant 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 will be established to the North East of Lochawe village, with access from the junction of the A85 and B8077 (Stronmilchan Road) (as shown on Figure 1.1 in Appendix A). Once construction work is complete, this compound would be removed and the land restored. The total area required for this compound would be approximately 9ha;

**(B) RECOMMENDATION:**

**Officers recommend that Members agree that the Council does not object, subject to the conditions as recommended by the Planning Authority and other consultees.**

**Officers also seek Member’s authority to undertake further discussions with the applicants and The Scottish Ministers to determine whether a planning condition or a Section 69 agreement between parties would most effectively address the Council’s requirement for the necessary Housing Strategy to be delivered.**

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**(C) CONSULTATIONS:**

**ENERGY CONSENT UNIT RESPONSES:**

**NatureScot** (Dated 5.7.22 & 16.1.23) No Objection subject to appropriate mitigation measures recommended being undertaken. Previous holding Objection withdrawn.

Response Dated 5.7.22

*The Proposal is within the Loch Etive Woods Special Area of Conservation (SAC) and the Coille Leitire Site of Special Scientific Interest (SSSI). The Proposal could*

affect internationally important natural heritage interests and **we therefore object to this Proposal until further information is provided**. This objection is due to a lack of information in the Environmental Impact Assessment Report (EIAR) and the supporting shadow Habitats Regulation Appraisal (HRA) of the Proposal in relation to the Loch Etive Woods SAC.

Response dated 16.1.23

NatureScot had a holding objection in relation to the Loch Etive Woods Special Area of Conservation (SAC) regarding potential impacts on the western acidic oak woodland. Given the location of the Proposal we considered the potential impacts on the woodland included: disturbance of the typical species, damage/ disturbance to the typical species through the process of widening the road and generally increased levels of noise and disturbance, and loss of qualifying habitat through the widening of the existing road..... The Proposal is located within the Loch Etive Woods Special Area of Conservation and the Coille Leitire Site of Special Scientific Interest (SSSI).

The Proposal could be progressed with appropriate mitigation. However, the Proposal could adversely affect natural heritage interests of national importance, and we therefore object to it unless it is made subject to the measures we have identified.

Mitigation: - The production of a Construction Method Statement, detailing road stabilisation techniques and the retaining structures, prior to the commencement of the Proposal. This should be agreed with NatureScot and Energy Consents Unit.

The appraisal we carried out primarily considered the impact of the Proposal on the following conservation objectives for the western acidic oak woodland of the Loch Etive Woods SAC: -

- 2a. Maintain the extent and distribution of the habitat within the site; -
- 2b. Restore the structure, function and supporting processes of the habitat; and –
- 2c. Maintain the distribution and viability of typical species of the habitat.

Our advice in relation to the SAC above also applies to the upland oak woodland interest of the Coille Leitire Site of Special Scientific Interest (SSSI)....

Glen Etive and Glen Fyne Special Protection Area (SPA)

Our advice is that it is unlikely that the proposal will have a significant effect on the qualifying interest either directly or indirectly. An appropriate assessment is therefore not required. The Proposal is in a location where disturbance is unlikely and is further mitigated by no above ground works during the breeding season. In addition, the amount and location of habitat loss is not significant.

**Transport Scotland (TS)** (Dated 25.11.22 & 9.1.23): No Objection subject to conditions.

In July 2022, Transport Scotland wrote to the applicant seeking clarification on a number of areas. A meeting was held between the applicant team and Transport Scotland to discuss the submitted information. This led to the submission of further information by the applicant to Transport Scotland on a number of items and a further technical meeting was held in October 2022.

Temporary Traffic Management on A85(T) The EIAR states that construction of the main access tunnel portal will require temporary traffic management on the A85(T). It was initially proposed to redirect the A85(T) using a temporary build out on the loch

foreshore, however, further information has been submitted to justify discounting this approach due to the additional material and construction timescale required to form this option. We note that it is now proposed to utilise the existing informal layby on the A85(T) which is currently used as parking for the Falls of Cruachan railway station as well as for hill walkers, to form a temporary realignment to the north of the existing A85(T), generally as illustrated on Stantec Drawing 331201086/001/C/0862. We also note that at a width of 4.7m, the use of this layby will result in the need for one-way signalised shuttle workings, lasting for approximately 3-4 months. Transport Scotland has indicated a desire for two-way operation to be retained at this location during the construction period and discussions continue on what might be possible at this location and the applicant is currently considering alternative options. The applicant has also indicated that whilst traffic management is in place on the A85(T), replacement public parking and access will be provided within the existing Visitor Centre car park. The details of this and the provision of appropriate pedestrian linkages along and across the A85(T) will require to be agreed. With regard to the current application, Transport Scotland is content that this aspect is covered by a Planning Condition and that the details of the temporary diversions and construction methodology affecting the A85(T) will be dealt with post-consent(should planning consent be awarded).

....We note, however, that the installation of the signals and the shuttle working has not been subject to any RSA at this stage. Transport Scotland will require a Road Safety Audit to be undertaken for these works and submitted to the Area Manager. This will require to be undertaken as part of the detailed design process for the traffic management arrangements

*Abnormal Loads Assessment An Abnormal Indivisible Loads Assessment (AILA) has been provided within the TA. This states that it is a preliminary assessment and that detailed AIL access route assessments will be undertaken for each required AIL at the time of the programmed movement dates, once the specification / dimensions of those loads are known. We note that the Port of Entry for components has yet to be finalised, and as such, the AIL route has yet to be finalised. Potential ports and associated routes have been identified, however, as the A85(T) and A82(T) connect directly to the site from the east and the west, constraints on these two sections have been identified within the AILA based upon a preliminary desktop study. This assessment has identified numerous height, width and weight restrictions on the A85(T) and A82(T) between Oban and Crianlarich, all of which could require further investigation and potential mitigation. We note that the AILA states that a transformer of a similar dimension and weight to the one assumed in the assessment was successfully transported to Cruachan Power Station from Longannet Power Station in Fife. This AIL was transported during the night via the M876, M9, A84(T), A85(T), A82(T) and A85(T). This required police escort, road closures on the A82(T) between Crianlarich and Tyndrum and the temporary reinforcement of a bridge at Inverherive. We understand that similar measures may be required during the delivery of AILs for the current application and these would be assessed as part of future detailed AIL assessments. Having discussed this issue with the applicant, Transport Scotland is content that the issue of transporting AILs can be covered by appropriate Planning Conditions.*

(Members are requested to note that the conditions requested by TS have been set out in the Appendix A at the appropriate section relating to Transportation matters).

#### **Marine Scotland Science (MSS) (Dated 25.10.22) No Objection**

*We advise that baseline fish population surveys should be carried out on the River Awe and other watercourses potentially impacted from the proposed development. Surveys should take place annually for at least 12 months prior to construction, during*

construction and for the first three years in the operational phase to monitor any changes in the fish populations and habitat throughout the construction and operation period.

MSS welcome the proposed Fish Monitoring and Management Plan (FMMP) and note that a smolt tracking study will be undertaken prior to the operational phase of the proposed development. MSS advise that this study should commence prior to construction taking place to gain baseline data on the outward migration of smolts from the River Orchy via Loch Awe, past the proposed development and to continue for at least two years of the operational phase of the development.

MSS welcome the proposed gill netting to exploit a larger survey area and to ascertain fish populations on both Loch Awe and Cruachan Reservoir. MSS advise that other techniques, that are less stressful on fish populations, should also be considered e.g. eDNA analysis.

MSS welcome the proposed mitigation measures including the appointment of an Ecological Clerk of Works, the use of an appropriately designed guidance system to minimise fish swimming towards the inlet/outlet, avoiding the smolt migration period when carrying out piling works, appropriately designed screens, controlling water velocities at inlet/outlet screens to not exceed  $0.3 \text{ m.s}^{-1}$ , regular cleaning of screens (SEPA state in their comments that fish screening will be considered at the CAR stage of the application), limiting artificial lighting to a distance of 10 m from waterbodies, a pollution prevention plan and a biosecurity management plan.

MSS welcome the proposed erosion prevention and sediment control plan and Construction Phase Surface Water management Plan the aim of which is to reduce the impacts on water quality and prevent hydro-morphological changes to surface water features during construction. MSS advise that these plans should also consider the potential impact associated with the release of concrete, sediment, fuel /hydrocarbons and acidic leachates (as highlighted by SEPA in their response) on the water quality and fish populations.

The resilience of fish populations to the potential impacts should be considered in the EIA report, particularly due to the large scale of this proposal. There is good information available on the resilience and state of the salmon population throughout Scotland

(Additional information provided on these matters in FEI on 14.12.22)

**National Grid** (Dated 8.6.22) No Objection

No assets in the area.

**Scottish Water** (Dated 10.6.22) No Objection

There is currently sufficient capacity in the DALMALLY Water Treatment Works to service your development. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us

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.

**Royal Society for the Protection of Birds Scotland (RSPB)** (Dated 24.6.22) No Objection

*RSPB Scotland is in broad support of the findings and proposed mitigation measures outlined in the Applicant's Environmental Impact Assessment Report (EIAR) and raises no objection to the Proposed Development.*

*RSPB Scotland is satisfied that appropriate avoidance and mitigation measures have been put forward to minimise impact, and that the Habitat Restoration and Landscape Mitigation Plan (to be produced prior to commencement of works) will include the restoration of disturbed peat, leading to insignificant residual negative effects.*

*Further, in respect of addressing Adverse significant effects at the Site level on oak and birch woodland (also known as Atlantic Oakwood, or Scotland's Rainforest) RSPB Scotland is pleased to note that both like-for-like replacement, additional tree planting and the facilitation of natural regeneration through browser exclusion will be outlined in the Habitat Restoration and Landscape Mitigation plan.*

**Argyll District Salmon Fishery Board** (Dated 28.6.22) No Objection but request additional matters should be considered by EIA

*We welcome the inclusion of the chapters on Hydrology and Ecology which should include Fishery management interests. However, the survey work carried out on Loch Awe and the Cruachan Reservoir, summarised on page 119 in the report do not fully cover our concerns of entrapment of fish, specifically salmon smolts as they migrate past the scheme intake in spring.*

*On the basis that the scheme has historically entrapped fish, we ask that this should be considered by the EIA. This is especially important when considering that some 90 % of Atlantic salmon smolts in the catchment migrate from the River Orchy and other tributaries around Loch Awe and will pass the intake for the scheme. Consequently, we will need to be assured that all measures are put in place to ensure that smolts and other fish are not drawn into the hydro scheme.*

(Additional information provided on these matters in FEI on 14.12.22)

**Scottish Environment Protection Agency (SEPA)** (Dated 30.8.22 & 20.1.23)  
Holding Objection based on lack of information.

30.8.22 Response

*We have reviewed the information supplied with the EIAR and have found it to be insufficient to allow us to determine the potential impacts. We therefore submit a holding objection and request determination be deferred until further information is provided in relation to hydrogeological / groundwater issues, site ecology and flood risk as detailed in Sections 1, 4 and 5 below. We will review our position if these issues are adequately addressed.*

*Although EIAR Section 14.9.20 reports it is not anticipated there will be any barriers to finding parties and businesses able to accept the materials we understand further market assessment is required to identify and investigate a local market option. As such there is no clarity on the locally viable option for the material within 5 miles.*

*We support the intention produce a Site Waste Management Plan (SWMP) and that this is to remain a live document throughout the duration of the construction period. We request a planning condition requiring the preparation of a full SWMP once design and contracting elements of the project are confirmed. We agree this should build on the information provided in the EIA and specifically, given the potential implications for its storage and the reuse potential of the material, this will also need to be informed by the outcome of further assessments required in relation to the potential for the geology at the site to generate acidic leachates and acid rock drainage as discussed in Section 1 above and Appendix 2 enclosed.*

*4.1 We have concerns regarding the impact to groundwater dependent flush habitats, in the Lower Site Compound area and throughout Upper Works (particularly down the slopes leading into Cruachan Reservoir and down to the existing Access Track). The mapping provided in Figures 3.3 and 3.4 of EIA Appendix 8.1 Non-Avian Ecology does not show the location of the flushes and the text has not made it clear how close the flushes are to excavation areas, nor their relative position. The M10 and M11 base-rich flushes can be assumed to be groundwater dependent, however the groundwater dependency of other potential GWDTE habitats noted on site has not been assessed.*

*We therefore request further information be provided to: a) Assess the likelihood of groundwater dependency of the potential GWDTE habitats which will be directly or indirectly impacted by the development. M10 and M11 flushes are assumed to be groundwater dependent so do not need to be included in the assessment; and b) Illustrate the relative position of the infrastructure and excavation areas in relation to the flushes, other groundwater dependent wetlands and wetlands valuable for nature conservation (i.e. all levels of importance above site level). The groundwater dependent wetlands should only be included for those assessed as being likely to be groundwater dependent. 4.2 Given the reliance on the Habitat Restoration and Landscape Mitigation Plan to address impacts to wetland habitats and peat we request an outline plan is provided prior to determination for review. A planning condition should also be applied to require the full plan to be submitted before commencement. Damage to groundwater dependent flushes is often permanent; it is difficult or impossible to reinstate or restore flushes after direct impact or redirection of groundwater emergence; the HRLMP, CEMP and infrastructure layout must consider this and address the likely outcome for these habitats, which are important for nature conservation. 4.3 Further information must be provided on the layout of the Lower Site Compound and the requirement to excavate at this location. The applicant should clarify if alternative locations for the Lower Site Compound were considered, if excavation can be avoided where peat depth is greater than 0.5 metre and if there are flushes in the Lower Site Compound area and how will these be managed*

*Therefore, a flood wall to a 1 in 100 SoP will not ensure the development will necessarily remain operational during a 200-year event. FRA Appendix E indicates the precise SoP is 107-year event and anything greater will overtop the proposed wall. We therefore request the design of the flood wall is modified to ensure it is designed and constructed to remain operational during the 1 in 200 year flood even During the construction phase of the project it is anticipated 2.3 million tonnes of excavated rock arisings will be produced over the 5.5 year construction period (2024-mid 2029). EIA Section 3.8.2 indicates that the excavation arisings will be in the form of rock 'chippings' ranging from boulders to fines produced by drill and blast techniques. It is reported that drill and blast methodology is assumed to be used for all underground works....0.45 million tonnes of excavated material is to be reused on site. It is proposed that 140,800 tonnes of material will be used towards the construction of a 510m long quayside structure on Loch Awe and used in concrete*

production. The excavation arisings, 15,000 tonnes of spoil at any one time, will be stored on the quayside structure, prior to transportation off-site by road. The arisings will be stored under a canopy structure, enclosed on three sides to prevent runoff and windblown silt from entering Loch Aweon for lining the tunnels. There is currently no agreed use for the remaining excavated material.

We also request, if you are minded to grant consent, the planning conditions detailed in Sections 2.6 (Site Waste Management Plan), 4.2 (Habitat Restoration and Landscape Mitigation Plan) and 4.8 (Peat Management Plan) be attached to the consent.

(Additional information provided on these matters in FEI on 14.12.22)

#### 20.1.23 Response

**Potentially Acid Generating (PAG) Rock** Construction of the Cruachan Expansion Project will require the removal and management of an estimated 2.3 million tonnes of rock. The EIA states it is likely some of the arisings will be Potentially Acid Generating (PAG) rock. We previously requested more information to understand the potential for the site geology to generate acidic leachates and acid rock drainage and to evaluate the appropriateness of material reuse as fill materials and concrete aggregates. The findings from the initial investigation in the submission are that some of the material is likely or highly likely to be potentially acid generating which means the rock arisings could potentially leach acidic leachate and mobile metals. This will heavily influence material storage, transport, disposal and potential reuse options. While we agree with the applicant that an Acid Rock Drainage (ARD) Management Plan will be required (and secured as a planning condition), there remains significant uncertainty regarding the amount of material which will be potentially acid generating. No information has been provided to estimate the scale of the issue. We therefore cannot currently advise on the potential environmental effects associated with this element of the project.

It is likely this material will have to be segregated and disposed of at an appropriate site (i.e. landfilled) with mitigation to prevent environmental impacts and regulation by SEPA under the Pollution Prevention and Control (Scotland) Regime (PPC). At this stage it is not clear what size of site would be needed and whether a suitable one would be available to accept the material. This represents a significant environmental risk which we expect to be addressed before determination.

On that basis we maintain our **holding objection** on grounds of lack of information in relation to the potential impacts associated with the potentially acid generating rock. To allow us to revisit this position we require further information to outline how much material is potentially acid generating, what will be the disposal method for it, the environmental risks involved and the contingencies should more material than anticipated be affected.

Members are requested to note that Officers discussed this further holding objection with SEPA on 22.1.23. It has been clarified that this is not an objection in principle to the development but a technical matter they require to be satisfactorily addressed before withdrawing their holding objection. This will be a matter for the ECU to resolve prior to reaching their conclusion on the proposal, and is not a matter which changes the recommendation of this report.

**Scottish Forestry (Dated 17.1.23) No Objection**



*From the additional information it would appear that tree felling is limited to the removal of individual trees associated with the Lower Works area (Loch Awe). The information states that any trees removed will be replaced like for like and this will be detailed in a Habitat Restoration and Landscape Mitigation Plan which will be produced prior to the commencement of works. As the forestry works are limited, SF advise there would be no need for a dedicated compensatory planting condition on this occasion, assuming that the Habitat Restoration and Landscape Mitigation Plan includes the replacement tree proposals and that the plan and its implementation are secured by a condition.*

**Historic Environment Scotland (HES)** (No response on ECU website)

It is understood by Officers that additional information was sought by HES in respect of the proposals which was included in the additional FEI submissions dated 14.12.22. HES have been granted an extension of time to respond by the ECU to 31.1.23. Any response provided prior to PPSL will be reported to Members.

**Defence Infrastructure Organisation/ Ministry of Defence (MOD)** (Dated 18.1.23)

*This application relates to a site outside of Ministry of Defence safeguarding areas. I can therefore confirm that the Ministry of Defence has no safeguarding objections to this proposal.*

***Please note: the above are summaries and the full external consultee responses can be viewed on the Energy Consent Unit website.***

**ARGYLL & BUTE COUNCIL INTERNAL CONSULTATION RESPONSES**

**ABC Area Roads** (20.1.23) No Objection subject to conditions.

*The proposal is situated off the A85 Oban-Tyndrum Trunk Road within a rural 60mph speed restriction. Trunk Roads to comment on A85 issues.*

*It is noted that the Trunk Road network will probably be impacted more than the local area network. If the local area roads network is to be affected by disposal of excavated materials for any reason then commensurate improvements may be required to facilitate significant additional vehicle movements at the developer's expense.*

- *Information to be provided on locations for disposal of material from works, specifically the impact on local area roads and infrastructure. Construction Traffic Management Plan to be provided if necessary.*
- *Traffic Impact Analysis required to cover any potential impact on Argyll and Bute Council local area roads. This report should include a cumulative report in concert with other S36 and S37 schemes in the North Argyll/ Loch Awe area paying particular attention to the possibility of utilizing materials locally to prevent unnecessary vehicle movements thus reducing the potential for related deterioration of the fragile local area roads network.*

**ABC Environmental Health** (10.11.22) No Objection subject to conditions

Noise and Vibration

*The noise and vibration survey identified 15 Noise and Vibration Sensitive Receptors. The sensitivity of 11 of the 15 identified receptors has been classed as high, 10 of which are residential sites.*

*The Environmental Impact Assessment Report Volume 1 – Main Report May 2022 states that ‘surface work is expected to take place Monday – Saturday 7am -7pm and Sundays 7am – 12pm with underground works expected to take place 24 hours a day’ With the number of noise and vibration sensitive receptors in the vicinity of the site, I would suggest the following condition:*

*‘Surface work and underground work should be restricted to:*

- Monday to Friday: 0700 hours until 1900 hours.*
- Saturday: 0700 hours until 1700 hours.*
- Sunday / Public holidays: – no works, except for servicing and maintenance of plant and equipment and emergency work.*

*Reason: In order to protect the amenities of the area from noise and vibration nuisance and to minimise local community annoyance”*

*It is understood that a project of this magnitude may require some construction activities to be take place outside of these hours. Environmental Health will consider all applications for construction activities outside of these hours and will remain flexible (without detriment to the local residents) throughout the project.*

#### *Private Water Supplies*

*In order to protect the identified private water supplies and the residents reliant upon these supplies; Environmental Health request that detailed information be provided on how these 17 private water supplies will be protected during the construction and operation phases of the proposed development.*

*Reason– in the interest of public health and to ensure adequate measures are in place to protect the identified private water supplies*

#### *Lighting*

*Artificial lighting will be used during the construction phase of the proposed development. Mitigation measures have been identified in the Draft Construction Environment Management plan. Environmental Health would be satisfied as long as the mitigation measures identified are implemented. Similar, mitigation measures should be identified and implemented for the operational phase of the proposed development.*

#### *Dust*

*The Draft Construction Environment Management plan has identified activities associated with the potential to generate dust. Specific control measures have been identified to ensure the employment of best practical means to minimise the risk of adverse effects from construction dust.*

*Environmental Health would be satisfied as long as the specified control measures identified are implemented.*

## Conclusions

*Environmental Health have no objections to the proposed development.*

**ABC Conservation and Heritage Officer** (Dated 29.11.22 & 23.1.23) No Objection subject to conditions

### 29.11.22 Response

*From Figure 11.8d (visualisation in 10 years' time) the Upper Intake/Outlet has a significant visual impact on the setting of the dam. Figure 11.5 (of Appendix 11.1) touches on mitigation measures in terms of planting yet these do not appear to have been shown on this visualisation. However even with the measures proposed in 11.5 I think that the proposed form and location of the excavation would have an unacceptable significant adverse effect on the setting of the dam.*

*From the section shown in Figure 3.2 it is not clear why such a large flat hardstanding is required and if possible, this should be reduced to reduce the impact on the landscape which forms part of the dam's setting.*

*Otherwise, alternative siting of the Upper Intake/Outlet should be considered (to an area where less excavation is required) which would have less of an adverse impact on the setting.*

### 23.1.23 Response

*Further to my previous comments below, we discussed yesterday that the proposed structure would not be highly visible from either the ascent up towards the B-listed Dam (where it would be screened by hill in front of it), or from higher up Ben Cruachan (where the key views are wider views towards River Awe).*

*The proposal will therefore have a limited effect on how the Dam's setting of Ben Cruachan is seen and experienced. Whilst it will be highly visible from the immediate vicinity of the Dam (as per Visualisation 11.8d) it could be considered that this location is not from where the Dam is principally viewed (which could be considered to be from below from where, as stated above, it would be screened). Setting also includes the experience or understanding of a place, and this structure provides a link to the workings within the Turbine Hall below.*

*However I would recommend that a Planning Condition be included in terms of the finish of the "box" and the contouring of the rock to mitigate any adverse effects as viewed from the immediate vicinity of the Dam.*

**ABC Local Biodiversity Officer** (28.11.22 & 25.1.23) No Objection

### 28.11.22 Response

*Having reviewed the supporting documents, I concur with the issues that NatureScot have raised in relation to this proposal as it is within the Loch Etive Woods Special Area of Conservation (SAC) and the Coille Leitire Site of Special Scientific Interest*

(SSSI). The proposal could affect internationally important natural heritage interests and as such NatureScot object to this proposal until further information is provided. I note that the objection is due to a lack of information in the Environmental Impact Assessment Report (EIAR) and the supporting shadow Habitats Regulation Appraisal (HRA) of the Proposal in relation to the Loch Etive Woods SAC. Once these issues have been resolved, I am content to provide comments as appropriate; in the meantime, I wish that my comments are treated as a holding response.

#### 25.1.23 Response

I note the contents of the latest submissions that clarify the works within the Loch Etive Woods Special Area of Conservation (SAC) and the Coille Leitire Site of Special Scientific Interest (SSSI).

I concur with NatureScot's (statutory consultee) recommendations in terms of including conditions that reflect the proposed mitigation as well as a Construction Method Statement which will need to be agreed in advance with the statutory consultee and the applicant consultants and added to the Construction Environment Management Plan.

#### **ABC Access Manager Response (Dated 20.1.23) No Objection**

It is important to note that the road leading up to the reservoir is heavily used by the public walking and cycling. If construction traffic is going to use this route it will be necessary to consider how this is managed to ensure the safety of the public and construction workers. It may be necessary for construction traffic to be reduced at weekends and during holiday periods when the greatest numbers of walkers and cyclists are likely to be using this road. Another major route is from Loch Awe Station and the Cruachan Visitor Centre beside the Allt Cruachan and Falls of Cruachan to the dam.

Where a developer needs to exclude the public from an area of land or water to allow construction any diversions must be for the minimum area and shortest period of time possible. For a project of this scale any closures will need to be planned such that people can continue to make a circuit of Ben Cruachan and Stob Daimh throughout the construction period. I have assumed that some work may be required in the vicinity of the Dam Wall which again may require walkers to use the track below the dam and it may be necessary to provide a short section of new path to facilitate this.

The location of the Upper Intake in particular will impact on hill walkers' access to and from Stob Daimh and Stob Garbh and will need to be carefully managed. It may be necessary to provide a temporary diversion route around the construction site and a permanent diversion once work is complete.

Although it is possible that I have missed it the developer must submit an Access Plan which details how the development will impact the public's legal rights of access during and after the construction of the Cruachan Expansion Project. In view of the scale and expected duration of the construction work which will be across a number of areas within the overall site it is likely that the plan will need to be phased. In conclusion I am asking that the developer is required to provide an Access Plan which must be approved by the Council before construction can commence.

Guidance on producing an Access Plan can be found here [Microsoft Word - A409251.doc \(nature.scot\)](#) & [Guidance - Good practice during Wind Farm construction | NatureScot](#). In summary the Access Plan should provide the following information.

**ABC Planning Policy Officer** (dated 2/2/23): The principle of this development is supported by Planning Policy at both Scottish Government and Local Development Plan policy. This is because the potential for additional pumped storage was identified in National Planning Framework 3 published in 2014, and it has also been identified as a National Development in the Final Draft National Planning Framework 4 which was approved by the Scottish Parliament 11 January 2023 and is to be adopted by Scottish Ministers and will become part of the Development Plan on 13 February 2023. Specifically the Cruachan Pumped Storage Project is part of the Pumped Storage Hydro identified as a Scotland wide National Development 9 under the “Productive Places” theme with significant potential for enhanced capacity and creation of significant job opportunities in a rural location. The proposal would also be supported under NPF4 Policy 11 – Energy which sets out that “development proposals for all forms of renewable, low carbon and zero emissions technologies will be supported”, including energy storage, such as pumped storage hydro. This support is subject to an expectation that they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.

As a national development NPF4 expects the Cruachan Expansion Project to promote a just transition to a low carbon economy and to be an exemplar of community wealth building whereby “A people-centred approach to local economic development, which redirects wealth back into the local economy, and places control and benefits into the hands of local people” is promoted.

In terms of the Argyll and Bute Local Development Plan 2015 (LDP2015), renewable energy generation is identified as one of Argyll and Bute’s competitive advantages in relation to economic development, and significant hydro energy developments are shown in the Spatial Strategy diagram for Oban and Lorn (page 12). As part of the settlement strategy renewable energy developments are identified as one of the specific categories of development which may be supported in Very Sensitive Countryside in Policy LDP DM1. The importance of creating a sustainable and growing economy is identified in Chapter 4 of LDP2015, where renewables are identified as one of our key growth sectors, Policy LDP 5 seeks to support the development of new industry and business which helps deliver sustainable economic growth throughout our area by taking full account of the economic benefits of any proposed development. The justification for this policy includes recognition that a successful and vibrant economy is fundamental to retain population and attract new people to the area. Policy LDP 6 supports the sustainable growth of renewables where it can be adequately demonstrated that there would be no unacceptable significant adverse effects, whether individual or cumulative on local communities, natural or historic environments, landscape character and visual amenity, and that the proposals would be compatible with adjacent land uses.

The proposed expansion of pumped storage at Cruachan is a significant development both as a recognised national development and particularly in the context of its location in north Argyll and in the Tobermory –Oban – Dalmally growth corridor as identified in Proposed Local Development Plan 2. The applicants have stated that the project will involve “significant investment with capital expenditure in excess of £450million which will be accompanied by associated expenditure in the local economy with local shops, restaurants, transport providers and businesses associated with the construction and development expected to benefit.” They also state: “The construction of the Proposed Development is estimated to support 357 full time equivalent jobs in Argyll and Bute over the six-year construction programme. Job creation during construction of the proposed development brings a huge economic benefit to the area. At the peak of

construction, it is estimated there will be approximately 300 staff working on site, with an average of 150 – 200 workers over the six-year programme.” This level of capital expenditure and the level of jobs to be created, is considerable and is likely to have a significant impact on the local economy and communities of north Argyll.

In particular the level of jobs that will be created during the construction period of the project which is expected to last up to 6 years is considerable. It will be important to ensure that the local economy is able to benefit from these, and is not actually disadvantaged by the increased competition for workers and most importantly the increased demand for housing. The Oban and Lorn housing market area, is already one of the more pressured in Argyll and Bute, with higher levels of demand for housing, and a higher proportion of existing housing stock being in use as short term lets to support the important tourism sector of the local economy. The use of temporary accommodation, or loss of tourist accommodation to provide homes for construction workers on the Cruachan expansion project, would have an adverse impact on local communities and the local economy. The applicants should therefore be asked to provide additional information to demonstrate how they intend to address this, in order to demonstrate compliance with development plan policy.

The other issue which has the potential to have significant impacts on local communities, the local road network and the local economy is in relation to the waste material from the construction project. The applicants have stated that: “The construction of the Proposed Development is anticipated to generate up to 2.30 million tonnes of excavated rock arisings over the 5.5 -year construction period (2024-mid of 2029). An average of 1,600 tonnes per day with peak generation of c. 3,000 tonnes per day. Approximately one fifth of this material (0.45Mt) will be re-used on Site, therefore, there will be a residual volume of 1.85 Mt of spoil which will be re-used off-site. During construction, approximately 15,000 tonnes spoil will be stored on the quayside structure at any one time, prior to removal by road.” Further information will be required as to how this material will be handled in terms of transportation, local reprocessing, and end use.

Without more detail from the applicants in relation to their recruitment and accommodation strategy for workers involved in the construction and how they propose to deal with the hard rock waste from the construction project, compliance with planning policy in NPF4 and the Local Development Plan is not assured and appropriate mitigation as in the Environmental Impact Assessment Report is not demonstrated.

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**(D) REPRESENTATIONS:**

As this is a S36 proposal representations must be sent to the ECU and not the Planning Authority. In respect of Public Representations the Energy Consents unit at time of writing three representations/objections have been lodged to the proposals by the following parties:

- Nigel MacBeath 1 Railway Cottage Falls of Cruachan Argyll PA33 1AW  
Concerns over impact of construction on residential amenity (Objection)
- Andreas Wolff 25 St Conans Rd Lochawe PA33 1A

Concerns over impact of development and movement of spoil on St Conans Road (clarifies that does not object to proposals)

- Lorraine McFee, Brae House, Kilchrenan Argyll PA35 1HD,

Proposals are not compliant with UK energy policy which does not reference pump storage. Financial case has not been properly justified by applicant and proposal will cause unacceptable harm and disruption to the local community.

The above matters will be for the Scottish Ministers to consider in determining the application. However having read the submissions, Officers are content that there are no substantive planning matters raised within them which would alter the recommendation of this report to Members, as either they are not material planning considerations or can be addressed through the imposition of appropriate conditions on any deemed planning consent issued by the Scottish Ministers in accordance with recommendation.

***Note: please note that the letters of representation above have been summarised and that the full letters of representations are available on the Energy Consents Units website at the link previously provided in this report.***

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## (E) SUPPORTING INFORMATION

- Has the application been the subject of:**
- i) **Environmental Impact Assessment Report (EIAR):** Yes

EIAR (May 2022) comprising:

- Volume I: Main Report
- Volume II: Figures and Appendices
- Volume III: Technical Appendices;
- Volume IV: Non-Technical Summary (NTS)

Key matters covered in the EIAR include:

- Flood Risk Assessment;
- Loch Awe Water Levels Report;
- Species Reports: Bat, Otter, Ornithology, Fisheries, Badger, Red Squirrel, Pine Martin;
- Ecological Constraints Plan;
- Habitats Regulation Assessment;
- Transport Assessment;
- Draft Construction Traffic Management Plan;
- Noise Monitoring;
- Draft Peat Management Plan;
- Cultural Heritage Assessment;
- Listed Buildings Consent;
- Draft Construction Environmental Management Plan;
- Schedule of Mitigation;
- Planning Statement;
- Design Statement; and

- Statement of Consultation and Engagement.

Further Environmental Information (FEI) (December 22) comprising:

Further Information was provided on 14.12.22 in response to matters raised in consultation responses to the initial EIAR related to the following headings.

- Ground Conditions
  - Cultural Heritage
  - Transport and Access
  - Scottish Forestry
  - BT
  - Argyll and District Salmon Fisheries Board
  - Public Representations
- ii) **An appropriate assessment under the Conservation (Natural Habitats) Regulations 1994:** If required – this will be undertaken by the ECU as the Determining Authority in this case.
- iii) **A design or design/access statement:** Yes Design Statement within EIAR
- iv) **A report on the impact of the proposed development e.g. Retail impact, transport impact, noise impact, flood risk, drainage impact etc.:** All relevant reports are encompassed within the EIAR and additional FEI submissions.

Members are requested to note that a more recent policy update dated 20.1.23 has been submitted by the applicant to address NPF 4 which comes into force on 13.2.23 as a statutory development plan. This has been placed on the Council website.

**(F) Local Development Plan (LDP) and any other material considerations over and above those listed above which have been taken into account in the assessment of the application:**

Members are asked to note in the context of the Local Development Plan (LDP) and planning process that this application has been submitted to the Scottish Government under Section 36 (S36) of the Electricity Act 1989. As part of the S36 application process, the applicant is also seeking that the Scottish Ministers issue a Direction under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997 that deemed planning permission be granted for the proposal. In such instances, the LDP is not the starting point for consideration of S36 applications, as Sections 25 and 37 of the Town and Country Planning (Scotland) Act 1997 which establish the primacy of LDP policy in decision-making, are not engaged in the deemed consent process associated with Electricity Act applications. Nonetheless, the adopted Argyll & Bute LDP 2015 still remains an important material consideration informing the Council's response to the proposal.

Schedule 9 of the Electricity Act does require both the applicant and the decision-maker to have regard to the preservation of amenity. It requires that in the formulation of proposals the prospective developer shall have regard to:



***(a) the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiological features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and***

***(b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.***

Similarly, it obliges the Scottish Ministers in their capacity as decision maker to have regard to the desirability of the matters at a) and the extent to which the applicant has complied with the duty at b). Consideration of the proposal against both the effect of SPP (2014), NPF 3, the adopted Argyll & Bute LDP 2015 and as from 13.2.23, revised Draft NPF 4, will ensure that proper consideration is given by the Council to the extent which the proposal satisfies these Schedule 9 duties.

As of 13 February 2023 The Scottish Ministers will be required to consider National Planning Framework 4 (NPF4) and the policies and objectives contained therein which are referenced elsewhere in this report in terms of their materiality to the determination of the current proposals.

It is fair to summarise that this is a period of transition in respect of NPF 4, and therefore the interpretation and application of not only the policies of NPF 4 but also the wider objectives contained therein, are still subject to consideration by Officers as to how these ambitions can be delivered in a competent manner. The interaction of the current S36 application, determined under the Electricity Act, not the Planning Acts, (but with a deemed planning consent issued to the Planning Authority for compliance) raises new and potentially complex procedural and policy matters which are still in a period of transition.

**(i) List of all Development Plan Policy considerations taken into account in assessment of the application.**

Argyll & Bute Local Development Plan (2015)

LDP STRAT 1 – Sustainable Development

LDP DM1 – Development within the Development Management Zones

LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment

LDP 5 – Supporting the Sustainable Growth of Our Economy

LDP 6 - Supporting the Sustainable Growth of Renewables

LDP 8 – Supporting the Strength of Our Communities

LDP 9 – Development Setting, Layout and Design

LDP 10 – Maximising our Resources and Reducing our Consumption

LDP 11 – Improving our Connectivity and Infrastructure

Supplementary Guidance to the Argyll & Bute Local Development Plan 2015 & 2016

SG LDP ENV 1 – Development Impact on Habitats, Species and Our Biodiversity (i.e. biological diversity)

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 6 – Development Impact on Trees / Woodland

SG LDP ENV 7 – Water Quality and the Environment

SG LDP ENV 11 – Protection of Soil and Peat Resources  
 SG LDP ENV 13 – Development Impact on Areas of Panoramic Quality (APQs)  
 SG LDP ENV 14 –Landscape  
 SG LDP ENV 16(a) – Development Impact on Listed Buildings  
 SG LDP PG 1 – Planning Gain  
 SG LDP BAD 1 – Bad Neighbour Development  
 SG LDP Sustainable - Sustainable Siting and Design Principles  
 SG LDP SERV 5 – Waste Related Development and Waste Management  
 SG LDP SERV 6 – Private Water Supplies and Water Conservation  
 SGLDP SERV 7 – Flooding and Land Erosion – The Risk Framework for Development  
 SG LDP TRAN 1 – Access to the Outdoors  
 SG LDP TRAN 4 – New and Existing, Public Roads and Private Access Regimes  
 SG LDP TRAN 6 –Vehicle Parking Provision  
 Supplementary Guidance 2 (December 2016)

**Note: The above supplementary guidance has been approved by the Scottish Government. It therefore constitutes adopted policy and the Full Policies are available to view on the Council's Web Site at [www.argyll-bute.gov.uk](http://www.argyll-bute.gov.uk)**

**(ii) List of other material planning considerations taken into account in the assessment of the application, having due regard to Annex A**

- National Planning Policy Framework, Scottish Government (NPF3 (June 2014) and Revised Draft NPF4 (to come into force on 13.2.23)
- Scottish Planning Policy (SPP), Scottish Government (June 2014)
- Planning Advice Notes & Web-based Renewables Guidance
- Renewable energy and climate change framework
- Climate Change (Emissions Reduction Targets) (Scotland) Act 2019
- The Future of Energy in Scotland: Scottish Energy Strategy, Scottish Government (December 2017) and position Update dated 16.3.21
- Scotland's Draft Energy Strategy and Just Transition Plan and Ministerial statement (Dated 10.1.23)
- The Scottish Government's Policy on 'Control of Woodland Removal' (Forestry Commission Scotland 2009)
- Views of statutory and other consultees;
- Planning history of the site
- Legitimate public concern or support expressed on relevant planning matters
- Argyll and Bute proposed Local Development Plan 2 (November 2019) – The unchallenged policies and proposals within pLDP2 may be afforded significant material weighting in the determination of planning applications at this time as the settled and unopposed view of the Council. Elements of the pLDP2 which have been identified as being subject to unresolved objections still require to be subject of Examination by a Scottish Government appointed Reporter and cannot be afforded significant material weighting at this time. The provisions of pLDP2 that may be afforded significant weighting in the determination of this application are listed below:
  - Policy 14 – Bad Neighbour Development
  - Policy 35 – Design of New and Existing, Public Roads and Private Access Regimes
  - Policy 36 – New Private Accesses
  - Policy 37 – Development Utilising an Existing Private Access or Existing Private Road

- Policy 38 – Construction Standards for Public Roads
- Policy 39 – Construction Standards for Private Access
- Policy 40 – Vehicle Parking Provision
- Policy 43 – Safeguarding of Aerodromes
- Policy 58 – Private Water Supplies and Water Conservation
- Policy 63 – Waste Related Development and Waste Management

### National Energy Policy Framework as a material planning consideration

#### Energy Policy Framework

Statutory and policy requirements at UK and Scottish level to mitigate climate change and increase renewable energy generation are informed by higher level international agreements, primarily the Paris Agreement (2015) which commits United Nations signatory countries to take action to cut carbon emissions and emphasises the aim of restricting temperature rises to below 2°C above preindustrial levels. At the UK level, action to tackle climate change is underpinned by the Climate Change Act 2008 as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019. A range of policy documents set out the UK Governments binding commitments to cut carbon emissions through the deployment of renewable energy, including the UK Government's Ten Point Plan for a Green Industrial Revolution (2020), Energy White Paper (2020), Carbon Plan (2011), the UK Renewable Energy Roadmap (2011) (updated 2012 and 2013) and the British Energy Security Strategy.

More recently the publication of Scotland's Draft Energy Strategy and Just Transition Plan and the accompanying Ministerial statement (Dated 10.1.23) further reinforces the importance of achieving net zero and addressing the Climate Emergency.

#### Planning

At a national level, planning policy relevant to the determination of the application for consent comprises National Planning Framework 3, the Scottish Planning Policy 2014 and the revised draft National Planning Framework 4. (which will come into force on 13.2.23). NPF 4 will then supersede NPF 3 and SPP 2014.

The Policies of NPF4 of most direct relevance to the current proposals are set out below:

1. Tackling the climate and nature crises
2. Climate mitigation and adaptation
3. Biodiversity
4. Natural places
5. Soils
6. Forestry, woodland and trees
7. Historic assets and places
11. Energy
12. Zero waste
- 25 Community Wealth Building

The national policy position in both documents contains a presumption in favour of development that contributes to sustainable development; coupled with support for the delivery of renewable energy generation capacity, including energy storage

projects at a range of scales. Support for such schemes feeds into policy consideration and guidance at all levels, in recognition of the wide range of benefits they offer.

NPF3 and NPF 4 identify pump storage hydro schemes (PSH) as key assets to achieve these objectives and recognises that increasing the capacity of PSH can complement ambitions for more renewable energy capacity. The expansion of Cruachan is specifically cited as being amongst the most advanced plans for new PSH schemes.

The emerging policy position as drafted for consultation in NPF4, takes this support further towards delivery, working from a baseline focussed on tackling climate change and setting a target of net zero emissions by 2045, with significant progress required by 2030. In the revised draft NPF4, under “Productive Places” the Cruachan Expansion project is specifically listed as a Scotland Wide National Development: 9. Pumped Storage Hydro. Ben Cruachan at Loch Awe is named as the initial focus of the PSH capability, with an all-Scotland intention thereafter. This will be further reinforced when NPF4 forms part of the development plan framework on 13.2.23.

Officers accept and ask members to note that there is robust high level Energy/Climate Change policy and National planning policy support for the current proposals. This is considered to be a substantive material consideration, however this does not undermine the need for the proposals to address the other policy objectives of NPF4 which, although supporting the proposals, requires other issues such as biodiversity improvements, Socio Economic benefits, and “Just Transition” to be considered in a balance of judgement on compliance with the overall objectives of NPF 4..

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**Does the Council have an interest in the site: No**

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**(G) Is the proposal consistent with the Local Development Plan: Yes**

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**Author of Report:** David Moore **Date:** 27.1.23

**Reviewing Officer:** Sandra Davies **Date:** 31.1.23

**Fergus Murray**

**Head of Development and Economic Growth**

## **APPENDIX A – PLANNING LAND USE AND POLICY ASSESSMENT**

### **A. THE SECTION 36 CONSENTING REGIME**

In Scotland, any proposal to construct, extend, or operate an onshore electricity generating station, in this case, a pump storage hydro, with a capacity of over 50 megawatts (MW), requires the consent of Scottish Ministers under section 36 of the Electricity Act. Such applications are processed on behalf of the Scottish Ministers by the Energy Consents Unit (“ECU”) Scottish Government - Energy Consents. Section 57(2) of the Town and Country Planning (Scotland) Act 1997 (“TCP(S)A”) also allows the Scottish Ministers, on granting consent under section 36, to direct that planning permission for that development shall be deemed to be granted, subject to such conditions (if any) as may be specified in the direction.

The consultation bodies to be consulted by the Scottish Ministers on Section 36 applications are the relevant planning authority, NatureScot, SEPA, Transport Scotland and HES and any other relevant public bodies with specific environmental responsibilities or local and regional competencies who the Scottish Ministers consider are likely to have an interest. The Council’s role in this process is therefore one of a consultee along with various other consultation bodies. It is open to the Council to either support or object to the proposal, and to recommend conditions it would wish to see imposed in the event that authorisation is given by Scottish Ministers.

In the event of an objection being raised by the Council, the Scottish Ministers are obliged to convene a Public Local Inquiry (PLI) if they are minded to approve the proposal. They can also choose to hold a PLI in other circumstances at their own discretion. Such an Inquiry would be conducted by a Reporter(s) appointed by the Directorate for Planning and Environmental Appeals. In the event that consent is given, either where there has been no objection from the Council, or where objections have been overruled following PLI, the Council as Planning Authority would become responsible for the agreement of matters pursuant to conditions, and for the ongoing monitoring and enforcement of such conditions contained in any issued “deemed planning consent”. Any decision notice would have a Part 1” List of conditions for the ECU to discharge and a “Part 2” deemed planning permission where the Planning Authority (often in consultation with other statutory consultees) will be required to consider and discharge the conditions.

This report reviews the policy considerations which are applicable to this proposal and the planning merits of the development, the views of bodies consulted by the Scottish Government along with other internal consultations undertaken by the Council, and 3<sup>rd</sup> party opinion expressed to the Scottish Government following publicity of the application by them. It recommends views to be conveyed to the Scottish Government on behalf of the Council before a final decision is taken on the matter.

### **B. SETTLEMENT STRATEGY**

Policy LDP 6 of the Adopted Local Development Plan sets out the Council’s Policy for renewable energy developments, in accordance with SPP 2014. In addition, there is also the Supplementary Planning Guidance. SPP 2 contains a Spatial Framework which has been prepared in accordance with SPP 2014.

In terms of the Local Development Plan Settlement Strategy, the main site is located within a combination of, Lorn and the Inner Area very sensitive countryside, North Argyll APQ and Glen Etive and Glen Fyne Special Protected Area, subject to the provisions of LDP policy LDP DM 1. In principle, policy LDP DM 1 supports renewable energy and ancillary developments of this type in these areas, providing they are consistent with all other Local Development Plan

Policies. It is the conclusion of Officers that this proposal satisfies the relevant local and national planning policy in respect to pumped storage hydro as detailed in the various sections of this report, subject to the ECU considering the pre-determination matters and conditions detailed in this report.

**Having due regard to the above it is considered that the proposal is consistent with the provisions of LDP DM1 – Development within the Development Management Zones; SPP (2014); NPF 3 and Revised Draft NPF4**

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## **C. SUPPORTING THE SUSTAINABLE GROWTH OF RENEWABLES**

Argyll & Bute Council is keen to ensure that Argyll & Bute continues to make a positive contribution to meeting the Scottish Government's targets for renewable energy generation. These targets are important given the compelling need to reduce our carbon footprint and reduce our reliance on fossil fuels, reinforced by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. The Council will support renewable energy 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.

Statutory and policy requirements at UK and Scottish level to mitigate climate change and increase renewable energy generation are informed by higher level international agreements, primarily the Paris Agreement (2015) which commits United Nations signatory countries to take action to cut carbon emissions and emphasises the aim of restricting temperature rises to below 2°C above preindustrial levels.

At the UK level, action to tackle climate change is underpinned by the Climate Change Act 2008 as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019. A range of policy documents set out the UK Governments binding commitments to cut carbon emissions through the deployment of renewable energy, including the UK Government's Ten Point Plan for a Green Industrial Revolution (2020), Energy White Paper (2020), Carbon Plan (2011), the UK Renewable Energy Roadmap (2011) (updated 2012 and 2013) and the British Energy Security Strategy.

At a national level, planning policy relevant to the determination of the application for consent comprises National Planning Policy Framework 3, the Scottish Planning Policy 2014 and the draft National Planning Policy Framework 4.

The national policy position contains a clear presumption in favour of development that contributes to sustainable development; coupled with support for the delivery of renewable energy generation capacity, including energy storage projects at a range of scales. Support for such schemes feeds into policy consideration and guidance at all levels, in recognition of the wide range of benefits they offer.

NPF3 identifies hydroelectric power as a key asset and recognises that increasing the capacity of PSH can complement ambitions for more renewable energy capacity. The expansion of Cruachan is specifically cited as being amongst the most advanced plans for new PSH schemes and the relationship with Cruachan 1 is noted. In the draft NPF4, under "Productive Places" the Cruachan Expansion project is specifically listed as a Scotland Wide National Development: 9. Pumped Storage Hydro. Ben Cruachan at Loch Awe is named as the initial focus of the PSH capability, with an all-Scotland intention thereafter. This will be further reinforced when NPF4 forms part of the development plan in due course.

The inclusion of the currently proposed Cruachan expansion in both NPF3 and NPF 4 as an important National Planning and climate priority is acknowledged and in Officers opinion must be regarded as a strongly supportive framework for the principle of the approving the current proposals.

## **D. LOCATION, NATURE AND DESIGN OF PROPOSED DEVELOPMENT**

### Background –

The Proposed Development will be located on land around and to the east of the existing Cruachan pumped storage hydro power station ('Cruachan 1') on the northern banks of Loch Awe. Cruachan 1 is a pumped storage hydro-electric facility and one of four large-scale pumped storage facilities in the UK. It currently operates with a nominal maximum output of 440 MW in full generation mode with an average annual generation output of circa 300 GWh/year. The current facility comprises the following main components:

- Cruachan Reservoir (upper head pond); Gross storage 11.1 million m<sup>3</sup>; live storage 8.47 million m<sup>3</sup>;
- Energy storage in upper head pond of 6.7 GWh per cycle;
- Twin 4.6 m diameter headrace tunnels that bifurcate to four steel-lined unit penstocks;
- Underground cavern power station housing 2 x 100 MW and 2 x 120 MW reversible Francis pump-turbines and motor-generators; and
- Single 6.8 m horseshoe shaped tailrace tunnel and inlet/outlet structure on the bank of Loch Awe.

The reservoir receives natural inflows from its 5.7 km<sup>2</sup> direct catchment and is supplemented by a series of indirect catchments that discharge at three principal locations around the shoreline of the upper reservoir.

Cruachan 1 opened in 1965. Its design by James Williamson responded to the challenge of developing a nationally significant power station in an area renowned for scenic beauty with two monumental and pioneering pieces of civil engineering. The turbine hall is concealed deep underground, minimising the visual impact of the scheme, whilst the buttressed dam, sitting back from the entrance to Coire Cruachan, appears almost a part of the landscape, the angle of the buttresses being close to that of the adjacent slopes. All the operational equipment is contained within the dam to negate the need for towers

### The Site -

The Site encompasses the existing Cruachan 1 facilities, including Cruachan Reservoir, the underground power station, and the visitor centre. Existing private and public roads which connect the A85 to Cruachan Reservoir (including St Conan's Road), a small section of the A85, Falls of Cruachan railway station, part of the Oban to Glasgow railway line, and parts of Loch Awe also lie within the boundaries of the Site.

Cruachan Reservoir, which provides the upper reservoir of Cruachan 1, 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 Allt Cruachan Burn. A path around the reservoir is part of the route used by the public to access the summit of Ben Cruachan.

A more detailed description of the site and surroundings is contained within the EIAR at Chapter 2

## The 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 adjacent to Cruachan 1 to provide up to 600MW of additional new generating capacity. The Proposed Development will be operated independently of the existing 440 MW Cruachan 1. Both power stations will use Loch Awe as the lower reservoir and Cruachan Reservoir as the upper reservoir. The construction process will take place over an estimated 65-month programme to achieve commercial operation of the first generating unit.

A full description of the main elements of the Proposed Development is provided in the EIAR Volume 1 at Chapter 3 and at Section A of this report. The submitted EIAR contains information and technical appendices in respect of the following matters:

- Flood Risk Assessment;
- Loch Awe Water Levels Report;
- Species Reports: Bat, Otter, Ornithology, Fisheries, Badger, Red Squirrel, Pine Martin;
- Ecological Constraints Plan;
- Habitats Regulation Assessment;
- Transport Assessment;
- Draft Construction Traffic Management Plan;
- Noise Monitoring;
- Draft Peat Management Plan;
- Cultural Heritage Assessment;
- Listed Buildings Consent;
- Draft Construction Environmental Management Plan;
- Schedule of Mitigation;
- Planning Statement;
- Design Statement; and
- Statement of Consultation and Engagement.

A major component of the Proposed Development is the generation of spoil from excavation of new tunnels and the powerhouse cavern during construction. The construction of the proposed development is anticipated to generate up to 2.30 million tonnes of excavated rock over the 5.5 -year construction period (2024-mid of 2029). An average of 1,600 tonnes per day with peak generation of c. 3,000 tonnes per day. The excavated materials will be in the form of rock 'chippings' ranging from boulders to fines produced by drill and blast techniques. Approximately one fifth of this material (0.45Mt) will be re-used on Site. Therefore, there will be a residual volume of 1.85 Mt of spoil which will require to be removed off-site for use elsewhere.

The primary re-use for spoil on site will be the quayside structure in Loch Awe. It has a depth of about 12 m and a length of 510m. It will require approximately 162,500 tonnes spoil, 21,700 tonnes which will be imported to form the initial tunnel access and 140,800 tonnes will be from excavated materials produced in forming the access tunnel.

The EIAR further confirms that up to 15,000 tonnes spoil will be stored on the quayside structure at any one time, prior to removal by road. The material would be stored under a temporary canopy structure, enclosed on three sides which would prevent runoff and wind-blown silt from entering Loch Awe.

The applicants have confirmed that for assessment purposes this EIAR has assumed a worst case that 100% of residual spoil is transported by road both to the east and west on the A85



and that the potential likely significant effects of spoil movement have been covered in more detail throughout the EIA Report, and specifically in Chapters 7 – Hydrology, 9 – Traffic, Transport and Access, Chapter 10, Noise and Vibration, and Chapter 14 – Waste Management.

Approximately 9ha of compound area will be required close to the Site. This will most likely be within an area of land to the east of the project, to the north of the B8077, close to Castles Farm.

**Having due regard to the above the proposals scale of contribution to renewable energy generation targets has been assessed and it is concluded that the proposal is consistent with the provisions of National Energy Policy SG 2; Supplementary LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 6 - Supporting the Sustainable Growth of Renewables; SPP (2014); NPF 3 and Revised Draft NPF4 Policies 1,2 and 11**

#### **E. IMPACTS ON COMMUNITIES AND INDIVIDUAL DWELLINGS, INCLUDING RESIDENTIAL AMENITY, and NOISE (INCLUDING CUMULATIVE IMPACTS).**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against impacts on communities and individual dwellings, including visual impact, and noise.

The EIAR has identified potentially sensitive visual receptors within the study area comprise residents or others present in and around buildings and settlement areas, those using routes (including transport and recreational routes) through the study area, and those obtaining views from outdoor locations where enjoyment of the view is one of principle reasons for being at the location.

Residential Receptor Locations (RRLs) are identified and described in detail in Technical Appendix 11.2 of the EIAR and their locations are shown on Figure 11.4. The EIAR identifies these receptor locations as contained in four general areas:

- To the east of Loch Awe;
- Along the northern shoreline of Loch Awe;
- To the west of Loch Awe; and
- Along the southern shoreline of Loch Awe.

23 building-based receptor locations were included in the visual assessment (as set out at Figure 11.4), comprising individual buildings or groups of buildings, and associated outdoor spaces where a view of the Proposed Development would potentially be obtained.

The assessment (see Technical Appendix 11.2) has identified that the majority of effects to receptors would be not significant. During construction, temporary significant effects were identified for three of these receptor locations with visual receptors in all other locations identified as likely to experience effects which would be not significant. In respect of the main and permanent works to create the underground turbine hall and associated above ground permanent structures near the dam.

Officers are in general agreement with these evaluations and do not consider that any unacceptable amenity impacts upon settlements or individual properties will occur after the construction stage of the proposals have finished. Clearly temporary impacts associated with construction works will be of a greater magnitude and the construction compounds and new quayside loading area will require to be designed and landscaped in a manner which

minimises transient impacts upon the area which is both attractive and well used by tourists.

The EIAR contends that during operation, views from all building-based receptor locations would be not significant, because the levels of activity and footprint of the Proposed Development would be reduced, and proposed reinstatement and mitigation measures would lead to permanent features appearing less noticeable and detracting in views. The detailed assessment of all building-based visual receptor locations during the operational phase is included in Technical Appendix 11.2. Officers are in agreement with these conclusions.

Officers accept that although some significant visual impacts will occur from some vantage points, and as accepted in the EIAR, these will not be significant in respect of the operation of the facility once the construction phase has finished. It is accepted by officers that a proposals of this scale and complexity cannot be built without some temporary adverse impacts as is often the case with construction activities. However it is important to ensure that construction activity impacts are controlled in an appropriate manner to minimise any impacts on surrounding sensitive receptors

A construction Environmental Management Plan will be finalised and submitted to ensure best practice during construction and in addition The Council's Environmental Protection Officer has recommended the following conditions be placed on any consent.

#### Noise and Vibration

*The noise and vibration survey identified 15 Noise and Vibration Sensitive Receptors. The sensitivity of 11 of the 15 identified receptors has been classed as high, 10 of which are residential sites.*

*The Environmental Impact Assessment Report Volume 1 – Main Report May 2022 states that 'surface work is expected to take place Monday – Saturday 7am -7pm and Sundays 7am – 12pm with underground works expected to take place 24 hours a day' With the number of noise and vibration sensitive receptors in the vicinity of the site, I would suggest the following condition:*

***“Surface work and underground work should be restricted to:***

- Monday to Friday: 0700 hours until 1900 hours.***
- Saturday: 0700 hours until 1700 hours.***
- Sunday / Public holidays: – no works, except for servicing and maintenance of plant and equipment and emergency work.***

***Reason: In order to protect the amenities of the area from noise and vibration nuisance and to minimise local community annoyance”***

*It is understood that a project of this magnitude may require some construction activities to be take place outside of these hours. Environmental Health will consider all applications for construction activities outside of these hours and will remain flexible (without detriment to the local residents) throughout the project.*

#### Private Water Supplies

*The Environmental Impact Assessment Report Volume 1 – Main Report May 2022 identified '17 private water supplies located within a 5km buffer of the Proposed Development. Multiple properties are served by the supplies which are considered to be of very high sensitivity'*

***In order to protect the identified private water supplies and the residents reliant upon these supplies; Environmental Health request that detailed information be provided on***

**how these 17 private water supplies will be protected during the construction and operation phases of the proposed development.**

**Reason – in the interest of public health and to ensure adequate measures are in place to protect the identified private water supplies**

### Lighting

*Artificial lighting will be used during the construction phase of the proposed development. Mitigation measures have been identified in the Draft Construction Environment Management plan. Environmental Health would be satisfied as long as the mitigation measures identified are implemented.*

*Similar, mitigation measures should be identified and implemented for the operational phase of the proposed development.*

### Dust

*The Draft Construction Environment Management plan has identified activities associated with the potential to generate dust. Specific control measures have been identified to ensure the employment of best practical means to minimise the risk of adverse effects from construction dust.*

*Environmental Health would be satisfied as long as the specified control measures identified are implemented.*

In terms of the design appearance of the new quayside shown in photomontages contained at (Figure 11.8 (a-d)) from the opposite side of Loch Awe near Tervine and from open water in the vicinity of the site, Officers consider that further details on the construction and appearance of the quayside require to be provided to investigate whether a softer and more natural appearance can be achieved than the somewhat stark and industrial finish indicated. As this is intended to be a permanent structure (notwithstanding that it is accepted that at this point the visitor centre and other engineered and man-made features can be found) it is important that best design and construction practice are used to minimise visual impact and maximise the opportunity to provide a more natural appearance from open water in particular as this is a popular location for water based recreational activities.

It is therefore proposed that a condition requiring further details of the design /appearance of the quayside feature and buildings be imposed to ensure that visual impacts are minimised, and biodiversity opportunities through soft engineering solutions are maximised in design and construction detail of this feature is required.

Officers also consider that although the main construction compound will be temporary this will still be large and potentially prominent in the landscape and in a localised context and it is essential that the compound minimises impact and integrates, in so far as is possible, into the landscape and also that restoration after use of the land also seeks to take on board the requirements of NPF 4 in respect of seeking biodiversity improvements. A condition to secure these objectives is also proposed

In respect of potential noise impacts Environmental protection officers have evaluated the potential amenity impacts from the proposals and are content that subject to the imposition of appropriate conditions these matters can be mitigated for the duration of the construction period. The long term operation of the facility is not considered to raise any amenity issues for residents.

**Having due regard to the above subject to the recommended conditions being applied in the event that consent is granted by the ECU it is concluded that the proposal will**

not have any adverse impacts on communities and individual dwellings, including, residential amenity, noise and subject to the recommended conditions is consistent with the provisions of SG 2 Renewable Energy; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; LDP 6 - Supporting the Sustainable Growth of Renewables; LDP 9 – Development Setting, Layout and Design and SPP (2014);

## F. LANDSCAPE AND VISUAL IMPACTS, INCLUDING EFFECTS ON WILD LAND (INCLUDING CUMULATIVE IMPACTS)

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for wind turbine developments to be assessed against any landscape and visual impacts including wild land.

In respect of these matters Volume 1 Chapter 11 of the main EIA report sets out in detail the evaluation of the proposals by the applicant. This chapter and its conclusions are supported by the following figures and appendices:

- Technical **Appendix 11.1**: Figures including:
- **Figure 11.1**: Zone of Theoretical Visibility;
- **Figure 11.2**: Designated and Protected Landscapes;
- **Figure 11.3**: Landscape Character;
- **Figure 11.4**: Visual Receptors;
- **Figure 11.5**: Indicative Landscape Mitigation Proposals;
- **Figure 11.6**: Developments included in the Cumulative Assessment;
- **Figure 11.7** (a-d): Visualisation of Proposed Upper Intake Structure from Cruachan Reservoir Track;
- **Figure 11.8** (a-d): Visualisation of Proposed Quayside Structure from above Tervine; and
- **Technical Appendix 11.2**: Visual Receptor Assessment.

Policy SG LDP ENV 14 in respect of Landscape and Policy LDP3 of the adopted Argyll and Bute Local Development Plan 2015 comprise the principal policies of relevance to landscape and visual evaluation of the Proposed Development. The aim of this policy is to protect, conserve and where possible enhance the built, human, and natural environment. Policy LDP3 also notes that a development proposal would not be supported where adverse effects, including cumulative effects on the integrity or special qualities of international or nationally designated sites; or, significant adverse effects, on the special qualities or integrity of locally designated natural and built environment sites, would occur.

In addition, Policy LDP9 concerns the design and setting of development, requiring development to be sited and positioned to pay regard to the context, and be compatible with the surroundings, particularly within sensitive locations including National Scenic Areas, Areas of Panoramic Quality or Gardens and Designed Landscapes.

- Woodland, green networks and wild land;
- The established character and local distinctiveness of the landscape; and
- The established character of the built environment in terms of its location, scale, form, and design.

Policy LDP3 is supported by various Supplementary Guidance with more specific regard to other landscape and visual considerations including:

- SG LDP ENV 6 Development Impact on Trees / Woodland;
- SG LDP ENV 9 Development Impact on Areas of Wild Land;
- SG LDP ENV 12 Development Impact on National Scenic Areas (NSAs);
- SG LDP ENV 13 Development Impact on Areas of Panoramic Quality (APQs);
- SG LDP ENV 14 Landscape; and
- SG LDP ENV 15 Development Impact on Historic Gardens and Designed Landscapes.

The following designated landscape areas and other areas protected through planning policy fall within the study area, as shown on Figure 11.2 of Appendix 11.1 of the EIA.

#### National Designations

- Wild Land Area (WLA) 09. Loch Etive Mountains; and
- Ardanaiseig House Inventory Garden and Designed Landscape (GDL).

#### Regional Designations

- North Argyll Area of Panoramic Quality (APQ).

Members are requested to note that LDP2 changes the name of Areas of Panoramic Quality (APQs) identified in the Argyll and Bute Local Development Plan (2015) to Local Landscape Areas. However, there is no change to the boundary of the North Argyll APQ which covers the LVIA study area defined in the application documents.

The applicants have provided separate Zone of Theoretical Visibility information (ZTVs) for the proposed Development indicating theoretical visibility of the upper intake structure and quayside and are shown on **Figures 11.1**. The ZTVs have been produced using the following assumed heights of features:

- Upper intake – Gate hoist structure at 13m above proposed ground level; and
- Quayside – Three operational buildings at 4.5m above proposed ground level.

The Proposed Development would be located on the northern shoreline and upper hills to the north of Loch Awe. Loch Awe is a long, linear Loch with a south-west / north-east orientation, but with an additional arm reaching westwards at its northern end towards the Pass of Brander where the existing Cruachan 1 is located.

The high craggy summits of Ben Cruachan and surrounding mountains rise steeply above this part of the loch shore and dominate the surrounding area whilst elsewhere, smaller scale landscapes of woodland, farmland and settlement characterise the loch-shore and surrounding straths, backed by a rugged landscape with a broad-scale pattern of moorland and commercial forestry.

The existing Cruachan concrete buttress Dam forms a striking feature within the mountain setting to the north of the Pass of Brander, and can be seen from many areas within the wider landscape context. Features of Cruachan 1 are also present on the shore of Loch Awe at the Pass of Brander, but are relatively discrete, being set within trees.

In respect of landscape visibility and potential impacts visibility the applicants submit that:

*11.6.16 Theoretical visibility of the proposed quayside is shown to be relatively localised within and around the arm of Loch Awe leading to the Pass of Brander. At the mouth of this arm of the loch, potential visibility is also shown to be funnelled across Loch Awe towards the south-eastern shore around Inistrynach, Bovuy and Achlian, and across the upland moorland and forestry area to the south-east up to around 7.5 km from the proposed quayside.*

*11.6.17 Theoretical visibility of the proposed upper intake structure is shown to be largely contained within Coire Cruachan by the ridges and summits of the mountains that surround it. More distant potential visibility is shown across areas to the south of this with patchy areas of ZTV coverage around areas such as Ardanaisig and Hayfield to the north of the main body of Loch Awe, and more consistent coverage across the loch and the southern shore across areas around Ardbrecknish and Keppochan as well as the hills beyond.*

*11.6.18 Site survey to verify the ZTV suggests that in most cases, woodland and local landform would limit actual visibility of these structures within the areas indicated, particularly around Loch Awe, and the existing Cruachan Dam would reduce visibility of the proposed upper intake structure from the south. The most consistent areas of intervisibility with the Proposed Development would therefore be likely to be within areas where woodland is limited, including views across the open waters of the loch, typically featuring the proposed quayside, and within the upland and mountainous areas, particularly around Coire Cruachan above the existing dam, where the proposed upper intake structure would be located.*

The EIAR confirms that evaluation of potential impacts have been undertaken from public transport routes and recreational routes. Residential Receptor Locations (RRLs) are described in detail in Technical Appendix 11.2 and their locations are shown on Figure 11.4.

The EIAR states that Landscape and visual issues have been a consideration throughout the design process for the proposed development and that the following embedded design principles have been adhered to in order to reduce potential landscape and visual effects where possible.

- The location of the majority of the proposed development underground;
- Considered positioning of permanent, above-ground features to minimise landscape and visual effect and optimise the opportunity for additional mitigation measures; and
- Minimising the permanent design footprint as far as is possible including the scale of required rock cuttings and requirements for woodland removal, particularly woodland included on the Inventory of Ancient and Long-established Woodland.

The applicants also confirm that embedded mitigation measures would also include habitat and landform reinstatement which would be integral to the restoration of areas disturbed during construction. The reinstatement of areas disturbed during construction would be fundamental to ensuring that the proposed development would be successfully accommodated into the existing landscape. This would be achieved through a combination of natural regeneration in sensitive upland habitat areas (refer to Appendix 3.1: Construction Environmental Management Plan), seeding where required and planting of appropriate woodland species to promote biodiversity as well and landscape integration.

Around the main permanent structures at the upper and lower control works, native woodland

planting is proposed to help soften the appearance of new features and compensate for trees and woodland lost through construction activities. The applicants contend that:

- *At the upper intake: Softening of the appearance of the rock cut areas through mounding of stored top soils / peat at the base of the cut and planting of upland woodland species (e.g. birch, rowan and willows), supplemented by the encouragement of natural vegetation growth at the base of the cutting and on benches; and*
- *At the quayside: Softening of the appearance of the new quayside walls with strategic replacement of stored soils on the quayside and planting with native woodland and scrub species reflective of those within the nearby Coille Leitire SSSI. The locations of such areas would be dependent on the operational requirements of the quayside*
- *During operation, no changes would be likely to be perceived relating to the upper works within the mountainous context. Therefore, potential change would be limited to the permanent quayside and other associated features such as buildings and tunnel portal. This would continue to form a perceptible change within this localised part of the landscape as it would result in a new section or artificial shoreline and built development in this area. However, this would occur within an area where the existing Cruachan 1 power station, Tervine fish farm and the A85 already lead to some similar features and the surrounding wooded character would reduce these changes to the localised context. Woodland planting on the quayside area would help to reduce the perceived level of change over time.*

Having examined the submissions in respect of such matters Officers are of the opinion that the longer term operational landscape and amenity impacts of the proposals are acceptable and accordance with Policy requirements subject to appropriate Landscaping, Biodiversity, Habitat and Peat management plans being produced to progress the detail of such measures Conditions on these matters are proposed.

It is accepted by officers that the scale and magnitude of impacts will be far greater on a temporary basis during construction than associated with the longer term operation of the facility. However officers consider that the greater transitional landscape and visual impacts during construction would not be a justification for raising objection to these proposals.

**Having due regard to the above subject to the recommended conditions it is considered that the landscape and visual impacts (including cumulative) are acceptable and the proposal is consistent with the provisions of: SG LDP ENV 13 – Development Impact on Areas of Panoramic Quality; SG LDP ENV 14 –Landscape; SG 2 Renewable Energy; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables; LDP 9 – Development Setting, Layout and Design; of the Argyll & Bute Local Development Plan; SPP (2014); NPF 3 and Revised Draft NPF4 Policy 14**

## **G. EFFECTS ON NATURAL HERITAGE INCLUDING BIRDS**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for wind turbine developments to be assessed against any impact they may have on natural heritage including birds.

The applicants have confirmed in Volume 1 Section 8 of the EIAR that in order to evaluate the potential ecological sensitivities associated with the Site, a desk study was conducted in advance of the field surveys. This included a review of:

- Ecological and ornithological surveys undertaken within the Site boundary or its environs since 2016;
- Existing data on statutory designated sites available through NatureScot Sitelink website for statutory designated sites up to 10 km from the Site;
- Records of Ancient Woodlands available from NatureScot (up to 2 km from the Site);
- The SBL;
- Argyll and Bute Council has designated non-statutory nature conservation sites, and such sites within 2 km from the Site were extracted from the Argyll and Bute Council Local Development Plan; and
- Other pre-existing biological data relevant to the Site were also searched for in online databases to which the authors had access and for which there were no copyright issues associated with their use in a commercial setting.

The EIAR conclusions have also been informed by a series of technical field studies, as described in Technical Appendix 8.1. In summary, the surveys included:

- Habitats, including GWDTEs and those listed as Annex 1 Priority Habitats, and notable flora, including Invasive Non-Native Species (INNS);
- Otter;
- Water vole;
- Badger;
- Red squirrel;
- Pine marten;
- Bats;
- Vantage point surveys for target raptor species;
- Breeding birds;
- Black grouse;
- Electrofishing surveys for fish;
- Spawning habitat surveys (for salmonid fish);
- Kick and sweep surveys for macroinvertebrates, and
- Aquatic macrophytes.

The potential impact on protected Woodland habitats associated with the Loch Etive Woods SAC and SSSI was the reason for NatureScot and the Councils Biodiversity Officer to both respond with a holding objection to the original EIAR submissions. Concerns over the potential impact of widening the access track as part of the construction process have been successfully addressed and by e-mail dated 25.10.22 the applicants clarified that:

*Further to our site visit last month and your request for further clarifications I am pleased to attach the following for your information.*

*1) Marked up technical drawings (as used on site visit) to show more clearly the existing deer fence and SAC boundary, as these relate to the proposed widening works. We agreed on site that, in practice, the SAC boundary would be aligned tightly to the southern edge of the existing metalled road.*

*2) Provision of cross sections at key points, to show how widening and earthworks would sit in the topography. On site we agreed that at this bend, where topography drops away quite quickly, it would be useful for you to see how this encroachment into the SAC may*



*look in profile. The previous commentary provided (see Q2 response in email trail below) regarding the stabilisation technique still applies.*

*3) Updated SAC impact report, including updated habitat loss calculations, based on the SAC boundary being aligned to the edge of the metalled road. As discussed on site, there will be a small encroachment into two areas where there is existing tree (birch) cover. The area of this encroachment has been calculated, in total along the whole length of the works, at 210m<sup>2</sup>. The precise number of trees that could be lost as a result of the widening works is not yet known. Once a contractor is on-board and we know their precise construction methods and requirements we can be precise about what, if any, impact there will be on existing trees.*

*We trust that these clarifications will assist in your consideration and allow you to remove your holding objection.*

The submission of the FEI at parts 5-7 and information enclosed therein on 14 December 22 has addressed these concerns and both holding objections have now been removed subject to conditions ensuring more detailed submissions are made for approval to assist finalising the design of the access track upgrades. RSPB are also satisfied with the proposals as set out in their consultation response.

In response to a request for additional clarification on felling and potential impact on woodland by Scottish Forestry the applicants confirmed within FEI Part 8 that:

*For the avoidance of doubt, there is no proposed loss of woodland and therefore a standalone woodland and forestry chapter has not been prepared as part of the EIA. Effects and impact on trees have however been assessed in Chapter 8 Ecology, and Chapter 11 Landscape and Visual Amenity.*

*Impact on woodland has been considered in Chapter 8 Ecology. To inform that chapter, a desk study was undertaken to anticipate potential ecological sensitivities associated with the site. This included reviewing records of ancient woodland (up to 2km from the site) and a review of statutory designated sites available through NatureScot Sitelink. That review identified woodland habitats present along the access track corridor only and not at either the lower works or the upper works. Table 8.9 summarises the likely construction phase impacts and effects on the Loch Etive Woods SAC, Coille Leitire SSSI and Ancient Woodland. Effects are from works to widen the dam access track, and for all works no significant effects are predicted.*

*A key premise of the proposed development is, where possible, the retention of existing trees to help limit the visual appearance of construction works and proposed features, particularly woodland included on the Inventory of Ancient and Long Established Woodland. This is covered in Chapter 3 at paragraph 3.3.6. As detailed designs of the proposals are developed more information about individual tree loss and planting as part of any landscaping proposals will become available and we will be happy to share and discuss these with you*

Scottish Forestry are content with the proposals and raise no objections as set out in their consultation response.

In respect of the responses from Marine Scotland and the Council's Marine Officer, they are both content with the proposals and raise no objections.

No objections have been raised by any of the external or internal consultees on ecological, habitat or marine ecology matters subject to the imposition of appropriate conditions by the Scottish Ministers.

Having due regard to the above it is concluded that subject to the conditions recommended by NatureScot, Marine Scotland, SEPA, Scottish Forestry and the Council's Local Biodiversity Officer and Marine Officer the proposal is acceptable in terms of natural heritage, the marine environment and birds and is consistent with the provisions of SG LDP ENV 1 – Development Impact on Habitats, Species and Our Biodiversity (i.e. biological diversity); SG LDP ENV 7 – Water Quality and the Environment; SG 2 Renewable Energy; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan; Government (January 2017); The Scottish Government's Policy on 'Control of Woodland Removal' (Forestry Commission Scotland 2009); NPF 3 and Revised Draft NPF4 Policies 3, 4 and 6

#### **H. IMPACTS ON CARBON RICH SOILS, USING THE CARBON CALCULATOR (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, Supplementary Guidance 2 and SPP require applications for renewable energy developments to be assessed against any impact they may have on carbon rich soils, using the carbon calculator.

The EIAR, volume 1 at chapter 6 addresses these matters under a general heading of "ground conditions". SEPA have raised issues in respect of potential Peat impacts, mostly related to the large construction compound area which is proposed to be located in an area with identified peat (including deep peat). They have requested the ECU to place a condition on any grant of consent requiring further information on the design and layout of the compound and access tracks, with a specific requirement for a peat management plan to be submitted and approved prior to works commencing. SEPA also wish not only restoration solutions to be provided, but also opportunities through proposed management to improve the peatland in the area. This after use of the construction compound is agreed to be an important matter which requires to be both sensitively and effectively addressed in further submissions related to both the operational phase of the compound and the restoration phase.

Officers are in agreement with SEPA on the need for both a peat management plan to be provided, but also for opportunities to improve the peatland/habitat in the general area of the construction compound and other construction areas to be investigated. Conditions to this effect have been requested by SEPA.

**Having due regard to the above, subject to the recommended conditions it is concluded that the proposal will not have an adverse impact on carbon rich soils, using the carbon calculator and is therefore consistent with the provisions of SG LDP ENV 1 – Development Impact on Habitats, Species and Our Biodiversity (i.e. biological diversity); SG LDP ENV 11 – Protection of Soil and Peat Resources; SG 2 Renewable Energy; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan; SPP (2014); NPF 3 and Revised Draft NPF4 Policy 5**

#### **I. PUBLIC ACCESS, INCLUDING IMPACT ON LONG DISTANCE WALKING AND CYCLING ROUTES AND THOSE SCENIC ROUTES IDENTIFIED IN THE NPF (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against any impact they may have on public access, including impact on long distance walking and cycling routes and those scenic routes identified in the NPF.

The Council's access manager has provided a lengthy consultation response which raises no objections to the proposals. However it is noted that an access plan has been requested and it is agreed that this is necessary in order to ensure that access to local footpaths and visitor facilities are not unnecessarily impacted. The EIAR submission confirms that access to the Dam Structure and the road to it, which is widely used by visitors will remain open however an access plan/strategy will give the advantage at looking at the potential impacts on wider access issues to ensure that there remain widespread opportunities for informal recreational access to the hills and other popular locations.

It is therefore considered that a wider access strategy is required to accompany the access plan, and this should also explore potential improvements to footpaths in the area as a community and tourism benefit associated with the proposals. Indeed some materials extracted may potentially be capable of re-use in the local area for footpath improvement. Officers will explore these opportunities with the applicants should consent be granted as part of an Access Plan and Strategy and a condition to this effect will be requested to be imposed.

**Having due regard to the above it is concluded that the proposal will not have any adverse physical impacts on public access, including impact on long distance walking and cycling routes and those scenic routes identified in the NPF and is therefore consistent with the provisions of SG 2 Renewable Energy, SG LDP TRAN 1 – Access to the Outdoors; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan; SPP (2014); NPF 3 and Revised Draft NPF4 Policy 21**

#### **J. IMPACTS ON THE CULTURAL HERITAGE, INCLUDING SCHEDULED MONUMENTS, LISTED BUILDINGS AND THEIR SETTINGS (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against any impact they may have on the historic environment, including scheduled monuments, listed buildings and their settings.

In respect of the current proposals there are three main listed features which require to be considered:

- The Turbine Hall and associated infrastructure (Category A)

The Turbine Hall is of high historic cultural significance for the role it played in the technological development of hydroelectric power and the post-war energy programme of Scotland. In 1965, when construction was completed, the asset was the first example of a reversible turbine pumped storage plant in Britain. This development was significant for British power generation as it improved energy efficiency; with the power station being able to store otherwise wasted energy produced in off-peak hours to instead be used when it was most needed. The construction of a power station of this scale, underground, and utilising pumped storage was 'pioneering' and paved the way for similar schemes elsewhere in the world. The hall was designed by James Williamson and Partners and is noted in the listing as being 'typical of their approach'

which was defined as being innovative and forward thinking. Williamson and Partners became synonymous with the North of Scotland Hydro Electric Board (NoSHEB)

The receptor holds high architectural significance for its distinctive 1960s interior design, featuring a timber mural by the artist Elizabeth Falconer. The turbine hall is 36m high by 90m long and features several design features dating from the 1960s, including the timber mural, lighting and use of timber and concrete throughout. The designation notes the following features specifically: • Viewing gallery to NE corner, • Concrete lined vaulted roof, • Supported track and gantry cranes, • Tiled Floor • Timber mural by Elizabeth Falconer, • Timber panels and acoustic baffling panels of concrete, geometric shapes, • Projecting window to control room, • Large overhead lighting panels

- The Falls of Cruachan Railway Viaduct (Category A)

As a Category A listed building, the viaduct, is a receptor of high sensitivity. The significance of the receptor is derived from its architectural and historic interest, as a result of its innovative form and its role in improving rail connections with Argyll. The viaduct is the first on a British railway to have arches made from mass concrete, an innovation which would greatly improve the ability of 19th century engineers to create long stretches of viaducts. The viaduct forms part of the Callander and Oban Railway which, constructed between 1866 and 1880, greatly improved connections into Argyll and brought significant benefits to the previously isolated western region.

The viaduct is also a fine example of 19th century rail infrastructure, described in the designation as comprising of three concrete arches sitting upon bull-face stone piers. The top of the viaduct has a crenelated parapet and a 21st century safety rail. There is a string course along the base of the parapet and the central crenulation is raised with a crest of arms. It forms a group with the nearby Cruachan Dam and Turbine Hall as part of a series of large-scale interventions into the surrounding landscape setting.

The viaduct is located to the north of the A85 and spans across a stream running down the southern slopes of Ben Cruachan. The railway line sits within a small area of wooded landscape at the foot of the mountain. The surrounding area makes a positive contribution to the setting, with the surrounding natural scenery creating an attractive backdrop. To the south of the asset is the A85, the potentially negative impact of the road is largely mitigated by intervening vegetation, blocking views and noise even in winter, and its position lower down the mountain.

The proposals do not include any direct works that would affect the sensitivity or significance of the Viaduct, as such any impact would arise through the introduction of new built form within its setting. During the construction phase there would be construction activity in and around the viaduct, including the temporary diversion of the A85 to facilitate construction works. This Likely Significant Effects 2 diversion would remain in place for 2-4 months during the construction of the initial section of the new main access tunnel. Given that this would utilise an existing 'lay-by' feature within the highway, it is not considered that this element of the proposals would result in any permanent or longer term impact on the significance of this receptor.

- The Cruachan Dam Structure (Category B)

The immediate setting of the dam makes a positive contribution to its heritage significance, creating a highly attractive natural setting, comprising of the reservoir which feeds the power station below. The landscape surrounding the dam includes the

mountains of Meall Cuanail to the west and Beinn a Bhuidh to the east. The dam appears as a manmade intervention within an otherwise scenic backdrop. The wider setting of the asset is largely similar to its immediate setting; there is a lack of development, and the area is largely natural.

The dam sits within the Ben Cruachan mountain range. The peaks of the mountain range create a horseshoe around the dam with the valley sloping southwards to Loch Awe. The valley south of the asset contains some surface features associated with the power station, such as a road and electrical substation. However, the smaller scale of these features in the larger setting mean that it does not detract from the experience of the asset. The weathered concrete exterior of the asset is complimented by the exposed rock of the mountain, improving the ability for one to appreciate its architectural form.

The proposals include the creation of a new upper intake, to the south-east edge of the reservoir, approximately 110m north of the dam. During construction, it is proposed to construct the intake within a temporary dry well and the rock cutting will be undertaken using a combination of blasting and rock support. This will then become a permanent feature which must be considered in respect of its potential impact upon the setting of the dam.

The applicants in their FEI submissions of 14.12.22 clarify that:

*For detailed plans relating to the Section 36 application, please refer to the original submission documents. Details of embedded mitigation are set out in detail within the EIAR Cultural Heritage Chapter 12. In summary, these include: o Landscape design to the proposed upper intake, o The preparation of a Construction Environmental Management Plan (CEMP), a draft of which was included in the original EIAR.*

*Following receipt of comments from HES and a site visit on 6 September 2022, further detail has been provided in the following documents, enclosed at Appendix 5. • Cruachan 2 – Upper Intake and Dam Memorandum, Nov 2022 • Cruachan 2 – Access Tunnels connecting Powerhouse and MAT Memorandum, Nov 2022 Likely Significant Effects 34289A5/P1/LK/ Page 13 December 2022*

*A separate Listed Building Consent application is to be submitted for creation of the two new access tunnels and the associated works that directly impact the listed Turbine Hall*

The proposed quayside would be a permanent change within the setting of the Category A listed Turbine Hall, through the introduction of new structures within proximity of the main access tunnel entrance. Once operational, the quayside would feature an administrative and storage buildings which are required to facilitate ongoing operation and maintenance of the expanded power station. Officers consider that conditions can be used to control the final appearance of these buildings.

The proposed quayside will be located below the existing embankment to Loch Awe, to the east of the existing access tunnel. As a result of the topography and position of the quayside and associated structures, these elements of the proposal will not result in any meaningful change to the way in which the main entrance tunnel will be experienced within the landscape. The applicants contend that; *“This element of the proposal would give rise to a negligible impact to the significance of the listed building.”* Officers are in agreement with this view.

**Historic Environment Scotland (HES) (No response)**

No response has been placed on the ECU Website at time of writing this report,

The Council's Conservation and Heritage officer is content that the proposals are acceptable subject to the use of appropriate conditions to provide more detail on the detailed design and appearance of the proposed works associated with the new inlet structure in the vicinity of the dam and set within a rock cutting. A condition requiring the submission of further details on the appearance and materials to be used is proposed.

Associated need for Listed Building Consent for works to Category A Listed Plant room connections

Members are requested to note that in addition to the applicant requiring S36 consent for the creation of the new Turbine Hall, plant and associated tunnels and, a separate detailed Listed Building Consent (which will be determined by the Planning Authority) is required to undertake any works which could potentially adversely impact on the Category A listed Plant Room.

Extensive discussions have been undertaken between Council Officers, HES and the applicants to form agreement on the extent of the existing plant and machinery which forms part of the listing potentially impacted by the proposals, and how the proposals can be undertaken in a manner which respects the sensitivities of the existing listed plant room and associated structures.

These discussions have been running in tandem with the S36 process and Officers and HES are content that the Listed Building Consent process can adequately safeguard the integrity and character of the category A Listed Turbine Hall through this separate consenting regime.

In respect of the S36 proposal and the need to safeguard the setting of the Category B Listed Dam itself and the Category A Listed Falls of Cruachan Railway Duct, the Council's Heritage advisor is content that the use of conditions requiring the submission of further details to be can properly address these matters.

**Having due regard to the above it is concluded that subject to the imposition of appropriate conditions this proposal is consistent with the provisions of SG LDP ENV 16(a) – Development Impact on Listed Buildings; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables; and SG 2 Renewable Energy of the Argyll & Bute Local Development Plan, NPF 3, Revised Draft NPF4 Policy 7 and Historic Environment Policy for Scotland (April 2019) in this respect.**

**K. IMPACTS ON ROAD TRAFFIC AND ADJACENT TRUNK ROADS (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against any impact they may have on road traffic and adjacent trunk roads.

Transport Scotland have the main responsibility for the adequate maintenance and proper functioning of the Trunk Road network in Argyll and Bute. The A85 is critical for not only residents and businesses going about their daily lives but also for tourism and associated socio economic well-being of the whole community served by the A85 as a main arterial route. As this is clearly an important matter, Officers have provided the Transport Scotland Response in some considerable detail within the report for ease of reference.

Members are requested to note that the Area Roads Manager has reviewed the response from TS and the proposed conditions, and has raised no objection to the proposals or the proposed conditions.

Transport Scotland (TS) – have considered both the original EIAR and the FEI and advise that they have no objection to the proposal subject to conditions to the conditions, set out below and imposed on any grant of consent. Given the potential importance of roads as a planning consideration comprehensive extracts of their consultation response have been set out below for Members ease of reference:

### **Temporary Traffic Management on A85(T)**

*The EIAR states that construction of the main access tunnel portal will require temporary traffic management on the A85(T). It was initially proposed to redirect the A85(T) using a temporary build out on the loch foreshore, however, further information has been submitted to justify discounting this approach due to the additional material and construction timescale required to form this option. We note that it is now proposed to utilise the existing informal layby on the A85(T) which is currently used as parking for the Falls of Cruachan railway station as well as for hill walkers, to form a temporary realignment to the north of the existing A85(T), generally as illustrated on Stantec Drawing 331201086/001/C/0862. We also note that at a width of 4.7m, the use of this layby will result in the need for one-way signalised shuttle workings, lasting for approximately 3-4 months. Transport Scotland has indicated a desire for two-way operation to be retained at this location during the construction period and discussions continue on what might be possible at this location and the applicant is currently considering alternative options. The applicant has also indicated that whilst traffic management is in place on the A85(T), replacement public parking and access will be provided within the existing Visitor Centre car park. The details of this and the provision of appropriate pedestrian linkages along and across the A85(T) will require to be agreed. With regard to the current application, Transport Scotland is content that this aspect is covered by a Planning Condition and that the details of the temporary diversions and construction methodology affecting the A85(T) will be dealt with post-consent(should planning consent be awarded).*

### **Development Access**

*It is proposed to construct a new junction on the A85(T) at the eastern extents of the site to provide access to the development area, in addition to the existing junction. This is illustrated on Stantec Drawing 331201086/001/C/0859/P02. Transport Scotland has reviewed preliminary design drawings for this junction and is content that the design of the junction can be covered by a Planning Condition at this stage.*

### **Assessment of Environmental Impacts**

*Chapter 9 of the EIAR presents the assessment of the likely significant transport effects arising from the construction and operation of the proposed development. We also note that a separate Transport Assessment (TA) has been prepared and is included at Appendix 9.1. The EIAR states that the assessment has been undertaken in accordance with the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Assessment of Road Traffic, Transport Assessment Guidance (2012), as well as the Design Manual for Roads and Bridges (DMRB). Transport Scotland is satisfied with this approach.*

### **Study Area**

*Chapter 9 states that in accordance with Transport Scotland's scoping response, the A82(T) and A85(T) have both been included within the study area. Baseline traffic flows have been*

determined using automatic traffic count (ATC) data for 2019 from Transport Scotland's National Traffic Data System (NTDS) platform and ATC surveys undertaken in 2017. The 2017 data has been uplifted to 2019 data based on a factor derived by comparing the 2017 Transport Scotland NTDS traffic counts to 2019 Transport Scotland NTDS traffic counts. We also note that in order to establish the AM and PM hour flows, the busiest hour between 06:00 -12:00 was taken as the AM peak hour and the busiest hour between 12:00 -18:00 was taken as the PM peak hour for each traffic count location separately. As such, the AM and PM peak hours used in the assessment are not uniform across all the traffic count locations and instead relate to the highest hourly AM and PM traffic flows for each location separately. Transport Scotland considers this approach to be acceptable....

... While we would acknowledge that the high percentage increase associated with HGV traffic is a factor of relatively low base flows, Transport Scotland would consider that some form of mitigation is appropriate. We note that the conclusion of the assessment is that the construction phase of would result in a "Negligible" magnitude of impact and hence a "Negligible" significance of effect, with no further mitigation proposed other than the embedded mitigation as detailed within Section 9.7 of the EIAR. Transport Scotland does not see how this conclusion can be reached without considering the specific HGV effects. Section 9.7 indicates the proposed embedded mitigation as being a review of the works programme to seek to reduce effects on sensitive receptors where reasonably practicable and the preparation and implementation of a Construction Traffic Management Plan (CTMP). It is noted that Transport Scotland would have looked for a CTMP to mitigate any environmental effects associated with increased HGV levels, so we are satisfied that appropriate mitigation can be put in place. A CTMP will therefore be required which should be submitted to, and agreed by, the Area Manager prior to the commencement of any works. A key aspect of the construction management will be the inclusion of a programme of before / during / after road condition surveys and the scope of these will require to be agreed with Transport Scotland. The applicant will be required to enter a Legal Agreement under Section 96 of the Roads Scotland Act 1984 (Extraordinary Damage to Road), whereby the applicant agrees to pay the costs of such damage attributed to their works. The adoption of this strategy is intended to ensure impacts on the structural integrity of the trunk road network are managed.

### **Road Safety Audit**

We note that an independent Stage 1 Road Safety Audit (RSA) was undertaken for the Widening of St Conan's Road, the main access road to the Lower Control Works site and the secondary access road to the Lower Control Works site. We note, however, that the installation of the signals and the shuttle working has not been subject to any RSA at this stage. Transport Scotland will require a Road Safety Audit to be undertaken for these works and submitted to the Area Manager. This will require to be undertaken as part of the detailed design process for the traffic management arrangements

### **Abnormal Loads Assessment**

An Abnormal Indivisible Loads Assessment (AILA) has been provided within the TA. This states that it is a preliminary assessment and that detailed AIL access route assessments will be undertaken for each required AIL at the time of the programmed movement dates, once the specification / dimensions of those loads are known. We note that the Port of Entry for components has yet to be finalised, and as such, the AIL route has yet to be finalised. Potential ports and associated routes have been identified, however, as the A85(T) and A82(T) connect directly to the site from the east and the west, constraints on these two sections have been identified within the AILA based upon a preliminary desktop study. This assessment has identified numerous height, width and weight restrictions on the A85(T) and A82(T) between Oban and Crianlarich, all of which could require further investigation and potential mitigation. We note that the AILA states that a transformer of a similar dimension and weight to the one



assumed in the assessment was successfully transported to Cruachan Power Station from Longannet Power Station in Fife. This AIL was transported during the night via the M876, M9, A84(T), A85(T), A82(T) and A85(T). This required police escort, road closures on the A82(T) between Crianlarich and Tyndrum and the temporary reinforcement of a bridge at Inverherive. We understand that similar measures may be required during the delivery of AILs for the current application and these would be assessed as part of future detailed AIL assessments. Having discussed this issue with the applicant, Transport Scotland is content that the issue of transporting AILs can be covered by appropriate Planning Conditions.

## **Conclusions**

Based on the review undertaken and further to the various discussions with the applicant, we can confirm that Transport Scotland is satisfied with the submitted EIAR and does not propose to object to this planning application, on the understanding that the Conditions identified below are attached to any consent granted.

**Condition 1:** Prior to the commencement of any works, written approval from the planning authority in consultation with Transport Scotland, must be obtained for the details of the proposed means of access from the A85(T), generally in accordance with Stantec Drawing Number 331201086/001/C/0859. Thereafter, the proposed access shall be constructed in accordance with the approved details.

*Reason:* To minimise interference with the safety and free flow of the traffic on the trunk road.

**Condition 2:** Prior to the commencement of any works, a plan for the design, implementation and duration of all temporary traffic management arrangements on the A85(T) must be submitted to and agreed by the planning authority in consultation with Transport Scotland. Thereafter, all temporary traffic management arrangements will be implemented in accordance with the agreed plans.

*Reason:* To minimise interference with the safety and free flow of the traffic on the trunk road.

**Condition 3:** Prior to the commencement of any works, a detailed design and specification for the proposed access portal structure beneath the A85(T) shall be submitted to and approved in writing by the planning authority in consultation with Transport Scotland. Thereafter, the proposed structure shall be constructed in accordance with the agreed plans. For the avoidance of doubt preconstruction compliance will include, but not be restricted to:

- (i) Approval in Principle
- (ii) (ii) Category 3 structural design check to CG300
- (iii) (iii) Geotechnical Check - Category B to SH4

*Reason:* To ensure that the proposed design of the works complies with the current standards and that the safety and free flow of traffic on the trunk road is not diminished.

**Condition 4:** Prior to the commencement of any works, a detailed design and specification for any proposed sheet piling works adjacent to the A85(T) shall be submitted to and approved in writing by the planning authority in consultation with Transport Scotland. Thereafter, the proposed structure shall be constructed in accordance with the agreed plans. For the avoidance of doubt pre - construction compliance will include, but not be restricted to: (i) Approval in Principle (ii) Category 3 structural design check to CG300 (iii) Geotechnical Check - Category B to SH4

*Reason:* To ensure that the proposed design of the works complies with the current standards, and that the safety and free flow of traffic on the trunk road is not diminished.

**Condition 5:** Prior to the commencement of any works, a Construction Traffic Management Plan must be submitted to and approved by Transport Scotland. The complete report shall include, but not be restricted to, details of the following:

- o Identification of designated construction vehicle routes to site
- o Access arrangements o Methods to ensure that construction routes are followed
- o Identification of construction vehicle volumes set against key construction tasks and programme
- o Measures to minimise and control construction vehicle volumes
- o Measures such as wheel washing and dust suppression requirements
- o Construction staff travel arrangements
- o Confirmation of site working hours
- o Measures for mitigating HGV movements through settlements lying within the A85 and A82 trunk road corridors
- o Measures for accommodating displaced car parking from the A85(T) during construction.
- o Measures for maintaining pedestrian access along and across the A85(T) during construction.
- o Arrangements for monitoring accelerated wear and tear on the road network
- o A blasting plan is to be included as part of CTMP
- o Arrangements for abnormal loads o Signage details and details of any temporary traffic management arrangements o Site liaison details
- o Arrangements for monitoring and updating the CTMP

*Reason: To minimise interference and maintain the safety and free flow of traffic on the Trunk Road as a result of the traffic moving to and from the development*

**Condition 6:** Prior to commencement of works on site, a methodology and programme shall be submitted to and agreed with the planning authority in consultation with Transport Scotland, relating to the monitoring of the condition of the A85 trunk road. Thereafter the approved programme of monitoring shall be implemented. Any remedial works shown by the monitoring as arising from the construction of the development, shall be undertaken by the applicant within 3 months of the completion of the final monitoring undertaken, unless an alternative means of securing the works is approved in writing by the Planning Authority in consultation with Transport Scotland.

*Reason: To ensure the fabric of the trunk road is not adversely affected by the construction operations*

**Condition 7:** Prior to commencement of deliveries to site, the proposed route for any abnormal loads on the trunk road network must be approved by the trunk roads authority prior to the movement of any abnormal load. Any accommodation measures required, including the removal of street furniture, junction widening and any traffic management, must similarly be approved.

*Reason: To minimise interference and maintain the safety and free flow of traffic on the Trunk Road as a result of the traffic moving to and from the development.*

**Condition 8:** During the delivery period of construction materials / plant etc., any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland before delivery commences.

*Reason: To ensure that the transportation will not have any detrimental effect on the road and structures along the route.*

*Transport Scotland has not included any Conditions relating to works associated with, or in close proximity to, the railway line or the various approvals and consents which will need to be obtained from Network Rail regarding these. Transport Scotland is willing to liaise and consult with Network Rail as required but would fully expect and anticipate Drax to do the same.*

*In addition to the above Conditions the applicant should also be informed of the following advisory notes setting out requirements relating to works within the trunk road boundary.*

- i. The applicant should be informed that the granting of planning consent does not carry with it the right to carry out works within the trunk road boundary and that permission must be granted by Transport Scotland Roads Directorate.*
- ii. Trunk road modification works shall, in all respects, comply with the Design Manual for Roads and Bridges and the Specification for Highway Works published by HMSO. The developer shall issue a certificate to that effect, signed by the design organisation.*
- iii. Trunk road modifications shall, in all respects, be designed and constructed to arrangements that comply with the Disability Discrimination Act: Good Practice Guide for Roads published by Transport Scotland. The developer shall provide written confirmation of this, signed by the design organisation.*
- iv. The road works which are required due to the above Conditions will require a Road Safety Audit as specified by the Design Manual for Roads and Bridges.*
- v. Any trunk road works will necessitate a Minute of Agreement with the Trunk Roads Authority prior to commencement.*
- vi. To obtain permission to work within the trunk road boundary the developer should contact the Area Manager through the general contact number 0141 272 7100.*
- vii. The Operating Company has responsibility for co-ordination and supervision of works and after permission has been granted it is the developer's contractor's responsibility to liaise with the Operating Company during the construction period to ensure all necessary permissions are obtained.*

#### The Council's Roads & Amenity Services

The Area Roads Manager has reviewed the above response by TS and both the original EIAR and the FEI. He advises that the site access connects directly to the A85 and that the advice of Transport Scotland should be sought by the ECU on the formation of this junction. The area Roads Manager has commented that:

*Trunk Roads to comment on A85 issues.*

*It is noted that the Trunk Road network will probably be impacted more than the local area network. If the local area roads network is to be affected by disposal of excavated materials for any reason then commensurate improvements may be required to facilitate significant additional vehicle movements at the developer's expense.*

The following conditional matters have been requested to be imposed by the Area Roads Manager.

- Information to be provided on locations for disposal of material from works, specifically the impact on local area roads and infrastructure. Construction Traffic Management Plan to be provided if necessary.*
- Traffic Impact Analysis required to cover any potential impact on Argyll and Bute Council local area roads. This report should include a cumulative report in concert with other S36 and S37 schemes in the North Argyll/ Loch Awe area paying particular attention to the possibility of utilizing materials locally to prevent unnecessary vehicle*

*movements thus reducing the potential for related deterioration of the fragile local area roads network.*

Discussions have been undertaken with the applicant about seeking to minimise the transportation of extracted rock material on the road network as part of minimising both HGV traffic on the wider road network, but also reducing emissions associated with this.

It has been agreed in discussions between the applicant and the Area Roads Manager that the requested Cumulative TIA which both Transport Scotland and The Area Roads Manager will require to approve should be conditioned, but also that as part of the CEMP a “waste” management plan and strategy should be provided to clarify how the applicants have sought to maximise local use of the extracted materials rather than transport it to more distant locations using the roads network. At the moment Officers have been informed that the use/destination of all materials has not been finalised and Officers consider that this is a matter which would benefit from further discussions between the applicants. A&B Council and Transport Scotland and the suggested condition will seek to achieve this approach.

**Having due regard to the above, subject to the relevant conditions being attached to any consent granted by the ECU, it is concluded that the proposal will not have any adverse impacts on road traffic and adjacent trunk roads and the proposal is consistent with the provisions of SG2 Renewable Energy, Policy LDP 6 – Supporting the Sustainable Growth of Renewables; SG LDP TRAN 4 – New and Existing, Public Roads and Private Access Regimes of the Argyll & Bute Local Development Plan , NPF 3 and Revised Draft NPF4 Policy 12**

#### **L. EFFECTS ON HYDROLOGY, THE WATER ENVIRONMENT AND FLOOD RISK (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, Supplementary Guidance 2: Renewable Energy and SPP require applications for renewable energy developments to be assessed against effects on hydrology, the water environment and flood risk.

In their initial consultation response SEPA raised a number of concerns/questions in respect of drainage/flooding and other technical matters which they required further clarification on, as set out below:

*We have reviewed the information supplied with the EIAR and have found it to be insufficient to allow us to determine the potential impacts. We therefore submit a holding objection and request determination be deferred until further information is provided in relation to hydrogeological / groundwater issues, site ecology and flood risk as detailed in Sections 1, 4 and 5 below. We will review our position if these issues are adequately addressed.*

*We support the intention produce a Site Waste Management Plan (SWMP) and that this is to remain a live document throughout the duration of the construction period. We request a planning condition requiring the preparation of a full SWMP once design and contracting elements of the project are confirmed. We agree this should build on the information provided in the EIAR and specifically, given the potential implications for its storage and the reuse potential of the material, this will also need to be informed by the outcome of further assessments required in relation to the potential for the geology at the site to generate acidic leachates and acid rock drainage as discussed in Section 1 above and Appendix 2 enclosed.*

*4.1 We have concerns regarding the impact to groundwater dependent flush habitats, in the Lower Site Compound area and throughout Upper Works (particularly down the slopes leading into Cruachan Reservoir and down to the existing Access Track). The mapping provided in Figures 3.3 and 3.4 of EIAR Appendix 8.1 Non-Avian Ecology does not show the location of*

*the flushes and the text has not made it clear how close the flushes are to excavation areas, nor their relative position. The M10 and M11 base-rich flushes can be assumed to be groundwater dependent, however the groundwater dependency of other potential GWDTE habitats noted on site has not been assessed.*

*We therefore request further information be provided to: a) Assess the likelihood of groundwater dependency of the potential GWDTE habitats which will be directly or indirectly impacted by the development. M10 and M11 flushes are assumed to be groundwater dependent so do not need to be included in the assessment; and b) Illustrate the relative position of the infrastructure and excavation areas in relation to the flushes, other groundwater dependent wetlands and wetlands valuable for nature conservation (i.e. all levels of importance above site level). The groundwater dependent wetlands should only be included for those assessed as being likely to be groundwater dependent. 4.2 Given the reliance on the Habitat Restoration and Landscape Mitigation Plan to address impacts to wetland habitats and peat we request an outline plan is provided prior to determination for review. A planning condition should also be applied to require the full plan to be submitted before commencement. Damage to groundwater dependent flushes is often permanent; it is difficult or impossible to reinstate or restore flushes after direct impact or redirection of groundwater emergence; the HRLMP, CEMP and infrastructure layout must consider this and address the likely outcome for these habitats, which are important for nature conservation. 4.3 Further information must be provided on the layout of the Lower Site Compound and the requirement to excavate at this location. The applicant should clarify if alternative locations for the Lower Site Compound were considered, if excavation can be avoided where peat depth is greater than 0.5 metre and if there are flushes in the Lower Site Compound area and how will these be managed*

*Therefore, a flood wall to a 1 in 100 SoP will not ensure the development will necessarily remain operational during a 200-year event. FRA Appendix E indicates the precise SoP is 107-year event and anything greater will overtop the proposed wall. We therefore request the design of the flood wall is modified to ensure it is designed and constructed to remain operational during the 1 in 200 year flood even*

*During the construction phase of the project it is anticipated 2.3 million tonnes of excavated rock arisings will be produced over the 5.5 year construction period (2024- mid 2029). EIA Section 3.8.2 indicates that the excavation arisings will be in the form of rock 'chippings' ranging from boulders to fines produced by drill and blast techniques. It is reported that drill and blast methodology is assumed to be used for all underground works....0.45 million tonnes of excavated material is to be reused on site. It is proposed that 140,800 tonnes of material will be used towards the construction of a 510m long quayside structure on Loch Awe and used in concrete production. The excavation arisings, 15,000 tonnes of spoil at any one time, will be stored on the quayside structure, prior to transportation off-site by road. The arisings will be stored under a canopy structure, enclosed on three sides to prevent runoff and windblown silt from entering Loch Aweon for lining the tunnels. There is currently no agreed use for the remaining excavated material.*

*We also request, if you are minded to grant consent, the planning conditions detailed in Sections 2.6 (Site Waste Management Plan), 4.2 (Habitat Restoration and Landscape Mitigation Plan) and 4.8 (Peat Management Plan) be attached to the consent.*

*(Additional information provided on these matters in FEI on 14.12.22)*

*Although many of these matters have now been addressed by the EIA/ FEI submissions and further clarifications provided to SEPA by the applicants, there remains one outstanding matter on which SEPA have maintained a holding objection to the proposals as set out below:*

**Potentially Acid Generating (PAG) Rock** Construction of the Cruachan Expansion Project will require the removal and management of an estimated 2.3 million tonnes of rock. The EIA states it is likely some of the arisings will be Potentially Acid Generating (PAG) rock. We previously requested more information to understand the potential for the site geology to generate acidic leachates and acid rock drainage and to evaluate the appropriateness of material reuse as fill materials and concrete aggregates. The findings from the initial investigation in the submission are that some of the material is likely or highly likely to be potentially acid generating which means the rock arisings could potentially leach acidic leachate and mobile metals. This will heavily influence material storage, transport, disposal and potential reuse options.

While we agree with the applicant that an Acid Rock Drainage (ARD) Management Plan will be required (and secured as a planning condition), there remains significant uncertainty regarding the amount of material which will be potentially acid generating. No information has been provided to estimate the scale of the issue. We therefore cannot currently advise on the potential environmental effects associated with this element of the project.

It is likely this material will have to be segregated and disposed of at an appropriate site (i.e. landfilled) with mitigation to prevent environmental impacts and regulation by SEPA under the Pollution Prevention and Control (Scotland) Regime (PPC). At this stage it is not clear what size of site would be needed and whether a suitable one would be available to accept the material. This represents a significant environmental risk which we expect to be addressed before determination.

On that basis we maintain our **holding objection** on grounds of lack of information in relation to the potential impacts associated with the potentially acid generating rock. To allow us to revisit this position we require further information to outline how much material is potentially acid generating, what will be the disposal method for it, the environmental risks involved and the contingencies should more material than anticipated be affected.

The treatment of this material will be tied into the required waste management plan which officers consider is required to sit outside the general CEMP as there are very specific and detailed matters which require to be addressed. In the opinion of Officers this will be best achieved through a separate document and not folded these matters into the larger CEMP submissions. SEPA have already advised the ECU that a condition on these matters is required.

Officers verbally discussed this Objection with SEPA on 22.1.23 and they have clarified that this is not an objection in principle to the development but a technical matter they require to be satisfactorily addressed before withdrawing their objection. This will be a matter for the ECU to resolve prior to reaching their conclusion on the proposal and is not considered a matter which the Planning Authority should raise objection to.

**Having due regard to the above, subject to the relevant conditions being attached to any consent granted by the ECU, it is concluded that the water environment and flood risk have been considered and the proposal is consistent with the provisions of SG 2 Renewable Energy, Policy LDP 6 – Supporting the Sustainable Growth of Renewables and SG LDP SERV 7 – Flooding and Land Erosion – The Risk Framework for Development of the Argyll & Bute Local Development Plan, SPP (2014), NPF 3 and Revised Draft NPF4 Policy 1**

## **M. IMPACTS ON TOURISM AND RECREATION (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against any impact they may have on tourism and recreation.

There is no record on the ECU website of any consultation advice from Visit Scotland on the ECU website. It is considered that it would be beneficial for the ECU to obtain their views prior to reaching a decision on this proposal.

The Council regards landscape as being a particularly valued asset both in terms of its intrinsic qualities and in terms of its value to the tourism economy. For all types of development the maintenance of landscape character is an important facet of decision-making in the countryside in Argyll & Bute, regardless of the scale of development proposed. The Council's LDP Policy LDP 6 identifies impacts on tourism and recreation as a material consideration in the assessment of renewable energy developments on the basis that inappropriate developments with significant adverse effects which contribute to the degradation of landscape character are unlikely to be in the interests of the Argyll tourism economy.

Potential impacts on tourism are addressed within the EIAR at Volume 1 chapter 13. The EIAR at 13.7.13 recognises that:

*Argyll and Bute is a popular tourist destination owing to its high quality natural environment, heritage attractions and onward travel connections to the Western Isles and Inner Hebrides. Tourism is a key sector and a growing industry in Argyll and Bute. In 2019, Argyll and the Isles witnessed notable growth in overnight tourism. Both domestic and international visitors increased in numbers which resulted in even bigger rises in nights and expenditure. Between 2017 and 2019, overnight trips to Argyll and the Isles were just under a million per year on average, a 15% increase from 2016-2018-22. ..Argyll and Bute has the highest share of tourism businesses when compared to any other area in Scotland. Tourism businesses make up 13% of businesses in Argyll and Bute compared to a national average of 8%23.*

The EIAR also clarifies that;

*Within the Study Area, Drax's Hollow Mountain visitor centre at the Cruachan pumped storage hydro power station is a popular indoor tourist destination. The visitor centre attracts approximately 50,000 visitors a year and in 2019 was ranked among the top 2% of Visit Scotland's quality assurance scheme with high scores for friendliness and hospitality. St Conan's Kirk in the village of Loch Awe is another indoor tourist destination in the Tourism and Recreation Study Area. It is a Category A listed building and a landmark which attracts visitors to the village of Loch Awe. It is accessed from the A85 and benefits from impressive views towards Loch Awe.*

In respect of potential visual impacts it is not considered that the proposals will have a long term significant adverse impact as the majority of the permanent works will be underground or be subject to appropriate landscape mitigation measures. The new quayside and office buildings will be retained, however as they are in the general local of the existing visitors centre and subject to appropriate scale/design and landscaping it is not considered that these will have an unacceptable permanent impact on the landscape or on tourism.

The Cruachan dam and ridge are important tourist attractions in themselves and Drax have confirmed in their submissions in Volume 1 chapter 13 (Table 13.1) of the EIAR that access to the Cruachan Dam and also the Cruachan Ridge will not be restricted. This is welcomed. It should however be noted that;

*...it is considered that the indoor tourist destination of Cruachan Visitor Centre and tour of the 'Hollow Mountain', could experience effects during the construction phase and therefore*

*the potential impacts on indoor tourist destinations during construction have been assessed'*

The Council's Access Manager has requested that an access plan be produced for the proposals to ensure clarity on access matters and a condition to this effect is therefore recommended. The require CEMP will also require to demonstrate how parking will be provided to access these features. The confirmation by the applicant that a more localised Construction Traffic Management Plan will be provided either separately as part of the overall CEMP, which will require to be approved by TS and the Area Roads Engineer, is welcomed.

The evaluation of potential construction phase impacts upon indoor and outdoor tourism are provided at Table 13.10 of the EIAR and conclude that all of the potential impacts are minor and not of significance, with the exception of impacts upon visitor accommodation where it is accepted that:

*In the absence of firm proposals for the accommodation of the construction workforce, significant adverse effects could arise on the visitor accommodation sector. This would result from accommodation being block booked for extended periods of time (high magnitude of change) and therefore being unavailable to the tourism sector during the construction period. This would be a major **(significant) adverse effect**.*

*The impact on visitor accommodation is set in the context of it being a constituent part of the tourism sector. If visitor accommodation is block booked, for up to 6 years in this instance, it becomes unavailable to the tourism sector and the magnitude of change in visitor attractiveness and tourism potential is therefore high as the benefits don't accrue to the other local businesses that serve the tourists staying in the hotels and guest houses. These accommodation providers would no longer be serving the tourism sector, instead they will play a role in serving the construction sector.*

*Conversely, the use of visitor accommodation on an ad-hoc basis for visiting executives, engineers and specialist advisors, would have a moderate beneficial effect, but this would only accrue if the accommodation options are not exhausted by use for construction workers. In the absence of firm proposals for construction worker accommodation this effect will not be realised and therefore the potential effect remains major and adverse*

The EIAR confirms that there is a projected significant impact on visitor accommodation. Officers also consider there will be potential impacts upon the operation of the general rented housing market as well as workers seek to find accommodation displacing local families and individuals and have requested that these matters be considered further by the Scottish Ministers prior to any determination of the S36 application being made and a deemed planning permission issued to ensure NPF 4 policies and objectives are fully considered.

**Having due regard to the above, in terms of the impacts on tourism and recreation the proposal is considered to be consistent with the provisions of: SG LDP TRAN 1 – Access to the Outdoors; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; Policy LDP 6 – Supporting the Sustainable Growth of Renewables; SG LDP ENV 14 –Landscape; and SG 2 Renewable Energy of the Argyll & Bute Local Development Plan, NPF 3 and Revised Draft NPF4 Policy 25**

**N. NET ECONOMIC IMPACT, INCLUDING LOCAL AND COMMUNITY SOCIO-ECONOMIC BENEFITS SUCH AS EMPLOYMENT, ASSOCIATED BUSINESS AND SUPPLY CHAIN OPPORTUNITIES**



Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewables and SPP require applications for renewable energy developments to be assessed against net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.

Community Benefit is not considered to be a ‘material planning consideration’ in the determination of planning applications for Energy Related Developments. In the event that the Scottish Ministers permission were to be granted, the negotiation of any community benefit, either directly with the local community or under the auspices of the Council, would take place outside the application process between the Scottish Ministers, The Council and the applicant. This is the established procedure for such discussions.

The EIAR confirms that Based the capital cost estimate provided by the application in June 2021 the construction of the proposed development is expected to require a UK capital expenditure of £450 million. This will give rise to employment and associated expenditure in the economy (direct, indirect, and induced). Construction of the proposed development is expected to extend across a 6-year programme of works to achieve operation of the first unit

The construction of the Proposed Development is therefore estimated within the EIAR to support a total 3567 gross Person Years of Employment (PYE) 31 over the 6-year construction period across the study area. This equates to 357 Full Time Equivalent (FTE)’s over the 6-year construction programme across the study area.

The EIAR further states that

*Based on the additionality assumptions, the 3,567 gross temporary construction jobs created by the Proposed Development are expected to support approximately 664 net temporary construction jobs across the 6-year construction period within the Labour Market Study Area. This represents 34.9% of existing construction jobs (664 jobs) within the study area.*

*The key sector likely to experience socio-economic effects from the Proposed Development during the construction phase is the construction sector. The effects on the construction sector have been reviewed and analysed in Section 13.11.3 to 13.11.9 above resulting in a conclusion of Short-Term Major Beneficial effect.*

*The operation of the Proposed Development would result in a Negligible Beneficial magnitude of change on the Key Business Sector of Construction (High sensitivity receptor) resulting in a Minor Permanent Beneficial effect.*

The EIAR confirms that there will be significant short term employments benefits, particularly in the construction industry, however the long term benefits in respect of employment are minor. This of course has to be viewed in the context that the benefits from workers moving into the area , displaces the tourists who would otherwise take up some of this accommodation which is not a benefit which is also recognised in the EIAR. The EIAR confirms;

Drax have confirmed to Officers that they will be seeking to use local staff and materials where they can and also that they are already engaging with other organisations to provide wider benefits to Argyll and Bute.

- *Drax will organise Meet the Supplier days to match local companies with opportunities during the construction phase.*
- *Drax is the first UK energy company to announce an initiative to improve employability for a million people by 2025. Through its ‘Mobilising a Million’ initiative,*

*Drax will connect with one million people by 2025 to improve skills, education, employability, and opportunity. The Proposed Development will provide opportunity for Drax to provide more opportunities in Argyll and Bute.*

- *Drax has a long running apprenticeship scheme which is part of its commitment to developing new talent as well as upskilling the workforce across the communities where it operates, including Argyll and Bute. The craft apprenticeship scheme, which operates at Cruachan, gives new recruits to Drax the opportunity to gain skills and expertise by working alongside highly qualified engineers. An expanded Cruachan power station will allow Drax to continue and expand this scheme giving apprentices a chance to develop core skills and prepare for future careers. These unique opportunities provided by Drax can boost economic development across Argyll and Bute.*

The applicants submit that during the construction phase there will be opportunity for the provision of work experience and apprenticeships and the applicant has already engaged with local schools and colleges and Highland and Islands Enterprise with regard to training and apprenticeship programmes to maximise local employment opportunities. This is welcomed and in their additional NPF 4 related submissions on 20.1.23 they further clarify that:

- *NPF4 calls for national developments to be exemplars of a Community Wealth Building (CWB) approach to economic development. CWB is defined as “A people-centred approach to local economic development, which redirects wealth back into the local economy, and places control and benefits into the hands of local people”.*
- *Along with the direct employment opportunities Drax provides at Cruachan, they also offer opportunities for STEM learning through educational tours of Cruachan and Drax personnel visit local schools to talk to students about routes into STEM careers and deliver hands on STEM learning workshops. Drax also offer work experience opportunities for Oban High School students to gain experience in engineering in the workplace environment. During Scottish Apprenticeship week Drax offer workshops to schools and colleges focussing on application skills and opportunities available for Drax apprenticeships across their operational assets. The proposed expansion of Cruachan Power Station will allow Drax to continue and expand these initiatives giving local young people a chance to develop core skills and prepare for future careers.*

They further state that;

*The Cruachan Expansion project can boost economic development across Argyll and Bute and will contribute to meeting key priorities not only of NPF4 but also the Argyll and Bute Economic Strategy 2019-2023 by attracting inward investment, bringing additional jobs and learning opportunities and improving linkages between skills providers and employers in both the public and private sector*

These measures are welcomed and the Planning Authority considers that delivering on these wider socio economic benefits are an important aspect of the successful delivery of the project. However, as previously clarified, such matters have historically been addressed outside the S36 Application process by the Council and Officers can identify no reason that this should not continue to be the case for this application.

**Given the large scale of this project along with the extended duration of the construction works, it is considered that there is the potential for the development to**

have adverse impacts on the local community caused by a greater demand and competition for housing. The Oban and Lorn housing market area is one of the more pressured in Argyll and Bute with higher levels of demand for housing combined with a higher proportion of the existing housing stock being in use as a short term lets for tourism. Mitigation is therefore required to address this impact which otherwise would result in the proposal being unacceptable. It is therefore recommended that, should the application be approved, a suspensive condition should be attached to the deemed planning consent, requiring the submission of a strategy for housing incoming construction workers. It is considered that this condition would give the applicant flexibility and allow for the consideration of a number of possible options including, but not limited to the provision of additional permanent housing in the area, the use of buildings which are currently vacant, the provision of temporary accommodation for workers or bussing in workers from further afield.

Having due regard to the above the proposals net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities has been assessed and it is concluded that the proposal is consistent with the provisions of Supplementary Guidance 2 (December 2016); LDP DM1 – Development within the Development Management Zones; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; LDP 6 - Supporting the Sustainable Growth of Renewables; NPF 3 and Revised Draft NPF4 Policies 11(c) and 25

#### **O. THE SCALE OF CONTRIBUTION TO RENEWABLE ENERGY GENERATION TARGETS**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against the scale of contribution to renewable energy generation targets.

The Scottish Government is committed to increasing the supply of renewable energy within Scotland. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 sets stringent targets for Scotland. The Act sets a legally-binding “net-zero” target of all greenhouse gases by 2045. The “net-zero” target for Scotland is five years ahead of the date set for the whole of the UK.

The proposal would provide approximately 600MW of additional power Generation and represents a significant and nationally important uplift in pump storage renewable energy production. As referenced elsewhere in this report. The expansion of Cruachan is a specific national priority contained within NPF3 and also revised draft NPF 4 which comes into force as a statutory planning document on 13.2.23.

Having due regard to the above the proposals scale of contribution to renewable energy generation targets has been assessed and it is concluded that the proposal is consistent with the provisions of SG 2; Supplementary LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; LDP 6 - Supporting the Sustainable Growth of Renewables; SPP (2014); NPF 3 and Revised Draft NPF4 Policies 1 and 11

#### **P. EFFECT ON GREENHOUSE GAS EMISSIONS**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, SG 2 Renewable Energy and SPP require applications for renewable energy developments to be assessed against their effect on greenhouse gas emissions.

The proposal would generate renewable electricity and would therefore displace carbon dioxide (CO<sub>2</sub>) emissions associated with electricity generation, which would otherwise be supplied via other forms of power generation requiring the combustion of fossil fuels.

**Having due regard to the above the proposals effect on greenhouse gas emissions has been assessed and it is concluded that the proposal is consistent with the provisions of SG 2 Renewable Energy; LDP STRAT 1 – Sustainable Development; LDP DM1 – Development within the Development Management Zone; LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment; LDP 6 - Supporting the Sustainable Growth of Renewables; SPP (2014); NPF3 and Revised Draft NPF 4 Policies 1 and 11.**

**Q. THE NEED FOR CONDITIONS RELATING TO THE DECOMMISSIONING OF DEVELOPMENTS, INCLUDING ANCILLARY INFRASTRUCTURE, AND SITE RESTORATION (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, Supplementary Guidance 2: Renewable Energy and SPP require applications for renewable energy developments to be assessed against the need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration.

The Proposed Development will have a design life of circa 100 years, after which the need for re-powering or decommissioning will be considered at that time. The Proposed Development is therefore treated as permanent in the submitted EIAR, and repowering and decommissioning are therefore not considered.

On a project with this projected lifespan, where the substantive new build elements are underground, and judged by officers not to be causing substantive harm in terms of landscape or localised impacts, this is considered by officers to be a reasonable approach.

**Having due regard to the above it is concluded that the need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration has been considered and the proposal is therefore consistent/inconsistent with the provisions of SG 2 Renewable Energy, Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan, SPP (2014); NPF3 and Revised Draft NPF 4 Policy 12.**

**R. OPPORTUNITIES FOR ENERGY STORAGE (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, Supplementary Guidance 2: Renewable Energy and SPP require applications for renewable energy developments to be assessed against any opportunities for energy storage which exist.

The proposal is for pump hydro storage to store energy from the development or excess electricity from the national grid by pumping up water and releasing it at time of high demand, providing stability to the electricity supply network, meeting energy demands and providing improved energy security.

**Having due regard to the above it is recommended that the Council should not object to the proposal on the grounds of opportunities for energy storage (including cumulative impacts) in accordance with the provisions of SG 2 Renewable Energy,**

**Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan, SPP (2014); NPF3 and Revised Draft NPF4 Policies 1 and 11.**

**S. THE NEED FOR A ROBUST PLANNING OBLIGATION TO ENSURE THAT OPERATORS ACHIEVE SITE RESTORATION (INCLUDING CUMULATIVE IMPACTS)**

Policy LDP 6 – Supporting the Sustainable Growth of Renewables, Supplementary Guidance 2: Renewable Energy and SPP require applications for renewable energy developments to be assessed against the need for a robust planning obligation to ensure that operators achieve site restoration.

The Proposed Development will have a design life of circa 100 years, after which the need for re-powering or decommissioning will be considered at that time. The Proposed Development is therefore treated as permanent in the submitted EIAR, and repowering and decommissioning are therefore not proposed. On a project with this projected lifespan, where the substantive new build elements are underground and judged not to be causing substantive harm, this is considered by officers to be a reasonable approach.

**Having due regard to the above it is concluded that opportunities for a robust planning obligation to ensure that operators achieve site restoration have been considered and the proposal is therefore consistent with the provisions of SG 2 Renewable Energy, Policy LDP 6 – Supporting the Sustainable Growth of Renewables of the Argyll & Bute Local Development Plan, SPP (2014); NPF3 and Revised Draft NPF 4 Policy 12.**

**T. CLIMATE CHANGE (EMISSIONS REDUCTION TARGETS) (SCOTLAND) ACT 2019, and THE SCOTTISH ENERGY STRATEGY**

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 - The Scottish Government is committed to increasing the supply of renewable energy within Scotland. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 sets out stringent targets for Scotland. The primary objective of the Act is to raise the ambition of the greenhouse gas emissions reduction targets set out in the Climate Change (Scotland) Act 2009. The Act sets a legally-binding “net-zero” target of all greenhouse gases by 2045. The “net-zero” target for Scotland is five years ahead of the date set for the whole of the UK.

The Scottish Energy Strategy (SES) (2017) and SES Position Statement (2021) – The SES was published in December 2017 and sets out the Scottish Government’s strategy through to 2050, marking a ‘*major transition*’ over the next 3 decades in terms of energy management, demand reduction and generation. The SES sets 2 new targets for the Scottish energy system by 2030: The equivalent of 50% of the energy for Scotland’s heat, transport and electricity consumption to be supplied from renewable sources; and, an increase by 30% in the productivity of energy use across the Scottish economy. The SES recognises that reaching the 50% target by 2030 ‘*will be challenging*’ but the target demonstrates ‘*the SG’s commitment to a low carbon energy system and to the continued growth of the renewable energy sector in Scotland*’.

SPP, NPF3 and NPF4

Despite now being seven years old, NPF3 and SPP are extant statements of Scottish Government planning policy and will remain in place until such time as NPF4 is adopted on 13.2.23. The status of NPF3 and SPP has not changed and they are significant material considerations in the determination of the present application.

The SPP introduced a presumption in favour of development that contributes to sustainable development. Paragraph 28 states: *“The planning system should support economically, environmentally and socially sustainable places by enabling development that balances the costs and benefits of a proposal over the longer term. The aim is to achieve the right development in the right place; it is not to allow development at any cost”*

Renewable energy generation targets are supported by NPF3 but that support is qualified as mirrored in SPP. It is stated at paragraph 4.7: *“The pressing challenge of climate change means that our action on the environment must continue to evolve, strengthening our longer-term resilience. A planned approach to development helps to strike the right balance between safeguarding assets which are irreplaceable, and facilitating change in a sustainable way.”* Paragraph 4.4 of NPF 3 recognises that Scotland’s landscapes are spectacular, contributing to our quality of life, national identity and visitor economy. Landscape quality is found across Scotland and all landscapes support place-making.

Revised Draft NPF 4 continues to provide a supportive policy framework for development of this type, and as has been referenced previously, specifically supports the expansion of hydro power generation at Cruachan as a National Priority.

**Having due regard to the above subject to the recommended advice and conditions it is considered that the proposal is consistent with the provisions of: SPP, NPF3, the Scottish Energy Strategy 2017; NPF3 and Revised Draft NPF4 Policies 1 and 11 , in this regard, which represent the Scottish Governments most up to date position on this type of development.**

## **U. CONCLUSION & RECOMMENDATION**

Both SPP and the Argyll & Bute Local Development Plan support renewable energy developments provided it has been adequately demonstrated that there would be no unacceptable significant adverse effects. Support is also offered by revised Draft NPF4, its overall climate change objectives, and policy 11 in particular which supports developments such as this, as well as identifying Cruachan Expansion as a specific Nationally Important project in its own right.

There is clear support throughout national and international policy that renewable energy projects, such as the proposed development, are supported and do have the capability of making an active contribution to the net zero targets Scotland is required to reach. The proposal will make a direct contribution to meeting the range of both international and national energy targets, whilst producing clean energy that meets the legally binding low carbon and net zero targets. The proposal will directly contribute to tackling climate change by reducing our reliance on fossil fuels for producing energy.

The specific inclusion of the Cruachan expansion proposal in Revised Draft NPF4 (Carried over from NPF3) as a nationally important and individually identified project which promotes sustainable development and assist in addressing the climate emergency is a substantive policy consideration in support of the proposal.

It is accepted that the proposal would make an important contribution to the Scottish Government’s renewable energy targets and reduce greenhouse gas emissions and these matters are important benefits which have been carefully considered and carry substantive weight in determining whether the proposals should be supported.

Officers therefore conclude, that subject to the recommended advice and conditions from external and internal consultees, that the proposal is consistent with the relevant provisions of SPP and the Argyll and Bute Local Development Plan in all other respects.

## **V. RECOMMENDATION:**

**Officers recommend that Members agree that the Council does not object, subject to the conditions as detailed below**

### **Matters which the Council recommend that the ECU consider prior to determination**

- That the conditions recommended by other consultation bodies are included in the suite of final conditions, the Council would expect to be consulted on any final list of conditions prior to permission being granted, should Scottish Ministers be minded to do so.
- The Council would also expect to be consulted on any further mitigation, changes to the layout should the proposal be required to be amended in line with any further advice provided by other consultation bodies.

### **Conditions to be considered by ECU for inclusion in overall suite of conditions**

#### Conditions Recommended by other ECU Consultation Bodies

- NatureScot (conditions recommended by them in their final response to include Habitat restoration and biodiversity management plans)
- SEPA (Monitoring; Construction Environment Management Plan, Waste Management Plan, Peat Management Plan, Acid Rock monitoring and extracted rock material storage and use strategy)
- Scottish Forestry (Compensatory Planting details);
- Transport Scotland; (Conditions as set out in their consultation response).
- RSPB (Habitat Management and Landscape integration Plan (HMP));

### **Conditions Recommended by the Council to be considered by the ECU**

#### Biodiversity Officer

- Prior to the commencement of development a Habitat and biodiversity management and enhancement strategy shall be provided to the planning authority for their approval in consultation with NatureScot and RSPB.

Reason: To ensure that habitat management/restoration and biodiversity enhancement are carried out in accordance with LDP and NPF 4 Objectives.

- Prior to the Commencement of works a Construction Environment Management Plan (CEMP) shall be submitted to the planning authority and shall provide details of the mitigation, management and enhancement for ornithological interest, habitat, species, water courses and peat management (CEMP) along with a series of Tool Box talks to reflect the above and overseen by an Ecological

Clerk of Works for the approval of the planning Authority in consultation with SEPA and NatureScot.

Reason: To ensure these matters are properly addressed prior to the commencement of works and that biodiversity and habitat improvements are maximised.

#### Area Roads Engineer

- Prior to the commencement of development an Extracted Materials Management Plan shall be provided which clarifies the locations of disposal/storage/use sites and the tonnage and vehicle movements associated with this. **The applicant shall seek to find uses for the waste material within the local area before considering locations further afield. Evidence of how this has been considered shall be included within the Extracted Materials Management Plan.**

*Reason:* To ensure the road network is suitable and able to accommodate the necessary HGV vehicular movement associated with the operations and in the interests of sustainability to ensure that distances travelled are minimised where possible.

- Prior to the commencement of development a Traffic Impact Analysis shall be undertaken to ensure that cumulative demands on the road network associated with these proposals and any other permitted or projected major infrastructure proposals in the area shall be provided to the Planning Authority for the approval in consultation with Transport Scotland. . This report should include a cumulative report in concert with other S36 and S37 schemes in the North Argyll/ Loch Awe area paying particular attention to the possibility of utilizing materials locally to prevent unnecessary vehicle movements thus reducing the potential for any related deterioration of the fragile local area roads network.

*Reason:* To ensure accurate vehicle movement data is available having regard to many other proposed major infrastructure in area are proposed, particularly those associated with Grid Infrastructure Upgrade proposals by SSEN.

#### Conservation Policy Advisor

- Works shall only to be undertaken to any Category A Listed structure in accordance with any separately approved Listed Building Consent for such works.

*Reason* To ensure works to the existing Category A Turbine Hall connected to the two new access tunnels are examined in sufficient detail to ensure no unacceptable impact on the integrity and character of the existing listed building and to the satisfaction of HES who are a statutory consultee on works to a Category A Listed Building.

- Prior to the commencement of development further detail of the design and appearance of ;
  - I. the new water inlet structure and associated rock cutting/contouring and
  - II. the referenced extension to the existing substation



shall be provided to the planning authority for their approval prior to the commencement of works.

*Reason:* To ensure the appearance of the works are acceptable in the context of the setting of the Category B listed Dam and also to ensure any potential wider landscape impacts are minimised.

#### Environmental Protection Officer

- Surface work and underground work should be restricted to:
  - Monday to Friday: 0700 hours until 1900 hours.
  - Saturday: 0700 hours until 1700 hours.
  - Sunday / Public holidays: – no works, except for servicing and maintenance of plant and equipment and emergency work.

*Reason:* In order to protect the amenities of the area from noise and vibration nuisance and to minimise local community annoyance”

- Prior to the development commencing detailed information shall be provided on how the 17 identified private water supplies will be protected during the construction and operation phases of the proposed development.

*Reason*– in the interest of public health and to ensure adequate measures are in place to protect the identified private water supplies

#### Access Manager

- Prior to the commencement of development an Access Plan and Strategy shall be submitted for the approval of the Planning Authority. This shall clarify how access to the formal and informal recreational facilities in the area will be maintained in so far as is possible during construction operations, and also seek to identify opportunities to utilise any extracted materials to provide footpath improvements to the surrounding network.

*Reason:* To ensure impacts on the footpath network are minimised and local use of extracted materials is maximised.

#### Worker Housing Strategy

- Prior to the commencement of development, a strategy for housing incoming construction workers shall be submitted to and approved in writing by the Planning Authority. Thereafter the development shall be carried out in accordance with the approved details.

*Reason:* In order to mitigate the adverse effects on tourist accommodation and in the Oban and Lorn housing market area *in accordance with the requirements of NPF4, and in particular Policy 11C and Policy 25 Objectives.*

#### Other recommended conditions

- No works shall commence to form the new quayside and associated permanent buildings until further details of the design, appearance and materials proposed associated with these works are submitted to the planning authority for their approval.

Such details shall include measures to minimise environmental impact and maximise biodiversity enhancement through design, layout and landscaping to form habitat opportunities on the permanent quayside site and maximise landscape integration from open water views in particular.

*Reason:* to ensure that permanent visual impacts, particularly from open water recreational users are minimised and biodiversity opportunities maximised in design and construction detail.