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By Email to:

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21 July 2023

Dear Lynsey Fraser

**CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND DEEMED PLANNING PERMISSION UNDER SECTION 57(2) OF THE TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 FOR THE CONSTRUCTION AND OPERATION OF A PUMPED STORAGE HYDRO ELECTRICITY GENERATING STATION KNOWN AS CRUACHAN EXPANSION PROJECT, LOCATED BETWEEN BEN CRUACHAN AND LOCH AWE WITHIN THE PLANNING AUTHORITY AREA OF ARGYLL AND BUTE COUNCIL**

**Application**

1. I refer to an application (“the Application”) made on 17 May 2022 under section 36 of the Electricity Act 1989 (“the Electricity Act”) by Stantec UK Limited on behalf of Drax Cruachan Expansion Ltd (“the Company”), a company incorporated under the Companies Act with company number 06657393, and having its registered office at Drax Power Station, Drax, Selby, North Yorkshire, YO8 8PH. The Application is for consent to construct and operate an underground electricity generating station comprising hydro-electric generating and pumping sets and associated infrastructure (the ‘proposed Development’) with a capacity of up to 600 megawatts (MW) on land adjacent to the existing Cruachan 1 facility, Dalmally, PA33 1AN.
2. The Company requested that Scottish Ministers direct under section 57(2) of the Town and Country Planning (Scotland) Act 1997 that planning permission is deemed to be granted for the proposed Development.
3. **This letter contains the Scottish Ministers’ decision to grant section 36 consent for the proposed Development as more particularly described at Annex 1.**

**Planning Permission**

4. In terms of section 57(2) of the Town and Country Planning (Scotland) Act 1997, Scottish Ministers may, on granting consent under section 36 of the Electricity Act for the



construction and operation of a generating station, direct that planning permission is deemed to be granted in respect of that generating station and any ancillary development.

**5. This letter contains the Scottish Ministers' direction that planning permission is deemed to be granted for the proposed Development.**

## **Background**

6. The proposed Development seeks to optimise use of the existing Cruachan Power Station, reservoir and dam through construction and operation of a new, separate but linked, underground electricity generating station and associated infrastructure to provide up to 600MW new generating capacity. Both generating stations will use Loch Awe as the lower reservoir and Cruachan Reservoir as the upper reservoir. The red line boundary covers a broad area and includes a corridor of land running from Cruachan Reservoir, extending into Loch Awe, a corridor along the access road which currently connects Cruachan Reservoir with the A85, and a separate parcel of land located to the east of the Site where a temporary construction compound is anticipated to be located. The application boundary encloses an area approximately 447 hectares (ha) in size.

7. A Scoping Opinion was issued to the Company by Scottish Ministers on 29 October 2021 describing the scope and level of detail of information to be provided by the Company in the Environmental Impact Assessment (EIA) Report. The Application was submitted on 17 May 2022 and is supported by an EIA Report.

## **Proposed Development**

8. The proposed Development comprises a number of reversible pump-turbines and motor-generators with associated equipment such as transformers and switchgear, substation, ventilation shaft, tailrace tunnel, lower control works, quayside (including stockpiles of spoil), administration building, storage building, access tunnels, and access road upgrades. The proposed Development also includes temporary works comprising an upper site compound for construction laydown and concrete batching plant, a lower site compound approximately 9 ha including workers' welfare facilities, and a temporary diversion of the A85 road.

9. The proposed Development will be able to import electricity from the grid by pumping water from Loch Awe to Cruachan Reservoir. The stored energy will then be used to generate electricity as the water flows through the turbines on its way back down to Loch Awe. The proposed Development will also provide other technical services to the grid system operator useful to maintaining the security and resilience of the electricity grid system.

## **Legislation**

10. Under paragraph 2(1) of Schedule 8 to the Electricity Act, the relevant Planning Authority, Argyll and Bute Council ("the Planning Authority") in this case, is required to be notified in respect of a section 36 consent application.

11. In accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the EIA Regulations"), the Company submitted an Environmental Impact Assessment report ("the EIA report") dated May 2022 in support of the Application. This describes the proposed Development and gives an analysis of its environmental effects.

12. To comply with the EIA Regulations, the Scottish Ministers are required to consult the relevant Planning Authority, as well as Scottish Natural Heritage, acting under its operating name NatureScot, the Scottish Environment Protection Agency (“SEPA”) and Historic Environment Scotland (“HES”) as well as other persons that are likely to be concerned by the proposed Development by reason of their specific environmental responsibilities.

13. In accordance with requirements of both the Electricity (Applications for Consent) Regulations 1990 (“the Consents Regulations”) and the EIA Regulations, a notice of the proposed Development was published on the Company’s website and advertised in the local and national press. The Application was made available in the public domain, and the opportunity given for those wishing to make representations to do so. Notifications were sent to the Planning Authority as well as to NatureScot, SEPA and HES and others likely to be concerned by the proposed Development by reason of their specific environmental responsibilities or local competencies.

14. The Scottish Ministers have had regard to the requirements regarding publicity and consultation laid down in the Consents Regulations and EIA Regulations and are satisfied the general public as well as statutory and other consultees have been afforded the opportunity to consider the proposed Development and make representations on it.

15. The Scottish Ministers have had regard to the matters set out in Schedule 9 of the Electricity Act in respect of the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna and geological and physiological features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest, and the extent to which the Company has complied with their duties under the Schedule.

16. In accordance with section 36(5A) of the Electricity Act, before granting any section 36 consent Scottish Ministers are also required to:

- obtain SEPA advice on matters relating to protection of the water environment; and
- have regard to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003.

17. As required by section 36(5A) of the Electricity Act, SEPA’s advice has been considered by the Scottish Ministers with due regard given to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003. SEPA raised no concerns regarding the potential effects on the water environment subject to conditions which are included in Annex 2. In their response to Scottish Ministers, they direct the Company to the Regulations section of the SEPA website for advice on Regulatory requirements and good practice advice.

18. The Scottish Ministers are satisfied that the EIA report has been produced in accordance with the EIA Regulations. The Scottish Ministers have assessed the environmental impacts of the proposed Development and taken the environmental information, being the Application, EIA report, additional information, consultation responses and internal advice from officials in the Energy Consents Unit and the Marine Directorate into consideration in reaching their decision.

19. The Scottish Ministers consider that there is sufficient information to allow Ministers to be satisfied that the Company has had regard to the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna, and geological and physiographical features of special interest and of protecting sites, buildings, and objects of architectural, historic, or archaeological interest.

20. The Scottish Ministers are satisfied that the Company has done what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside, or any such flora, fauna, features, sites, buildings or objects.

21. The Scottish Ministers are satisfied that the Company has avoided so far as possible, causing injury to fisheries or to stock of fish in any waters.

### **Conservation of Habitats and Species Regulations 2017**

22. The Conservation of Habitats and Species Regulations 2017 (“the Habitats Regulations”) require Scottish Ministers to consider whether the proposed Development would be likely to have a significant effect on a European site, as defined in the Habitats Regulations, and if the development is directly connected with or necessary to the management of the European site. The proposed Development is located within the Loch Etive Woods Special Area of Conservation (“the SAC”). Consequently, Scottish Ministers are required to consider the effect of the proposed Development on the SAC by carrying out a Habitats Regulations Appraisal (“HRA”).

23. The HRA concluded that the proposal is likely to have a significant effect on the qualifying interests of the SAC, and therefore Scottish Ministers have undertaken an appropriate assessment in view of the site’s conservation objectives for its qualifying interests.

24. An existing access track is to be widened for the proposed Development and passes through the SAC. This poses a potential loss of habitat and potential for damage and disturbance through dust, deposition of excavated material and noise as the track is widened.

25. The Scottish Ministers’ appropriate assessment has been carried out and the environmental information to inform the assessment was presented in the EIA report. The appropriate assessment has therefore been carried out using information already advertised in accordance with the EIA Regulations, and with the regard to advice from NatureScot. The appropriate assessment concluded in respect of the SAC, following advice from NatureScot, that there will be no adverse effect on integrity of the SAC from the proposed Development either on its own or in combination with other developments and subject to implementation of best practice and the mitigation referred to within the Application and EIA report and specified by NatureScot. The mitigation measures include the production of a Construction Method Statement, detailing road stabilisation techniques and the potential retaining structures, prior to the commencement of development. The Scottish Ministers have attached conditions within Annex 2, which secures the above mitigation through planning conditions attached to this consent.

### **Consultation responses**

26. Argyll and Bute Council (the “Planning Authority”) considered the proposed Development under what it considered to be the relevant policies of the Local Development Plan (LDP) and stated that it objects to the proposed Development unless the conditions as recommended by the Planning Authority and other consultees are imposed on any consent. Scottish Ministers have included conditions in line with the council’s recommendations.

27. The Planning Authority considered the support for the proposed Development under the final draft of the Fourth National Planning Framework (NPF4). The final draft has been adopted by the Scottish Ministers, and it supersedes the previous Scottish Planning Policy and the

Third National Planning Framework (NPF3). The Planning Authority acknowledged the proposed Development would be “an important National Planning and climate priority” and with a strongly supportive national policy framework for the principle of the approving the proposed Development.

28. Argyll District Salmon Fishery Board (ADSFB) stated that its response represented the interests of local fishery managers in the Awe catchment which include the Awe District River Improvement Association (ADRIA) and Loch Awe Improvement Association (LAIA) who administer the protection order for fish on Loch Awe. The ADSFB has no objection to the proposed Development but expressed concern about the potential for entrapment of fish (salmon smolts) as they migrate through Loch Awe in the spring. The ADSFB commented that the fish surveys supplied with the EIA Report were limited. Additional information supplied by the Company addressed the points raised by the ADSFB who were consulted on it by Scottish Ministers. ADSFB did not respond to the consultation on the additional information.

29. BT commented that the proposed Development should not cause any impact on point-to-point microwave radio links.

30. The Defence Infrastructure Organisation has no objection to the proposed Development. It states that the proposed Development is outside of Ministry of Defence safeguarding areas.

31. National Grid has no objection to the proposed Development. It states that it has no assets in this area.

32. Network Rail has no objection the proposed Development but describes requirements for safe working that does not disturb the operation of the railway, and the circumstances under which the Company would need to have discussions with Network Rail Asset Protection Engineers.

33. RSPB Scotland has no objection to the proposed Development. RSPB Scotland suggests the Company liaises with Argyll and the Isles Coast and Countryside Trust, and the Alliance for Scotland’s Rainforest. RSPB Scotland does not make any recommendations for additional mitigation beyond the Habitat Restoration and Landscape Mitigation Plan proposed in the EIA Report to be secured by planning conditions, although it encourages the Company to go beyond tree planting for reinstatement of habitat, to go further and enhance the habitat, to contribute to net biodiversity gain and increased climate change resilience. Scottish Ministers have included a planning condition which requires the Habitat Restoration and Landscape Mitigation Plan to be agreed by the Planning Authority.

34. Scottish Water has no objection to the proposed Development. Scottish Water provided some general information on connection to its water and sewer network.

35. Historic Environment Scotland (HES) has no objection to the proposed Development. HES states the proposals are unlikely to have significant adverse impacts on the setting of the category A listed buildings or on the character of the category A listed Railway Viaduct. HES adds the proposals have the potential to have significant adverse impacts on the character of the category A listed Turbine Hall because they would involve creation of a new access tunnel into it and its access tunnel. HES states it is content with the information related to embedded mitigation included in the EIA Report as amended by the additional information; HES agrees with the assessment provided and with the conclusions that no significant effects on the setting

of the assets in the vicinity of the proposed Development are likely. HES are satisfied that no issues of national interest for their remit are raised by the proposed Development.

36. NatureScot (the operating name of Scottish Natural Heritage) objects to the proposed Development unless strict conditions are applied to consent, requiring adherence to a Construction Method Statement, detailing road stabilisation techniques and the retaining structures, agreed to by the Planning Authority in consultation with NatureScot prior to the commencement of development. NatureScot also advised the proposed Development is likely to have a significant effect on the western acidic oak woodland qualifying interest of the Loch Etive Woods SAC and that Scottish Ministers are therefore required to carry out an appropriate assessment to satisfy the Habitats Regulations. Scottish Ministers have carried out such an assessment and the conclusions are described in paragraphs 22-25 of this letter.

37. The Scottish Rights of Way and Access Society (Scotways) does not object to the proposed Development. Scotways refers to path SA10 as recorded in the National Catalogue of Rights of Way (CROW) which crosses or is close to the application site and requests the route is kept open and free from any obstruction or encroachment before, during and after the lifetime of the proposed Development.

38. The Scottish Environment Protection Agency (SEPA) does not object to the proposed Development provided that conditions are attached which require various development control and mitigation measures to be agreed by the Planning Authority in consultation with SEPA prior to commencement of specific works. These measures include: an Acid Rock Drainage (ARD) Management Plan; Site Waste / Materials Management Plan; a finalised Peat Management Plan; a Full Habitat Restoration and Landscape Mitigation Plan; Details of the final design of the lower works compound demonstrating this has minimised impacts on peat, groundwater dependent flush habitats and watercourses on site; and adherence to the mitigation outlined in the Schedule of Mitigation and Monitoring. SEPA provided details on the matters which each of these measures must address to satisfy their requirements, and clarifies that it objects to the proposed Development if all the aforementioned conditions are not applied to the consent. Scottish Ministers have applied conditions which secure all measures recommended by SEPA.

39. Scottish Forestry does not object to the proposed Development and states that forestry works are limited, with no need for a dedicated compensatory planting condition 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. Scottish Ministers have included a planning condition which requires approval and implementation of such a Habitat Restoration and Landscape Mitigation Plan.

40. Transport Scotland is satisfied with the approach taken to assessment in the EIA Report. Transport Scotland recommends a number of planning conditions to secure mitigation covering the following matters: the proposed means of access from the A85(T); a plan for the design, implementation and duration of all temporary traffic management arrangements on the A85(T); a detailed design and specification for the proposed access portal structure beneath the A85(T); a detailed design and specification for any proposed sheet piling works adjacent to the A85(T); a Construction Traffic Management Plan; a methodology and programme relating to the monitoring of the condition of the A85 trunk road, the route for any abnormal loads on the trunk road network, and any additional signing or temporary traffic control measures. Scottish Ministers have included conditions which address these recommendations in full.

41. The Scottish Ministers' internal advisors in the Marine Directorate welcome the proposed mitigation measures and recommend fish population and habitats surveys, as well

as consideration of the resilience of the fish population to any impact. The Marine Directorate adds that construction environmental management planning should consider the potential impact associated with the release of concrete, sediment, fuel/hydrocarbons and acidic leachates (as highlighted by SEPA) on the water quality and fish populations. Scottish Ministers have accepted the advice from the Marine Directorate and included planning conditions which secure their recommendations.

42. No response to the consultation was received from: Argyll Fisheries Trust; Avich and Kilchrenan Community Council; British Horse Society; Civil Aviation Authority; Connel Community Council; Fisheries Management Scotland; Glenorchy and Innishail Community Council; Inverary Community Council; Mountaineering Scotland; National Grid; Oban Community Council; Scottish Wildlife Trust; Scottish Wild Land Group; Taynuilt Community Council; Visit Scotland, or the West of Scotland Archaeology Society.

### **Representations**

43. Representations were received from three members of the public, with two objecting to the proposed Development. The grounds for objection were loss of residential amenity; that the impact of blasting had not been fully assessed in the EIA Report; that the proposed Development is not in compliance with UK Energy Policy and would be seriously damaging and disruptive for the local communities. The third representation did not object to the development and indicated a wish to see a commitment to move the cattle grid adjacent to St Conans Road 200 metres further up the hill to reduce the noise pollution of cars going past.

### **Public Inquiry**

44. In terms of paragraph 2(2) of Schedule 8 to the Electricity Act if a planning authority makes an objection and that objection is not withdrawn, the Scottish Ministers must cause a Public Inquiry to be held unless the Scottish Ministers propose to accede to the application subject to such modifications or conditions as will give effect to the objection of the planning authority. Following the consultation in this instance, the Planning Authority ultimately has no objection to the consent of the proposed Development subject to the planning conditions it recommends and therefore a Public Inquiry is not a statutory requirement.

45. Paragraph 3 of Schedule 8 provides that where the Scottish Ministers are not, by virtue of paragraph 2(2), to cause a Public Inquiry to be held, but objections or copies of objections have been sent to the Scottish Ministers, the Scottish Ministers must consider those objections together with all other material considerations with a view to determining whether a Public Inquiry should be held with respect to the application and, if they think it appropriate to do so, they must cause a Public Inquiry to be held.

46. The Scottish Ministers have considered the objections raised by the members of the public and, having taken all material considerations into account, decided that a Public Inquiry is not required.

47. The Scottish Ministers are content there is sufficient information to be able to make an informed decision on the Application and that they can weigh all the conflicting issues without holding a Public Inquiry.

48. The Scottish Ministers are satisfied that both the public and the consultative bodies have been afforded ample opportunity for their objections to be made and that little would be

added to the Scottish Ministers' understanding of parties' positions by discussion in a Public Inquiry forum.

## **THE SCOTTISH MINISTERS CONSIDERATIONS**

### **Main Determining Issues**

49. The proposed Development is designed to generate electricity from the kinetic energy of water descending by gravity from a height and passing through turbines coupled to generators. The proposed Development also provides a facility to store energy in a reservoir by pumping water from Loch Awe which can then be released from the reservoir to generate electricity on demand as described in the previous sentence. The proposed Development will not, in its operation, have any significant direct on-site emissions of CO<sub>2</sub>.

50. Having considered the Application, responses from consultees and Scottish Government policies, Scottish Ministers consider that the determining issues are as follows:

- environmental impacts of the proposed development, in particular the impacts of rock removal and the management of spoil on transport and local communities during the construction phase;
- the estimated economic benefits which the proposed development is likely to bring and;
- the extent to which the proposed development accords with and is supported by Scottish Government policy.

### **Assessment of the Determining Issues**

#### **Rock Removal and Spoil Management**

51. 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 extraction of 1,600 tonnes per day with peak generation of approximately 3,000 tonnes per day is predicted. The excavated materials will be in the form of rock 'chippings' ranging from boulders to fines produced by drill and blast techniques.

52. 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.

53. 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.

54. 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.

55. Possible impacts arise from the noise of blasting and rock and spoil removal, and from the transportation of some of this material off-site via local transport networks. There would be

increased traffic on local roads, whether within the local area for disposal or use or further afield. Scottish Ministers are satisfied that the noise and transport impacts would be acceptable subject to the planning conditions they have included in relation to construction hours and roads.

56. Some of the rock to be removed would potentially be acid generating, which could give rise to acidic leachate and mobile metals. Drainage of this leachate could have a negative impact on the water quality of Loch Awe and its fisheries if not adequately controlled and mitigated. Scottish Ministers note that SEPA does not object subject to mitigation measures including an Acid Rock Drainage (ARD) Management Plan and Site Waste / Materials Management Plan. Scottish Ministers have made these measures a condition of the deemed planning permission and conclude that rock removal and spoil management can be satisfactorily managed such that the environmental impacts are acceptable. Regarding the potential impacts of rock and spoil removal on fish and fisheries, Scottish Ministers have considered the environmental information and consultation responses. Scottish Ministers accept the advice from their internal advisors in the Marine Directorate and include conditions to secure the recommended mitigation measures for the fish population of Loch Awe.

### **Other Environmental Impacts**

57. Scottish Ministers accept there would be localised, significant landscape and visual impacts. These would be of a temporary nature during the construction phase and for a limited period post construction until vegetation recovery is complete. A majority of the permanent works will be underground. Following re-establishment of vegetation, no longer term significant landscape or visual effects will remain above ground. Scottish Ministers consider the landscape and visual impacts acceptable.

58. There would be some impacts on traffic and transport including the transport of rock and spoil indicated in paragraphs 51-56. The construction of the temporary diversion of the A85 and deliveries of equipment to site could also have temporary impacts on the normal flow of traffic. Scottish Ministers are satisfied that the planning conditions they have applied in relation to roads provide satisfactory mitigation such that the impacts on roads and traffic would be acceptable.

59. There would be noise associated with some of the construction activities including the movement of construction vehicles, leading to temporary significant effects. Construction hours will however be limited to normal working hours wherever possible so that the amenity of local residents will not be significantly affected in the evenings and night time. Scottish Ministers are satisfied that the noise impacts would be acceptable.

### **The Scottish Government Policy Context**

#### **Scottish Energy Strategy: The future of energy in Scotland (“the Energy Strategy”) Draft Scottish Energy Strategy and Just Transition Plan 2023**

60. Scottish Ministers have considered the role the proposed Development can play in relation to meeting our future energy needs. The Energy Strategy states that there will be a role for pumped hydro storage, adding that storage is a strategically important issue, with real potential benefits for Scotland. The Energy Strategy states “Scotland should have the capacity, the connections, the flexibility and resilience necessary to maintain secure and reliable supplies of energy to all of our homes and businesses as our energy transition takes place”. It adds that “Scotland needs a balanced and secure electricity supply. That means a system and

a range of technologies which provide sufficient generation and interconnection to meet demand. It means an electricity network which is resilient and sufficiently secure against any fluctuations or interruptions to supply”.

61. The proposed Development, through provision of energy storage, adds flexibility and resilience necessary to maintain secure and reliable supplies of energy to all of our homes and businesses as our energy transition takes place. Scottish Ministers conclude that the proposed Development is supported by the Energy Strategy.

62. The Scottish Government’s Draft Energy Strategy and Just Transition Plan 2023 (DESJTP) is focussed on delivering a fair and secure zero carbon energy system for Scotland and signals the support for pumped storage will continue. It states, “as we transition to a net zero energy system, renewables and other zero-carbon technologies, including pumped hydro storage, will need to provide all the services required to ensure a secure energy system.”

63. The DESJTP adds that “pumped hydro storage projects have the potential to create a large number of jobs and benefit the local economy, as well as providing much needed resilience in the system.”

### **Climate Change Plan**

64. The Climate Change Plan sets out the Scottish Government’s pathway to achieve the ambitious targets set by the Climate Change (Scotland) Act 2009, as amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, and the commitment to end Scotland’s contribution to climate change by 2045. Scotland’s renewable electricity generation has grown rapidly over the last twenty years, and a large contribution to achieving the commitment set out in the plan will be made by the increased decarbonisation of our electricity system.

65. The Update to the Climate Change Plan published in December 2020 states that “pumped storage also has an important role to play, as it can release stored electricity when the demand is high, and the system needs it most (e.g. when there is less wind energy available)”. The proposed Development is therefore supported by the Climate Change Plan as it is low carbon and supports the deployment of high levels of electricity generation from renewables.

### **Scotland’s Fourth National Planning Framework (NPF4)**

66. NPF4 brings together the Scottish Government’s long-term spatial strategy with a comprehensive set of national planning policies. The energy policy principles encourage, promote, and facilitate pumped storage hydro. Development proposals for all forms of pumped storage hydro will be supported where they maximise net economic impact.

67. The energy policy sets out the matters that are to be addressed in the design and mitigation of a development which include impacts (including cumulative) on communities and individual dwellings; significant landscape and visual impacts; historic environment; biodiversity; trees and woodlands; public access; road traffic; water environment; decommissioning of developments and site restoration. The policy regards pumped hydro storage requires that in considering these impacts, significant weight will be placed on the contribution of energy storage technology and capacity, to provide the vital services, including flexible response, that a zero carbon network will require. The policies within NPF4 require to

be considered and balanced when reaching a decision on applications for pumped hydro storage.

## **NPF4 part 1 - National Spatial Strategy for Scotland**

68. The National Spatial Strategy for Scotland emphasises that Scotland's future places will be net zero, nature-positive places that are designed to reduce emissions and adapt to the impacts of climate change, whilst protecting, recovering, and restoring our environment. Every decision on our future development must contribute to making Scotland a more sustainable place. We will encourage low and zero carbon design and energy efficiency, development that is accessible by sustainable travel, and pumped hydro storage.

69. NPF4 part 1 classifies Pumped Hydro Storage as a National Development, which supports the transition to a net zero economy through the ability of pumped hydro storage schemes to optimise electricity generated from renewables by storing and releasing it when it is required.

70. The Scottish Ministers consider that the proposed Development is therefore supported by the National Spatial Strategy for Scotland given by part 1 of NPF4.

## **NPF4 part 2 - National Planning Policy**

71. Under NPF4, storage is part of the supporting infrastructure necessary to support the continued expansion of renewable energy developments necessary for decarbonising electricity supply and therefore is consistent with the policy principles of NPF4 for tackling the climate and nature crises. Policy 1 requires that significant weight is given to the global climate and nature crisis. Scottish Ministers consider that there is strong support for the proposed Development under policy 1.

72. The proposed Development is also consistent with NPF4 policy intent regarding climate mitigation and adaptation. The proposed Development comprises a low carbon technology and is sited and designed to share some of the infrastructure of the existing Cruachan generating station (the upper reservoir and dam). This will minimise lifecycle greenhouse gas emissions and Scottish Ministers consider there is strong support for the proposed Development under policy 2.

73. Scottish Ministers consider the proposed Development protects biodiversity and that the included mitigation measures avoid significant negative biodiversity impacts. The proposed Development would provide biodiversity enhancement, which is secured by planning condition 7, requiring implementation of a Habitat and Biodiversity Management and Enhancement Strategy. The proposed Development would conserve, restore, and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. The policy outcome sought by the key principles in relation to biodiversity would be delivered by the proposed Development and there is support under Policy 3.

74. Scottish Ministers have carried out the Appropriate Assessment required under the Habitats Regulations in respect of the Loch Etive Woods SAC as described in paragraphs 22 to 25 of this letter. Their conclusion is that adverse impacts on the integrity of the SAC would be avoided, therefore Scottish Ministers find the proposed Development is also consistent with the key principles of NPF4 in relation to natural places and the associated policy 4.

75. Scottish Ministers are satisfied the proposed Development takes all reasonable steps to protect carbon-rich soils, restore peatlands and minimise disturbance to soils. Scottish Ministers find the proposed Development is consistent with the key principles of NPF4 in relation to soil. The proposed Development contains sufficient measures to minimise the disturbance of soils and protect soils from damage and is supported by policy 5 (a). Scottish Ministers consider the proposed Development is essential infrastructure. Using the existing upper reservoir and dam will minimise environmental impacts and emissions, and such benefits can only be realised by locating the proposed Development adjacent to Cruachan 1. There is no other identified site which would realise these benefits, and Ministers consider that there is specific locational need. The proposed Development is therefore supported by policy 5 (c) (i). Sufficient information has been included with the EIA Report that Scottish Ministers are confident that policy 5 (d) is satisfied. Scottish Ministers find the proposed Development is consistent with, and supported by, policy 5.

76. Scottish Ministers are content the impacts on forestry, woodland and trees are described satisfactorily in the EIA Report. The potential for any significant removal of woodland or ancient woodland is avoided. What removal of woodland may take place in the Loch Etive Woods SAC is mitigated by the measures recommended by NatureScot which are secured by a planning condition. Scottish Ministers consider the proposed Development is consistent with policy 6.

77. The proposals are unlikely to have significant adverse impacts on the setting of the Ben Cruachan Hydro Electric Scheme, Turbine Hall and Falls of Cruachan Railway Viaduct or on the character of the category A listed Railway Viaduct. However, the proposals have the potential to have significant adverse impacts on the character of the category A listed Turbine Hall because they would involve creation of a new access tunnel into it and its access tunnel. Scottish Ministers are satisfied that the mitigation measures which form part of the proposed Development ensure potential impacts will be reduced to a level that is not significant. Furthermore, a Listed Building Consent process will be followed which will ensure that Historic Environment Scotland is completely satisfied with the finer construction details and finishes. Scottish Ministers find the proposed Development values and protects the historic environment, supports the transition to net zero and is consistent with the key principles of NPF4 in relation to historic assets and places and the associated policy 7.

78. The proposed Development comes under the category of storage in the NPF4 Energy policy intent. Under this policy intent of NPF4, storage is treated as a “renewable energy development”. The proposed Development will generate electricity via the conversion of the potential energy of water previously pumped to the upper reservoir to the kinetic energy of water descending under gravity to spin turbines and generators to generate electricity. Subsequently, the water which has passed through the turbines will be pumped back up to the upper reservoir from Loch Awe using electricity from the grid.

79. Storage in general, and the proposed Development in particular, may be considered part of the supporting infrastructure necessary to support the continued expansion of renewable energy developments necessary for decarbonising electricity supply, although storage itself does not convert any additional renewable energy to electricity.

80. Scottish Ministers consider that the proposed Development would make a strong contribution to the desired policy outcome of the expansion of renewable, low-carbon and zero emissions technologies. In generation mode, the Development would provide an additional 600MW of electrical output. The net effect of additional energy storage on the energy system is likely to reduce the constraint of wind powered electricity generation in Scotland, and

therefore by having the proposed Development operational more renewable energy can be harnessed by other electricity generators in Scotland without constraint.

81. NPF4 Policy 11 states proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business, and supply chain opportunities. Scottish Ministers consider the proposed Development will bring substantial economic benefits, with opportunities for many local businesses, for employment in construction and in the longer term. The existing Cruachan power station is already a tourist attraction in its own right with a tourist centre and café and this will continue. Scottish Ministers note that the Planning Authority has expressed concern that the large incoming workforce required may not be of maximal benefit if it causes a reduction in tourist numbers and tourist spend, through loss of available visitor accommodation. The Application identifies that there is a potential adverse effect associated with accommodation being unavailable to tourists for protracted periods of time. Argyll and Bute Council require a condition to be applied to mitigate this potential outcome, which has been applied by the Scottish Ministers.

82. Scottish Ministers are satisfied the EIA Report includes sufficient information including information on socio-economic benefits to reach the conclusion that the proposed Development is supported by policy 11 (a) and (c); that policy 11 (b) does not apply; and that the requirements of policy 11 (d) and (e) are fulfilled. Policy 11 (f) provides that consent may be time limited. Scottish Ministers consider that consent should be given for a period of 75 years.

83. Scottish Ministers find there is unequivocal, strong support for the proposed Development under the key principles for Energy and the associated policy 11.

84. Scottish Ministers note the proposed Development is consistent with the NPF4 zero waste policy outcomes, as it achieves a reduction of materials in construction by using the existing Cruachan dam and upper reservoir and reuses as much of the excavated materials as possible in constructing the quayside. It is also an aim of the project to recycle excavated materials for use in concrete batching. Scottish Ministers are satisfied the proposed Development seeks to reduce, reuse, or recycle materials in line with the waste hierarchy, consistent with policy 12 (a). In addition to reuse of existing buildings and infrastructure, demolition is minimised; waste is minimised to reduce pressure on virgin resources and enable components to be disassembled and reused at the end of their useful life; and, recycled and natural construction materials such as excavated rock and spoil will be used. This is consistent with policy 12 (b). The proposed Development is not likely to generate significant quantities of waste when operational so policy 12 (c) does not require consideration. The proposed Development is not waste infrastructure, landfill or energy-from-waste facilities so policies 12 (d) to (g) do not require consideration. Scottish Ministers conclude the proposed Development is supported by NPF4 policy 12.

85. Scottish Ministers note the Planning Authority considers that community wealth building is a relevant NPF4 policy for the proposed Development. NPF4 aims to encourage, promote and facilitate a new strategic approach to economic development that also provides a practical model for building a wellbeing economy at local, regional and national levels, to achieve outcomes of local economic development that focuses on community and place benefits as a central and primary consideration – to support local employment and supply chains; and support community ownership and management of buildings and land. Scottish Ministers are satisfied the proposed Development will contribute to community wealth building as set out in policy 25 (a) - along with the direct employment opportunities at the proposed Development,

the Company will continue and expand on its work to offer opportunities for STEM learning through educational tours of Cruachan and visits to local schools to talk to students. Workshops and work experience opportunities are also provided for students to gain experience in engineering in the workplace environment. The proposed Development will boost economic development across Argyll and Bute 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. The proposed Development is not linked to community ownership and management of land so policy 25 (b) is not relevant. Scottish Ministers conclude the proposed Development is supported by NPF4 policy 25.

86. The proposed Development does not run counter to any of the principles of National Planning Policy and there is support for the proposed Development under policies 1, 2, 3, 4, 5, 6, 7, 11, 12 and 25. Owing to the climate emergency significant weight must be attached to policies 1, 2 and 11 and Scottish Ministers conclude the proposed Development is strongly supported by the National Planning Policy when NPF4 part 2 is read as a whole.

87. The transition to a low carbon economy is an opportunity for Scotland to take advantage of our natural resources to grow low carbon industries and create jobs. Scottish Ministers are satisfied the proposed Development has the potential for significant positive net economic benefits for the local community, Argyll and Bute, and Scotland. Secure and stable energy supply is a fundamental need of a prosperous economy. The proposed Development would provide further economic benefit through its contribution to underpinning energy security and flexibility.

88. The Scottish Ministers are satisfied that the matters pertaining to NPF4 have been assessed in the Application and considered in responses from the Planning Authority, HES, SEPA, NatureScot and other relevant bodies.

89. As stated above, NPF4 supports the planning and delivery of sustainable places, liveable places and productive places, and that the planning system should support economically, environmentally and socially sustainable places by enabling development that balances the costs and benefits over the longer term. Decisions should be guided by policy principles including, among others, giving due weight to net economic benefit; supporting the delivery of renewable energy infrastructure (including electricity storage); reducing greenhouse gas emissions and responding to the nature crisis.

## **Conclusions**

### **Reasoned Conclusions on the Environment**

90. Scotland's climate change, energy and planning policies are all material considerations when weighing up this proposed Development. NPF4, the Energy Strategy and the DESJTP make it clear that pumped hydro storage deployment remains a priority of the Scottish Government. This is a matter which should be afforded significant weight in favour of the proposed Development.

91. The Scottish Ministers acknowledge that the proposed Development would result in impacts on the environment. There would be impacts arising from rock removal and spoil management during construction. Satisfactory measures are in place to mitigate the potential pollution of the environment from the impacts of rock removal and spoil management. There would be some residual effects, including noise, traffic impacts and some limited landscape and visual impacts. These impacts are considered acceptable in the context of the benefits

that the proposed Development will bring in terms of net economic benefit, and the addition of supporting infrastructure necessary to support the continued expansion of renewable energy developments necessary for decarbonising electricity supply, while protecting the natural environment.

92. Scottish Ministers conclude, for the reasons set out above, that the proposed Development is supported by the relevant Scottish Government policies.

93. Scottish Ministers have considered the Planning Authority's comments on support for the proposed Development under the Local Development Plan, taking into account matters including the local planning policies suggested by the Planning Authority and the Planning Authority's consideration, reasoning and conclusion. Scottish Ministers agree the development will facilitate the wider deployment of renewable energy and support the resilience of the electricity network through the electricity it generates and consider the development is supported by the Local Development Plan and local planning policies when read as a whole.

94. The Scottish Ministers in making their determination on the Application, have had to balance the above considerations, decide what weight is to be given to each and reach a view as to where the balance of benefit lies. On balance, it is considered that the proposed Development is acceptable.

95. The Scottish Ministers are satisfied, having regard to current knowledge and methods of assessment, that this reasoned conclusion addresses the likely significant effects of the proposed Development on the environment. The Scottish Ministers are satisfied that this reasoned conclusion is up to date.

### **The Scottish Ministers' Determination**

96. Subject to the conditions set out in **Part 1** of **Annex 2**, the Scottish Ministers **grant consent** under section 36 of the Electricity Act for the construction and operation of the electricity generating station including pumped hydro storage, known as Cruachan Expansion Project, located within the Planning Authority area of Argyll and Bute Council (as more particularly described in **Annex 1**).

97. The consent hereby granted will last for a period of 75 years from the Date of Final Commissioning.

98. Subject to the conditions set out in **Part 2** of **Annex 2**, the Scottish Ministers **direct that planning permission is deemed to be granted** under section 57(2) of the Town and Country Planning (Scotland) Act 1997 in respect of the Development described in Annex 1.

99. Section 58(1)(a) of the Town and Country Planning (Scotland) Act 1997 requires where planning permission is deemed to be granted, that it must be granted subject to a condition that the permission will expire if has not begun within a period of three years. Section 58(1)(b) of that Act enables the Scottish Ministers to specify that a longer period is allowed before planning permission will lapse. Scottish Government policy is that due to the constraints, scale and complexity of constructing such developments, a seven-year time scale for the commencement of development is typically appropriate.

100. The Scottish Ministers consider that three years is not to apply with regard to the planning permission granted above, and that planning permission is to lapse on the expiry of

a period of seven years from 21 July 2023, unless the development to which the permission relates is begun before the expiry of that period. A condition has been imposed stating that development must be begun within seven years beginning with the date on which the permission is deemed to be granted (21 July 2023) and if development has not begun at the expiration of that period, the planning permission will lapse in terms of section 58(3) of the 1997 Act.

101. Copies of this letter have been sent to the public bodies consulted on the application. This letter has also been published on the Scottish Government Energy Consents website at <https://www.energyconsents.scot>.

102. The Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine Applications for consent. The rules relating to the judicial review process can be found on the website of the Scottish Courts: <http://www.scotcourts.gov.uk/docs/default-source/rules-and-practice/rules-of-court/court-of-session/chap58.pdf?sfvrsn=8>

103. Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours faithfully

*pp Alan Brogan*

**RUTH FINDLAY**  
**Head of Energy Consents**

For and on behalf of the Scottish Ministers  
A member of the staff of the Scottish Government

# ANNEX 1

## DESCRIPTION OF DEVELOPMENT

The Development comprises the construction and operation of an electricity generating station and ancillary development known as Cruachan Expansion Project.

The principal components of the development are:

- Upper Control Works – A new intake structure directing water into a new headrace tunnel and underground waterway system;
- Headrace Waterway System – A series of underground tunnels, shafts that will convey water between Cruachan Reservoir and Loch Awe, through the underground power station complex;
- Power Station Complex – A series of underground caverns, shafts and tunnels containing reversible pump-turbines and motor-generators together with associated mechanical and electrical equipment such as inlet valves, transformers and switchgear. The interconnecting tunnels will enable construction and will provide post construction access;
- Tailrace Waterway System – A series of underground tunnels and shafts that will convey water between the power station complex and Loch Awe.
- An underground gate chamber and gate shaft, housing the tailrace tunnel gates located near the downstream end of the tailrace tunnel;
- Main Access Tunnels – A main access tunnel to provide access to the underground power station complex from the shoreline of Loch Awe. This tunnel will cross-connect to the existing Cruachan access tunnel and power station caverns to allow personnel to easily move between both facilities and provide a further means of access/egress;
- Ventilation Shaft – A ventilation shaft to circulate fresh air through the underground access tunnels and cavern power station complex. The ventilation shaft will house the 275kV cable circuits from the power station complex to surface substation;
- Surface Substation – The existing substation compound will be extended in order to install two new 275kV circuit breakers and associated disconnectors, to provide a suitable connection to the existing 275KV circuits that connect to Dalmally sub-station, located some 7km to the east;
- Lower Control Works – A fish-screen inlet / outlet structure, stop logs and associated equipment, positioned at the end of the tailrace tunnel in Loch Awe. These structures would direct water in and out of Loch Awe;
- Quayside – Constructed on the northern shoreline of Loch Awe to facilitate the construction of the underground access tunnels, waterway system and caverns forming the power station complex and for temporary storage of spoil prior to its off-site removal;
- Administration Buildings – 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; and
- Upgrading of service roads and associated infrastructure to facilitate the construction and operation of the power station.

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 will be established in the vicinity of the existing Cruachan Dam. Once construction work for the Upper Control Works and sub-station is complete, this compound will be removed and the land reinstated;
- A lower site compound including welfare facilities 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 1.1). Once construction work is complete, this compound will be removed, and the land reinstated. The total area required for this compound will be approximately 9 ha;
- A temporary diversion of the A85 using an existing car-parking layby at the Falls of Cruachan Station will be carried out in order to facilitate construction of the initial sections of the main access tunnel. The A85 will be reinstated to its current alignment once the access to the main access tunnel portal is constructed. The re-alignment is shown on Figure 3.5 of the EIA Report, and
- A temporary canopy structure located on the quayside will cover the temporary stockpiles of excavated spoil. The canopy structure will be enclosed on 3 sides by brick / concrete walls and have a 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. An indicative layout of the structure is shown on Figure 3.1 in Appendix 1.1 of the EIA Report and further described in Chapter 7 – Hydrology.

**All as described in the Application.**



## ANNEX 2

### CONDITIONS

#### Part 1 - Conditions applying to the section 36 consent

##### Commencement of Development

1. The Commencement of the Development shall be no later than seven years from 21 July 2023, or in substitution such other period as the Scottish Ministers may hereafter direct in writing. Written confirmation of the intended date of Commencement of Development shall be provided to the Scottish Ministers and the Planning Authority no later than one calendar month before that date.

**Reason:** *To ensure that the development is commenced within a reasonable period.*

##### Notifications

2. Written notification of the actual date of Commencement of the Development and the Date of Final Commissioning shall be provided to the Scottish Ministers and the Planning Authority no later than one calendar month after that date.

**Reason:** *To allow the Planning Authority and the Scottish Ministers to calculate the date of expiry of the consent.*

##### Non-assignment

3. The Company must not assign the consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant authorisation, with or without conditions. The consent, must not be assigned, alienated or transferred otherwise than in accordance with this condition.

**Reason:** *To safeguard the obligations of the consent if transferred to another company.*

##### Serious incident reporting

4. In the event of any breach of health and safety or environmental obligations relating to the Development during the period of this consent written notification of the nature and timing of the incident shall be submitted to the Scottish Ministers within twenty-four hours of the incident occurring, including confirmation of remedial measures taken and/or to be taken to rectify the breach.

**Reason:** *To keep Scottish Ministers informed of any serious incidents which occur and which may be in the public interest.*

## Part 2 - Conditions applying to the deemed planning permission

### Implementation in accordance with approved plans and requirements of this consent

5. Except as otherwise required by the terms of this consent and deemed planning permission, the Development shall be undertaken in accordance with the Application, the planning drawings and all documentation lodged in support of the Application.

**Reason:** *To ensure that the Development is carried out in accordance with the approved details.*

### Commencement of development

6. (1) The development must be begun not later than the expiration of seven years beginning with 21 July 2023.

(2) Written confirmation of the intended date of Commencement of Development shall be provided to the Planning Authority and the Scottish Ministers no later than one calendar month before that date.

**Reason:** *To comply with section 58 of the Town and Country Planning (Scotland) Act 1997 and to ensure that the permission is implemented within a reasonable period and to allow the Planning Authority to monitor compliance with obligations attached to this planning permission as appropriate.*

### Habitat and Biodiversity Management and Enhancement Strategy

7. No development other than Site Exploratory Works shall commence unless and until a Habitat and Biodiversity Management and Enhancement Strategy has been submitted 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 the relevant planning policy objectives.*

### Construction Environment Management Plan

8. (1) No development other than Site Exploratory Works shall commence unless and until a Construction Environment Management Plan (CEMP) has been submitted to and approved in writing by the Planning Authority. The CEMP shall provide details of mitigation, management and enhancement for ornithological interests, habitats, species, water courses and peat management overseen by an Ecological Clerk of Works for the approval of the Planning Authority in consultation with SEPA and NatureScot.

(2) The CEMP shall demonstrate adherence to the mitigation outlined in the Schedule of Mitigation and Monitoring (Appendix 4.1 of the EIA Report). The approved CEMP shall be implemented in full.

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

## Blasting

9. (1) No blasting shall take place on the Site until a Blast Management Plan has been submitted to and approved in writing by the Planning Authority. The Blast Management Plan shall include details of:
- a) the timing and methodology of any blasting associated with the Development;
  - b) sensitive receptors;
  - c) appropriate thresholds values for Peak Particle Velocities (mm/sec), Frequency (Hz) and Overpressure (kPa) with respect to sensitive receptors;
  - d) proposed blasting monitoring locations;
  - e) proposed mitigation;
  - f) the types of monitoring equipment to be used and calibration expectations;
  - g) the frequency of monitoring; and
  - h) measures for community and stakeholder liaison to advise on the timing and duration of blasting activities and safety.
- (2) All blasting shall thereafter be carried out in accordance with the approved Blast Management Plan, unless otherwise agreed in writing by the Planning Authority.

**Reason:** *To limit the duration and frequency of noise (air and water overpressure) and vibration from blasting activities in the interests of local residents, properties, environmental receptors, and sensitive infrastructure.*

## Roads

10. No development other than Site Exploratory Works shall commence unless and until an Extracted Materials Management Plan has been submitted to and approved by the Planning Authority. The Extracted Materials Management Plan must clarify the locations of disposal/storage/use sites, and the tonnage and vehicle movements associated with this. The Company 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.*

11. (1) No development other than Site Exploratory Works shall commence unless and until details of the proposed means of access from the A85(T) have been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland.
- (2) Thereafter, the proposed access shall be constructed in accordance with the approved details.

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

12. (1) No development other than Site Exploratory Works shall commence unless and until a plan for the design, implementation and duration of all temporary traffic management arrangements on the A85(T) has been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland.
- (2) 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.*

13. (1) No development other than Site Exploratory Works shall commence unless and until a detailed design and specification for the proposed access portal structure beneath the A85(T) has been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland.
- (2) 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:
- (a) Approval in Principle from Transport Scotland
  - (b) Category 3 structural design check to CG300
  - (c) 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.*

14. No development other than Site Exploratory Works shall commence unless and until a Construction Traffic Management Plan (CTMP) has been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland. The complete report shall include, but not be restricted to, details of the following:
- a) Identification of designated construction vehicle routes to site
  - b) Access arrangements
  - c) Methods to ensure that construction routes are followed
  - d) Identification of construction vehicle volumes set against key construction tasks and programme
  - e) Measures to minimise and control construction vehicle volumes
  - f) Measures such as wheel washing and dust suppression requirements
  - g) Construction staff travel arrangements
  - h) Confirmation of site working hours
  - i) Measures for mitigating HGV movements through settlements lying within the A85 and A82 trunk road corridors
  - j) Measures for accommodating displaced car parking from the A85(T) during construction.
  - k) Measures for maintaining pedestrian access along and across the A85(T) during construction.
  - l) Arrangements for monitoring accelerated wear and tear on the road network
  - m) A blasting plan is to be included as part of CTMP

- n) Arrangements for abnormal loads
- o) Signage details and details of any temporary traffic management arrangements
- p) Site liaison details
- q) 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.*

15. No development other than Site Exploratory Works shall commence unless and until a methodology and programme has been submitted to and approved in writing by 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.*

16. No movement of any abnormal load on the trunk road network shall take place unless and until the details of the proposed route for any abnormal loads on the trunk road network together with details of any accommodation measures required (including the removal of street furniture, junction widening and any traffic management) has been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland.

**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.*

17. During the delivery period of construction materials / plant etc. on the trunk road network, any additional temporary 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.*

## Traffic Impact Analysis

18. 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 utilising 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

19. No development other than Site Exploratory Works shall commence unless and until final detail of the design and appearance of:

- I. the new water inlet structure and associated rock cutting/contouring for the upper intake at Cruachan reservoir and
- II. the referenced extension to the existing substation

has been submitted to and approved in writing by the Planning Authority.

**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.*

## Construction Hours

20. 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;

unless as otherwise may be agreed in writing by the Planning Authority in consultation with Environmental Protection Officers.

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

## Private Water Supplies

21. Prior to the Commencement of Development, detailed information shall be provided to the Planning Authority 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

22. Prior to the Commencement of Development an Access Plan and Strategy shall be submitted to and approved by of the Planning Authority. This shall clarify how access to the 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.

## Quayside

23. (1) No works shall commence to form the new quayside and associated permanent buildings until final details of the design, appearance and materials proposed associated with these works are submitted to the Planning Authority for their approval.
- (2) 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.*

## Loch Etive Woods Mitigation

24. (1) No works shall commence on the widening of the access track which passes through the Loch Etive Woods Special Area of Conservation unless and until a Construction Method Statement, detailing road stabilisation techniques and retaining structures, has been submitted to and approved in writing by the Planning Authority in consultation with NatureScot.
- (2) The approved Construction Method Statement shall thereafter be implemented in full unless otherwise agreed in writing by the Planning Authority in consultation with NatureScot.

**Reason:** *To provide satisfactory mitigation for the potential loss of qualifying oak woodland habitat within the Loch Etive Woods Special Area of Conservation.*

## Habitat Restoration and Landscape Mitigation Plan

25. (1) No development other than Site Exploratory Works shall commence unless and until a Habitat Restoration and Landscape Mitigation Plan (HRLMP) has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The HRLMP shall be based on the outline details regarding habitat restoration and

enhancement included in section 8.10.4 and 11.8 of the EIA Report. The HRLMP must include details of the removal and replacement of trees on at least a like-for-like basis.

(2) The approved HRLMP shall thereafter be implemented in full unless otherwise agreed in writing by the Planning Authority in consultation with SEPA.

**Reason:** *To protect and where possible enhance wetland and peatland habitats and to improve carbon sequestration.*

## **Acid Rock Drainage Management Plan**

26. (1) No development other than Site Exploratory Works shall commence unless and until an Acid Rock Drainage (ARD) Management Plan has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The scope of the ARD Management Plan shall include the following, as set out in Section 14.10.2 of the EIA Report:

- (a) Geological mapping to better define the likely environmental hazard and risk.
- (b) ARD testing and Acid-Base Accounting (ABA) comprising detailed ARD leach tests and X-ray Diffraction (XRD) and XRF analysis of recovered rock core, drill cutting and hand specimen samples to define the mineral percentages within the excavation rock spoil.
- (c) Surface mapping at outcrops to develop the geological ground model and additional petrographic and geochemical analysis using XRF and XRD. Such mapping should include any surface infrastructure planned as part of the scheme where significant rock excavation is to be undertaken.
- (d) Methodology of how Potentially Acid Generating (PAG) materials are tested and segregated during the drilling and blasting and other methods of rock excavation both underground and at surface within the site.
- (e) Defining appropriate waste sites and temporary storage and transportation of materials identified as PAG aligned with the appropriate legislation and international guidance.
- (f) Investigations to evaluate appropriate material reuse geotechnically as fill materials and also as concrete aggregates.

(2) The scope of the ARD Management Plan shall also include the following:

- (a) Dynamic ('Kinetic') ARD Testing involving leaching column or humidity cells. This may be required to provide more accurate assessment of contaminant release potential than the more simplistic and static ABA methods.
- (b) Waste Rock Storage/Deposition will require detailed site-specific assessment supported by a Conceptual Site Model and Water Environment Risk Assessment. Any long-term storage or deposition of high-risk waste rock will require contingency planning and long-term monitoring.

- (c) Risk Mitigation Planning should be defined within the plan. This could include for example capping or containment of high-risk material to limit infiltration and capture and treat any potentially contaminated leachate or run off.
- (d) Water Environment Monitoring. This will be required in areas where high-risk waste rock is handled or stored. The scope of this should be defined based on the site-specific setting but is likely to include monitoring of rock drainage and run off, peripheral site and storage area drains, surface waters, groundwater (depending on the site) and any other identified at-risk receptors such as wetlands. Monitoring suites should be informed by the results of rock testing but are likely to include metals, major ions and physicochemical parameters.

**Reason:** *To manage the specific risks associated with sulphide mineral bearing Potentially Acid Generating (PAG) material generated at the site, to prevent water pollution.*

### **Site Waste Management Plan**

- 27. (1) No development other than Site Exploratory Works shall commence unless and until a Site Waste Management Plan has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The Site Waste Management Plan shall be based on the EIA Report and shall be informed by the ARD Management Plan set out in the foregoing condition.
- (2) The approved Site Waste Management Plan shall thereafter be implemented in full unless otherwise agreed in writing by the Planning Authority in consultation with SEPA.

**Reason:** *In the interests of environmental protection.*

### **Peat Management Plan**

- 28. (1) No development other than Site Exploratory Works shall commence unless and until a Peat Management Plan has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The Peat Management Plan shall be based on the EIA Report Appendix 6.2 – Outline PMP. The Peat Management Plan shall also include detailed information on the Lower Compound excavation requirements; potential peat re-use locations and volumes and on the restoration of bare peat areas. The Peat Management Plan shall include details of how it is intended to prioritise leaving as much peat in the ground by exploring the possibility of floating parts of the Lower Compound.
- (2) The approved Peat Management Plan shall thereafter be implemented in full unless otherwise agreed in writing by the Planning Authority in consultation with SEPA.

**Reason:** *To demonstrate how micro-siting and other measures have been used to minimise peat and good quality peat habitat disturbance.*

### **Lower Compound Design**

29. (1) No development other than Site Exploratory Works shall commence unless and until details of the final design of the lower works compound have been submitted to and approved in writing by the Planning Authority in consultation with SEPA.
- (2) The approved final design of the lower works compound shall thereafter be implemented in full.

**Reason:** To demonstrate how micrositing and other measures have been used to minimise peat and good quality peat habitat disturbance.

### **Fish Monitoring and Mitigation**

30. (1) No development other than Site Exploratory Works shall commence unless and until details of a Fish Monitoring and Mitigation Plan (FMMP) have been submitted to and approved in writing by the Planning Authority in consultation with Scottish Ministers.
- (2) The FMMP shall include but not be limited to details of fish population and habitat surveys already carried out, or to be carried out on the River Awe and other watercourses potentially impacted from the Development and in Loch Awe and Cruachan Reservoir. If the FMMP requires a new survey to be carried out, it must take place at least 12 months prior to construction.
- (3) The FMMP shall include details of a smolt tracking study which should consider the potential cumulative impact on salmon smolts associated with the Development and other adjacent developments in Loch Awe (operational and consented, including Cruachan I and the Loch Awe Barrage).
- (4) The FMMP shall refer to the erosion prevention and sediment control plan and Construction Phase Surface Water Management Plan described in the EIA Report, and the Acid Rock Drainage Management Plan required by condition 26. The FMMP shall contain details of mitigation of the potential impact associated with the release of concrete, sediment, fuel /hydrocarbons and acidic leachates on the water quality and fish populations.
- (5) The FMMP shall include proposed mitigation and fish protection measures.
- (6) The approved FMMP shall thereafter be implemented in full.

**Reason:** *In the interests of the protection of the fish populations.*

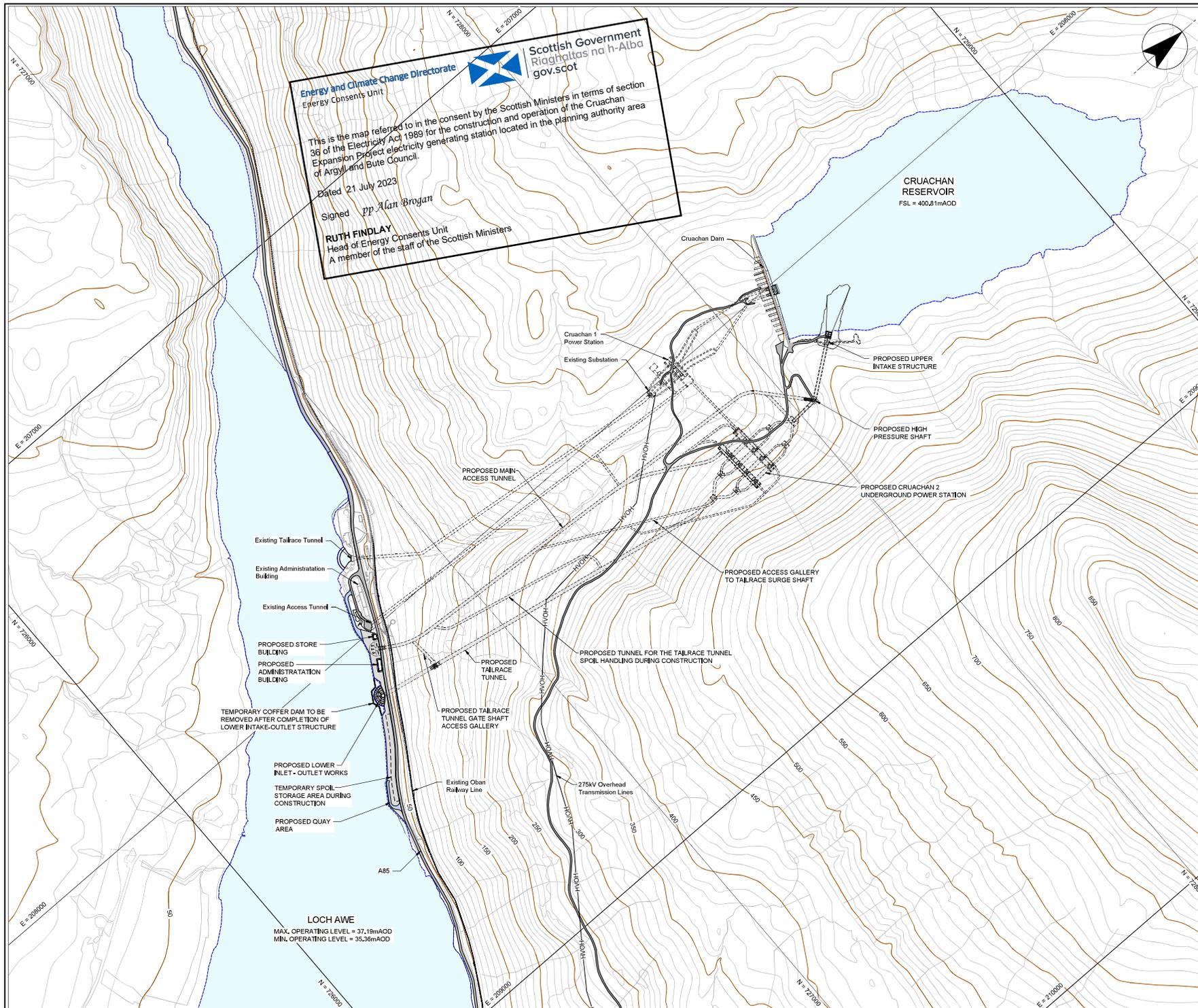
### **Worker Housing Strategy**

31. 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:** *To address potential adverse socio-economic effects identified in the application.*

## DEFINITIONS

“Application”	Means the application submitted by the Company on 17 May 2022 and its supporting documents, including the EIA Report as amended by the additional information submitted by the Company in December 2022.
“Approved Plans”	Means the plans included in the application as drawings reference 331201086/01/C/0961 and 331201086/01/C/0015 reproduced in Annex 3.
“Commencement of Development”	Means the implementation of the consent and deemed planning permission by carrying out a material operation within the meaning of section 27 of the Town and Country Planning (Scotland) Act 1997.
“Date of Final Commissioning”	Means the earlier of (i) the date on which the Development first exports electricity to the national grid on a commercial basis; or (ii) the date falling five years from the date of Commencement of Development.
“Development”	Means the development described in Annex 1. (For the avoidance of doubt, this includes the ancillary development described in Annex 1.)
“Planning Authority”	Means Argyll and Bute Council.
“Site”	Means the area enclosed by the red line boundary of the development described in the plans included in the application reproduced in Annex 3 as drawing reference Figure 1.1.
“Site Exploratory Works”	Means (i) site investigation, exploratory or preparatory works or surveys required for the purpose of satisfying or discharging any pre-commencement obligations under the section 36 conditions or the planning conditions and (ii) the provision of temporary contractors’ facilities within the Site that are necessary for the aforementioned (i) above.



**Scottish Government**  
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**Energy and Climate Change Directorate**  
 Energy Consents Unit

This is the map referred to in the consent by the Scottish Ministers in terms of section 36 of the Electricity Act 1989 for the construction and operation of the Cruachan Expansion Project electricity generating station located in the planning authority area of Argyll and Bute Council.

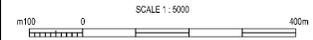
Dated 21 July 2023  
 Signed *pp Alan Brogan*

**RUTH FINDLAY**  
 Head of Energy Consents Unit  
 A member of the staff of the Scottish Ministers

**NOTES**  
 1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.  
 2. THIS IS A CONCEPT PHASE DRAWING TO ILLUSTRATE THE PROJECT BASE CASE. ALL DIMENSIONS AND ELEVATIONS ARE APPROXIMATE AND WILL BE REVIEWED AND UPDATED AS PROJECT DESIGN STAGES CONTINUE. ALL CONCEPTS, DETAILS, DIMENSIONS AND ELEVATIONS INDICATED ON THIS DRAWING WILL REQUIRE FURTHER REFINEMENT DURING A SUBSEQUENT DESIGN PHASE.

# ANNEX 3

**FIGURE No. 3.3**



**CURRENT VERSION INFORMATION**  
 C. PROPOSED STORE AND ADMINISTRATION BUILDING RELOCATED. TEMPORARY SPOIL STORAGE AREA ADDED.

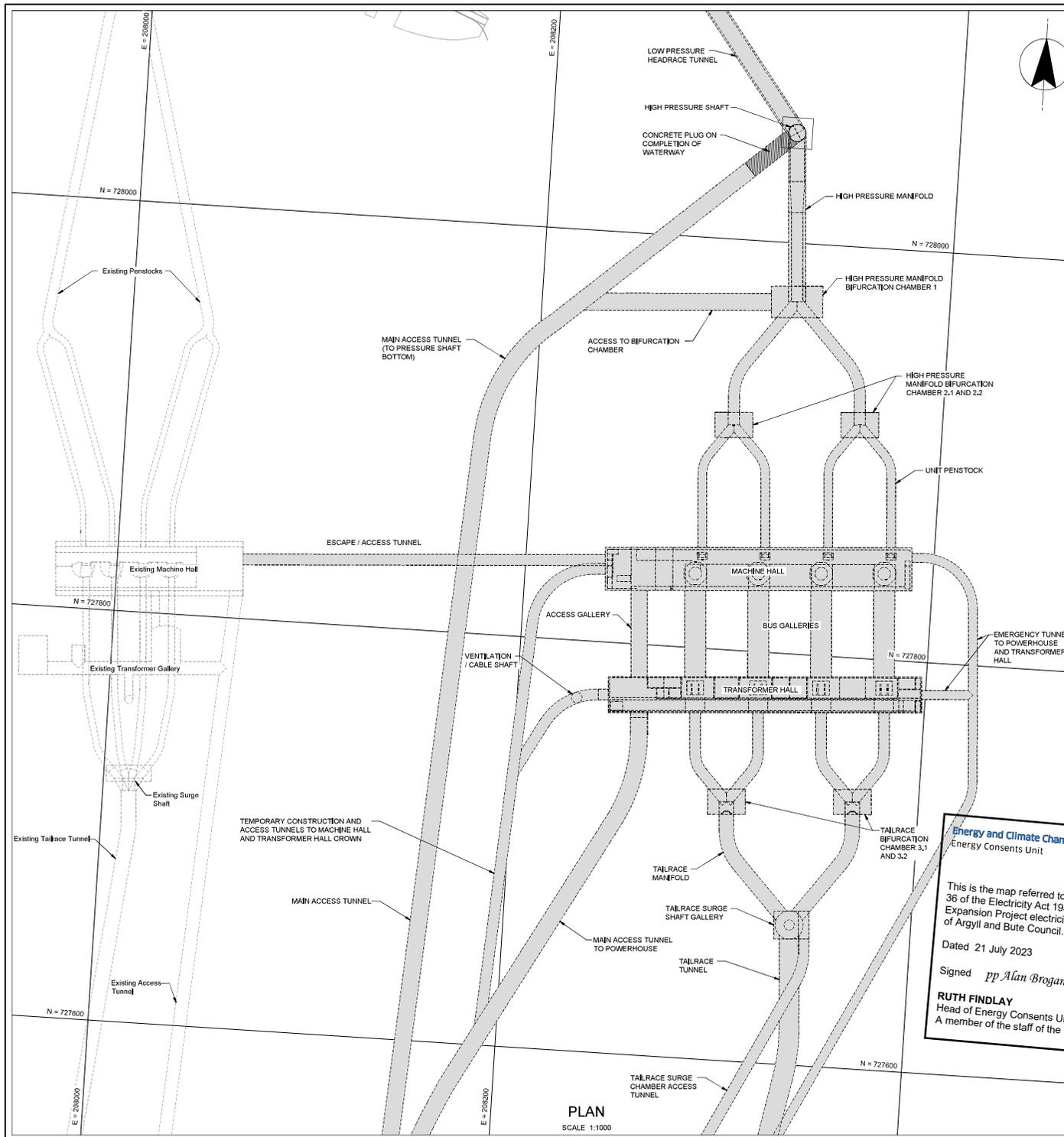
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DATE	DRWN	CHD	REV	VER	REASON FOR ISSUE
10.03.22	MD	SS	CS	C	FOR INFORMATION
26.02.22	PPS	SS	CS	B	FOR INFORMATION
21.09.21	RAB	SS	CS	A	FOR INFORMATION

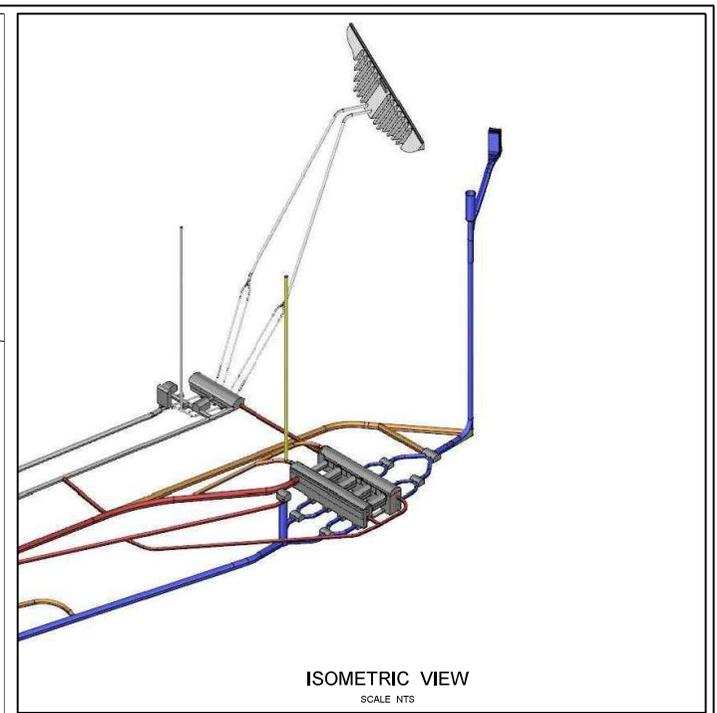
**DRAX CRUACHAN EXPANSION LTD**  
**CRUACHAN 2**  
 4 x 150 MW GENERAL ARRANGEMENT PLAN  
 ALTERNATE MAIN ACCESS TUNNEL  
 AND UPPER INTAKE ARRANGEMENT  
 OPTION-2



CONTRACT NO.	01	SCALE	1:5000	MASTER SHEET	A1
DRAWING NO.	331201086/01/C/961	VERSION			C



**PLAN**  
SCALE 1:1000



**ISOMETRIC VIEW**  
SCALE NTS

**NOTES**

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE.
2. THIS IS A CONCEPT PHASE DRAWING TO ILLUSTRATE THE PROJECT BASE CASE. ALL DIMENSIONS AND ELEVATIONS ARE APPROXIMATE AND WILL BE REVIEWED AND UPDATED AS PROJECT DESIGN STUDIES CONTINUE. ALL CONCEPTS, DETAILS, DIMENSIONS AND ELEVATIONS INDICATED ON THE DRAWING WILL REQUIRE FURTHER REFINEMENT DURING A SUBSEQUENT DESIGN PHASE.
3. VENTILATION ARRANGEMENT NOT SHOWN ON THE DRAWING FOR CLARITY PURPOSES.
4. THE ELECTRO-MECHANICAL EQUIPMENT AND DETAILS SHOWN ON THE DRAWING ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.



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DATE	DRWN	CHKD	REV	ISS	BY	REASON FOR ISSUE
28/02/22	RAB	SS	CS	A		FOR INFORMATION

DRAX CRUACHAN EXPANSION LTD  
CRUACHAN 2  
GENERAL ARRANGEMENT  
POWER STATION COMPLEX - 4 x 150 MW OPTION



CONTRACT NO.	01	SCALE	1:1000	MASTER SIZE	A1
DRAWING NO.	331201086/01/C/0015	VERSION			A

Energy and Climate Change Directorate  
Energy Consents Unit

 Scottish Government  
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gov.scot

This is the map referred to in the consent by the Scottish Ministers in terms of section 36 of the Electricity Act 1989 for the construction and operation of the Cruchan Expansion Project electricity generating station located in the planning authority area of Argyll and Bute Council.

Dated 21 July 2023

Signed *pp Alan Brogan*

**RUTH FINDLAY**  
Head of Energy Consents Unit  
A member of the staff of the Scottish Ministers

**FIGURE No: 3.4**



Client  
**Stantec**  
Drax Generation Enterprise Ltd

**CRUACHAN EXPANSION PROJECT**  
Site Location Plan

0 0.5 1 km  
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1:17,500 @ A3	Date: 03/03/2022
Drawn: JP	Checked: CL
Figure 1.1	Rev D