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Red John Pumped Storage Hydro Scheme

Appendix 4.3: Scoping Opinion

ILI (Highlands PSH) Ltd.

November 2018

The Scottish Government

Energy Consents Unit

Scoping Opinion on behalf of the Scottish Ministers under Part 4 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Intelligent Land Investments (ILI) Group Plc.

RED JOHN PUMPED STORAGE HYDRO

November 2017

Contents

1. Introduction

On 29 September 2017, Intelligent Land Investments (ILI) Group Plc. (the Applicant) submitted a request to the Scottish Ministers for a scoping opinion under The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, relating to the proposed Red John Pumped Storage Hydro. The request was accompanied by a scoping report.

The Red John Pumped Storage Hydro proposal ("the proposed development")

The proposed development would be located in the Scottish Highlands, approximately 14km southwest of Inverness.

The relevant planning authority will be The Highland Council.

The proposed development would have a storage capacity of approximately 2400 Mega Watt hours (MWhrs) with approximately 400 MW installed electricity generation capacity. Associated permanent and temporary infrastructure would include: headpond, headrace, powerhouse, tailrace, spillway, access tracks, construction compounds, substation and spoil mound; all as described in more detail in Annex 1.

2. Scoping Opinion

This scoping opinion has been adopted following consultation with The Highland Council within whose planning authority area the proposed development would be situated, Scottish Natural Heritage, the Scottish Environment Protection Agency and Historic Environment Scotland, all as statutory consultation bodies, and with other bodies listed in Annex 2, which Scottish Ministers consider likely to have an interest in the proposed development by reason of their specific environmental responsibilities or local and regional competencies.

Scottish Ministers adopt this scoping opinion having taken into account the information provided by the applicant in its request dated 29 September 2017 in respect of the specific characteristics of the proposed development and representations received in response to the consultation undertaken. In providing this scoping opinion, the Scottish Ministers have also had regard to current knowledge and methods of assessment, the specific characteristics of that type of development and the environmental features likely to be affected.

This scoping opinion is based on information contained in the applicant's written request for a scoping opinion and information available at today's date. The adoption of this scoping opinion by the Scottish Ministers does not preclude the Scottish Ministers from requiring of the applicant information relating to any EIA report submitted in connection with its application for section 36 consent for the Red John Pumped Storage Hydro proposed development. Nothing in this scoping opinion will prevent the Scottish Ministers from seeking additional information at application stage, for example to include cumulative impacts of additional developments which enter the planning process after the date of this opinion.

Without prejudice to that generality, it is recommended that advice regarding the requirement for an additional scoping opinion is sought from Scottish Ministers in the event that no application has been submitted within 12 months of the date of this opinion.

3. Site specific issues of interest to the Scottish Ministers

Subject to specific comments below, the Scottish Ministers expect the EIA report which will accompany any application for the proposed development to include full details showing that **all the advice**, **guidance, concerns and requirements** raised by each consultee in the correspondence attached at **Annex 2** to this opinion, have been addressed.

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

In the case of a generating station in respect of which a controlled activity, within the meaning of the Water Environment (Controlled Activities) (Scotland) Regulations 2005, will be carried on, the Scottish Ministers shall, before granting a consent under section 36 of the Electricity Act 1989, obtain and have regard to the advice of the Scottish Environment Protection Agency (SEPA) on matters relating to the protection of the water environment and have regard to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003.

The proposed development will require an authorisation from SEPA under CAR. The ECU encourages applicants to twin-track applications for consent under section 36 and CAR to ensure that CAR requirements can be accommodated more easily when proposals are at their most fluid.

Scottish Ministers will not issue any section 36 consent in respect of a hydro development until the CAR licence has been approved and issued.

Water Rights for Hydro-Electric Generating Stations in Scotland

In Scotland, Schedule 5, Section 10(5) of the Electricity Act 1989 allows for a person who holds a generation licence under section 6(1)(a) to be authorised by Scottish Ministers to abstract and divert from any watercourse or loch and to use such water as may be necessary for the purposes of constructing or extending a generating station wholly or mainly driven by water, and of operating that generating station after construction or extension. Such authorisation shall be by order and shall provide for the compulsory acquisition by the person of such rights, as regards the abstraction, diversion and use, as may be specified in the order; and the order may contain such incidental, consequential and supplementary provisions as the Scottish Ministers thinks necessary or expedient.

Should an Acquisition of Water Rights Order be required, it is advised that this is applied for at the same time as the application for section 36 consent in order to avoid protracted consultation timescales.

It should be noted that to facilitate uploading to the Energy Consents portal, the EIA Report and its associated documentation, when submitted, should be accompanied with a CD containing the EIA report and its associated documentation divided into appropriately named separate files of sizes no more than 10 MB. This will also assist SNH and other consultees.

4. Consultation

Prior to the scoping report being issued for consultation, a list of consultees was agreed by the Applicant and the ECU. For a list of respondents and copies of their responses, see Annex 2. Each should be read in full for detailed requirements from individual consultees and for comprehensive guidance, advice and, where appropriate, templates for preparation of the EIA report. Unless stated to the contrary in this scoping opinion, Scottish Ministers expect the EIA report to include all matters raised by the consultees.

The Scottish Ministers are satisfied that the requirements for consultation set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, have been met and have considered all representations received by them pursuant to that consultation.

5. Mitigation Measures

The Scottish Ministers are required to make a reasoned conclusion on the significant effects of the development on the environment as identified in the environmental impact assessment. The mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to each chapter. Applicants are also asked to provide a consolidated schedule of all mitigation measures proposed in the environmental assessment, provided in tabular form, where that mitigation is relied upon in relation to reported conclusions of likelihood or significance of impacts.

6. Process Going Forward

It is acknowledged that the environmental impact assessment process is iterative and should inform the final layout and design of proposed developments. Ministers are aware that further engagement between parties regarding the refinement of the design of the proposed development will be necessary, including selection of the preferred option in relation to the final headpond location and design. Ministers request that they are kept informed of such discussions.

All applicants are encouraged to engage with officials at the Scottish Government's ECU before proposals reach design freeze. This will afford an opportunity for additional comments to be provided on the final proposals at pre-application stage.

Applicants are reminded that there will be limited opportunity to materially vary the form and content of a proposed development post submission.

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

Annex 1

Description of Proposed Development

The principle components of the Red John Pumped Storage Hydro would comprise:

- Headpond* - The upper reservoir and embankment or dam;
- Tailpond – The lower reservoir. In this case this is the existing water body of Loch Ness;
- Inlet/outlet - The location where the tunnels enter the headpond and tailpond;
- Headrace - The high pressure tunnel connecting the headpond to the pump turbines;
- Tailrace - The low pressure tunnel connecting the pump turbines to the outlet in the tailpond;
- Power cavern - Contains the combined pump/turbines, generators, switchgear and transformers;
- Spillway - The spillway will consist of a buried pipeline and will be used as a system to drain any excess water from the headpond as well as being used for the scouring and draining down of the headpond in an emergency situation;
- Temporary and permanent access tracks;
- Temporary and permanent construction compounds;
- Substation; and
- Spoil mound.

*The scoping layout presented two options for the headpond features of the development:

Option A: a headpond design utilising two small lochs: Loch na Curra and Lochan an Eoin Ruadha;

Option B: an alternative headpond location located away from the two lochs but partially within Ancient Woodland Inventory woodland.

Following on-going baseline surveys and stakeholder engagement, the final design will be presented in the EIA report and will confirm which headpond layout will be progressed.

Annex 2

Consultation Responses

Consultee

AM Geomorphology
Forestry Commission Scotland
Highlands and Islands Airports Ltd
The Highland Council
Historic Environment Scotland
Joint Radio Company
Marine Scotland Science
NATS Safeguarding
Ness District Salmon Fishery Board
RSPB Scotland
Scottish Rights of Way and Access Society
Scottish Water
Scottish Environment Protection Agency
Scottish Natural Heritage
Transport Scotland
Visit Scotland

McInnes T (Theresa)

From: Andy Mills <andymills@amgeomorphology.co.uk>
Sent: 14 September 2017 15:19
To: McInnes T (Theresa)
Subject: RE: Red John Pumped Storage Hydro - pre-scoping information

Dear Theresa,

Thank you for the opportunity to comment on the Red John Pumped Storage draft documents.

We note from section 7.3.6 of the Main Report that dependent on the extent of peat present across the site, a range of peat studies may be undertaken as part of the EIA (including a peat stability assessment). It is important therefore that peat probing is undertaken at a sufficient level to inform the need for such studies (or demonstrate that they are not required).

If you have any queries, please don't hesitate to get in touch.

Best regards,

Andy

Dr Andy Mills
Geomorphologist

Tel: +44 7943 875773

Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Highland and Islands Conservancy
"Woodlands", Fodderty Way
Dingwall, Ross-shire, IV15 9XB

Glèidhteachas na Gàidhealtachd's nan Eilean
"Fearann – coilleach"
Rathad Fodderty
Inbhir Pheodhearan
Sgire Rois, IV15 9XB

Tel/Fòn 0300 067 6950
highland.cons@forestry.gsi.gov.uk

Conservator/Neach Dion Arainneachd
John Risby

Theresa McInnes
Energy Consents Unit
The Scottish Government

14 September 2017

Dear Theresa McInnes

The Electricity works (Environmental Impact Assessment) (Scotland) Regulations 2017, for the Red John Hydro Pumped Storage Hydro Scheme.

Introduction

This document represents Forestry Commission Scotland (FCS) views on the proposed Red John Pumped Storage Scheme, as described in the Scoping Report for the project**.**

Background

FCS supports the Scottish Government's (SG) commitment on renewables. FCS is the SG competent authority on forests and woodlands. As such, FCS advises on the evaluation of development proposals when they may have an effect on a woodland environment.

FCS Assessment of the Scoping Report in relation to woodland

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

FCS acknowledges the consideration of changes to the woodland structure, resulting in possible loss of woodland area. An analysis will need to be done to determine the area of woodland loss and how this fits with The Control of Woodland Removal Policy and compensatory planting that this will likely require. The implications of restructuring on the landscape and stability / integrity of the woodland remaining will also have to be considered.

The key to this is in the Forest Design Plan for the area and the restocking proposals for the site.

Any compensatory planting outside the current planning area would be subject to The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017. These can be found here http://scotland.forestry.gov.uk/supporting/grants-and-regulations/environmental-impact-assessment

Contrary to Section 14.2.1 the proposed development is located entirely within privately owned woodland and does not extend to within the boundaries of the National Forest Estate.

Section 14.2.5 Although a proportion of the Native Scots Pine Woodland is managed on a 'commercial basis' the impact of the proposed development on the integrity or conservation value of the woodland should not be considered insignificant as it will have been managed in accordance with The UK Forestry Standard (The governments' approach to sustainable forestry). Active management of native pinewoods when undertaken sensitively can benefit biodiversity and increase resilience by allowing greater diversity.

According to the Native Woodland Survey of Scotland (NWSS) four UK Biodiversity Action Plan (UKBAP) Priority Habitats are present within the proposed development namely Native Pinewood, Upland Mixed Ashwood, Upland Birchwood and Wet Woodland. The proposed development will also impact on Ancient Semi-Natural Woodland (ASNW) and Long Established Woodland of Plantation Origin (LEPO). NWSS describes a wide range of species and structural diversification within the development area. All age classes from visible regeneration to veteran trees have been recorded as being present. The majority of the woodland likely to be impacted by this development also records a high degree of semi-naturalness.

Both the Scoping Report and the NWSS indicate the presence of Juniper within the development area (a UKBAP Priority Species recorded within the Scottish Biodiversity List, considered by the Scottish Ministers to be of principal importance for biodiversity conservation). Juniper is already under threat from *Phytophthora austrocedri* (*P. austrocedri*). *P. austrocedri* is a fungus-like pathogen which poses a threat to juniper trees in Britain. Further information can be found at https://www.forestry.gov.uk/paustrocedrae

A large proportion of the area earmarked for spoil disposal (approx. 50ha) is naturally regenerated Native Pine and Upland Birchwood established with public funding through the Woodland Grant Scheme (WGS III Ref: 030/001885 Clune Wood). There will be contractual obligations as well as nature conservation implications for this area.

Policy relevance: Conservation of ASNW and restoration of the biodiversity of plantations on ancient woodland sites are priorities in the Scottish Forestry Strategy and Scottish Biodiversity Strategy. Scottish Planning Policy recognises the high value of ancient woods and semi-natural woodlands for nature conservation.

SG Policy on Control of Woodland Removal guiding principles include a strong presumption in favour of protecting Scotland's woodland resources and that woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits.

Conclusion

FCS would welcome the inclusion of a forestry assessment and chapter as part of the EIA.

In the first instance FCS would prefer the developer find an alternative design that would not resort to woodland removal. The proposed development as detailed within the Scoping Report does not comply with the SG Policy on Control of Woodland Removal as it is located within woodlands with a strong presumption against removal.

Both Options identified within the Scoping Report lack the recognition of the value of nature and do not sit well with SG Route Map to 2020, in that they oppose Priority Project 2: The restoration of Native Woodland.

Compensatory planting is insufficient in terms of mitigating against the loss of priority woodland habitats and species as such FCS would object to any final design that would impact negatively on Scotland's
Native Woodland resource.

Further information will be required on how the proposed development is likely to affect the UKBAP Priority Habitats and species and likely mitigation measures.

Woodland removal is likely to result in a requirement for compensatory planting for an area yet to be determined. FCS would seek that this was a condition of approval and that compensatory planting had to be in place prior to construction commencing.

FCS would be happy to work with the developers as plans progress. I also enclose a copy of FCS generic scoping opinion for further information; although the document is mainly directed at windfarm developments much of the information is relevant to the Red John Pumped Storage Scheme.

If you have any queries on this advice please do not hesitate to contact me.

Yours sincerely

Martin MacKinnon
Regulations & Development Manager
martin.mackinnon@forestry.gsi.gov.uk

Forestry Commission Scotland

Generic Scoping Opinion – March 2015

Forestry and Woodlands
Scotland's woodlands and forestry are an economic resource, as well as an environmental asset, as stated in the third National Planning Framework[1] (para 4.23, page 48).

There is a strong presumption in favour of protecting Scotland's woodland resources. For this reason the Scottish Government published a policy on control of woodland removal[2] in 2009 (refer Scottish Planning Policy[3] paragraph 218). The policy aims protect the existing forest resource in Scotland and supports woodland removal only where it would achieve significant and clearly defined additional public benefits. In some cases, including those associated with development, a proposal for compensatory planting may form part of this balance.

The criteria for determining the acceptability of woodland removal and further information on the implementation of the policy is explained in the policy on control of woodland removal. These should be taken into account when preparing the development plans for a wind farm proposal. Beyond this, applicants should refer to guidance documents issued by Forestry Commission in relation to good forestry practice, sustainable forest management and associated environmental issues.

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

Where a developer intends to construct a windfarm within a forest, partially within a forest, or that will affect the forest environment, it is important that pre-application discussions takes place with Forestry Commission Scotland (FCS), the planning authority and other relevant key agencies, at the earliest possible stage of the project, to ensure all parties have a shared understanding of the nature of the proposed development, information requirements and the likely timescale for determination. This collaborative approach will ensure that all forestry issues are identified and mitigated at the earliest opportunity.

The developer should consider the potential cumulative impact of the proposed development in respect to the local and regional context. This should include consideration of potential cumulative impact of proposed woodland removal, when considering existing development in the surrounding woodland. In particular consideration needs to be given to the implication of felling operations on such things as habitat connectivity, landscape impact, impact on timber transport network and forestry policies included in the local and regional Forestry and Woodland Strategies and local development plans.

[1] http://www.gov.scot/Topics/Built-Environment/planning/NPF3-SPP-Review/NPF3
[2] http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/woodland-expansion/control-of-woodland-removal
[3] http://www.gov.scot/Topics/Built-Environment/planning/Policy

The Environmental Statement should include a stand-alone chapter on 'Woodland management and tree felling' that describes and recognises the social, economic and environmental values of the forest and the woodland habitat and take into account the fact that, once mature, the forest would have been managed into a subsequent rotation, often through a restructuring proposal that would have increased the diversity of tree species and the landscape design of the forest. The chapter should describe the baseline conditions of the forest, including its ownership. This will include information on species composition, age class structure, yield class and other relevant crop information. The baseline should be prepared from existing records, site surveys and aerial photographs.

The chapter should clearly indicate proposed areas of woodland for felling to accommodate new turbines, access roads and other infrastructure. Details of the area to be cleared around those structures should also be provided, along with evidence to support the proposed scale and phasing of felling. The chapter should describe the changes to the forest structure, the woodland composition and describe the work programme. The felling plan should clearly identify which areas are to be felled and when.

Trees cleared for turbine bases, access roads and any other wind farm related infrastructure must be replaced by replanted on-site or on an alternative site (compensatory planting). The restocking plan should show which areas are to be replanted and when during the life of the windfarm. The plan should clearly identify and describe the restocking operations including changes to the species composition, age class structure, timber production and traffic movements.

Integration of the windfarm into future forest design plans is a key part of the development process. Applicants are therefore advised to prepare a Long Term Forest Plan, alongside their Environmental Statement, that provides a strategic vision to deliver environmental benefits through sustainable forest management and describes the major forest operations over a 20 years period. Such a plan should be presented to the planning authority, as a technical appendix as part of the Environmental Statement, for context.

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

It should be made clear that both felling operations and compensatory planting (if relevant) must be carried out in accordance to good forestry practice as defined in the UK Forestry Standard[4] (UKFS). The UKFS, supported by a series of guidelines, is the reference standard for sustainable forest management in the UK and provides a basis for regulation and monitoring. The Scottish Government expects all forestry plans and operations in Scotland to comply with the standards. FCS therefore expect for Environmental Statement developed for wind farms (and other projects that impact on forests) to clearly state that the project will be developed and implemented in accordance with the UKFS and associated guidelines. A key component of this is to ensure that even-age woodlands are progressively restructured in a sustainable manner: felling coupes should be phased to meet adjacency requirements and their size should be of a scale which is appropriate in the context of the surrounding woodland environment.

Details of the proposed mitigation should not be left to post-consent Habitat Management Plans (or others) to decide and implement. The specifics of the proposed mitigation should be included in a Compensatory Planting Plan, appropriately described in the Environmental Statement, as they are

[4] http://www.forestry.gov.uk/ukfs

vital in understanding the development in full.

Forestry Commission Scotland
FCS works as part of Scottish Government to protect and expand Scotland's forests and woodlands and so has an interest in major developments that have the potential to impact on local forests and woodlands and/or the forestry sector.

Relevant discussion on forestry matters should take place prior to the submission of an Environmental Statement and developers and their consultants should allow sufficient time in their project plan to accommodate such advice. Developers should consult the local FCS Conservancy office that can be accessed at: http://www.forestry.gov.uk/website/forestry.nsf/byunique/infd-8see6d

McInnes T (Theresa)

From: Anne Phillips <APhillips@hial.co.uk>
Sent: 30 October 2017 15:03
To: Econsents Admin; Econsents Admin
Cc: McInnes T (Theresa)
Subject: Red John Pumped Storage Hydro

Your Ref: Scoping Opinion for Red John Pumped Storage Hydro
HIAL Ref: 2017/0166/INV

Dear Sir/Madam,

PROPOSAL: Scoping Opinion Request for Proposed Application under Section 36 for the Red John Pumped Storage Hydro
LOCATION: Area between Loch Ness, Loch Ashie and Loch Duntelchaig

This development falls inside the safeguarded areas for **Inverness Airport** (*as defined in CAP 670 - Air Traffic Services Safety Requirements*).

The proposal contains a reference to an embankment of 30m to 43m above the existing ground level. However, the position and extent of the embankment is not fully clear.

The Inverness instrument approach procedures pass over this area and the instrument landing system funnel lies adjacent to the site.
There is a concern over the possibility of the proposal impacting on these.

The developer should take into account the possibility of the development coming into conflict with the approach procedures and the instrument landing system.

Therefore it would be useful if the developer could provide a cross-section or elevation drawing showing the embankment in relation to the surrounding terrain.

HIAL would be likely to object until such a drawing is provided and the concern raised has been addressed.

Regards

Safeguarding Team
Highlands and Islands Airports Limited
Head Office, Inverness Airport, Inverness IV2 7JB
☏ 01667 464244 (DIRECT DIAL)
✉ safeguarding@hial.co.uk 🖷 www.hial.co.uk

Econsents_Admin@gov.scot

Please ask for:	Elaine Watt
E-mail:	elaine.watt@highland.gov.uk
Your Ref:	
Our Ref:	17/04775/SCOP
Date:	06 November 2017

Dear Sir/Madam,

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
SCOPING OPINION REQUEST FOR PROPOSED APPLICATION UNDER SECTION 36 FOR THE RED JOHN PUMPED STORAGE HYDRO, IN THE PLANNING AUTHORITY AREA OF THE HIGHLAND COUNCIL

I write in response to your consultation of 9th October 2017 for the above.

Development Plans
The relevant Development Plan is the Highland-wide Local Development Plan (HwLDP) (adopted 2012) and the following are the relevant policies.

Policy 51: Trees and Development & Policy 52: Principle of Development in Woodland – set out the Council's support for proposals that safeguard existing woodland, but require applicants to demonstrate the capacity of the site to deliver development where woodland is present. Given that this proposal has the potential to create adverse impacts, with the presence of Ancient and Long Established woodland (please see the relevant constraints map), it will be essential to demonstrate how woodland is being safeguarded and, where it is being removed, what provisions will be made for compensatory planting. Any proposed works should also have regard to Scottish Government's Control of Woodland Removal Policy. The response in this pack from the Forestry Team provides further detail on the issues around trees and woodland. Policy 51 includes reference to the Trees, Woodland and Development Supplementary Guidance which may be of relevance.

Policy 55: Peat and Soils – requires applicants to demonstrate that their proposal will not cause unnecessary disturbance, degradation or erosion of peat and soils. This is particularly relevant in relation to the potential spoil disposal and dredging works described in the Draft Scoping Report submitted with the pre-application meeting request. There are pockets of Carbon Rich Soil, Deep Peat and Priority Peatland Habitat (Groups 1 and 3) as indicated in the SNH Carbon and Peatland 2016 Map. As your proposals progress, you should ensure that appropriate assessment and mitigation of potential impacts on the peat and soil resource is identified. It is noted from the pre-application meeting that you are in the process of undertaking peat probing onsite.

Policy 57: Natural, Built and Cultural Heritage – considers impacts on natural, built and cultural heritage designations and features. These are split into three categories of importance: international, national and local/regional. The following key features will require survey work and assessments:

- Loch Ashie SPA and SSSI
- Loch Ruthven SAC, SPA, SSSI and Ramsar
- Caisteal an Dunriachaidh Scheduled Monument within the site and several other Scheduled Monuments in proximity to the site
- multiple Historic Environment Records within the site
- Listed Buildings in proximity to the site
- Aldourie Designed Landscape around 1 km NW of the site, Dochfour Designed Landscape around 3 km NW of the site
- Loch Ness and Duntelchaig Special Landscape Area, described in the Assessment of Highland Special Landscape Areas (whole site within SLA, not shown on constraints map)

Policy 58: Protected Species – safeguards European protected species and only supports development where an adverse effect is likely if there are other overriding interests. You should refer to the response from SNH for further detail about potential for impacts from the proposal on protected species.

Policy 61 Landscape – sets out that development should reflect the character of the landscape and the special qualities identified in the relevant Landscape Character Assessment. The LCAs are a starting point to base assessment of landscape and visual impact on. It is key to set out who the visual receptors of the development are, what the landscape impacts are and how these two factors relate. This proposal sits in a potentially sensitive landscape setting, being wholly within the Loch Ness and Duntelchaig Special Landscape Area. You should refer to the response from the Landscape Officer on key landscape considerations for this proposal. The Highland Council has Visualisation Standards for Wind Energy Developments, these will be relevant to this proposal given the likely need to assess scale and distance in relation to the proposal.

Policy 63 Water Environment – supports development that does not compromise the objectives of the Water Framework Directive. Assessment of this proposal will include how the proposal relates to the River Basin Management Plan for the Scotland River Basin District and, for this proposal, the North Highland River Basin Management Plan.

Policy 64 Flood Risk – sets out the Council's expectations in regard to floodrisk. This policy is highly likely to be relevant to the proposal. The Council's Flood Team and Scottish Environment Protection Agency responses in this pack provide further information as does the Council's Flood Risk and Drainage Impact Assessment Supplementary Guidance.

Policy 67 Renewable Energy Developments – supports proposals that contribute to meeting renewable energy generation targets. This support is subject to addressing important key issues and other criteria. The Council must be satisfied that the development is located, sited and designed in a way that will not be significantly detrimental to a number of considerations as set out in the Policy. This proposal has potential to make a considerable contribution to renewable energy generation. The Onshore Wind Energy Supplementary Guidance includes a Landscape Appraisal for the Loch Ness area. Although this proposal is for pump storage hydro rather than onshore wind, there are likely to be elements of this study (e.g. Key Views, Routes and Gateways identified) that will be of relevance to Landscape and Visual Assessment of the proposal.

Policy 77 Public Access – sets out the requirement for proposals that will affect a Core Path to retain the existing path or ensure suitable alternative provision. Drumashie Moor (IN12.05) and Kindrummond to Dirr Wood (IN12.04) Core Paths are within the site and the proposals will have to comply with this policy. The Policy also affords protection to the Public's wider access rights. There are several routes in the wider path network across the site and these should be taken into consideration. You should refer to the response from the Council's Access Officer for further detail.

Policy 78 Long Distance Routes – safeguards long distance routes and seeks to enhance them and their setting. There are two on the site, the Trail of the Seven Lochs and the South Loch Ness Trail. You should refer to the response from the Council's Access Officer for further detail. The relevant Core Paths, Long Distance Routes and Wider Path Network Routes are shown in the relevant constraints map.

Landscape and Visual Impact Assessment
The proposal outlines two Options, A and B which both include Headponds with banking rising above the existing ground level, Option A – to a max of 30.2m and Option B to a Max of 43m above existing, in addition to headrace, powerhouse, tailrace, spillway, access and other associated infrastructure

Whilst it is difficult to fully anticipate the likely effects of the development on the degree of information currently available, it is clear that for either option the headpond alone would be a significant intervention in the existing landscape.

The application site lies wholly within the Loch Ness and Duntelchaig Special Landscape Area, and as such, key characteristics, qualities and sensitivities are outlined in the 'Assessment of Highland Special Landscape Areas' found at https://www.highland.gov.uk/directory_record/712044/special_landscape_area_citations The most relevant passages are extracted below:

Overview – this area is dominated by the vast linear feature of Loch Ness and its dramatic landform trench, flanked by steep, towering wooded slopes that leads to undulating moorland ridges and a contrasting remote interior plateau of upland lochs, small woods and rocky knolls.

Key Landscape and Visual Characteristic – the striking, linear landform trench containing Loch Ness offers a dramatic sequence of landscape elements along its 23 mile length. The horizontal water's surface combines with adjacent steep slopes to create a simple and distinctive profile of contrasting planes and edges. To the east of Loch Ness an undulating moorland plateau characterised by rocky knolls and small-scale woods and forests, and peppered with upland lochs, creates an intricate landscape mosaic which contrasts strongly with the adjacent simple drama of the Great Glen.

Special Quality: Contrasting Intimate Plateau – an undulating moorland plateau of rocky knolls flanked by small-scale woods and forests, patches of pastures and sporadic farmsteads, and interspersed with a sequence of tranquil lochs, that creates an intimate mix of landscape elements of changing visual interest.

Sensitivity to change – both sides of Loch Ness are sensitive to the introduction of built development which would intrude on views up and down the loch and also across the loch. The area is sensitive to any development which would require significant modification to the landform of the Great Glen and surrounding moorland plateau. Not only could this be highly visible upon the glen sides slopes and affect the apparent bounding edge of the glen, but it could also affect the sense of openness and wildness within the moorland parts of this part of the SLA.

From these it is clear that the simplicity of the landscape composition of Loch Ness and the Great Glen is highly valued, as is the landscape around Loch Duntelchaig, for its own characteristics, for its contrast with the adjacent landscape of Loch Ness and for its contribution to views across the loch.

In addition to the SLA, the Headpond Options sit within the Flat Moorland Plateau with Woodland LCT, in proximity to Farmed and Wooded Foothills and the broad, Streep Sided Glen.

Key Characteristics of the LCTs are set out in the Landscape Character Assessment documents. In view of the nature of the earthworks required for the construction of the headponds, following aspects are highlighted.

Flat *Moorland Plateau with Woodland:*

- a predominantly horizontal skyline, with a general lack of features of known scale resulting in it being often difficult to determine distance or relative size.
- a simple landscape with little diversity and where it is often difficult to orientate oneself.
- a strong perception of remoteness.

Farmed and Wooded Foothills:

- typified by low rocky hills with complex and irregular landform of steep sided slopes, rocky ridges and peaks.
- generally open upper slopes - offering extensive and panoramic views which convey a sense of exposure.
- boundary with the Flat Moorland Plateau with Woodland area marked by conifer plantations.

Broad Steep Sided Glen:

- long even skylines create a very strong sense of linear enclosure

If it is to be possible to successfully integrate a headpond into the landscape and visual environment, a high degree of mitigation by design will have to be achieved.

Assessment of impact must include any impacts arising from the 'realignment' of the C1064.

The full extent of disturbance and excavation is difficult to determine from the information available, but as the applicants clearly understand all impacts arising from such works stand to be assessed for LVIA impacts.

The final form of the infrastructure required at the side of Loch Ness is also not fully clear, and a Visitor Centre is mooted within the presentation. And impacts from these stand to be assessed.

Post operationally it is indicated that the dam would stay in place. At first consideration this seems as though it would create an extraordinary landscape feature, so it will be useful to see what the decision process is that leads to retention of earthworks rather than reinstatement.

Attached is a document that details generally how the Council would like Visual Impact Assessments to be carried out.

Noise

The scoping report outlines the proposal to submit a detailed noise assessment for both the construction and operational phases. Elevated levels during construction are to be expected but provided the best practicable measures are taken to minimise noise, the impact should be within acceptable levels. Generally, the most important aspect for construction noise is to keep to normal working hours and avoid week-ends, evenings and early mornings.

Environmental Health Officers are happy with the proposal to assess operational noise in terms of BS 4142. As suggested in the report, it is advisable for the consultant to liaise with Environmental Health on the way this standard should be applied. One such aspect is the implementation of any penalties for noise characteristics. As per the pre-app request, it was advised that the usual standard noise condition for this sort of noise source i.e. -

"Noise should not exceed NR 20 when measured or calculated within the bedroom of any noise-sensitive premises with windows open for ventilation purposes."

OR
"The operating noise Rating level should not exceed the Background noise level by more than 5dB(A) including any characteristics penalty. Terms and measurements to be in accordance with BS 4142: 2014 Methods for Rating Industrial & Commercial Sound. "

Environmental Health confirms they are happy with the proposed noise monitoring locations. The exact siting should be chosen to be representative of the locations at which any condition would apply which would usually be the garden or patio or another external amenity area. If there are any site specific noise sources that might affect the measurement this should be noted and included in the assessment report.

Environmental Health are happy with the proposals for the assessment of vibration however, to clarify, the target outcome should be for vibration from this development to be noticeable at any noise sensitive property.

Archaeology

The methodology as set out in the scoping report is acceptable. The appropriate sources of data have been identified in order to inform the site characterisation and the method of whole project and of cumulative impact assessment is appropriate.

The ES chapter will need to follow Highland Council Standards for Archaeological Work. The Standards are available at http://www.highland.gov.uk/downloads/file/1022/standards_for_archaeological_work.

Transport Planning

Traffic Impacts

Transport Planning will be looking for the traffic impacts of this development to be contained within a Transport Assessment (TA) supporting the EIA, with the principles of the scope covering that set out in the attached note and produced in accordance with the below linked Local Guidelines:

- Roads and Transport Guidelines for New Developments (Section 2.2)

- Guidance on the Preparation of Transport Assessments

The TA will need to come forward with preferred routing arrangements to and from the site and the assessment done on that basis. We'd be happy to comment on a scope for the TA once the routing arrangements have been established and a draft scope produced.

Cumulative impacts from other developments in the area will need to be taken account of within the TA. We note that Table 3.6 lists a series of developments taken from Highland Council Planning Portal. Highland Council Planners would be best-placed to clarify the status of these developments and whether there are any other developments that need including. We note that the final list of cumulative developments will need to be formed after the preferred routing arrangements to the development have been established. However, we would expect cumulative developments to also include traffic from developments that may not be in the proximity of the site, but will be generating their own construction traffic on the routes this development proposes to use. This can include other power-generation schemes in that part of the Highlands. The proposed list of cumulative developments should be identified within the TA Scoping and agreed with Highland Council prior to commencing the TA.

We agree with your assumptions that the likely largest traffic impacts from a development of this type will result during the construction and possibly decommissioning of the development, with operational traffic impacts likely to be low. However, we would expect the TA to identify the proposed routing and access arrangements for operational traffic, plus any mitigation needed on the road network to safely accommodate it.

We note that a desktop exercise has been done that concluded Highland Council do not hold historic records of traffic data for the roads identified in the study area. The proposals for traffic data gathering to inform the TA should be set out and agreed through the TA scoping exercise.

Re. the statement about using 'Low' growth assumptions from NRTF, this should again be justified through the TA scoping exercise.

We welcome the statements about looking into opportunities for on-site batching and sourcing of materials needed for the build. If such approaches are possible, this should limit the amount of vehicle movements needed in and out of the site. However, its currently not clear to what extent such on-site sourcing and re-use will be possible. If this information won't be known at the time of developing the TA, the assessment will need to test the implications of different scenarios, including a worst case scenario that may be no excavated material being deemed suitable for re-use and needed to be taken off-site. The justification for the establishment of different scenarios for testing should be set out through the TA scoping exercise.

Vehicular Access
Access to the site is still being investigated, with consideration being given to using combinations of the following local roads in the area:

- B862 Dores Road
- B851 Errogie to Culloden Moor Road
- B861 Culduthel Road
- C1064 Inverness to Ashie Moor Road
- C1076 Loch Ashie to Brin Road
- C1068 Daviot to Dunlichity Road
- U1084 Darris Road

Once the route(s) for accessing this site have been identified, we'd expect the TA to identify the location, type and scale of any mitigation needed to allow them to be used for construction access purposes, whilst also keeping them safe and usable by others. It should be noted that the routes identified are popular tourist routes, whilst also providing key connections for communities east of Loch Ness. Although there have been some improvements in recent years, funded in part by contributions from other developments in the area, there are still sections of these routes that would struggle to accommodate large and heavy construction traffic, whilst also remaining safe for use by tourists and people from the local communities in the area. The condition of some of those roads is also poor and we'd want to ensure they remain safe and usable for all, both during their use by construction traffic and after the works had been completed.
Some of the routes identified are also included in the National Cycle Network Route 78, which the TA should take into consideration when assessing the impacts of this development on the transport networks in the area.

The B851, B861 and B862 are covered by the South Loch Ness Road Improvement Strategy that identifies aspirations for improving them going forward. Should the final proposals identify use of any of these routes for either construction or ongoing operational access purposes, we'd recommend that discussions are held with Council Officers involved in developing and delivering the South Loch Ness Road Improvement Strategy to identify the likely mitigation needed and possible methods for getting that mitigation delivered.

We welcome the proposals for off-road access tracks for the movement of plant and material linked with the works. This should help to limit the impacts of construction traffic on the local roads within the works area. We also welcome the suggestion of marshals being used to manage the points

where construction traffic will cross the public road. However, we'll expect the TA to give some indication of what other traffic management arrangements will be used at these conflict points, such as signage, road markings, gating arrangements, proposals for keeping the public road clean and free of dirt and debris etc. For clarity, we would expect general priority of movement to be kept in favour of the public road and the traffic using those roads.

Depending on the scale of any mitigation works needed to the road networks proposed for accessing this site and their location with regards to the surrounding environment, it is possible that the impacts of those road mitigation measures may need to be considered within the EIA. Certainly the need for any such assessment should be justified within the EIA.

One possible proposal that may require specific consideration in the EIA is if Option B comes forward requiring the realignment of the existing C1064. We would not support closure of that route until a suitably designed alternative was implemented and available for all road users. The standards for designing such a route would need to adhere with our published Roads and Transport Guidelines for New Developments, with any proposals needing to be agreed through a formal Road Construction Consent application. Any designs should maintain the continuity of the C1064, avoiding the need to give-way when travelling along it, whilst also avoiding protracted re-routing and the creation of excessive gradients. This could involve changes to that shown towards the northern tie-in with the existing C1064.
It is likely that most improvements needed to the public road network to permit safe access to and from your site will be left in-place as lasting improvements for general users of those roads. However, should there be unacceptable safety, operational or maintenance issues with the implemented improvements, The Council may require them either to be removed or changes implemented once their need for construction purposes has ended.

With regards to the routing of abnormal loads, the TA will need to evaluate the appropriateness of the proposed route for moving such vehicles to and from the site, including any mitigation needed to accommodate their movement. This could include a full survey of the route and the provision of Trial Runs to prove the route is achievable and/or to establish the extent of works required to facilitate transportation.

The proposed point(s) of access from the public road into the site will need to be identified, together with sufficient justification for their adequacy to accommodate the likely types and volumes of traffic anticipated. We will be looking for dimensioned drawings showing the intended form of the junction(s) and the scale of any improvements needed to establish them.

Achievable clear visibility distances out of any access should be demonstrated and their adequacy justified, both in terms of the nature of public road they're taking access from and the prevailing speeds of traffic using that road. Any accesses should also take suitable steps to prevent surface water run-off or any loose material from the private access tracks, including mud and construction materials, from being brought onto the public road. Any gates on accesses should also be set back sufficiently to avoid a vehicle needing to wait in the public road.

It is likely that The Council will be seeking an agreement under Section 96 of the Roads (Scotland) Act to cover any potential extraordinary expenses in repairing local roads that may be damaged by vehicles associated with this development. We'll be looking for any such agreement to be supported by a suitable financial guarantee, usually in the form of a Road Bond, to cover the likely costs of such repairs.

Structures
Any changes needed to structures on the publicly adopted local road network to accommodate the proposed construction traffic for this development will need to go through the Councils' Technical Approval procedure as described within Section 3.1.7 of the current Roads and Transport Guidelines for New Developments. These Guidelines recommend early engagement with The Councils' Structural Engineering Team to help ensure that all necessary approvals are in-place

prior to works commencing. The point of contact is Norman Smart Norman.Smart@highland.gov.uk.

The document states that maximum embankment heights for both headpond options will be significant (30.2m for Option A and 43m for Option B). It is not clear what the likely heights of such structures will be in the vicinity of the public road network. However, we will want comfort that such structures have been adequately designed and their implementation will not change the ground conditions that support those local public roads (eg surcharging, changes to groundwater levels, new springs etc). These issues should be taken up with the Council Structures Team to determine what level of information they will need to determine if the proposals will or will not adversely impact the public road network.

Transport Scotland should be approached about any impacts or alterations needed to structures on the Trunk Road Network.

Parking and Loading
All temporary and permanent parking provision or loading and unloading requirements for the construction and operation of this facility will need to be provided for off the publicly adopted local road network.

Given the scale of workforce anticipated at this site (up to 300 people at the busiest times), the TA should clarify the proposed location and scale of staff parking provision, justifying the adequacy of the proposed approach. This should include setting out any measures to manage staff movements to and from the site to limit the number of single occupancy vehicles needing access on a daily basis.

It is noted that the documentation provided refers to possible conversion of temporary compounds to permanent visitor centres for educational and tourism purposes. If such features are to form part of a planning application, the arrangements for accessing, servicing and parking at such facilities should be set out in the TA.

Construction Traffic Management Plan
A Framework Construction Traffic Management Plan should be provided in the TA, setting out how the construction activities of this development, including access to and from the site, will be managed to limit their impacts on other road users and the communities on the proposed access route(s).

We would expect the routing of construction traffic to wherever possible avoid existing communities such as Dores. Where this cannot be avoided, we would look for the TA to clarify what traffic management arrangements will be established to avoid or limit any adverse impact on the day-to-day operation of those communities.

The Framework Construction Traffic Management Plan should also set out how feedback from local community groups will be sought and fed into the development and ongoing delivery of the Construction Traffic Management Plan.

Note on Matters to be included in a Transport Assessment:
1. Identify all public roads affected by the development. In addition to transporting abnormal loads, this should also include routes to be used by local suppliers and the workforce.

2. Set out the existing nature and condition of these public roads, including:

    - The road name and number, where applicable.

    - Road widths, including any pinch points.

- The nature of their horizontal and vertical alignments, including any known steep gradients.
- The location, size and condition of existing passing places on single track roads.
- An assessment of the carriageway strength including, where necessary, construction depths and road formation where there is likely to be significant proposed impacts. This may include the need for non-destructive testing and sampling as required to determine the carriageway construction and strength. This work should be undertaken by a suitably capable and qualified consulting engineer acceptable to the Council.
- The location and nature of any structures either spanning or supporting the roads, including a description of their nature (e.g. bridge, culvert etc.), any width, height or weight restrictions and where necessary, an assessment of their load carrying capability. This work should be undertaken by a suitably capable & qualified consulting engineer acceptable to the Council.
- The nature and quantum of properties serviced by the roads. In addition to the quantum of residential properties, specific recognition should be made of any schools, businesses or other community facilities serviced by these roads.
- The nature and quantum of existing traffic flows on these roads, taking account of seasonal variations and tourism impacts. This should include reference to how often the roads are used by school or commercial bus services, refuse vehicles and whether the routes are used by pedestrians, cyclists and equestrians.

3. Identify the anticipated impacts from the proposed development, including any cumulative impacts from other developments likely to be happening at the same time as your development. These impacts should include:
   - The quantum of existing and new traffic impacting on these roads, including:
     - numbers of light and heavy vehicles
     - numbers of abnormal loads
     - profiles of anticipated new traffic movements throughout the duration of the works
   - Any impacts to existing carriageways, structures, verges or other aspects of these public roads. This should include information on swept paths and gradient analysis where the passage of traffic could be problematic.
   - The location of any new or changes to existing accesses off these public roads to be used for accessing this development. This should include the extent of existing visibility from each of these accesses onto the public roads.
   - Any impacts or restrictions needing to be imposed on existing road users.
   - Any impacts or restrictions needing to be imposed on adjacent properties or local communities serviced by these public roads.
4. Set out the proposed mitigation measures needed to tackle the anticipated impacts set out above. This should include:
   - The location and nature of any carriageway widening or strengthening.
   - Visibility improvements at access points and along the public roads forming access routes.
   - The location and nature of any strengthening or widening needed to existing structures.

- The provision of new or enhanced passing places on single track roads.
- Road safety measures to manage the impacts of any identified road safety concerns.
- Traffic management proposals for the construction and ongoing operation of the facility.

5. Any residual effects on the road network and its users following implementation of the proposed mitigation and any actions proposed associated with those residual effects.

Conclusion

From the Council's point of view, the biggest challenge will be the visual impact, not just from the immediate vicinity where it will be vital to make sure the new loch sits well, and looks as natural as possible, within the pattern of waterbodies in that area, but also from further afield, from across Loch Ness and the hills above it and also the A82 trunk road as a key tourist route.

This will be a complex and challenging proposal. While the potential output would make a sizable contribution to energy targets, Scottish Government policy, advice and guidance is clear that a balance must be struck between meeting our energy challenge and safeguarding our environment.

Yours faithfully,

Elaine Watt

ELAINE WATT
Planner
Development and Infrastructure Service

GLVIA3 2.21 *Assessment of Visual Effects: assessing effects on specific views and on the general visual amenity experienced by people.*

GLVIA3 2.21 has two clear elements:

- effects on specific views
- effects on the general visual amenity experienced by people.

The Highland Council stance is that:

'**effects on specific views**' are effects experienced by receptors of views *from or to* landmark locations. Judgement of value of views should take account of indicators such as those listed in GLVIA37. Eg.

- *relation to heritage assets*
- *planning designations*
- *appearance in guidebooks/tourist maps*
- *through references in literature and art*

Where views are from a landmark location, *provision of facilities for their enjoyment eg parking and interpretive material* will also be an indicator. However where views are to the landmark no lack of value should be construed solely on the basis of absence of such features. By their nature landmarks may be appreciated for their constancy from a range of routes and locations, with no one spot being perceived as providing the essential view.

'**effects on general visual amenity**' are effects experienced across an area as receptors move through and within the landscape.

In practice, Visual Impact Assessments often focus on specific views with less emphasis on consideration of the general visual amenity experienced by people.

GLVIA3 is clear on the need to identify:

- areas of visibility
- groups of people affected and their susceptibility to change
- nature and scale of visual effect
- whether 'viewpoints' are representative, specific or illustrative

GLVIA3 6.3 *Baseline studies for visual effects should establish, in more detail than is possible in the scoping stage, the area in which the development may be visible, the different groups of people who may experience views of the development, the viewpoints where they will be affected and the nature of the views at those points. Where possible it can also be useful to establish the approximate or relative number of different groups of people who will be affected by changes in views or visual amenity, while at the same time recognising that assessing visual effects is not a quantitative process.*

Again we can break this down. Studies should establish:

- the area in which the development may be visible
- *the different groups of people* who may experience views of the development
- the viewpoints where they will be affected
- the nature of the views at those points
- the approximate or relative number of different groups of people who will be affected by changes in views or visual amenity,

I encourage the developers and their consultants to think about visual impact in a layered way including:

- Experience of people as they move around the area- this might include looking at travel routes as '*typical journeys for receptor groups'* rather than assessment of visibility of development over the entire length of a numbered route within the study area.

- Identification of any key valued views, recognising that these might be:

    - Views **from** key locations

    - Views **to** any key features

It is essential to recognise the difference between 'representative viewpoints' and 'specific viewpoints'. While GLVIA3 describes different types of viewpoints - representative, specific and illustrative – it then treats the viewpoints much the same for assessment purposes, treating each as a 'view'.

This approach can lead to an over-emphasis on a handful of locations which are selected very early in the VIA process and a failure to give due weight to the **frequency, range and duration of exposure** to effects which are experienced by receptors. Representative viewpoints are 'selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included and where significant effects are unlikely to differ' (GLVIA 6.19.1). Therefore it is expected that the VIA should, when discussing a representative viewpoint, indicate the extent of the area for which that visual effect prevails and not treat impacts as occurring at a point location.
Therefore I would encourage the assessors to retain emphasis and focus on categories of receptors, eg Tourists, Residents of various localities, local settlements etc in preference to the 'viewpoint' locations. . Consideration should be given to relative numbers of receptors within categories and their typical frequency of reception of impacts.
The Visual Impact Assessment report should not be an esoteric document which can only be deciphered by Landscape and Planning professionals. Any member of the

public who may be affected should be able to recognise themselves in the receptor descriptions and understand what impacts they are likely to experience. The assessment should be Receptor-led in preference to Viewpoint-led.

Generally

- Methodology for the Assessment: must make clear what thresholds are defined for significance of impact.
- Mitigation measures must be clearly identified and their effectiveness evaluated. This applies to all aspects of the development, including tracks borrowpits, compounds, control buildings, lay-down areas etc.
- Visualisations will be required to meet the most recent version of Highland Council Standard, available from the HC Website https://www.highland.gov.uk/downloads/file/12880/visualisation_standards_for_wind_energy_developments .

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

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Our ref: AMN/16/H
Our case ID: 300023154

14 September 2017

Dear Ms McInnes

Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Red John Pumped Storage Hydro, Highland
Pre-scoping Information

Thank you for your email of 31 August 2017, inviting Historic Environment Scotland's response to the draft scoping report for the above proposed development. This letter contains our comments for our historic environment interests. That is, scheduled monuments and their setting, category A listed buildings and their settings, World Heritage Sites, and gardens and designed landscapes and battlefields included in their respective inventories.

If you have not already done so, I recommend that you consult the relevant planning authority's archaeological and conservation services, who will also be able to comment on potential impacts on the historic environment. This may include heritage assets outwith our remit, such as category B and C listed buildings, and unscheduled archaeology.

Background
We understand that the development proposal would be for a pumped storage hydro scheme close to the north end of Loch Ness, between Loch Ness and Loch Duntelchaig. The scheme will comprise seven elements including a headpond, tailpond, inlet/outlet, headrace, tailrace, power cavern and spillway. We note that there are currently two options being considered for the headpond: Option A which would combine the two smaller lochs of Loch na Curra and Lochan an Eoin Ruadha into a headpond and Option B would create an entirely new headpond further to the north east.

Potential direct impacts
There are four scheduled monuments within the red line boundary for the scheme:

- Caisteal an Dunriachaidh, fort 1520m N of Achnabat (SM 11817)
- Achanabat, cairn 960m N of (SM 11799)
- Achnabat, hut circle 1065m N of (SM 11828)
- Achnabat, hut circle 815m NNE of (SM 11827)

From the information and figures submitted with the draft scoping report it appears that there will not be any direct physical impacts from the construction and operation of the proposed scheme. However, we note that the scoping report at section 9.4.1 states that there are likely to be significant physical impacts on all four scheduled monuments in both options A and B. It is not entirely clear to us at this stage why direct impacts are being predicted. Further comments are included in the attached annex.

Potential setting impacts
There are also a number of heritage assets within our remit in the vicinity of the proposed scheme whose settings have the potential to be adversely impacted by it. The annex to this letter gives details of a number of assets which appear likely to experience impacts. This list should not be treated as exhaustive, and is only intended as a reference to those assets which at this stage appear most likely to be impacted.

The scoping report
We welcome that cultural heritage has been scoped into the environmental impact assessment (EIA). We are generally content with the overall methodology set out in the scoping report, however we do have a few comments to make. We note that section 9 of the scoping report refers to a 3km study area for assessing setting impacts, however there is no explanation of why this particular limit has been set and the ZTV's provided cut off at 5km so it is not possible to identify if sites beyond this point may potentially receive setting impacts. A fixed radius of search can miss sensitive assets at greater distances and we therefore recommend using a wider ZTV in the first instance to identify the potential for setting impacts.

We welcome that our Managing Change in the Historic Environment guidance note is included in the references at the end of Section 9 of the scoping report and we strongly recommend its use when assessing potential setting impacts.

There is no reference to any visualisations being provided to help support the assessments of impacts and effects. We strongly recommend that visualisations such as photomontages are provided to demonstrate the effects of the proposals on the setting of assets. Further detailed comments are provided in the attached annex.

General considerations
Our website provides general information on a number of issues the applicant may find helpful. This includes our role in the Environmental Impact Assessment (EIA) process,

advice about pre-application consultations and general recommendations about the Scoping and Environmental Statement stages.

Yours sincerely

Historic Environment Scotland

Annex

Historic Environment Scotland consider that it may be possible to accommodate a pumped storage hydro scheme at this location but, based on the information provided so far, it appears that the proposals have the potential to raise significant concerns for our interests. There is the potential for significant adverse impacts on the setting of historic environment assets within the site and around it. In order to address these issues, amendments or alterations to the layout may be required, subject to information provided during the assessment.

The list below is not considered to be exhaustive, and we would recommend that a wider search is undertaken of the surrounding area for potential impacts in the first instance. It is important to note that some assets have settings that are particularly sensitive to impacts, and the likely sensitivity of the setting should be used to help determine which sites are assessed in more detail in the EIA Report.

Potential direct impacts

We note that section 9.4.1 of the scoping report suggests that there are likely to be significant physical impacts on all four of the scheduled monuments within the proposed development boundary from both Options A and B. As noted above it is not clear to us from the drawings and information provided at this stage as to how these direct physical impacts would occur.

From the drawings provided neither headpond for Option A nor B would appear to directly impact on any of the scheduled monuments, although we note the very close proximity of the headpond in Option A. The spillways, head and tailraces, power caverns, access tracks both temporary and permanent and construction compounds also do not appear to directly impact on any of the scheduled monuments. We would welcome clarification on the physical impacts which are being predicted in the scoping report and we are happy to discuss this matter in more detail at a meeting.

We would like to take this opportunity to note that any physical interventions within the scheduled areas of any of the scheduled monuments would be likely to require scheduled monument consent from Historic Environment Scotland. At this stage we can confirm that it is unlikely that scheduled monument consent would be granted for any works within the scheduled areas.

Potential setting impacts

There are a number of scheduled monuments both within the development boundary and in the surrounding area which may receive setting impacts from the proposed development. As noted above this list is not exhaustive and a wide ZTV should be used in the first instance to identify assets which require further detailed assessment.

- Caisteal an Dunriachaidh, fort 1520m N of Achnabat (SM 11817)
- Achanabat, cairn 960m N of (SM 11799)
- Achnabat, hut circle 1065m N of (SM 11828)
- Achnabat, hut circle 815m NNE of (SM 11827)
- West Town, five hut circles 480m WSW of (SM 11813)
- West Town, ring cairn 240m SW of (SM 11551)
- Urquhart Castle (SM 90309 and Property in Care of Scottish Ministers)

Our key interest in this case is likely to be the potential setting impacts on the scheduled fort within the proposed development boundary and our comments below have focused on this asset.

Caisteal an Dunriachaidh, fort 1520m N of Achnabat (SM 11817)
This scheduled monument represents the remains of a fort of probable Iron Age date, defended by inner and outer stone ramparts which follow the top of the rocky ridge on which the fort is located on a NNE/SSW alignment. The fort commands the lower lying ground of Ashie Moor where extensive remains of prehistoric settlement have been identified. The fort is an obvious landmark on a high point in the surrounding low lying ground between Loch Duntelchaig and Loch Ness and commands extensive views outward in all directions over the relatively undeveloped landscape which forms a key characteristic of the setting of this monument. There are clear and uninterrupted views to the NE towards the two smaller lochs of Loch na Curra and Lochan an Eoin Ruadha and in the further distance the prehistoric settlement and funerary monuments near West Town (SM 11813 and 11551).

<u>Option A</u>
From the information and drawings provided so far, we have significant concerns over the proposed Option A for this pumped storage hydro scheme. The proposals to combine the two smaller lochs of Loch na Curra and Lochan an Eoin Ruadha into one larger headpond for the scheme would dramatically alter the topography and setting of the fort. Figure 2.3 indicates that the headpond for this option would be in very close proximity to the scheduled fort, within c. 300m of the asset. The information provided in the scoping report indicates that the embankment surrounding the headpond would be up to a maximum height of 30.2m above the existing ground level. This represents a substantial change to the topography of the landscape in very close proximity to the fort and would have a significant impact on the setting of the fort in this direction, radically changing the views outwards. Given that a key characteristic of the setting of the fort is the low lying/flat nature of the surrounding it, the development proposals comprising such a change in topography in such close proximity have the potential to have an adverse impact on the integrity of the setting of the monument. The size of the new headpond and the height of the embankment would potentially reduce our ability to understand, appreciate and experience the monument in its setting.

We therefore have significant concerns over the proposals for the scheme shown in Option A. We consider that Option A may lead to impacts on the setting of the monument which may impact on the integrity of that setting and therefore raise issues of national importance. It seems unlikely that it would be possible to substantially mitigate the level of impact to the setting of the fort from Option A. Should Option A be chosen to go forward in its current form it is possible that Historic Environment Scotland will object to the development. We would be happy to discuss this further if that would be helpful.

Option B

From the information and drawings provided at this stage Option B appears to be less likely to raise such significant impacts on the setting of this scheduled monument. The proposals shown in Option B are considerably further to the NE, over 1km from the monument on an area of ground which begins to rise up above the low lying ground surrounding the fort. The information provided indicates that the embankment required for this option would be higher than Option A, at up to 43m above existing ground level. The location of the new headpond at this greater distance and on ground which does not form part of the low-lying/flat Ashie Moor suggests that the impacts to the setting of the scheduled fort would be lesser than the impacts from Option A. We consider that it is likely that there will still be impacts to the setting from Option B which would need to be assessed in the EIA Report, however we consider that it may be possible to accommodate this option for the scheme without significantly reducing the ability to understand, appreciate and experience the monument in its setting.

Visualisations

We would strongly recommend that visualisations are provided to demonstrate the impacts of the proposed development on the setting of the scheduled fort. Visualisations, including photomontages, should demonstrate both the views from the fort towards the development and from the surrounding area showing both the fort and the development in the same view to demonstrate the impacts on views towards the fort in its setting. We would be happy to be involved in further discussions regarding visualisations if this would be helpful.

Urquhart Castle (SM 90309 and Property in Care)

Urquhart Castle lies on the opposite shore of Loch Ness, around 5.5km from the red line boundary of the development. We note that this scheduled monument currently lies ouwith the 3km study area proposed and beyond the 5km ZTVs provided with the scoping report. Urquhart Castle has an expansive setting given its location on the edge of Loch Ness and it is not currently clear whether the proposed development will be visible from the castle. Given the scale of the development proposals and that some elements of the scheme will be located on the edge of Loch Ness, including the potential substation, we recommend that consideration should be given to potential setting impacts

on Urquhart Castle. Should significant impacts be identified we would recommend that visualisations are provided to support the assessment.

Other scheduled monuments
There are a number of other scheduled monuments in the area surrounding the proposed development, including those listed above. It is not clear from the information provided at this stage whether or not either of the options for the proposed scheme would be likely to have significant impacts on the setting of these assets. We therefore recommend that they are assessed to determine whether significant setting impacts are likely. Should significant impacts be identified we suggest that any assessment in the EIA Report should also be accompanied by visualisations to demonstrate the level of impacts.

Summary
We note that there are currently two options being considered for the proposed pumped storage hydro scheme. Historic Environment Scotland considers it likely that Option A will raise significant concerns for the impacts to the integrity of the setting of Caisteal an Dunriachaidh, fort 1520m N of Achnabat (SM 11817). It seems likely from the information provided so far that Option B will not raise concerns over the integrity of the setting of this monument. We therefore recommend that Option B is the preferred option for our remit. We would be happy to meet with the developer to discuss these matters further.

Historic Environment Scotland
14 September 2017

By email to: Theresa.McInnes@gov.scot

Ms Theresa McInnes
Energy Consents Unit
4th Floor, 5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

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

Our ref: AMN/16/H
Our case ID: 300023154

31 October 2017

Dear Ms McInnes

The Electricity Act 1989 Section 36
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Red John Pumped Storage Hydro
Scoping Report

Thank you for your consultation which we received on 09 October 2017 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

The relevant local authority archaeological and cultural heritage advisors will also be able to offer advice on the scope of the cultural heritage assessment. This may include heritage assets not covered by our interests, such as unscheduled archaeology, and category B- and C-listed buildings.

Proposed Development
I understand that the proposed development would be for a pumped storage hydro scheme close to the north end of Loch Ness, between Loch Ness and Loch Duntelchaig. The scheme will comprise seven elements including a headpond, tailpond, inlet/outlet, headrace, tailrace, power cavern and spillway. We note that there are currently two options being considered for the headpond: Option A which would combine the two smaller lochs of Loch na Curra and Lochan an Eoin Ruadha into a headpond and Option B would create an entirely new headpond further to the north east.

Scope of assessment
We have previously provided comprehensive comments on the draft version of this scoping report in our letter dated 14 September 2017. I have reviewed the scoping report provided and note that there have been no changes made to the project

description, the archaeology and cultural heritage chapter or the figures provided. We are therefore content to rely on the comments laid out in our previous response from 14 September which I will forward along with this letter. We have no further detailed comments to add at this time.

I would also note that Historic Environment Scotland met with the applicant's cultural heritage advisor on the 25th September to discuss the comments made in our letter of 14th September. At the meeting we reiterated our comments and discussed the need for visualisations to demonstrate the level of impacts on the setting of the scheduled monuments for both options for the scheme.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Victoria Clements and she can be contacted by phone on 0131 668 8730 or by email on Victoria.Clements@hes.scot.

Yours sincerely

Historic Environment Scotland

McInnes T (Theresa)

From: JRC Windfarm Coordinations <windfarms@jrc.co.uk>
Sent: 11 October 2017 14:22
To: McInnes T (Theresa)
Subject: RE: Red John Pumped Storage Hydro [WF966779]

Dear theresa,

A Windfarms Team member has replied to your coordination request, reference **WF966779** with the following response:

Dear Sir/Madam,

***Planning Ref**: Section 36 Scoping Report*

***Name/Location**: Red John Pumped Storage Hydro Scheme, Achnabat, Drumnadrochit, Inverness*

***Site Centre at NGR**: 260479 832531*

***Development Radius**: 3.5km (approx)*

***Hub Height**: n/a **Rotor Radius**: n/a*

*This proposal **cleared** with respect to radio link infrastructure operated by:*

The Local Electricity Utility and Scotia Gas Networks

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements.

In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However,if any details of the wind farm change, particularly the disposition or scale of any turbine(s), it will be necessary to re-evaluate the proposal.

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently,developers are advised to seek re-coordination prior to considering any design changes.

Regards

Wind Farm Team

The Joint Radio Company Limited
Dean Bradley House,
52 Horseferry Road,
LONDON SW1P 2AF
United Kingdom

Office: 020 7706 5199

We hope this response has sufficiently answered your query.
If not, please **do not send another email** as you will go back to the end of the mail queue, which is not what you or we need. Instead, **reply to this email keeping the subject line intact or login to your account** for access to your coordination requests and responses.

https://breeze.jrc.co.uk/tickets/view.php?auth=o1xyacqaaaifaaaafkYqkgaYg6UMSw%3D%3D

McInnes T (Theresa)

From: Gardiner R (Ross) (MARLAB)
Sent: 06 November 2017 18:38
To: McInnes T (Theresa)
Cc: Bridcut E (Emily) (MARLAB)
Subject: RE: Red John Pumped Storage Hydro

Dear Theresa

RED JOHN PSH REQUEST FOR A SCOPING OPINION
Marine Scotland Science advice

Thank you for seeking advice from MSS, and thank you very much for the short extension.

MSS looked at the Red John Scoping Report of September 2017, Highland Council's Pre-Application Advice Response of 28 September, Scottish Water's comments of 20 September and joined you at the meeting hosted by The Highland Council on 27 September.

The Scoping Report

- Proposes that fish surveys are not required for either headpond Option and suggests that fish assessment could be scoped out of the EIA Report if the Option B headpond is taken forward.
- Notes that the Ness and Beauly Fisheries Trust has advised that the potential for impacts to arise on the River Moriston SAC, which is designated for Atlantic salmon and freshwater pearl mussel, should also be considered. The report notes that salmon migrate between the SAC and the sea via Loch Ness and may feasibly pass by the inlet / outlet for the proposed development.
- Notes that a range of fish species is known to inhabit Loch Ness, including salmon, that Loch na Curra is stocked with brown trout, and that Lochan an Eoin Ruadha is also likely to contain brown trout and advises that, although detailed survey of the watercourses that flow through the proposed development site was not carried out, that where barriers to fish movement (e.g. steep waterfalls) were observed, this was noted. The report considered it unlikely that there is any migration of fish out of Loch Ness into the upper parts of the proposed development site, but that these watercourses might contain resident populations of brown trout.
- Notes that Option A involves the creation of a new waterbody in the location of Loch na Curra and Lochan an Eoin Ruadha, which are recreationally fished at present, and suggests that sufficient data on their stock is anticipated to be pre-existing. The report indicates that no significant effects on fish resources were identified for the Option B headpond as no waterbodies are directly affected and therefore proposes that the fish assessment can be scoped out of the EIA Report.
- Notes the need for suitable screens at inlets / outlets to prevent fish from being drawn into the system. The report also notes the need to avoid impacts on identified invasive non-native species (The "on" is presumably a typo and should presumably be "from" as it would seem unlikely that there would be an intention to conserve invasive non-native species.)

MSS has the following comments.

- The report understates the fish issues, which should not be scoped out of either option
- Loch Ness has an important fish community of high conservation and fisheries importance, which includes salmon, brown trout including the long lived ferox form, Arctic charr, eel and pike. Regardless of which Option is pursued, there will be a need to review what information is available on the fish present in Loch Ness and what potential there is for them to be adversely affected by the construction work and operation of the scheme, and consider what mitigation to minimise

adverse effects is possible. Although Loch Ness is large, areas important to particular fish species may be localised, for example for spawning in the case of loch spawning fish. The developer should consider whether survey work to establish whether the stretch of loch shore involved has or is likely to have any special value to any of the fish species and consider what action to take if special value is identified.

- Effective non-injurious screening to prevent fish from being drawn into the system will not be a simple matter and will require careful attention as many of the fish may be very small. There should be consideration of what action will be taken and / or additional measures will be needed should fish become regularly present or established in the system and header loch.
- The screening arrangements will also require assessed by SEPA under CAR and there will a need to co-ordinate the assessments
- There will be a need to consider potential impacts on the salmon species interest of the Moriston SAC. The whole SAC salmon population needs to pass through Loch Ness at two life stages - salmon smolts emigrating from the River Moriston to the sea feeding grounds and adult salmon returning to need to pass through Loch Ness. The preliminary Ecological Assessment notes that the exact route of migration through Loch Ness is not known but that this will be investigated to determine the potential for fish connected with the designated site to interact directly with the Development. This is helpful, but regardless of the results the developer commits to screening.
- For option A there will be a need to establish by survey work the fish species and an indication of their abundance in Loch na Curra and Lochan an Eoin Ruadha to assess conservation value and risks. MSS notes that Bruce Sandison (2011) Rivers and Lochs of Scotland: The Anglers Complete Guide mentions Lochan na Curra as having a large stock of pike. Draining / transferring the fish from Loch na Curra and Lochan an Eoin Ruadha completely into Loch Duntelchaig would have major logistical considerations and there would be cross catchment considerations and licences to consider both for rescuing and transferring fish to other waters.
- With both options, there will be similar considerations on a smaller scale for the fish populations of the burns which will be lost.
- As already noted, there will be a need to prevent further or wider impacts from identified invasive non-native species, and this should be extended to cover all invasive non-native species, whether they have been identified or not.

Please let me know if you would like this response as a formal letter.

Best wishes,

Ross

Ross Gardiner
Marine Renewables Diadromous Fish Advisor
Marine Scotland Science
Freshwater Laboratory
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Perthshire
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Email: ross.gardiner@gov.scot
http://www.gov.scot/Topics/marine

McInnes T (Theresa)

From: ALLEN, Sarah J <Sarah.ALLEN@nats.co.uk> on behalf of NATS Safeguarding <gmb-bdn-000913@nats.co.uk>
Sent: 16 October 2017 12:41
To: Econsents Admin
Subject: RE: Red John Pumped Storage Hydro (Our Ref: SG25258)

The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.

If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.

Yours Faithfully

NATS

NATS Safeguarding

D: 01489 444687
E: natssafeguarding@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

NESS
District Salmon Fishery Board

Birchwood
4 Loch Lait
Abriachan
Inverness-shire
Telephone: 01463 861245
Email: ceo@ndsfb.org
Webpage: www.ness.dsfb.org.uk

Joyce Melrose
Admin Officer
Energy Consents Unit
The Scottish Government

11th October 2017

Dear Madame

THE ELECTRICITY ACT 1989 SECTION 36
THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
SCOPING OPINION REQUEST FOR PROPOSED APPLICATION UNDER SECTION 36 FOR THE RED JOHN PUMPED STORAGE HYDRO, IN THE PLANNING AUTHORITY AREA THE HIGHLAND COUNCIL

The Ness District Salmon Fishery Board (Ness DSFB) is a statutory body responsible for the protection and enhancement of migratory salmonid (salmon and sea trout) populations in the Ness District. This includes the area covered by the proposed 'Red John Pumped Storage Hydro Scheme'.

Migratory Salmonid Populations

Loch Ness forms an important migratory route and refuge for Atlantic salmon and Sea trout (migratory salmonids) as they travel between the marine and freshwater environments. Fish originating in the upper Ness system (including the Rivers Oich, Garry, Tarff and Moriston), middle Ness system (Rivers Enrick, Coiltie, Foyers and Farigaig) and lower Ness system (River Ness and tributaries) all have the potential to be present in the area of the proposed development.

The River Moriston is a Special Area of Conservation (SAC) designated for Atlantic salmon and freshwater pearl mussel (which depend on the juvenile salmon for part of their lifecycle). The most recent site condition monitoring for the Moriston SAC considers the condition of the Atlantic salmon interest to be 'Unfavourable, No Change'. The Scottish Government has also recently published its 'Conservation Assessment' for the 2018 salmon fishing season. This estimates that the Moriston SAC has only a 0.5 percent probability of meeting its salmon 'egg requirement'. As such it has been designated as a 'Category 3' system, where exploitation is deemed to be unsustainable and management action is required to reduce exploitation.

Further to the above, abundance of salmon in the Upper River Garry has declined over the last fifty years and is showing little sign of recovery. Historical annual returns of up to 900 salmon through the fish counter in the Garry Dam have now reduced to a five-year average of just 50 fish. More widely, there has been a long-term decline in the annual Ness district salmon rod catch.

The general decline in salmon numbers places a greater emphasis on the protection and enhancement of salmon populations in the Ness district. We aim to maximise the number of healthy wild salmon and sea trout that go to sea from their home rivers (referred to as 'smolt escapement').

Potential Impacts of Proposal

A number of potential impacts arising from the proposed development are of concern to us. These include, but are not limited to the following:

- Entrainment and/or impingement of salmon and sea trout smolts at the Loch Ness inlet, in particular those originating from the River Moriston SAC;

- The cumulative effects of the proposed development on smolt escapement in combination with other projects that are under construction or going through planning, but also existing developments such as SSE Hydro Dams at Invergarry and Dundreggan, Foyers Power station and the Caledonian Canal;

- Reduction of water levels in Loch Ness resulting from the intake of water for the proposed development (particularly during low flow conditions). This has the potential to effect water levels in the River Ness and the ability of fish to negotiate the fish pass at Ness Weir; and

- Disruption of the migratory behaviour of salmon and sea trout resulting from the discharge of water from the outlet of the proposed development. This has the potential to leave them more vulnerable to illegal exploitation and predation.

Environment Impact Assessment

The proposal has the potential to impact on salmon and sea trout populations across the Ness system. As such, the spatial extent of the studies to inform the EIA should cover the entire area of the catchment accessible to salmon, rather than be limited to the proposed development area and 'nearby watercourses' as stated in the scoping document.

Information relating to the behaviour of migratory salmonids as they pass through Loch Ness is extremely limited. Given the scale of the proposed development and its potential impacts on migratory salmonid populations in the Ness system; it is imperative that an extensive desk study together with both adult and smolt tracking studies be commissioned to adequately inform the assessment of likely impacts.

The impacts of development proposals on fish and fisheries are different to the standard receptors normally considered as part of an Environmental Impact Assessment. We strongly recommend that the developer produces a stand-alone 'Fisheries Impact Assessment'. This will more easily allow the balance of conservation and socioeconomics (i.e. the impacts on angling) to be considered.

Given our statutory duties, this response concentrates on salmon and sea trout populations. The Environmental Impact Assessment should however also include an assessment of the likely effects on other key fish species including brown trout, Arctic char, European eel and lamprey species.

If you have any questions regarding this response then please do not hesitate to contact me.

Yours sincerely

Chris Conroy *BSc (Hons) MSc MIFM*
Director & Clerk - Ness District Salmon Fishery Board
Office: 01463 861245
Mobile: 07944 617202
Email: ceo@ndsfb.org

giving nature a home

RSPB Scotland

Theresa McInnes

Senior Case Officer

Energy Consents Unit

The Scottish Government

By Email: Theresa.McInnes@gov.scot

Date: 3rd November 2017

Dear Theresa

17/04775/SCOP Red John pumped storage hydro | Land 1230M NE Of South Barn Dores

Thank you for consulting RSPB Scotland on the request for an EIA scoping opinion in relation to the above proposal. Having considered the submitted information including the scoping report and the Preliminary Ecological Appraisal, we wish to provide the following advice.

We note that the site contains some areas of peatland, including deep peat. As required by Policy 55 of the Highland-wide Local Development Plan, the proposal should demonstrate how it avoids unnecessary disturbance, degradation or erosion of peat and soils. If any peat would be disturbed, an assessment of the likely effects of the development on carbon dioxide emissions should be undertaken, as required by Scottish Planning Policy.

Several bird species listed for their importance in a European context, and others which are of conservation concern in the UK, are present or potentially present on the site. These include black-throated and red-throated diver, Slavonian grebe, goshawk, hen harrier, osprey and peregrine. All of these species are in Annex 1 of EU Directive 79/409/EEC on the Conservation of Wild Birds, which requires the Government to take special conservation measures to protect their habitats, including due regard to their conservation in the taking of development management decisions. All of these species are also on Schedule 1 of the Wildlife and Countryside Act 1981. Other important bird species likely to occur on the site include black grouse which is on the Red list of Birds of Conservation Concern. The potential impacts on all of these species should be adequately covered within the EIA report.

The assessment should consider phasing, timing of operations, and access routes as well as the development footprint and construction works, in order to minimise the impacts on the bird interest in the area.

North Scotland Office
Etive House
Beechwood Park
Inverness
IV2 3BW

Tel 01463 715000
Fax 01408 715315

rspb.org.uk

We have the following more detailed comments with regard to some of these species and issues that should be considered in the EIA:

Black-throated (RTD) and red-throated diver (BTD)

Both black-throated divers and red-throated divers are known to breed in or frequent all the lochs surrounding Loch Duntelchaig. Red-throated divers have been recently recorded breeding on Loch na Curra and are present on Loch an Eoin Ruadha. We would be opposed to Option A as shown on Figure 2.3, as this layout would result in the loss of these lochs as a breeding habitat. As paragraph 5.3.5 of the Preliminary Ecological Appraisal states, replacement of these lochs with a head pond subject to water level fluctuations of high amplitude and frequency would render the water body unsuitable for much of the notable vegetation and fauna. The head pond proposed for Option A would be unsuitable for breeding and also result in potential loss of primary feeding habitat due to higher water levels (shallow waters are required by young birds to access invertebrate prey species). Fluctuating water levels could prove detrimental to nest sites, which could flood or be left surrounded by dry land allowing access to predators. These impacts would also need to be considered in relation to Slavonian grebe.

Additionally, the construction of any scheme is likely to be a major source of disturbance to the birds present on water bodies. In addition to their main breeding loch, adult RTDs and BTDs frequent other nearby lochs to forage and this requires consideration. We would recommend no disturbance during the breeding season from April 1st – July 31st and that the minimum exclusion zone distance adopted is 750m from a nest.

Artificial nesting rafts are used readily by black-throated and red-throated divers, and the extra provision of these may help to mitigate impacts and create suitable nesting habitat. It must be noted that rafts require annual maintenance and long-term commitment. Careful consideration must be given to the siting of rafts, as black-throated divers will displace red-throated divers and grebes.

Slavonian Grebe

The proposed development lies in an area which forms part of the core range in Scotland (and UK) of the Slavonian grebe, one of our rarest water birds. The breeding range in Britain has always been restricted to a few freshwater lochs in a relatively small part of Scotland. Loch Ashie and Loch Ruthven Special Protection Areas are both large open lochs and are two of the most important sites designated in Britain for Slavonian grebe. Loch Ashie is used as an important pre- and post-breeding site and sometimes supports breeding birds. It is likely that Slavonian grebe also regularly use other lochs in the area, which along with Loch Ashie therefore should be included in the scope of survey work and assessment.

Due to the potential impacts of the development on Slavonian grebe associated with Loch Ashie SPA, particularly in relation to disturbance (from noise and visual effects), the Scottish Government (Energy Consents Unit) will need to undertake an appropriate assessment of the potential impacts on the SPA,

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taking into account advice from Scottish Natural Heritage. The applicant should submit information to inform that appropriate assessment, including on the impacts of fluctuating and low water levels as discussed above.

Should breeding or pre/post-breeding behaviour be in evidence we recommend an exclusion zone of at least 300m radius, within which no construction or other activities can take place from 15th April – 31st July, in order to avoid disturbance of the birds.

Raptors

Our records show that goshawk, hen harrier, long-eared owl, osprey and peregrine, are recorded as breeding or probably breeding on or around the development site. Due to the sensitivity of nest locations they are not detailed here but can be provided on request by the Highland Raptor Study Group (HRSG). Advice should be obtained from the HRSG before any survey work is undertaken to avoid any extra disturbance to already established nest locations which can be identified by HRSG.

Additionally, it is important to consider the home hunting ranges of certain species and potential effects of the development on these, as hunting adult raptors will regularly frequent the same area and could be affected by disturbance. For example, male ospreys can show preferences to certain lochs for hunting.

Black grouse

Black Grouse are identified as being present within the development area, and the potential impact on this species could be significant. A minimum buffer around the development site of 1.5km should be applied for survey work. Black grouse are known to suffer from disturbance and displacement while lekking and we recommend that in order to avoid this, there should be construction and other activity within a buffer of 750m around any lek site (this distance can vary according to line of sight and time of day) between 1 hour before and 2 hours after local sunrise from the 15th March – 15th May.

If you require any further advice please do not hesitate to contact me.

Yours faithfully

Darrell Stevens

Conservation Officer

South Highland

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Safeguarding public access in Scotland since 1845

Econsents_Admin@gov.scot

Joyce Melrose
Admin Officer
Energy Consents Unit
The Scottish Government

07/11/2017

Dear Ms Melrose,

The Electricity Act 1989 Section 36
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Scoping Opinion Request For Proposed Application Under Section 36 For The Red John Pumped Storage Hydro, In The Planning Authority Area The Highland Council

Thank you for your email of 9 October 2017 requesting observations on the above application. We gratefully acknowledge the additional time allowed for our outline scoping response.

The National Catalogue of Rights of Way does not show any rights of way affected by the area outlined in red on *Figure 1.2 The Proposed Development Site*. As there is no definitive record of rights of way in Scotland, there may be other routes that meet the criteria to be rights of way but have not been recorded as they have not yet come to our notice.

Baseline Information 12.3.3 states that information sources for tourism and recreation may include ScotWays: Aecom is welcome to contact the Society directly if a more detailed consultation response is required.

You will no doubt be aware there may now be general access rights over any property under the terms of the Land Reform (Scotland) Act 2003. We understand that the applicant has consulted the Core Paths Plan, prepared by Highland Council's access team as part of their duties under this Act. We strongly recommend that the applicant consult with the access team at Highland Council with regard to any proposals for closure/diversions of recreational routes across the site.

We note that Figure 10.2 is titled *Public Rights of Way.* As, noted above, there are no recorded rights of way across the development site this sheet appears to use the recreational baseline rather than show the right of way network over the site and should perhaps be re-titled.

I hope the information provided is useful to you. Please do not hesitate to contact me if you need more detail or if you have any queries.

Yours sincerely,

Lynda L Grant
Access Assistant

The Scottish Rights of Way and Access Society 24 Annandale Street, Edinburgh EH7 4AN (Registered Office)
Tel: 0131 558 1222 e-mail: info@scotways.com web: www.scotways.com

20 September 2017

Theresa McInnes
Scottish Government

SCOTTISH WATER
The Bridge
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Stepps
G33 6FB

www.scottishwater.co.uk
EIA@scottishwater.co.uk

By email to Theresa.McInnes@gov.scot

Dear Ms McInnes

Red John Pumped Storage Hydro – Pre-application Consultation

Thank you for consulting with Scottish Water (SW) regarding the above proposed development. We have the following comments to make on this proposal:

Drinking Water Protected Areas (DWPAs)

The proposed site falls partly within the drinking water catchments within which SW abstractions from Loch Duntelchaig, Loch Ashie and Loch Ness are located (see attached drinking water catchment map). SW abstractions are designated as Drinking Water Protected Areas (DWPA) under Article 7 of the Water Framework Directive. Loch Duntelchaig and Loch Ashie supply Inverness Water Treatment Works (WTW), Loch Ness supplies Invermoriston WTW. It is essential that water quality and water quantity in the area are protected. Annex 1 details a list of precautions and protection measures to be taken within a DWPA and the wider drinking water catchment.

Scoping Report comments:

SW has concerns over the location of the proposed works within Loch Duntelchaig and Loch Ashie and the impact it could have on public drinking water supplies. SW would prefer that the headponds and other associated infrastructure and activities are located out of both Loch Duntelchaig and Loch Ashie drinking water catchments. If it can be demonstrated that this is not practicable, an assessment of impacts on the structural integrity of Loch Duntelchaig and Loch Ashie, their dams, their water quality and quantity and any other associated infrastructure, will require to be undertaken. This should cover the construction, operation and decommissioning stages.

<u>Section 6 Ecology</u>

There is no mention of the following non-native invasive species Phagocata woodworthi (a flatworm), Elodea nuttallii (a type of pond weed) or Cragonyx pseudogracilis (a non native shrimp) in the ecology section. These are species which SW has experienced concern from SEPA regarding potential cross-catchment spread.

Section 6.2.13 it says that due to the nature of the proposed development there is significant scope for non-native invasive species (NNIS) in Loch Ness to be pumped up into the headpond and in Option A there is a risk of a NNIS being transferred to Loch Duntelchaig during dewatering, whilst in Section 8.5.3, it is noted that the development has been designed to avoid cross-catchment transfer however, there is no information on how this will be done. SEPA in discussion with SW over a future option to supply Loch Ness water directly to a WTW located in the Loch Ashie catchment, have raised concerns over the potential for catchment transfer of NNIS. We would therefore request further information and details of the mitigation for cross-catchment transfer of NNIS into Loch Ashie catchment.

<u>Section 7 Geology and Hydrogeology</u>

It has not been identified that the options will be located within water catchments for Loch Duntelchaig and Loch Ashie DWPA which are public water supplies. This is a key factor which is not detailed in this section. It is only mentioned that The Middle ORS is known to be used for public water supplies from a borehole in the Turriff Basin. Loch Ness is also a public supply DWPA which has not been identified.

<u>Section 7.3.4</u>

There is potential for groundwater contribution to both Loch Duntelchaig and Loch Ashie due to the local geology. This section refers to the assessment of construction and operational effects which may interact with the aquifers

and any existing abstractions which are found locally. It is not clear if this is referring solely to private water supplies, but this should include the interaction with groundwater contributing to Lochs Duntelchaig and Ashie.

Section 8 Water Quality and Water Resources.

Whilst within Figure 8.1, Lochs Ness, Duntelchaig and Ashie are labelled as DWPA, it has not been identified that the options will be located within Loch Ness DWPA and Loch Duntelchaig and Loch Ashie DWPA. It should be stated that the proposals are located in the above mentioned DWPAs.

Section 8.2.1.

It is mentioned that "*indirect effects on Loch Ashie from changes in water abstraction as a consequence of the proposed Development may also need to be considered but may be scoped out depending on the headpond Option chosen*". This differs from section 8.4.4 where it is stated that:

"Depending on the headpond Option, during operation there may also be direct hydrological impacts to Loch Duntelchaig, Loch Ashie and the Allt a' Mhinisteir stream due to a loss of catchment area. Option A could result in a reduction in the availability of potable water supply from Loch Duntelchaig, which could indirectly affect Loch Ashie should SW decide to augment supplies by increasing their abstraction from that loch. In a similar manner, Option B could result in a reduction in the availability of potable water supply from Loch Ashie by affecting flows along the main feeder stream. This could also indirectly affect Loch Duntelchaig, should SW decide to augment supplies by increasing their abstraction from that Loch Duntelchaig. The scope of this assessment will be confirmed upon confirmation of the headpond Option, but it should be noted this aspect could also be scoped out subject to further discussions with SW.".

The impacts need to be discussed with SW and taken into account to determine the risks on these public drinking water supplies. Neither option can be scoped out, as they could have a significant impact on water quality, quantity and infrastructure and this has to be assessed.

Section 8.2.11

The following is stated:

"Scottish Water are understood to also have the ability to transfer water from Loch Ness to Loch Duntelchaig under drought conditions, although do not abstract on a daily basis under normal circumstances. "

This statement is incorrect. There is no transfer from Loch Ness in place at present and no infrastructure to do so. A proposed future scheme takes water from Loch Ness to the water treatment works directly.

Section 8.2.16

It is stated that Loch Duntelchaig in conjunction with Loch Ashie is the main potable water supply reservoir for Inverness, but does not state that it is a DWPA. It does highlight that the current arrangement is under pressure to meet future demand. It is not stated that any impact on current yield as a result of this proposal will therefore exacerbate this.

Section 8.2.20

It is recognised that Loch Ashie is included within a Drinking Water Protected Zone and provides a secondary supply to Inverness. Loch Ashie is used in conjunction with Loch Duntelchaig i.e. abstraction takes place from both sources simultaneously forming a blend at the WTW (Loch Duntelchaig the majority in the blend).

Section 8.2.22

It is recognised little is known about the water quality and hydrology of Loch na Curra and Lochan an Eoin Ruadha, and the surrounding moorland. This would need to be determined to understand potential impacts of the options and on dewatering the lochs on Loch Duntelchaig.

Section 8.3.7

This needs to include a study of the impact of dewatering Loch na Curra and Lochan an Eoin Ruadha into Loch Duntelchig on raising the water levels of Loch Duntelchaig.

Please can details be provided of how drainage to Loch Duntelchaig and Loch Ashie from the remaining contributing area downstream of the headponds is to be aligned and managed and any impacts on water quantity and quality be assessed. From Figure 2.3 (Option A), it looks like only a portion of Lochan an Eoin Ruadha is to be included in the headpond.

Section 8.3.10

This states that an assessment of low flows impact will be carried out and if significant, there will be a review of safe yield of the WTW sources. This should be an assessment of the impact on all flows and an assessment of the impacts on yield is required, regardless of how large or small the impacts on the inflow flow sequence appears to be.

Section 8.4.6

This section states that Option B would avoid impacts on Loch Duntelchaig as there would be no loss of catchment area. From the map provided (Figure 2.3), the headpond would encroach into Loch Duntelchaig catchment over a small area. It also says that the headpond area will be isolated from the local catchments, reducing the catchment areas of Lochs Ashie and Duntelchaig and a detailed assessment of the contributing area will be assessed. SW requires details of these contributing areas and how they will be assessed.

Section 8.4.9

This notes that in extreme rainfall there could be potential overtopping of the pond embankment and spill arrangements will be provided to Ness catchment. SW requires details of this to ensure that there is no impact on its sources. We would expect flood studies to be completed and reservoir inundation maps prepared to assess the impact of a breach of either option on the downstream environment and to identify if there is potential for a breach scenario to discharge into Loch Duntelchaig/Ashie, artificially raising top water level enough to impact on the dam structures. As the applicant will be aware, a Qualified Civil Engineer (QCE) should be appointed from the DEFRA All Reservoir Panel to sign off the construction of the headpond impoundments.

Section 8.5.3

Notes that the development has been designed to avoid cross-catchment transfer- can details of this be supplied?

Options Appraisal:

We would make the following comments on the proposed options:

Option A

- Locating the headpond and other infrastructure, partly within the existing Loch Duntelchaig DWPA catchment, will impact on water yield and water quality in the loch, which could be exacerbated if the yield is reduced. This will be affected during construction and then operation of the proposal.
- If the two lochs and any significant watercourses flowing in will be diverted to settlement ponds and then into Loch Duntelchaig, this could cause concerns with water quality even if via settlement ponds. Lochan na Curra is not within the existing catchment area of Loch Duntelchaig and would appear to flow naturally towards Loch Ness, so draining water from one catchment to another could affect water quality, which would require to be assessed. SEPA may have concerns, as this would effectively be a cross-catchment transfer of water. Sediment in the bottom of the existing lochs could introduce elements that would not normally be expected to enter Loch Duntelchaig. Sediment is not the only concern which is mentioned in the Scoping Report, organic carbon content and other parameters such as metals will need to be assessed as this could affect the water treatment work and potentially public supply.
- Part of the headpond, temporary access track and one of the temporary construction compounds would be located within the catchment Loch Duntelchaig. The impact on water quality would require to be assessed and mitigated. It is stated in the Scoping Report that the compounds are anticipated to be unsealed (stone, metalled or gravel surface) in nature.
- It is proposed that water pumped from Lochan an Eoin Ruadha to Loch Duntelchaig will have the outlet situated away from the shore in Loch Duntelchaig to reduce the sediment disturbance at the shoreline. The outlet location will also have a silt curtain installed to reduce the chance of any sediment dispersal. This is not sufficiently clear to understand the impact of the proposal.
- Any peaty and silty water will be pumped out into large silt dewatering bags that could be located in the low lying area between Loch Duntelchaig and Lochan an Eoin Ruadha. The bags will be placed onto the existing vegetation and in an area where the filtered water can drain towards Loch Duntelchaig. Locating the sediment bags within the Loch Duntelchaig catchment could affect water quality particularly if there was a burst. They will then be left to dry out and cut open in the catchment. It is not indicated where the material will be disposed to, only that it will be used for reinstatement.
- It is indicated that following the removal of the water from the lochs, a smaller continuous pumping operation will be carried out over the majority of the construction period as the new headpond is being constructed. It is not stated where this will be drained to, if into Loch Duntelchaig, this introduces a continual risk to water quality.
- It is not stated how the watercourse from the Lochan an Eoin Ruadha and the surrounding area will be sealed off from Loch Duntelchaig catchment and when.

- Plant to be used to drain the lochs introduces the risk of fuel and oil spills into Loch Duntelchaig, in particular plant working within watercourses.

Option B

- Locating the headpond partly within the existing Loch Duntelchaig DWPA (a small area) and Loch Ashie DWPA catchments, will impact on water yield and water quality in both lochs, which could be exacerbated if the yield is reduced. This will be affected during construction and then operation of the proposal.
- The impact of deforestation would require to be assessed and mitigated.

Both Options A & B

- All proposed works seem to be far enough away to minimise any impact on our existing dam structures (albeit there is no indication of construction access routes at this stage), but we would ask that levelling surveys are completed across the dam structure at both Loch Duntelchaig and Ashie before and after work activities, to see if there has been any impact.
- During construction, we would request the on-site presence within the project team for a dedicated Environmental Manager to look after the interests of SW and to ensure that risks to our raw water sources are kept to a minimum.

Scottish Water Assets

A review of our records indicates that there are Scottish Water assets including a 180mm water distribution main running along the B862 which may be affected by the proposed development. The location of SW assets (including water supply and sewer pipes, water and waste treatment works, reservoirs etc.) should be confirmed by obtaining detailed plans from our Asset Plan Providers. Details of our Asset Plan Providers are included in Annex 1.

All SW assets potentially affected by the development should be identified, with particular consideration being given to access roads and pipe crossings. If necessary, local Scottish Water personnel may be able to visit the site to offer advice. All of Scottish Water's processes, standards and policies in relation to dealing with asset conflicts must be complied with.

In the event that asset conflicts are identified then early contact should be made with the Scottish Water Asset Impact Team (AIT) at **service.relocation@scottishwater.co.uk**. All detailed design proposals relating to the protection of Scottish Water's assets should be submitted to the AIT for review and written acceptance. Works should not take place on site without prior written acceptance by Scottish Water.

In addition to the precautions and protection measures to be undertaken when works are to take place within a DWPA or drinking water catchment. Annex 1 also includes a list of precautions to be taken when working within the vicinity of Scottish Water assets. This list of precautions is not exhaustive but should be taken into account as the development progresses through the planning and development process.

It should be noted that the development will be required to comply with Sewers for Scotland and Water for Scotland 3rd Editions 2015, including provision of appropriate clearance distances from Scottish Water assets.

If you have any questions relating to the above, or in relation to the information presented in Annex 1, please do not hesitate to contact me.

Yours sincerely

Rebecca Williams
Strategic Planner – Environmental Impact Assessment
EIA@scottishwater.co.uk

Annex 1: Precautions to protect drinking water and Scottish Water assets during hydro development construction and operational activities

General requirements

1. The proposed timing of the works, including planned start and completion dates, should be submitted to Scottish Water in advance of any activities taking place on-site. This information should be submitted to **EIA@scottishwater.co.uk.**

2. If a connection to the water or waste water network is required, a separate application must be made to the Scottish Water Development Operations Team for permission to connect. It is important to note that the granting of planning consent does not guarantee a connection to Scottish Water assets. The Development Operations Team can be contacted by telephone on **0800 389 0379** or via email at **developmentoperations@scottishwater.co.uk**.

3. In the event of an incident occurring that could affect Scottish Water we should be notified without delay using the Customer Helpline number **0800 0778 778** and the local contact if known.

Protecting drinking water quality

Regulatory requirements

4. Scottish Water is required to ensure that any activity within a drinking water catchment does not affect the ability of Scottish Water to meet its regulatory requirements.

5. Water Treatment Works are designed to treat the specific parameters of the raw water source they receive (i.e. the specific chemical, biological and other characteristics of natural, untreated water). If the characteristics of the raw water change or deteriorate, it can affect the ability of the works to supply drinking water to customers at the required standards.

6. The regulations relating to the quality of drinking water supplied by Scottish Water are the Water Supply (Water Quality) (Scotland) Regulations 2001. Quality Standards are derived from the European Drinking Water Directive 98/83/EC.

7. Drinking water catchments feed Scottish Water abstractions which supply water to water treatment works. Under Article 7 of the Water Framework Directive, waters used for the abstraction of drinking water are designated as Drinking Water Protected Areas (DWPA). The objective of the Water Framework Directive is to ensure that no activity results in the deterioration of waters within the DWPA. If an activity falls within a DWPA or drinking water catchment, it is essential that water quality and quantity are protected.

Specific precautions for drinking water protection during hydro scheme activities

8. A detailed, site specific Construction Method Statement including e.g. Construction Environmental Management Plan, Risk Assessment, Pollution Prevention and Contingency Plan must be submitted to Scottish Water at least three months prior to the works commencing. This should be agreed with Scottish Water prior to any operations taking place. Any other associated documents (e.g. Drainage Plan, Peat Management Plan etc.) should also be submitted and agreed with Scottish Water at least three months prior to works commencing. In the first instance, this information should be supplied to **EIA@scottishwater.co.uk**.

9. Where possible, infrastructure and activities should be located outside of the catchment area, with the exception of the intake, impoundment, tail race and sections of road and pipeline accessing the facilities. If this can be demonstrated to be impracticable then all infrastructure and activities should be located 100m from any watercourse where possible, and a minimum of 50m distant where 100m can be demonstrated to be undeliverable. This includes, access tracks, electricity connection and temporary construction related activities such as borrow pits, plant stockpiled materials, cement batching, wheel washing and construction compound areas

10. Any potential effect on the hydrology of the area resulting from the construction and operation of the proposed development should be assessed and the findings presented in the Environmental Statement/environmental appraisal accompanying the planning application. This should include an assessment of effects on natural drainage patterns, base flows/volume, retention/run off rates and potential changes to water quantity. Any required mitigation measures and proposed monitoring should also be detailed in the Environmental Statement or environmental appraisal accompanying the planning application.

11. When constructing roads, drainage ditches and trenches, drainage should not be directed into adjacent catchments but retained within the existing catchment.

12. Any potential pollution risk which could affect water quality should be considered and mitigation measures implemented to prevent deterioration in water quality and pollution incidents. This includes sediment run-off, soil or peat erosion, management of chemicals and oils, etc. (see also point 18 below). This should be considered for operations at all stages of development including pre- and post-construction.

13. Mitigation measures to prevent pollution to watercourses should be outlined in the Environmental Statement or environmental appraisal accompanying the planning application and adopted in the Construction Method Statement/Construction Environmental Management Plan prior to work starting onsite. Any measures implemented should be regularly checked, maintained and improved if pollution occurs.

14. Consideration should be given to the use of food grade oils within turbines in close proximity to watercourses. The use of food grade oils within other plant and vehicles should also be considered depending on the risk to the drinking water catchment.

15. Watercourses that feed into any watercourses or reservoirs that Scottish Water abstracts from should be considered when developing new road or access infrastructure. Any crossing of these watercourses should be kept to a minimum. Pollution prevention measures should be put in place at each crossing point and silt traps, or equivalent, should be installed at regular intervals to minimise the risk from pollution.

16. Once constructed, site roads should be regularly maintained to ensure minimal erosion and hence run-off and pollution, from the road surface. Site roads should be constructed from inert, non-metalliferrous material, with low erodibility and low sulphide content.

17. No refuelling or storage of fuel or hazardous materials should take place within the drinking water catchment area. If this can be demonstrated to be impracticable, then the appropriate Scottish Environment Protection Agency (SEPA) Pollution Prevention Guidelines (PPG 2: Above ground oil storage, PPG 6: Working and Construction and Demolition Sites, PPG 8: Safe storage and disposal of fuel oils, PPG 21: Pollution incident response planning and PPG 22: Incident response – dealing with spills) should be followed. 50m buffers should be applied to all surface watercourses, groundwater borehole abstraction points and springs. Oil storage should be in accordance with The Water Environment (Oil Storage) Regulations (Scotland) 2006. There should be dedicated oil storage areas created. Spill kits should be located within all vehicles, plant and high risk areas.

18. Waste storage, concrete preparation and all washout areas should not be within the drinking water catchment area. If this can be demonstrated to be impracticable then this should be in dedicated areas 50m from a watercourse and designed to be contained and to prevent escape of materials/runoff to the environment.

19. Welfare/waste water facilities should preferably be located outside the drinking water catchment. If not practicable, then portable toilets should be used and waste disposed of off-site. Alternatively secondary treatment and soakaways should be used and, if required, a sampling chamber installed and sampling programme agreed. The proposed method of managing welfare and waste water facilities should be detailed in the Environmental Statement or environmental appraisal accompanying the planning application. If sampling is required, Scottish Water should be contacted via **EIA@scottishwater.co.uk** in the first instance.

20. Any proposed abstractions for activities such as welfare facilities or cement batching plants should be detailed in the Environmental Statement or environmental appraisal accompanying the planning application.

21. Induction training should be given to all personnel on-site and should include Scottish Water site sensitivities in relation to drinking water catchments and assets (see below), as well as spill response as outlined in PPG 22: Dealing with spills.

22. Construction and Environmental Management Plans, Pollution Prevention and Contingency Plan and associated documents should include the Scottish Water Customer Helpline Number **0800 0778 778** and the local contact details.

Protecting drinking water in peatland areas

23. When peat is present within the proposed area of activity the Environmental Statement or environmental appraisal accompanying the planning application should include an assessment on the potential release of colour, dissolved organic carbon and total organic carbon as a result of changes to hydrology and/or physical disturbance. This should cover the construction and post-construction phases.

24. Excavations and ground disturbance in areas of deep peat should be avoided. Deep peat is considered to be peat greater than 0.5m deep.

25. The natural hydrology within peat should be maintained and/or restored. This should be taken into account when designing the access tracks, pipelines, power house, etc. Any necessary measures to maintain natural drainage of peat and sub-surface hydrology, such as tailored drain spacing on access tracks, should be implemented as part of the design of the development.

26. Scottish Water requests that, where possible, access tracks in the drinking water catchment are constructed as floating tracks with adequate provision for maintaining existing drainage patterns.

27. Exposed soils and peat can release sediment, colour and dissolved organic carbon. The use of geotextiles, turf replacement and/or reseeding, should be undertaken as soon as possible.

28. Restoration of any degraded peat should be considered for areas within the drinking water catchment.

Protecting drinking water due to forestry activity

29. An assessment of any forestry activity, including felling, planting or other activity, likely to affect the drinking water catchment should be included in the Environmental Statement or environmental appraisal

accompanying the planning application. Any specific mitigation measures should be identified and incorporated into the Construction Environmental Management Plan for the site prior to works commencing.

30. The Environmental Statement or environmental appraisal accompanying the planning application should include details on the harvesting/clearance process for any felling/woodland removal. The least disturbing method/s should be selected where possible.

31. Any historic drains or ditches within the site boundary that discharge directly to a watercourse in the drinking water catchment should be blocked and slowly discharged to a buffer area in line with current Forestry Commission Forest and Water Guidelines. Where possible, this should be undertaken in advance of any work being carried out on-site, to provide protection for watercourses during site activities.

Monitoring requirements to protect drinking water quality

32. During construction, a programme of daily visual inspection of the watercourses, flow conditions (i.e. high, medium, low, or no flow), prevailing weather and any other pertinent observations, will be required to be implemented. The results should be recorded and the information submitted to Scottish Water (i.e. in a monthly progress report). This should be undertaken when water quality samples are taken. In the first instance, reporting should be provided to **EIA@scottishwater.co.uk**.

33. Depending on the vulnerability of the public water supply, Scottish Water may request that a water sampling programme shall be established and agreed with Scottish Water. This should assess the baseline water quality for a minimum of one year prior to any activities commencing on-site where possible, including ground investigations and any felling activities, to allow an accurate understanding of baseline conditions at the site. Water sampling should continue during construction and then post-construction for a minimum of one year. Following completion of one year of sampling post-construction, this should be reviewed to determine whether this should continue for a further agreed period. The parameters, frequency and sampling locations will also need to be agreed with Scottish Water. This monitoring will establish if any decline in water quality can be attributed to the development. It may also be necessary to establish trigger levels to determine when any potential issues should be reported to Scottish Water.

34. The appointed Contractor/Site Foreman or Ecological or Environmental Clerk of Works should have relevant knowledge and experience to provide advice and monitor compliance with measures for the protection of water quality in relation to abstractions for water supply.

35. Depending on the vulnerability of the public water supply, Scottish Water may request that a dedicated Environmental Manager be appointed and present on-site to assess and monitor any effects caused by the development.

Guidance documents

36. Please ensure the appropriate Guidance Documents are followed, including

- Guide to Hydropower Best Practice. SEPA, Version 2 (January 2015).
- Floating Roads on Peat. Forestry Civil Engineering and SNH. (August 2010).
- Constructed tracks in the Scottish Uplands, 2nd edition. SNH (June 2013).
- Forests and water UK Forestry Standard Guidelines, 5th Edition. Forestry Commission (2011).
- General Binding Rules under the Controlled Activities Regulations (see The Water Environment (Controlled Activities) Scotland Regulations (as amended) A Practical Guide, Version 7.2, SEPA (March 2015)).
- SEPA Pollution Prevention Guidance (visit http://www.sepa.org.uk/regulations/water/guidance/).

Protecting Scottish Water assets

37. If an activity associated with a development proposal is located within close proximity to Scottish Water assets, including water and waste water pipe infrastructure, treatment works and reservoirs etc., it is essential that these assets are protected from damage. To this end, the developer will be required to comply with Scottish Water's current process, guidance, standards and policies in relation to such matters.

38. Copies of Scottish Water's relevant record drawings can be obtained from the undernoted Asset Plan Providers. This is distinct from the right to seek access to and inspect apparatus plans at Scottish Waters area offices, for which no charge is applied.

Site Investigation Services (UK) Ltd
Tel: 0333 123 1223
Email: sw@sisplan.co.uk
www.sisplan.co.uk

National One-Call
Tel: 0844 800 9957
Email: swplans@national-one-call.co.uk
www.national-one-call.co.uk/swplans

Cornerstone Projects Ltd
Tel: 0151 632 5142
Email: enquiries@cornerstoneprojects.co.uk
http://www.cornerstoneprojects.co.uk/index.php/scottishwaterplans

39. It should be noted that the site plans obtained via the Asset Plan providers are indicative and their accuracy cannot be relied upon. It is therefore recommended that the developer contacts the **Scottish Water Asset Impact Team** at **service.relocation@scottishwater.co.uk** for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of the infrastructure shown could be a key consideration for the proposed development. An appropriate site investigation may be required to confirm the actual position of assets in the ground. Scottish Water will not be liable for any loss, damage or costs caused by relying upon plans or from carrying out any such site investigation.

40. Prior to any activity commencing, all known Scottish Water assets should be identified, located and marked-out.

41. Scottish Water expects method statements, safe systems of work and risk assessments to be prepared and submitted in advance to Scottish Water for formal review and acceptance. These documents shall consider and outline in detail how existing Scottish Water assets are to be protected and/or managed for the duration of any construction works and during operation of the development if relevant. These documents must be submitted to Scottish Water's Asset Impact team for formal prior written acceptance.

42. The developer shall obtain written acceptance from Scottish Water's Asset Impact Team where any site activities are intended to take place in the vicinity of Scottish Water's assets. The Asset Impact Team can advise on any potential risk mitigation measures that may be required.

43. Scottish Water and its representatives shall be allowed access to Scottish Water assets at all times for inspection, maintenance and repair. This will also ensure that the Scottish Water assets are protected and that any Scottish Water requirements are being observed.

44. Any obstruction or hindrance of access to Scottish Water assets should be avoided. The prompt and efficient use and manipulation of valves, hydrants, meters or other apparatus is required at all times. There should also be no interference with the free discharge from water main scours or sewer overflows.

45. In the event of an incident occurring that could affect Scottish Water, including any damage to assets, Scottish Water should be notified without delay, using the Customer Helpline number **0800 0778 778**, and the local contact if known. Scottish Water apparatus should not be interfered with or operated by anyone other than Scottish Water personnel.

46. The 'offset distance' is the distance between any Scottish Water asset and adjacent properties and structures. Scottish Water reserves the right to ask for an offset distance in accordance with its own current policy and standards and to suit specific circumstances. The details of this requirement should be confirmed with Scottish Water as an early part of the design process.

47. Stationary plant, equipment, scaffolding, construction or excavated material, etc. should not be placed over, or close to, any Scottish Water assets without the prior written consent of Scottish Water which may be withheld depending on circumstances on-site.

48. Special care should be taken to avoid the burying of Scottish Water assets or the obstruction of sewers or manholes with fill or other material. Arrangements for altering the level of any chambers should be agreed in advance with Scottish Water and these should be constructed in accordance with Scottish Water requirements. The cost of any work to Scottish Water assets will be met by the project developer.

49. Excavation works (e.g. of wind turbine foundations) should not be carried out in the proximity of a water or waste water main without due notice having been given to Scottish Water and prior written acceptance obtained. The developer will comply fully with any Scottish Water specific site requirements.

50. Any tree planting associated with the development (e.g. compensatory planting or screening etc.) should be undertaken in line with Water for Scotland 3rd Edition (April 2015) to ensure that Scottish Water assets are not put at risk by future growth of tree roots.

51. Vibration in close proximity to Scottish Water pipelines or ancillary apparatus should be managed in accordance with British Standard 5228-1:2009 (Code of practice for noise and vibration control on construction and open sites). The predicted levels of vibration should be agreed in advance with Scottish Water as part of the risk assessment and method statement and agreed vibration monitoring arrangements will be required.

52. The developer will consider the possibility of increased loading on Scottish Water apparatus and measures will be taken to eliminate or mitigate increased loading on assets. Care should be taken to identify any assets which may be crossed by vehicles on the access route to the site and crossing points will be engineered to the requirements of Scottish Water. Any pipe crossing proposals are subject to prior written acceptance by Scottish Water.

53. Scottish Water will not accept liability for any costs incurred in fulfilling any of the above requirements during the development planning, construction or operational phases, either by the developer, the developer's associates, contractors or any other person or organisation involved in the project.

54. If the developer damages any Scottish Water asset they will be held liable for any costs resulting from this.

55. Scottish Water may require costs associated with the development to be reimbursed by the developer or the developer's agents.

Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

Our ref: PCS/155469
Your ref: ECU00000488

Theresa McInnes
Energy Consents Unit
Edinburgh

If telephoning ask for:
Susan Haslam

11 October 2017

By email only to: Econsents_Admin@gov.scot

Dear Ms McInnes

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Red John Pumped Storage Hydro

Thank you for consulting us on the above development by way of your email received on 10 October 2017. We have had useful early engagement with the developer but had hoped that they would have used our earlier written advice to you to help produce a focussed finalised version of the scoping report. Nonetheless we note the comments in your email that they will take into consideration the advice we have already provided.

Our site specific advice is below; unsurprisingly it is very similar to our last response to you of 28 September 2017. We have also provided our generic advice for scoping windfarm developments in the attached appendix.

1. Site specific comments

1.1 We would very much welcome early sight of the habitat and peat survey work before it is formally submitted as part of the application. This will allow us to give early and focused advice on the proposals. In this case we would also welcome further engagement on the material balance assessment to ensure that excavations are minimised and suitable uses are found for all the material.

1.2 In relation to section 1 of the attached Appendix (site layout):

- For a development of this scale it is especially important to ensure that detailed layout plans submitted at the application stage are provided for all elements of the development. The plans submitted with the application must detail all the temporary or ancillary works such as laydown areas, rock and peat storage areas and site compounds, which we presume will be extensive for a development of this size. The application submission should include plans which show above and below ground infrastructure separately.

SEPA Dingwall Office
Graesser House, Fodderty Way,
Dingwall Business Park, Dingwall IV15 9XB
tel 01349 862021 fax 01349 863987
www.sepa.org.uk • customer enquiries 03000 99 66 99

- The assessment should specifically consider whether there are opportunities to minimise overall impacts from the development by collaborative working and sharing infrastructure with Scottish Water who also have existing and planned works in this area.

1.3 In relation to section 2 of the attached Appendix (CAR requirements) and Section 3 and Appendix 6.1 of the scoping report:

- We are aware of the following invasive non-native species in the Ness catchment - Flatworm (Phagocata woodworthi), Freshwater shrimp (Crangonyx pseudogracilis) and Nuttall's Waterweed (Elodea Nuttallii).

- If option A is to be pursued then an assessment of the environmental significance of the loss of the two lochs and change in proposed catchment is required.

1.4 In relation to section 3 of the attached Appendix (other water impacts):

- We note that the existing access track from one of the compounds to the road through the forest requires upgrading. For the avoidance of doubt the assessment should provide information on the extent of all upgrading works.
- We note that access between the construction compounds and different work areas will change throughout the construction periods. The application should identify proposed corridors for these routes, taking into consideration local sensitivities.
- Detailed drawing of the potential temporary wharf in Loch Ness should be provided accompanied by as assessment of effects on the water body.

1.5 In relation to section 4 of the attached Appendix (peat):

- We welcome the proposal for a Peat Management Plan. All excavated peat must be re-used on site with no permanent storage or disposal allowed. Floating track should be used to reduce the volume of excavated peat.

- The Plan should consider proposals for peatland restoration works on the site, including for example, restoration of any redundant tracks or historic peat cuttings. Such works could also help compensate for loss of GWDTE.

1.6 In relation to section 5 (GWDTE) and Appendix 6.1 of the scoping report we are generally content with the habitat survey proposals outlined in Appendix 6.1.

1.7 In relation to section 8 of the attached appendix (borrow pits) and rock and overburden excavation generally as outlined in the scoping report:

- In view of the extensive volume of excavated material being produced we do not expect the development to include additional borrow pits.

- The information requirements outlined in section 8.2 of the appendix should be provided insofar as they are relevant to the excavation works proposed.

- The proposals outlined in section 2.5.6 and to some extent section 2.6.33 of the scoping report and related figures for a “soil disposal area” would not be acceptable as they would represent a licensable landfill operation and as such should not be included in the application. However there will be a requirement for temporary material storage and as the land take for this is likely to be significant they should be shown in the application. Storage locations should be as close to the excavated area as possible and avoid local sensitivities such as watercourses.

- We expect the application to be supported by an assessment of the amount of overburden and rock that will be generated and expected quality, based on intrusive site investigations. This should be accompanied by detailed proposals either for justifiable re-use on site (our preference) or use or disposal elsewhere. The application submission will need to include a detailed map of where and how rock or other material will be re-used on site, including volumes and depths. Any waste materials will need to be removed from the site and disposed of to a suitably licenced facility or made use of via a suitable waste management exemption.

- We understand that there may be significant transportation issues with removal of any of the material from the site so, although not an issue directly within our remit, we recommend that the assessment includes information on transport implications.

1.8 In relation to section 7 (forest waste) we are content that this information can be provided in the proposed Materials Management Appraisal.

1.9 In relation to section 9 (pollution) we can confirm that from our perspective an outline Construction Environmental Management Plan (CEMP), Waste Management Plan and Dust Management Plan need not be provided with the application. This is on the understanding that (1) the proposed Materials Management Appraisal will address all aspects of material management (minimisation, handling, processing, reuse on site, reuse off site and if required disposal) and any related waste management, (2) detailed site plans are submitted which demonstrate how impacts on the environment have been minimised through design and (3) all mitigation is detailed within a suitably robust schedule of mitigation. This approach will hopefully help streamline the overall information and assessment requirements.

1.10 Please see our website for further information above the Reservoirs Act 2011.

Should you wish to discuss this letter please do not hesitate to contact me on 01349 860359 or planning.dingwall@sepa.org.uk.

Yours sincerely

Susan Haslam
Senior Planning Officer
Planning Service

ECopy to: Ken.McCorquodale@highland.gov.uk; Catherine.Anderson@aecom.com; Liz.McLachlan@snh.gov.uk; Theresa.McInnes@gov.scot

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

Appendix 1: Detailed scoping requirements

This appendix sets out our scoping information requirements. There may be opportunities to scope out some of the issues below depending on the site. Evidence must be provided in the submission to support why an issue is not relevant for this site in order **to avoid delay and potential objection**.

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

1. Site layout

1.1 All maps must be based on an adequate scale with which to assess the information. This could range from OS 1: 10,000 to a more detailed scale in more sensitive locations Each of the maps below must detail all proposed upgraded, temporary and permanent site infrastructure. This includes all tracks, excavations, buildings, borrow pits, pipelines, cabling, site compounds, laydown areas, storage areas and any other built elements. Existing built infrastructure must be re-used or upgraded wherever possible. The layout should be designed to minimise the extent of new works on previously undisturbed ground. Cabling must be laid in ground already disturbed such as verges. A comparison of the environmental effects of alternative locations of infrastructure elements, such as tracks, may be required.

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

2.1 The proposed hydro scheme will require an authorisation from us under CAR. It is likely that the CAR application will be subject to a derogation (exemption under the Water Framework Directive) assessment and third party consultation which could result in amendments to the scheme. We therefore encourage applicants to twin-track applications for consent under planning and CAR to ensure that CAR requirements can be accommodated more easily when proposals are at their most fluid.

2.2 Should the applicant choose not to twin-track their applications then the following details must be included in the planning submission to allow us to provide an indication of the potential consentability of the proposal under CAR:

a) The location and design of the intakes and outfalls and their impact upon the morphology of the water environment.

b) Compensation flow.

c) Fish passages.

d) Other relevant CAR or planning applications or consents for abstractions/hydro schemes.

e) Sensitive water uses, water dependent species (including bryophytes) and ecosystems.

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

3. Other impacts on the water environment

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

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

b) A buffer of at least 10m drawn around each loch or watercourse. If this minimum buffer cannot be achieved each breach must be numbered on a plan with an associated photograph of the location, dimensions of the loch or watercourse and drawings of what is proposed in terms of engineering works.

c) Detailed layout of all proposed mitigation including all cut off drains, location, number and size of settlement ponds.

3.2 If water abstractions or dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided.

3.3 Further advice and our best practice guidance are available within the water engineering section of our website. Guidance on the design of water crossings can be found in our Construction of River Crossings Good Practice Guide.

3.4 Refer to Appendix 2 of our Standing Advice for advice on flood risk. Watercourse crossings must be designed to accommodate the 0.5% Annual Exceedance Probability (AEP) flows, or information provided to justify smaller structures. If it is thought that the development could result in an increased risk of flooding to a nearby receptor then a Flood Risk Assessment must be submitted in support of the planning application. Our Technical flood risk guidance for stakeholders outlines the information we require to be submitted as part of a Flood Risk Assessment. Please also refer to Controlled Activities Regulations (CAR) Flood Risk Standing Advice for Engineering, Discharge and Impoundment Activities.

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

4.1 Scottish Planning Policy states (Paragraph 205) that "Where peat and other carbon rich soils are present, applicants should assess the likely effects of development on carbon dioxide (CO_2) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO_2 to the atmosphere. Developments should aim to minimise this release."

4.2 The planning submission must a) demonstrate how the layout has been designed to minimise disturbance of peat and consequential release of CO_2 and b) outline the preventative/mitigation measures to avoid significant drying or oxidation of peat through, for example, the construction of access tracks, drainage channels, cable trenches, or the storage and re-use of excavated peat. There is often less environmental impact from localised temporary storage and reuse rather than movement to large central peat storage areas.

4.3 The submission must include:

a) A detailed map of peat depths (this must be to full depth and follow the survey requirement of the Scottish Government's Guidance on Developments on Peatland - Peatland Survey (2017)) with all the built elements (including peat storage areas) overlain to demonstrate how the development avoids areas of deep peat and other sensitive receptors such as Groundwater Dependent Terrestrial Ecosystems.

b) A table which details the quantities of acrotelmic, catotelmic and amorphous peat which will be excavated for each element and where it will be re-used during reinstatement. Details of the proposed widths and depths of peat to be re-used and how it will be kept wet permanently must be included.

4.4 To avoid delay and potential objection proposals must be in accordance with Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste and our Developments on Peat and Off-Site uses of Waste Peat.

4.5 Dependent upon the volumes of peat likely to be encountered and the scale of the development, applicants must consider whether a full Peat Management Plan (as detailed in the above guidance) is required or whether the above information would be best submitted as part of the schedule of mitigation.

4.6 Please note we do not validate carbon balance assessments except where requested to by Scottish Government in exceptional circumstances. Our advice on the minimisation of peat disturbance and peatland restoration may need to be taken into account when you consider such assessments.

5. Disruption to Groundwater Dependent Terrestrial Ecosystems (GWDTE)

5.1 GWDTE are protected under the Water Framework Directive and therefore the layout and design of the development must avoid impact on such areas. The following information must be included in the submission:

a) A map demonstrating that all GWDTE are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m and proposed groundwater abstractions. If micro-siting is to be considered as a mitigation measure the distance of survey needs to be extended by the proposed maximum extent of micro-siting. The survey needs to extend beyond the site boundary where the distances require it.

b) If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all GWDTE affected.

5.2 Please refer to Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems for further advice and the minimum information we require to be submitted.

6. Existing groundwater abstractions

6.1 Excavations and other construction works can disrupt groundwater flow and impact on existing groundwater abstractions. The submission must include:

a) A map demonstrating that all existing groundwater abstractions are outwith a 100m radius of all excavations shallower than 1m and outwith 250m of all excavations deeper than 1m and proposed groundwater abstractions. If micro-siting is to be considered as a mitigation measure the distance of survey needs to be extended by the proposed maximum extent of micro-siting. The survey needs to extend beyond the site boundary where the distances require it.

b) If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all existing groundwater abstractions affected.

6.2 Please refer to Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems for further advice on the minimum information we require to be submitted.

7. Forest removal and forest waste

7.1 If tree felling is proposed the submission must include a map with the boundaries of where felling will take place and a description of what is proposed for this timber in accordance with Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS.

8. Borrow pits

8.1 Scottish Planning Policy states (Paragraph 243) that "Borrow pits should only be permitted if there are significant environmental or economic benefits compared to obtaining material from local quarries, they are time-limited; tied to a particular project and appropriate reclamation measures are in place." The submission must provide sufficient information to address this policy statement.

8.2 In accordance with Paragraphs 52 to 57 of Planning Advice Note 50 Controlling the Environmental Effects of Surface Mineral Workings (PAN 50) a Site Management Plan should be submitted in support of any application. The following information should also be submitted for each borrow pit:

a) A map showing the location, size, depths and dimensions.

b) A map showing any stocks of rock, overburden, soils and temporary and permanent infrastructure including tracks, buildings, oil storage, pipes and drainage, overlain with all lochs and watercourses to a distance of 250 metres. You need to demonstrate that a site specific proportionate buffer can be achieved. On this map, a site-specific buffer must be drawn around each loch or watercourse proportionate to the depth of excavations and at least 10m from access tracks. If this minimum buffer cannot be achieved each breach must be numbered on a plan with an associated photograph of the location, dimensions of the loch or watercourse, drawings of what is proposed in terms of engineering works.

c) You need to provide a justification for the proposed location of borrow pits and evidence of the suitability of the material to be excavated for the proposed use, including any risk of pollution caused by degradation of the rock.

d) A ground investigation report giving existing seasonally highest water table including sections showing the maximum area, depth and profile of working in relation to the water table.

e) A site map showing cut-off drains, silt management devices and settlement lagoons to manage surface water and dewatering discharge. Cut-off drains must be installed to maximise diversion of water from entering quarry works.

f) A site map showing proposed water abstractions with details of the volumes and timings of abstractions.

g) A site map showing the location of pollution prevention measures such as spill kits, oil interceptors, drainage associated with welfare facilities, recycling and bin storage and vehicle washing areas. The drawing notes should include a commitment to check these daily.

h) A site map showing where soils and overburden will be stored including details of the heights and dimensions of each store, how long the material will be stored for and how soils will be kept fit for restoration purposes. Where the development will result in the disturbance of peat or other carbon rich soils then the submission must also include a detailed map of peat depths (this must be to full depth and follow the survey requirement of the Scottish Government's Guidance on Developments on Peatland - Peatland Survey (2017)) with all the built elements and excavation areas overlain so it can clearly be seen how the development minimises disturbance of peat and the consequential release of CO_2.

i) Sections and plans detailing how restoration will be progressed including the phasing, profiles, depths and types of material to be used.

j) Details of how the rock will be processed in order to produce a grade of rock that will not cause siltation problems during its end use on tracks, trenches and other hardstanding.

9. Pollution prevention and environmental management

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

10. Decommissioning

10.1 The submission must set out how decommissioning will be achieved should the proposed development be discontinued. The submission needs to demonstrate that there will be no discarding of materials that are likely to be classified as waste as any such proposals would be unacceptable under waste management licensing. Further guidance on this may be found in the document Is it waste - Understanding the definition of waste.

10.2 The layout and the general principles for decommissioning must demonstrate waste minimisation and compliance with the above waste regulatory position.

Scottish Natural Heritage
Dualchas Nàdair na h-Alba
All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Joyce Melrose
Energy Consents Unit
The Scottish Government

31 October 2017

Our ref: CNS/REN/HYD/Red John

Dear Joyce

THE ELECTRICITY ACT 1989 SECTION 36
THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
SCOPING OPINION REQUEST FOR PROPOSED APPLICATION UNDER SECTION 36 FOR THE RED JOHN PUMPED STORAGE HYDRO, IN THE PLANNING AUTHORITY AREA THE HIGHLAND COUNCIL

Thank you for your e-mail, dated 9 October 2017, requesting our scoping advice on the above proposal. We received a copy of the Scoping Report direct from the developers.

1. Background

We provided pre-application/pre-scoping advice in relation to this project in our response dated 28 September 2017.

Our consideration of the scoping report is limited to the following sections within our remit, namely:

Chapter 2 Project description
Chapter 5 Landscape and Visual impact assessment
Chapter 6 Ecology
Chapter 7 Geology and ground conditions
Chapter 8 Hydrology and hydrogeology

2. Site specific issues

- **Designated Sites** - Loch Ashie Special Protection Area (SPA) and Loch Ruthven SPA, both designated for Slavonian grebe, are in close proximity to the site. Consideration should be given to potential impacts on this species.

- **Invasive non-native species** - There are a number of invasive non-native species present in Loch Ness and we would expect the applicant to provide mitigation measures in any application to ensure the spread of these species is not exacerbated by this proposal. Further information on non-natives can be found on our website at http://www.snh.gov.uk/protecting-scotlands-nature/nonnative-species/

- **Woodland Removal** - We note that approximately 41% of the development site contains woodland and that woodland clearance will be required as part of the proposed development. We recommend that the applicant contacts Forestry

Commission Scotland at an early a stage to discuss the Control of Woodland Removal Policy and the implications it may have on the development.

- **Landscape and Visual Impact Assessment (LVIA) -** We support the proposal to include an LVIA in the EIA. We recommend that the EIA Report explains the design process used to select the final layout and assesses any alternatives considered and how landscape and visual mitigation has been incorporated.

  We advise that the following viewpoints be added at this stage for consideration:

  1. Urquhart Castle for tourist impacts. We are unclear why a 5km buffer has been added but presumably there will be visibility from here.
  2. The viewpoint layby on the A82. We are not sure what tree coverage is like but visualisations should be obtained after leaf fall to capture a "worst case" scenario
  3. A visualisation from the water to reflect the path of the Jacobite Cruises and other vessels and which has been used as a viewpoint for other developments. Again this will assess impacts on tourists.
  4. Lochend to include residential amenity.

  Visualisation should comply with the standard detailed in the following guidance: https://www.snh.scot/sites/default/files/2017-07/A2203860%20-%20Visual%20representation%20of%20wind%20farms%20-%20Guidance%20-%20Feb%202017.pdf

- **Fisheries -** We can find no reference in the scoping report to assess the impact of the proposal on fish or fisheries. We advise that an assessment of the current/ existing fisheries interests should be undertaken. The level of detail required in relation to this will depend on the final site option and the watercourses affected. If the final design has an impact on existing water bodies or water course we advise that an electrofishing survey to identify fish species present would be required. Should any salmonids be present in the watercourses then a further survey of the salmonid population will be required to establish the exact limit to migration within the catchment and assess the impact that the proposal will have upon nursery habitat for salmonids. Any relevant mitigation measures would need to be identified in the EIA Report.

  We recommend that any fisheries surveys required are done in consultation with the Ness District salmon Fisheries Board.

  We can provide further advice if necessary once the site location has been agreed.

To guide the applicant, we have provided details of further generic advice on what should be considered during the EIA process in Annex A of this letter.

3. Our comments on the Scoping Report
The scoping report includes all the topics that we wish to be covered in the EIA process.

We request that each chapter of the ES is saved to a separate pdf file with a maximum size of 10MB in order to make the file sizes manageable.

Should you have any queries about this letter please contact me at the address below.

Yours sincerely

Liz McLachlan
Area officer
South Highland
liz.mclachlan@snh.gov.uk

Annex A – Further details to assist with the EIA for Red John Pumped Storage Scheme

1 Guidance for assessing impacts on the natural heritage
There are a variety of guidance and advice notes for developments available on our website, covering topics such as landscape, birds and protected species. We would expect the applicant to follow the latest guidance as published on our website via http://www.snh.gov.uk/planning-and-development/ .

2 Service Level Statement (SLS)
We refer the applicant to our Service Level Statement (SLS), which sets out the level of engagement they may expect from us during the planning process. The SLS is available on our website via http://www.snh.gov.uk/planning-and-development/renewable-energy/our-approach-to-renewables/managing-applications/ .

3 Peat
Carbon rich soils, deep peat and priority peatland habitat has been identified in Scottish Planning Policy as a nationally important mapped resource.

The area of this development is mapped (http://www.snh.gov.uk/docs/A2009248.pdf) as Class 2 for carbon rich soils, deep peat and priority peatland habitat, i.e.

- Most of the vegetation cover indicates priority peatland habitats
- All soils are carbon-rich soil and deep peat

We therefore advise that an assessment should be made of the impacts of the proposal on carbon rich soils, deep peat and priority peatland habitat (not just a review of peat depth data as suggested on p31). The assessment should describe the overall size and scale of resource including the type of peatland likely to be affected, quantify the loss of any of that resource as well as any loss of function of the habitat, whereby the peat, or peatland habitat, is likely to be lost or significantly degraded as a result of the development. It should also describe the frequency of drains and peat cutting, the presence of plant species indicating peat formation capability and/or lack of disturbance, any areas of natural surface pattern, and whether or not there is any invasion by woodland or scrub. It should also detail whether the development footprint contains any of the following:

- an abundance of Sphagnum-rich ridges,
- ridges of Sphagnum – Betula nana,
- hummocks of S.fuscum or S. austinii
- Peat mounds
- Hollows of Sphagnum or bare peat

The overall effect of the above Scottish Government policies and initiatives is an expectation that developments will be no less than neutral in their impacts on peat and areas of peatland habitat. Mitigation and compensation measures to achieve that should be integral to any planning application affecting the peatland resource and should be presented as a Peatland Management Plan.

4. Protected Species – birds and mammals
We support the proposal to survey all protected birds and mammal species as described in the Scoping Report. Due to the mobile nature of mammals survey work should be undertaken within 12 months of the submission date of any application which comes forward and should extended to include any off site work that may impact on protected species. For example bat

surveys should be completed for any bridges that are to be upgraded or re-pointed as a result of this development, and appropriate licenses obtained where applicable.

All surveys should follow the latest agreed methodologies. Results and any possible mitigation measure should be provided in the EIA Report and if necessary in a confidential annex.

5. Habitats

We support the proposal to undertake a new Phase 1 and NVC Survey of the site. However, it should be noted that it is not just the land directly affected by works which may be impacted upon, but also a buffer zone which may be indirectly affected by, for example, alterations to hydrology, vehicle movement compaction or land to be managed as part of compensation or mitigation of the proposal.

We would expect surveys to extend to the proposed access route and new tracks. The ES should also fully consider the potential natural heritage impacts of vehicle movements, track creation and modification along the full length of the proposed routes, including those outwith the development area. The applicant may find the "Constructed Tracks in the Scottish Uplands" (available from our website publications pages, via http://www.snh.org.uk/pdfs/publications/heritagemanagement/constructedtracks.pdf) provides useful advice on track creation and maintenance in upland area. The Forestry Commission's "Forests and Water Guidelines" (4th edition) (available from http://www.forestry.gov.uk/PDF/fcgl002.pdf/$FILE/fcgl002.pdf) also provides useful advice on water crossings and working in forests.

The importance of habitat types should be analysed, and that the amount of habitat lost will be quantified, we recommend that habitat mitigation measures, including any areas of restoration are described in a dedicated Habitat Management Plan. Further guidance on what to include in Habitat Management Plans can be found on our website (http://www.snh.gov.uk/planning-and-development/renewable-energy/onshore-wind/general-advice-and-information/)

Advice on peatland habitats is given above.

6. Access and Recreation

With reference to the Land Reform (Scotland) Act 2003, the applicant should pay due regard to the potential use of the area for recreation by the general public when designing and planning the proposed development. Regard should be given not only to the proposed development site but also the proposed access routes and additional tracks, which may increase the perceived recreational value of the area. Access should not be restricted unless necessary for health and safety or other overriding reasons. Where access needs to be restricted at any time, clear signage following the Scottish Outdoor Access Code branding guidelines is recommended (http://www.outdooraccessscotland.com/branding/).

Development Management and Strategic Road Safety
Trunk Road and Bus Operations

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TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

Theresa McInnes
Energy Consents Unit
The Scottish Government
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Econsents_Admin@gov.scot

Your ref:

Our ref:
TS00538

Date:
26/10/2017

Dear Sirs,

ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) (EIA) REGULATIONS 2000 – SCOPING REPORT FOR THE RED JOHN PUMPED STORAGE HYDRO SCHEME.

With reference to your recent correspondence on the above development, we acknowledge receipt of the Red John Hydro Scoping Report (SR), dated September 2017 and prepared by AECOM in support of the above development.

This information has been passed to SYSTRA Limited for review in their capacity as Term Consultants to Transport Scotland – Trunk Road and Bus Operations (TRBO). Based on the review undertaken, we would provide the following comments.

Proposed Development

The proposed development comprises the construction of a Pumped Storage Hydro scheme (PSH) of approximately 400MW installed electrical generation capacity. The site is located 14km south-west of Inverness and we note that the nearest trunk road to the site is the A9(T), located approximately 12km to the north-east.

Pre-Scoping

Transport Scotland was consulted on a pre-scoping report and provided comments in a letter dated 11/09/2017. It is noted that the Scoping Report under consideration has not changed significantly since this previous submission, with the most notable amendment being headpond options. The choice of headpond has no bearing on the Trunk Road network and consequently, Transport Scotland has no comment to make on this issue. In conclusion, the comments made in our previous correspondence remain valid. For ease of reference, these have been provided again below.

Construction

The SR indicates that construction of the development is expected to take up to 5 years and it has the potential to generate a significant volume of materials which will vary and differ depending on the chosen design option.

Environmental Impact Assessment

The SR indicates that Traffic and Transport will be dealt with within Chapter 10 of the Environmental Statement (ES). This indicates that at present there are no Trunk Roads identified within the study network, however, we note that the A9(T) may be utilised for the transportation of quarried materials.

In the event that the trunk road is to be utilised, we would request that an assessment of the potential effects of traffic and transport relating to the construction of the new proposal on the trunk road receptors be undertaken as part of the EIA.

Detailed assessment of potential trunk road related environmental impacts (associated with increased traffic) such as driver delay, severance, pedestrian amenity, safety etc should be considered and assessed where appropriate (i.e. where Institute of Environmental Management and Assessment (IEMA) Guidelines for further assessment are breached). These specify that road links should be taken forward for assessment if:

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

The methods adopted to assess the likely traffic and transportation impacts on traffic flows and transportation infrastructure should comprise:

- Determination of the baseline traffic and transportation conditions, and the sensitivity of the site and existence of any receptors likely to be affected in proximity of the trunk road network;
- Review of the development proposals to determine the predicted construction and operational requirements; and
- Assessment of the significance of predicted impacts from these transport requirements, taking into account impact magnitude (before and after mitigation) and baseline environmental sensitivity.

Where environmental impacts are fully investigated but found to be of little or no significance, it is sufficient to validate that part of the assessment by stating in the EIA report:

- The work that has been undertaken;
- What this has shown i.e. what impact if any has been identified; and
- Why it is not significant.

It is not necessary to include all the information gathered during the assessment of these impacts, although this information should be available, if requested.

Noise and Air Quality Assessments

We note that an assessment of potential noise impacts associated with the construction phase will be provided within the EIA Report. Given the temporary nature of the construction phase, we can confirm that we do not require any assessment of trunk road receptors in this regard. Similarly, there will be no requirement to provide any assessment of potential air quality or vibration impacts on trunk road receptors.

Operational Assessment

The SR indicates that once the PSH facility is operational, the amount of traffic associated with the development will be minimal, therefore, it is proposed that any operational assessment will be scoped out of the EIA Report. This is considered acceptable.

I trust that the above is satisfactory and should you wish to discuss any issues raised in greater detail, please do not hesitate to contact Alan DeVenny at SYSTRA's Glasgow Office on 0141 226 6923.

Yours faithfully

[redacted]

John McDonald

Transport Scotland
Trunk Road and Bus Operations

cc Alan DeVenny – SYSTRA Ltd.

31 October 2017

Joyce Melrose
Admin Officer
Energy Consents Unit
The Scottish Government

Dear Ms Melrose,

Red John Pumped Storage Hydro Scheme

Thank you for giving VisitScotland the opportunity to comment on the above Pumped Storage Hydro Scheme.

Our response focuses on the crucial importance of tourism to Scotland's local and national economy, and of the natural landscape for visitors.

Background Information

VisitScotland, as Scotland's National Tourism Organisation, has a strategic role to develop Scottish tourism in order to get the maximum economic benefit for the country. It exists to support the development of the tourism industry in Scotland and to market Scotland as a quality destination.

While VisitScotland understands and appreciates the importance of renewable energy, tourism is crucial to Scotland's economic and cultural well-being. It sustains a great diversity of businesses throughout the country. According to a recent independent report by Deloitte, tourism generates £11 billion for the economy and employs over 200,000 - 9% of the Scottish workforce. Tourism provides jobs in the private sector and stimulates the regeneration of urban and rural areas.

One of the Scottish Government and VisitScotland's key ambitions is to grow tourism revenues and make Scotland one of the world's foremost tourist destinations. This ambition is now common currency in both public and private sectors in Scotland, and the expectations of businesses on the ground have been raised as to how they might contribute to and benefit from such growth.

Importance of scenery to tourism

Scenery and the natural environment have become the two most important factors for visitors in recent years when choosing a holiday location.

The importance of this element to tourism in Scotland cannot be underestimated. The character and visual amenity value of Scotland's landscapes is a key driver of our tourism product: a large majority of visitors to Scotland come because of the landscape, scenery and the wider environment, which supports important visitor activities such as walking, cycling wildlife watching and visiting historic sites.

The VisitScotland Visitor Experience Survey (2015/16) confirms the basis of this argument with its ranking of the key factors influencing visitors when choosing Scotland as a holiday location. In this study, over half of visitors rated scenery and the natural environment as the main reason for visiting Scotland. Full details of the Visitor Experience Survey can be found on the organisation's corporate

website, here: http://www.visitscotland.org/research_and_statistics/tourism_topics/wind_farms-1.aspx

Taking tourism considerations into account

We would suggest that full consideration is also given to the Scottish Government's 2008 research on the impact of wind farms on tourism. In its report, you can find recommendations for planning authorities which could help to minimise any negative effects of renewable energy developments on the tourism industry. The report also highlights a request, as part of the planning process, to provide a tourism impact statement as part of the Environmental Impact Analysis. Planning authorities should also consider the following factors to ensure that any adverse local impacts on tourism are minimised:

- The number of tourists travelling past en route elsewhere
- The views from accommodation in the area
- The relative scale of tourism impact i.e. local and national
- The potential positives associated with the development
- The views of tourist organisations, i.e. local tourist businesses or VisitScotland

The full study can be found at www.scotland.gov.uk/Publications/2008/03/07113507/1

Conclusion

Given the aforementioned importance of Scottish tourism to the economy, and of Scotland's landscape in attracting visitors to Scotland, VisitScotland would strongly recommend any potential detrimental impact of the proposed development on tourism - whether visually, environmentally and economically - be identified and considered in full.

VisitScotland strongly agrees with the advice of the Scottish Government –the importance of tourism impact statements should not be diminished, and that, for each site considered, an independent tourism impact assessment should be carried out. This assessment should be geographically sensitive and should consider the potential impact on any tourism offerings in the vicinity.

VisitScotland would also urge consideration of the specific concerns raised above relating to the impact any perceived proliferation of developments may have on the local tourism industry, and therefore the local economy.

We hope this response is helpful to you.

Yours sincerely

[redacted]

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