



The Scottish Government
Energy Consents Unit

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

Scienteuch Wind Farm
Natural Power Consultants Ltd
On behalf of Renewables Energy Systems Limited (RES)

November 2021

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1. Introduction

1.1 This scoping opinion is issued by the Scottish Government Energy Consents Unit on behalf of Scottish Ministers to Natural Power Consultants Ltd, on behalf of Renewables Energy Systems Limited (RES), a company incorporated under the Companies Act with company number 1589961 and having its registered office at Beaufort Court, Egg Farm Lane, Station Road, Kings Langley Hertfordshire WD4 8LR (“the Company”). This is in response to a request dated 10 August 2021 for a scoping opinion under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 in relation to the proposed Scienteuch Wind Farm (“the proposed Development”). The request was accompanied by a scoping report.

1.2 The proposed development site is located in both South Ayrshire and East Ayrshire near Waterside, east of the A713. The site of the proposed Development covers an area of approximately 1,000 hectares and is currently a mixture of sheep grazing and commercial forestry. It occupies forested hills and the River Doon valley passes to the east, with settlements at Dalmellington, Waterside and Patna. To the west is the Water of Girvan, which flows through the village of Straiton.

Scottish Ministers are aware that the Company is currently exploring the possibility of using borrow pits on the site, the potential impact of any borrow pits should be considered in the EIA.

1.3 The proposed Development will consist of 9 turbines with a likely maximum blade tip height of 200 metres.

1.4 In addition to wind turbines, there will be ancillary infrastructure including:

- Transformers and associated switchgear
- wind turbine foundations;
- crane hardstands at each turbine location;
- substation compound containing a control building;
- site access route from main road network;
- on series of onsite tracks;
- underground cabling;
- borrow pits(dependant on availability of stone on site);
- temporary construction compounds;
- water crossings;
- temporary concrete batching plant;
- signage and anemometer and/or communication masts.

1.5 The Company has not indicated the operational life of the proposed Development however the proposed Development will be decommissioned and the site restored in accordance with a decommissioning and restoration plan.

1.6 The proposed development is located within the planning authority areas of South Ayrshire Council and East Ayrshire Council.

1.7 Located to the west of Waterside, Dalmellington the site was subject to a previous application for wind energy development by RES in 2013 (Keirs Hill Wind Farm application). Chapter 1.2 of the scoping report “need for the development” sets out the Company’s position regarding this proposed Development.

2. Consultation

2.1 Following the request for a scoping opinion, a list of consultees was agreed between Natural Power (acting as the Company’s agent), and the Energy Consents Unit. Scottish Ministers undertook a consultation on the scoping report and this commenced on 01 September 2021. The consultation closed on 22 September 2021.

2.1.1 Extensions to this deadline were granted to:

- East Ayrshire council;
- South Ayrshire Council;
- Historic Environment Scotland;
- Scottish Environment Protection Agency (SEPA);
- NatureScot;
- Crown Estate Scotland;
- RSPB Scotland; and
- Crosshill, Straiton and Kirkmichael Community Council.

2.1.2 Scottish Ministers also requested responses from their internal advisors Transport Scotland and Scottish Forestry. Standing advice from Marine Scotland Science (MSS) has been provided with requirements to complete a checklist prior to the submission of the application for consent under section 36 of the Electricity Act 1989. All consultation responses received, and the standing advice from MSS, are attached in **ANNEX A Consultation responses** along with a full list of consultees.

2.2 The purpose of the consultation was to obtain scoping advice from each consultee on environmental matters within their remit. Responses from consultees and advisors should be read in full for detailed requirements and for comprehensive guidance, advice and, where appropriate, templates for preparation of the Environmental Impact Assessment (EIA) report.

2.3 Unless stated to the contrary in this scoping opinion, Scottish Ministers expect the EIA report to include all matters raised in responses from the consultees and advisors.

2.4 No responses were received from:

- Scottish Forestry
- Civil Aviation Authority – Airspace
- Crown Estate Scotland
- Fisheries Management Scotland
- Doon ASFB
- Joint Radio Company
- Mountaineering Scotland

- Scottish Wildlife Trust
- Scottish Wild Land Group (SWLG)
- Visit Scotland
- West of Scotland Archaeology Service
- Galloway and Southern Ayrshire Biosphere
- Patna Community Council
- Dalmellington Community Council

2.5 With regard to those consultees who did not respond, it is assumed they have no comment to make on the scoping report, however each would be consulted again in the event that an application for section 36 consent is submitted subsequent to the Environmental Impact Assessment scoping opinion.

2.6 The Scottish Ministers are satisfied that the requirements for consultation set out in Regulation 12(4) of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 have been met.

3. The Scoping Opinion

3.1 This scoping opinion had been adopted following consultation with South Ayrshire Council and East Ayrshire Council, within whose area the proposed development would be situated. Scottish Environment Protection Agency (“SEPA”), NatureScot (Previously “SNH”) and Historic Environment Scotland (“HES”), were also consulted as statutory consultation bodies, as were other bodies, which Scottish Ministers considered likely to have an interest in the proposed development by reason of their specific environmental responsibilities or local and regional competencies.

3.2 Scottish Ministers adopt this scoping opinion having taken into account the information provided by the Company in their request dated 10 August 2021 in respect of specific characteristics of the proposed Development and responses received to the consultation undertaken. In providing this scoping opinion, the Scottish Ministers have had regard to current knowledge and methods of assessment; have taken into account the specific characteristics of the proposed Development, the specific characteristics of that type of development and the environmental features likely to be affected.

3.3 A copy of this scoping opinion has been sent to South Ayrshire Council and East Ayrshire Council for publication on their website. It has also been published on the Scottish Government energy consents website at www.energyconsents.scot.

3.4 Scottish Ministers expect the EIA report, which will accompany the application for the proposed Development to consider in full all consultation responses attached in **Annex A**.

3.5 Scottish Ministers are satisfied with the scope of the EIA set out in chapter 2 Section 2.3.3 of the scoping report.

3.6 In addition to the consultation responses, Ministers wish to provide comments with regards to the scope of the EIA report. The Company should note and address each matter.

3.7 The proposed development set out in the scoping report refers to wind turbines and other technologies and if the proposed development includes battery storage and/or solar panels further information may be required. Any application submitted under the Electricity Act 1989 requires to clearly set out the generation station(s) that consent is being sought for. For each generating station details of the proposal require to include but not limited to:

- the scale of the development (dimensions of the wind turbines, battery storage, solar panels if included in the final design)
- components required for each generating station
- minimum and maximum export capacity of megawatts and megawatt hours of electricity for battery storage and the technology being used.

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

3.9 Scottish Ministers request that the Company investigates the presence of any private water supplies which may be impacted by the development. The EIA report should include details of any supplies identified by this investigation, and if any supplies are identified, the Company should provide an assessment of the potential impacts, risks, and any mitigation which would be provided. Scottish Ministers advise the Company to take on board the points raised by South Ayrshire Council and their Environmental Health Department regarding the Private Water Supplies in the area.

3.10 Scottish Ministers request the Company now review Marine Scotland's generic scoping guidelines for both onshore wind farm and overhead line development which outline how fish populations can be impacted during the construction, operation and decommissioning of a wind farm development and informs developers as to what should be considered, in relation to freshwater and diadromous fish and fisheries, during the EIA process. (<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren>).

3.10.1 In addition to identifying the main watercourses and waterbodies within and downstream of the proposed development area, developers should identify and consider, at this early stage, any areas of Special Areas of Conservation where fish are a qualifying feature and proposed felling operations particularly in acid sensitive areas.

3.10.2 MSS also provide standing advice for onshore wind farms (which has been appended at **Annex A** which outlines what information, relating to freshwater and diadromous fish and fisheries, is expected in the EIA report. Use of the checklist, provided in Annex 1 of the standing advice, should ensure that the EIA report contains the required information; the absence of such information may necessitate requesting additional information which may delay the process.

3.11 Scottish Ministers request the Company now review SEPA's standing advice and planning guidance which is available at the link below and to contact them at the earliest opportunity to discuss impacts on watercourses, lochs, groundwater, other water features and sensitive receptors, such as water supplies, need to be assessed. Measures to prevent erosion, sedimentation or discolouration will be required, along with monitoring proposals and contingency plans.

<http://sepa.org.uk/environment/land/planning>

3.12 Scottish Ministers consider that where there is a demonstrable requirement for peat landslide hazard risk assessment, the assessment should be clear understanding of whether the risks are acceptable and capable of being controlled by mitigation measures. The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition), published at <http://www.gov.scot/Publications/2017/04/8868>, should be followed in the preparation of the EIA report, which should contain such assessment and details of mitigation measures. Scottish Ministers are aware that 'Class 1' priority peatland is located within the Site.

3.13 The proposed viewpoints are given at Table 5.1 of the scoping report. At this stage we would request that any additional viewpoints, wireframes, ZTVs and photomontages as requested by East Ayrshire Council, South Ayrshire Council and NatureScot are considered in full.

3.13.1 It is recommended by the Scottish Ministers that the final list of viewpoints and visualisations should be agreed following discussion between the Company, East Ayrshire Council, South Ayrshire Council and NatureScot.

3.14 The noise assessment should be carried out in line with relevant legislation and standards as detailed in chapter 12 of the scoping report. The noise assessment report should be formatted as per Table 6.1 of the IOA "A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise. Scottish Ministers request that the Company see the points raised by East Ayrshire Council and South Ayrshire Council who have responded to the focused questions and previous noise survey.

3.15 As the maximum blade tip height of turbines exceeds 150m the LVIA as detailed in chapter 5 of the scoping report must include a robust Night Time Assessment with agreed viewpoints to consider the effects of aviation lighting and how the chosen lighting mitigates the effects. Scottish Ministers request that the Company contacts Defence Infrastructure Organisation and Glasgow Prestwick Airport for further information on Aviation Safety lighting and Low Flying Aircraft.

3.16 Scottish Ministers request that the Company review the information provided in the response from Glasgow Airport and Glasgow Prestwick Airport regarding mitigation measures for impacts on primary radars and Instrument Flight Procedure (IFP) and NATS Safeguarding for further information on safeguarding criteria.

3.17 Scottish Ministers request that the Company review the information provided in the response from Historic Environment Scotland and undertakes an initial

assessment of potential impacts on scheduled monuments, category A listed buildings, and GDLs at an early stage and consults Historic Environment Scotland once this has been undertaken and to keep The Scottish Ministers up to date with any ongoing dialogue.

3.18 Scottish Ministers request that the Company review the information provided in the response from South Ayrshire Council, and John Muir Trust and undertakes a Wild Land Area Impact Assessment for Merrick Wild Land Area.

3.19 Scottish Ministers are aware that further engagement is required between parties regarding the refinement of the design of the proposed development regarding, among other things, surveys, management plans, peat, finalisation of viewpoints, transport routes, cultural heritage, designated sites and cumulative assessments and they request that they are kept informed of relevant discussions.

4. Mitigation Measures

4.1 The Scottish Ministers are required to make a reasoned conclusion on the significant effects of the proposed development on the environment as identified in the EIA. 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, in tabular form, of all mitigation measures proposed in the environmental assessment, where that mitigation is relied upon in relation to reported conclusions of likelihood or significant of impacts.

5. Conclusion

5.1 This scoping opinion is based on information contained in the Company's written request for a scoping opinion and information available at the date of this scoping opinion. The adoption of this scoping opinion by the Scottish Ministers does not preclude the Scottish Ministers from requiring of the Company information in connection with an EIA report submitted in connection with any other application for section 36 consent for the proposed development.

5.2 This scoping opinion will not 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.

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

5.4 It is acknowledged that the environmental impact assessment process is iterative and should inform the final layout and design of proposed developments. Scottish Ministers note further engagement between relevant parties in relation to the refinement of the design of this proposed development will be required, and would request that they are kept informed of on-going discussions in relation to this.

5.5 Applicants are encouraged to engage with officials at the Scottish Governments Energy Consents Unit at the pre-application stage and at design chill (before proposals reach design freeze.)

5.6 Applicants are reminded that there will be limited opportunity to materially vary the form and consent of the proposed development once an application is submitted.

5.7 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.

5.8 It should be noted that to facilitate uploading to the Energy Consents portal, the EIA report and its associated documentation should be divided into appropriately named separate files of size no more than 10 megabytes (MB). In addition, a separate CD/USB stick containing the EIA report and its associated documentation in electronic format will be required.

Carolanne Brown
Energy Consents Unit
November 2021

ANNEX A

Consultation

List of consultees

East Ayrshire Council	A1-A13
South Ayrshire Council	A14-A18
Ayrshire River Trust	A19-A20
British Horse Society	A21-A23
BT	A24-A25
Civil Aviation Authority – Airspace*	
Crown Estate Scotland*	
Defence Infrastructure Organisation	A26-A27
Doon ASFB*	
Edinburgh Airport	A28
Fisheries Management Scotland*	
Galloway and Southern Ayrshire Biosphere*	
Glasgow Airport	A29
Glasgow Prestwick Airport	A30-A31
Highlands & Islands Airport*	
Historic Environment Scotland	A32-A34
John Muir Trust	A35
Joint Radio Company*	
Mountaineering Scotland*	
NATS Safeguarding	A36-A45
NatureScot	A46-A52
RSPB Scotland	A53
Scottish Environment Protection Agency (SEPA)	A54-A60
Scottish Forestry*	
Scottish Rights of Way and Access Society (ScotWays)	A61-A68
Scottish Water	A69-A70
Scottish Wild Land Group (SWLG)*	
Scottish Wildlife Trust*	
Visit Scotland*	
West of Scotland Archaeology Service*	
Crosshill, Straiton & Kirkmichael Community Council	A73-A78
Dalmellington Community Council*	
Patna Community Council*	

Officials from Transport Scotland and Marine Science Scotland areas of the Scottish Government provided internal advice at A71 to A72, and A79 to A87 respectively.

*No consultee responses were received.

General Letter

Governance

**Chief Governance Officer, Solicitor to the Council
and Council Monitoring Officer: David Mitchell**



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Our Ref: 21/0004/S36SCP

Date: 30th September 2021

Contact: Graham Mitchell

Scottish Government Energy Consents Unit
4th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Dear Sir/Madam

**THE ELECTRICITY ACT 1989 SECTION 36
THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT)
(SCOTLAND) REGULATIONS 2017**

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36
APPLICATION FOR SCLENTEUCH WIND FARM**

Site Address: Scienteuch Wind Farm

I refer to your email dated 01 September 2021 requesting this Council's comments regarding the scoping report submitted by Natural Power on behalf of RES.

The purpose of this response is to provide advice and guidance based on the Planning Authority's knowledge of the site and the surrounding area, and has included any comments received from the limited consultation undertaken by the Planning Authority. This enables the Applicant to consider the issues that are identified and address these in the EIA process and EIA Report associated with the Section 36 application.

The Council has undertaken a limited consultation with internal departments though at the time of providing this response no responses have been received.

The Opera House
8 John Finnie Street
Kilmarnock, KA1 1DD
T E L: 0 1 5 6 3 5 7 6 7 9 0
F A X: 0 1 5 6 3 5 5 4 5 9 2
www.east-ayrshire.gov.uk

If responses are subsequently received they will be forwarded to you for your consideration. You should be aware that this consultation list is selective as the onus, in this case, is on the Energy Consents Unit to undertake statutory and non-statutory consultations. A list of further consultees that would be useful to engage with as part of this process is included as Appendix 1. Please be aware that any lack of inclusion on this list of a particular party or organisation in no way indicates that the Planning Authority considers that consultation would not be beneficial.

The sections below highlight the comments of the Planning Authority on a number of matters. Please note that comments of any consultees have not been fully replicated, therefore the content of any responses should be treated in the same manner and given the same consideration as the comments below.

Non-technical summary

This should be written in simple non-technical terms and should include a summary of the main issues of each chapter of the EIA Report, including the significant effects of the development and any mitigation measures to address these potential adverse impacts. A plan sufficient to identify the application site within the wider locality and a proposed site plan should be incorporated as a minimum.

Summary of Environmental Information

A summary of the environmental information assessed throughout the EIA Report shall be provided.

List of qualifications and evidence of competency

A list detailing the qualifications and evidence of relevant expertise / competency of each individual who has been involved in the production of the EIA Report, including those involved in the assessments which have been used to inform the various chapters of the EIA Report, shall be included.

Format of the EIA Report

Two full paper copies including appendices should be provided to the Planning Authority for internal use, although additional paper copies may be required depending on whether temporary restrictions / exemptions regarding copies for public inspection change.

A number of electronic copies should also be provided including at least one copy that is split into manageable sized files for uploading by the Applicant to the online viewing system of the Planning Authority. These files should be clearly named thus enabling easier public interpretation, consideration and navigation. An example would be splitting the EIA Report by chapter / topic. Any confidential

annex should be clearly marked and kept separate from the remainder of the EIA Report but should not contain any non-confidential information or, if it does, this should be replicated within the EIA Report.

Consideration of alternatives

Schedule 4, paragraph 2 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 requires that information on the reasonable alternatives (including design, technology, location, size and scale) considered and the main reasons for selecting the chosen option, including a comparison of the environmental effects be included within the EIA Report. Such consideration of alternatives should therefore be included within the EIA Report.

Baseline Information

The Council has published a State of the Environment Report on its website: <https://www.east-ayrshire.gov.uk/PlanningAndTheEnvironment/Development-plans/State-of-the-Environment-Report.aspx>

This report collates up to date information on the environment within East Ayrshire and how it is changing. The information can be used to help inform applications. This may be of use when preparing your EIA Report.

EIA Assessment Methodology

There should be a degree of flexibility adopted within the EIA Report when reporting the significance of the impacts as moderate effects can be considered as significant in terms of the EIA Regulations and would be based on the assessor's judgement.

Planning Policy Context

The Council would advise that some policies contained within the East Ayrshire Minerals Local Development Plan could also be relevant to the proposed development (particularly given that borrow pits are being indicated as likely to be proposed at this time), and therefore this plan will also require consideration in addition to the East Ayrshire Local Development Plan 2017. The Council has nothing further to add in respect of this section, though would note that Scottish Ministers advised that SPP 2014 would remain in force rather than any amended 2020 version at this time.

Landscape and Visual

The Planning Authority agrees that a 45km study area and 60km cumulative study area are appropriate in this case given the scale of the proposed turbines. Based on the indicative ZTV (Figure 5.2) provided detailed study areas of 20km for the project-alone and 25km for cumulative landscape and visual impacts are considered reasonable.

The Applicant is advised to keep the cumulative situation under review during the preparation of the EIA Report as this is an evolving situation, particularly in this part of the district where there is considerable wind energy development pressure. In this respect, it is suggested that they make contact with any local authorities within the study area to obtain up to date information relating to wind energy development in their respective authority areas. With respect to Table 5.2 and the Overhill scheme mentioned, in addition to the current application for 10 x 180m high turbines (refused at Planning Committee on 24 September but still within the appeal period so should still be considered), there is also an existing consent on this site for 10 x 149.9m high turbines. So the assessment will need to consider both the consented scheme and proposed scheme. In terms of any Section 36 applications, you should keep these in review as some have changed such as North Kyle, with adjustments to turbine numbers.

In addition to the cumulative effects with other wind farms, the Applicant should give consideration to potential effects with other tall structures such as electricity pylons and any nearby mineral extraction sites (or former sites yet to be restored) which could contribute to cumulative landscape and visual impacts.

Regarding the proposed viewpoint locations as set out in Table 5.1, The Planning Authority would agree to these (although relevant neighbouring authorities may wish to clarify if locations in their areas are acceptable to them). A viewpoint from the core path which runs through the site would be requested in addition.

In terms of the night-time photomontage visualisations, the Planning Authority would agree with the viewpoints listed in section 5.3.22 of the Scoping Report. In addition we would also request Viewpoint 6 (Dalmellington) be included and some form of wireline or visual produced to evidence whether or not the turbines would be visible at hub height from the Scottish Dark Sky Observatory (currently damaged by fire but still worth considering in the event this tourist facility be rebuilt and reopened to the public). Lighting impacts on the Dark Sky Park will also need to be assessed, particularly given the close proximity to the boundaries of this designation, and the Planning Authority welcome any detailed consideration of aviation lighting impacts on this designation alongside consideration of Dark Sky Park Lighting Supplementary Guidance.

Any measures to reduce the number of lights required should be reported within the EIA Report alongside any details regarding any mitigation of the lighting where available.

No mention is made about cumulative lighting impacts. Given the increasing numbers of turbines operational / consented / proposed which have / will require visible aviation safety lighting then the night-time lighting assessment shall also include a cumulative night-time assessment taking into account other wind farms / turbines which have / will require visible aviation lighting and any other tall

structures which have visible aviation lighting on them.

The Planning authority welcomes the addition of a Residential Visual Amenity Assessment and would request that cumulative schemes are shown on separate wirelines to the project-alone wirelines. Additionally photomontages should be considered from some properties to assist the consideration and assessment of impacts from them where the turbines are more prominent.

The Council's East Ayrshire Landscape Wind Capacity Study should be considered when assessing landscape character and visual impacts rather than just those landscape character areas identified by NatureScot. The Council welcomes the inclusion of an assessment of the Sensitive Landscape Areas.

Cultural Heritage and Archaeology

Inner study area up to 500m for more direct impacts and outer study area of 10km for wider, setting impacts seems reasonable.

With respect to Gardens and Designed Landscapes (GDLs) those not on the inventory are also protected and consideration of impacts on any such non-inventory GDLs should also be assessed. Two closest non-inventory GDLs include Grimmet GDL and Keirs Castle GDL, the latter being located partly within the application site. The Planning Authority welcomes the assessment of impacts on Craigenhillan inventory GDL. There should be some flexibility when considering viewpoints as some heritage assets may benefit from visualisations to aid the assessment of impacts on their setting. Comments from Historic Environment Scotland and West of Scotland Archaeology Service should be taken into account when finalising the assessment methodology in respect of Cultural Heritage and Archaeology.

Scheduled Monuments will require assessment, with Waterside having such designations around the settlement. Setting impacts on conservation areas will also require to be taken into account, with Waterside conservation area most likely to experience setting impacts.

Ecology

Local Nature Conservation Sites (LNCS) should be assessed alongside other ecological designations such as S.S.S.I.s. There are a number of LNCS within relatively close proximity to the application site including one within it (Wallace Moor / Keirs Hill LNCS). Impacts on Ancient Woodland will also need to be assessed with such ancient woodland already located within the proposed application site and others out with (though those out with the application site may be less likely to face impacts).

Consultation should also be undertaken with the River Doon Salmon Fisheries Board and Ayrshire Rivers Trust to agree on the appropriate methodologies and

scope of assessment in terms of fish and other species. The Planning Authority would suggest the Applicant ensure any requirements and advice from NatureScot, SEPA, RSPB and the Scottish Wildlife Trust be taken into account to inform the scope of the assessment, including any cumulative impact assessment, of such matters for reporting within the EIA Report.

Ornithology

The Planning Authority has no particular comments to make with regards to ornithological matters and would suggest the Applicant ensure the requirements and requests of NatureScot and RSPB and any other relevant body with information and records of relevant ornithological interests are taken into account to inform the assessment of these matters for reporting within the EIA Report.

Geology, Hydrology and Hydrogeology

In terms of flood risk, any potential for the release of water from peat excavation should be considered as a potential cause of flooding.

With regards to any Private Water Supplies (PWS), the EIA Report should risk assess any PWS potentially affected by the proposed development, and in assessing the risk, should not only consider the source, its catchment and the receptor, but also identify / map out and consider the pathway from the source to the receptor. Only through identifying the pathway is it possible to gain a full understanding of any potential impacts that infrastructure / construction activity might have on any PWS. Details of any mitigation and/or contingency measures that may be required should be detailed within the EIA Report. The Council's Environmental Health Service should be contacted to assist in the identification of any PWS in and around the site. It would also be appropriate to contact relevant neighbouring authorities with respect to any potential PWS in their area or sourced from within / with a pathway through the application site.

In terms of any borrow pits, if these are taken forward as part of the proposed development, the EIA Report should include information on the location, size and nature of these borrow pits, including details of the depth of the borrow pit floor and an indicative borrow pit final reinstated profile. The impact of such features (including dust, blasting and impacts on hydrology) should be appraised as part of the overall impact of the proposal. Information on the proposed depth of excavations compared to the actual topography, the proposed restoration profile, proposed drainage and settlement traps, turf and overburden removal and storage for reinstatement should be included within the EIA Report. The Council's Minerals Local Development Plan includes a policy on borrow pits and information to address the requirements set out within that policy should form part of the EIA Report.

The Council has also recently adopted new non-statutory guidance - Peat, excess soils and sewage sludge, which will be relevant to the proposed

development.

The relevant fisheries boards should be consulted to discuss their expectations and requirements regarding the extent of hydrological assessment required to inform the assessment of hydrological impacts, including water quality impacts, which also links to the potential ecological impacts on aquatic life.

The application site features areas identified as high risk on the Coal Authority Mining Risk Assessment and the Coal Authority should be consulted to ascertain the scope of methodology and assessment required to address any potential risks for reporting in the EIA Report. The Planning Authority would also rely on detailed comments on such matters from NatureScot, SEPA and the Scottish Government's advisors on peat, Ironside Farrar Ltd. These bodies would be able to advise further on the appropriateness of the methodologies reported.

Forestry

Details of any compensatory forestry planting should be detailed within the EIA Report and accompanied by relevant figures to demonstrate areas of loss and compensatory planting as relevant. Some details of species composition and design of any compensatory planting areas would be beneficial. It may be worth considering native broadleaf species if appropriate. Scottish Forestry would be able to advise in more detail as to the expectations of a forestry chapter or any relevant guidance. Any potential impacts on Ancient Woodland will also require to be considered.

Traffic and Transport

Early contact with the Ayrshire Roads Alliance (ARA) is advised. Should any comments be subsequently received from ARA in respect of the Scoping Report these will be sent on to the Energy Consents Unit.

The Planning Authority would advise that any assessment of traffic impacts should be based on a worst-case scenario which assumes 100% of construction materials such as stone requiring to be imported to site. Any expected reduction in stone importation due to the use of borrow pits can be reported within the EIA Report, along with the consequent effect this would have on traffic volumes. A worst-case scenario should nevertheless be presented in case any proposed borrow pits fail to provide the anticipated volume of stone to ensure a robust assessment of impacts.

The EIA Report should identify potential sources of materials (e.g. stone quarries) if these are off-site and consider the impacts of those routes to site, including communities along those routes. Such assessment should also include cumulative impacts with other developments. As highlighted within SPP, borrow pits should only be permitted where there are significant environmental or economic benefits compared to obtaining material from local quarries. As such,

should any borrow pits be proposed, appropriate environmental and/or supporting information should be submitted to justify the need for borrow pits. The Council's Minerals Local Development Plan Policy MIN SUP2 indicates the matters the Council would take into consideration, and supporting evidence Applicants should provide, in respect of borrow pits.

Any consented / under construction developments likely to generate large volumes of traffic should be taken into account in the cumulative traffic assessment and should not necessarily be limited to other wind farm developments.

Transport Scotland may provide advice in respect of the trunk road network. The EIA Report should detail the port of entry and the delivery route for turbine components to site.

Noise

Whilst consultation with the Council's Environmental Health Service will be useful and could assist with agreeing the noise methodology, the Council currently uses the services of an independent noise consultant to deal with wind farm noise matters and the Planning Authority would recommend that discussion is undertaken with the Council's noise consultant to agree the methodology for noise assessment. The Planning Authority would encourage the use of the lower end of the ETSU limits. Cumulative noise assessments with other wind farms is welcome although the Applicant should also consider other noise generating developments within the vicinity and consider the impacts these might have in addition to the proposed development.

The Planning Authority would agree that low frequency noise (or infrasound) can be scoped out of the assessment. The Council has experience of a wind turbine which was generating Amplitude Modulation such that it was deemed to be causing a statutory noise nuisance and a noise abatement notice was served on the operator. Nevertheless, the Planning Authority understands that until such time as the relevant guidance is updated, there is no formally adopted method for assessing Amplitude Modulation and the Planning Authority agrees that this can be scoped out of the assessment.

Safety and Other Issues

Safety:-

Provided the relevant chapters make it clear that public health has been addressed within where relevant, then a specific chapter on human health and public safety would not be necessary. A separate chapter could be used to cover off this requirement of the EIA Regulations if the Applicant wished to take such an approach. Measures to suppress dust in the interests of air quality should be set out within the EIA Report.

Major Accidents and/or Incidents:-

The Planning Authority consider it would be worthwhile to include a summary or table just to highlight each of the potential risks and provide a brief explanation as to why these are not deemed to be relevant or necessary of further detailed consideration within the EIA Report.

Public Access:-

The Applicant should summarise the measures taken to control public access during the construction period and during any operational period.

Aviation and Radar:-

The Planning Authority will required a detailed assessment of aviation impacts to accompany any application to ensure any potential impacts are fully assessed and any appropriate mitigation detailed. It would be beneficial if the continued requirement for visible aviation lighting is explored with the Civil Aviation Authority to understand if there is any scope or possibility that this requirement might change and the need for visible lighting could be reduced or eliminated entirely. Early engagement with all relevant aviation bodies is encouraged.

Television and Telecommunications:-

The Planning Authority considers that consultation with the relevant bodies should be undertaken to inform the assessment of impacts. It is expected that details of any correspondence to confirm the relevant system operators are satisfied that there will be no impacts is included within the EIA Report, alongside plans showing any relevant infrastructure or buffer areas to confirm that all proposed infrastructure is beyond the area of influence of such features. It remains the case that appropriate conditions are likely to be needed to ensure that if there are any impacts attributable to the proposed development, that these are mitigated.

Shadow Flicker:-

The Planning Authority is content that an assessment of shadow flicker is undertaken based on the location of turbines after the design freeze stage. It is worth noting that the 10 rotor diameters' distance is a guide and does not guarantee no effects will be experienced beyond that distance. The Planning Authority also has experience of a turbine within East Ayrshire which has been causing shadow flicker at a property which is beyond a distance of ten rotor diameters. As such, if there are properties beyond a distance of ten rotor diameters but not too distant, consideration should be given as to the potential effects on such properties. The Planning Authority notes that a distance of 2.5km is mentioned in the Scoping Report which should cover a distance of more than ten rotor diameters.

Potential Grid Connection

It seems appropriate if the grid connection route is known at the time of applying that this, and associated environmental impacts, can be reported and assessed

in detail within the EIA Report, though the Planning Authority notes that grid connections are often dealt with separately and is content with either approach.

Socio Economic

The EIA Report should consider any strategies for long-term public access to the site for recreational uses during its operational lifetime, including any options for connections to be made with surrounding land and uses, to maximise the public access benefits. Management of public access to the site during the construction period should also be detailed. It will be important to ensure that any recreational or tourist receptors which may face significant impacts as a result of landscape and visual impacts are considered. Whether this is fully addressed within an LVIA chapter or within the socio-economic chapter is not important, as long consideration of such impacts has been taken into account and reported.

The proposed approach set out in chapter 15 of the Scoping Report seems reasonable, with the inclusion of assessments of impacts on a range of recreational and tourist receptors proposed, including recreational routes (such as core paths) and other visitor attractions within the area. A core path exists through the proposed application site alongside a number of other core paths and rights of way on the eastern side of the Doon Valley where views towards the wind farm are likely. It is noted that the A713 forms the Galloway – Ayrshire Tourist Route and impacts on the qualities and experience of this route, predominantly by road users, should be assessed.

The EIA Report should also detail any proposed community benefits or shared ownership proposals.

Climate Impact Assessment

The full report generated from the Scottish Government's Carbon calculation, accounting for carbon emissions and losses through disturbance and loss of peatland and savings over the lifetime of the development, should be submitted as part of the EIA Report. The proposed methodology set out in the Scoping Report seems reasonable.

Other Matters

Waste

The Planning Authority consider that discussion should be made within the EIA Report of the potential sources of waste and how waste might be suitably dealt with (for example forestry waste used for brash matting, etc.), although these matters might be able to be addressed in each relevant chapter instead of a specific section.

Decommissioning and Restoration

Although not a specific topic, an assessment of the likely impacts of decommissioning of the proposed development on all of the environmental topics shall form part of the EIA Report (though it is noted for some topics this could be scoped out). This will ensure a reasonable idea as to what those impacts may be and what possible mitigation would be required. Mention is made of the development being considered in perpetuity. The application shall be accompanied by a decommissioning report which sets out a costed breakdown of the decommissioning, restoration and aftercare works likely on site, based on the observations made within the EIA Report regarding decommissioning.

The decommissioning report will require to be reviewed by the Council's independent consultants to inform the expected financial guarantee quantum which the Council would seek to secure via a Section 75 legal agreement. The Applicant should advise what mechanism they intend to secure this, such as a bond. These matters would inform the Council's assessment of the application. The complete removal of the development, including access tracks and ancillary infrastructure, as part of the decommissioning and restoration process is the preferred approach of this Council unless a better alternative (taking account of all relevant environmental, social and economic issues) can otherwise be demonstrated by the Applicant. Although potentially seeking a permanent consent, the Planning Authority still consider a financial guarantee would be necessary to secure decommissioning, restoration and aftercare on the site should the Applicant / Developer fail to do so and the environmental risks to the site if a development of such a nature is left on site.

Planning Monitoring Officer

The Council promotes the use of a Planning Monitoring Officer (PMO) on all major infrastructure developments. The PMO is appointed by the Council to assist in the assessment of detailed environmental planning conditions and to monitor and report on the construction works. The Council asks that developers fund the cost of the PMO and that this is secured by a Section 75 legal agreement. The benefits of the PMO use include more robust discharge of planning conditions, communities having greater certainty that proper monitoring is taking place and the developer is doing what they said they would do, and ultimately it provides an independent overview that can be relied upon during the construction phase and afterwards by the Council and the developer.

The use of the PMO need not necessarily be an integral part of the EIA Report, however, the Council's approach should be given consideration as part of the wider suite of monitoring and environmental best practice considered by the EIA Report.

Closing Comments

The Planning Authority note that much reference to Kiers Hill wind farm is made and there does appear to be a desire to link into, and attempt to address the issues raised in the decision by Scottish Ministers in that case. Whilst it would be reasonable to discuss / demonstrate how the Applicant has sought to overcome the previous issues associated with the previously proposed Kiers Hill wind farm, the Planning Authority would caution against too much emphasis on the previous scheme. Any new proposed scheme is a different development and impacts found in respect of the previous, different development, would not necessarily be similar to issues which could arise in respect of any new proposed development. The new application would be assessed based on its merits and the environmental impacts associated with that development irrespective of the findings of a previous assessment of a different development.

The Applicant is advised to ensure that all the requirements of the up to date regulations and guidance documentation is complied with in undertaking the EIA and subsequent compilation and submission of the EIA Report. The Applicant is advised to contact the relevant consultees to seek their views/input into the various chapters to ensure all matters raised are adequately dealt with and based on as up to date a position as possible.

Yours faithfully

Graham Mitchell
Interim Team Leader

Appendix 1 – suggested additional consultees

East Ayrshire Council Access Officer;

Scottish Power Energy Networks;

Scotland Gas Networks;

The Coal Authority;

Ayrshire Roads Alliance;

River Ayr District Salmon Fishery Board;

River Doon Salmon Fisheries Board;

Ayrshire Rivers Trust;

Scottish Wildlife Trust, and

Local Community Councils.



Place Directorate

Assistant Director: Louise Reid

Planning Service, County Buildings, Wellington Square, Ayr, KA7 1DR

Tel: REDACTED
 Email: alastair.mcgibbon@south-ayrshire.gov.uk
 Our Ref: Scienteuch
 Your Ref: ECU00003318
 Date: 8 October 2021

Carolanne Brown
 Energy Consents Unit
 5 Atlantic Quay
 150 Broomielaw
 Glasgow
 G2 8LU
By email

Dear Carolanne,

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 EIA Scoping Report (August 2021)

SITE ADDRESS **Proposed Scienteuch Wind Farm, located north east of Straiton, South Ayrshire and west of Waterside, East Ayrshire**

PROPOSAL: **Construction and operation of Scienteuch Windfarm comprising approximately 9 wind turbines to tip height of 200m (Application to be submitted to ECU under S36 of the Electricity Act 1989)**

Thank you for your email of 1st September 2021 inviting South Ayrshire Council's response as a consultee to the scoping opinion received by Scottish Ministers from Natural Power on behalf of RES. I acknowledge with gratitude your agreement to extend the period for issuing our Opinion. In keeping with the breadth of environmental topics acknowledged within the applicant's Scoping Report, South Ayrshire Council has consulted internally with various departments whose respective remits pertain to those topics. The various responses to that intra council consultation are contained in the enclosed Annex and to avoid duplication their collective content forms an integral part of South Ayrshire Council's consultation response. Responses have yet to be received from the Ayrshire Roads Alliance, West of Scotland Archaeology Service (WoSAS) and the Council's Biodiversity Officer; however, I can confirm that these shall be forwarded on if/when available.

In addition to the observations and suggestions regarding scope and methodology contained in the Annex, South Ayrshire Council would particularly like to bring to the applicant and ECU's attention the publication of the revised South Ayrshire Landscape Wind Capacity Study. The updated version is dated August 2018 and is available on the Council's website. Accordingly, we would request that the assessment within the LVIA chapter of the EIA Report addresses and references the relevant findings of the 2018 Study amongst the sources it draws from, and that any mitigation/design response to the same is clearly articulated.

I trust the feedback to be of assistance and note that notwithstanding the foregoing and attached, South Ayrshire Council's response at this juncture is confined to the technical parameters of the sufficiency of scope as regards EIA – and is strictly without prejudice to the authority's future partial consideration as to the actual merits of the proposal of the proposal upon its anticipated consultation, in due course, at S36 application stage.

Yours faithfully

Mr Alastair McGibbon
Supervisory Planner, Priority Projects

Carol Anderson Landscape Consultant – Landscape and Visual for the Council

The Scoping Report dated 24th August 2021 sets out the methodology and scope of the Landscape and Visual Impact Assessment (LVIA). We are in agreement with the methodology to be adopted for the LVIA and with the Study Area being defined as 45km from the proposal.

The proposed development site largely lies in an area of forest. Detailed consideration should be given to the landscape and visual effects of felling and restocking proposals (both adverse and beneficial) in the LVIA and mitigation and landscape enhancement should be optimised in the design of any Wind Farm Forest Plan and/or compensatory planting. Proposed forest felling areas should be shown in relevant visualisations from nearby LVIA viewpoints.

In respect of valued landscapes, we have the following comments:

- The Water of Girvan Valley Local Landscape Area (LLA) will replace the Scenic Area designation in South Ayrshire and effects on the character and qualities of this designated area should be assessed in the LVIA.
- We disagree that the Merrick Wild Land Area (WLA) should be scoped out of the assessment (Scoping Report, paragraph 5.4.8). While the proposal would be seen further away than the operational Dersalloch wind farm, the turbines would be substantially larger and lit at night. An assessment should be undertaken using the NatureScot *Assessing Impacts on Wild Land Areas – Technical Guidance* (October 2020). Particular focus should be on the potential effects of turbine lighting on the WLA and we would wish to see a night-time visualisation from Viewpoint 14 from Cornish Hill, with the cumulative effects of lighting associated with the Clauchrie, Craiginmoddie and Carrick wind farms also considered.
- We note that no conclusion is reached in paragraph 5.4.10 of the Scoping Report as to whether, or how, potential effects on the Galloway Dark Sky Park will be assessment in the LVIA. Confirmation on the proposed approach is required from the applicant.

A detailed ZTV should be provided in the EIA-R based on an OS 1:50,000 scale map base within 15km of the proposal to allow more accurate appraisal of potential visibility. The representative viewpoints listed in Table 5.1 are acceptable to the Council.

We agree with the proposed approach to focus the cumulative landscape and visual assessment (CLVIA) on wind farms lying within 25km of the proposal. The list of wind farms set out in Table 5.2 appears to be up to date (we note that Table 3.1 omits Craiginmoddie and is not up to date in the status of other wind farms). We would wish to see the Carrick wind farm proposal included in the CLVIA as it is imminently due to be submitted as an application. Other proposed wind farm developments to be considered in the cumulative LVIA should be confirmed with South Ayrshire Council once an assessment cut-off date has been established.

ACCON UK Ltd Noise Consultants

ACCON have reviewed the noise section of the scoping report. The proposed methodology is in line with what ACCON would expect from the noise consultants. ETSU-R-97 and IOA Good Practice guide are referenced in relation to operational wind turbine noise. Various aspects of the proposed assessment have been set out, such as how baseline noise data will be obtained and how the operational/construction phases will be assessed. More detail is provided below.

12.1 Introduction

Paragraph 12.1.1 provides a brief explanation that the noise assessment will assess construction noise and operational noise from the Proposed Development.

12.2 Legislation, Policy and Guidance

Paragraph 12.2.1 identifies ETSU-R-97 and the IOA Good Practice Guide (IOA GPG) as the main guidance for assessing operational noise from the Proposed Development. Planning Advice Noise 1/2011 is also mentioned.

Paragraph 12.2 identifies BS 5228-1:2009 Code of Practice for Noise and Vibration Control on Construction sites – Part-1: Noise for the assessment of construction noise.

Paragraph 12.3 identifies BS 5228-2:2009 Code of Practice for Noise and Vibration Control on Construction sites – Part-2: Vibration for the assessment of construction vibration.

Section 12.2 identifies the appropriate guidance for assessment purposes. However, it should include 'Wind Turbine Development: Submission Guidance Note' (SGN) issued by South Ayrshire Council Environmental Health should also be considered in relation to the operational noise assessment in the Environmental Statement.

12.3 Proposed Scope of Assessment

Paragraph 12.3.1 states that *'the assessment will consider the potential effects associated with construction and the operation of the Proposed Development'*.

Section 12.3 states that the operational noise assessment will be carried out using broadband noise levels with penalties applied for tonality. The reason for this approach is not described in the scoping report, however it is mentioned that further reasoning for this approach will be provided as part of the EIA.

Paragraph 12.3.3 states that cumulative operational noise will be considered. The Proposed Development will be assessed in combination with the nearby operational Dersalloch Wind Farm. As Dersalloch Wind Farm is currently operational it could in theory be permitted to generate noise immissions equal to its consented noise limits, at noise sensitive receptors. In reality the windfarm may not have the capacity to generate noise up to its consented limits. Therefore, it is explained that a scaling factor will be applied to noise immissions from Dersalloch Wind Farm. The scaling factor will be a correction added to the predicted noise levels from Dersalloch. A correction of +3 dB is suggested, which should be agreed with the Local Planning Authority before the assessment is undertaken.

Paragraph 12.3.4 states that *'noise limits for use in the cumulative assessment shall be based on baseline data measured by RES in 2012, except where the noise levels assumed for the operational Dersalloch Wind Farm alone would exceed these limits'*. Otherwise, conditioned noise limits will be used, or an increased lower ETSU-R-97 limit. It is suggested that upper *'daytime lower limit of 40 dB(A) is used where necessary in the cumulative assessment due to increased planning merit of the cumulative development'*

Paragraph 12.3.5 states that construction noise including construction traffic effects will be assessed at the nearest residential properties. Vibration will also be assessed.

The proposed scope sets out an appropriate approach. It also correctly highlights the requirements for discussion with the LPA regarding a correction margin for Dersalloch predicted noise levels when considering the cumulative effects of operational noise.

Section 12.4 discusses baseline conditions. Noise survey results from 2012 will be utilised. Paragraph 12.4.2 states that *'results of this survey provide a comprehensive description of the existing baseline conditions'*. Paragraph 12.4.3 states that the area has not changed since 2012 therefore it is not proposed to undertake another noise survey.

Section 12.5 discusses potential mitigation. Paragraphs 12.5.1 to 12.5.4 set out the standard approach to mitigation for wind turbine developments as suggested in ETSU-R-97 and IOA GPG.

12.5 Focussed Questions

Q1: Do the consultees agree with the proposed assessment methodology? Yes.

Q2: Do the consultees agree with the use of the baseline noise data gathered in 2012, and that it is not necessary to undertake a further survey? Although the previous noise survey was undertaken in 2012 it is unlikely that baseline noise conditions would have changed significantly to warrant a further noise survey. However, before we can agree to use of the 2012 data, the applicant should explain clear how they will ensure wind shear effects are taken into account when deriving the noise limits given the requirement to relate background noise measurement to hub height wind speeds. Proposed tip heights for Scienteuch are up to 200 m, whereas Dersalloch tip heights are 115 m to 125 m.

Q3: Do the consultees agree that, where significant headroom exists between the predicted noise levels and conditioned noise limits for Dersalloch Wind Farm, a margin of 3dB is appropriate? A margin of +3 dB is appropriate. This would ensure uncertainty in the noise predictions are taken into account for the cumulative assessment.

Q4: Do the consultees agree with the use of conditioned noise limits for Dersalloch Wind Farm as the cumulative noise limit where necessary in the cumulative assessment? Yes, we would prefer to see cumulative limits based on the conditioned noise limits for Dersalloch Wind Farm.

Q5: Do the consultees agree that a higher lower limit can be used where necessary in the cumulative assessment due to the increased planning merit of the cumulative development? A higher lower limit of up to 40 dB(A) may be justifiable based on increased cumulative generating capacity. However, South Ayrshire Council would request that they are consulted further before agreeing to an increased limit, should the applicant consider the possibility of an increased limit necessary.

South Ayrshire Council Environmental Health

It is noted that the Scoping Report - Scienteuch Wind Farm, RES of 24 August 2021 has no section dealing with Private Water Supplies.

There are some Private Water Supplies (PWS) in the area, out with the marked boundary, but which take their abstractions from catchment areas, within the marked boundary. Glenhead Cottage takes private water supply from the Scienteuch Farm supply SAY380, Scienteuch and Hazel Lodge are on mains feed.

Gass Farm, Gass Farm Cottage and Glentaggan Bungalow are on PWS but are not hydrologically connected as the catchment is on the other side of the road from the proposed development.

South Ayrshire Council Access Officer

Having read through the Scienteuch Wind Farm scoping report, I'm rather disappointed at the low level of content relating to public access.

South Ayrshire, especially in rural areas, is an important tourist and holiday destination. It is very popular for walking, cycling and horse riding; with the countryside around Straiton especially attractive. The financial contribution these visitors bring to the areas is a great support to the fragile rural economies.

In the Socio-Economic section of the report, it asks the question: Do you agree that the proposed approach with respect to the socio-economic assessment is appropriate?

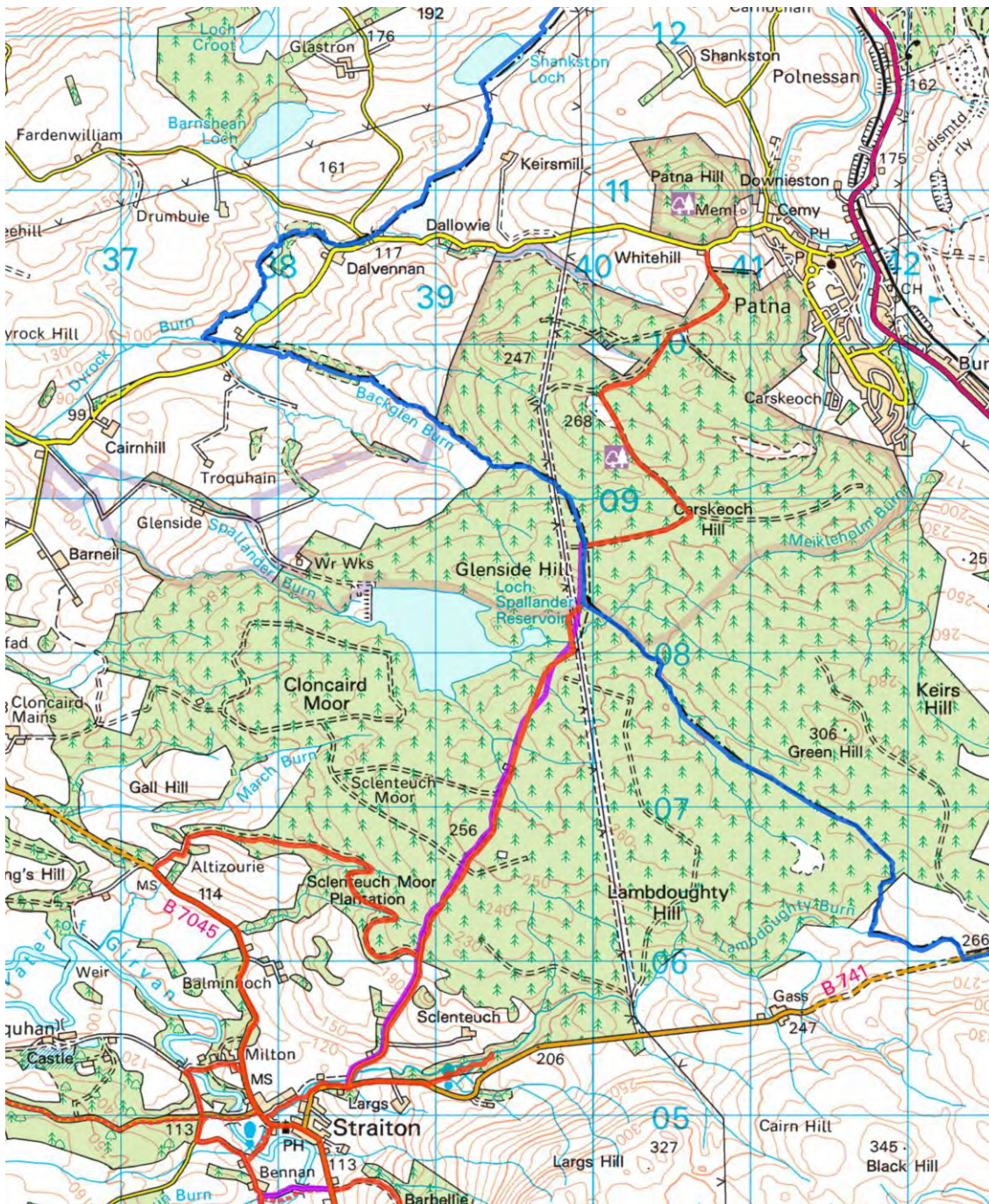
My answer is: No, there should be much more weight given to acknowledging the great opportunity that the windfarm could offer to tourism, by improving/ increasing the off-road recreational facilities for walking, cycling and horse riding. Actions to incorporate public access into the site should be included.

The Traffic and Transport section of the report states that, once operational, there will be minimal vehicular traffic within the site. Therefore, the site is suitable for public access.

The area around Straiton has several core paths and rights of way (see plan, below – rights of way indicated with purple line/ core paths & local paths with a red line)), to which the windfarm site could be linked to extend this network of public routes.

There is a right of way (ref. SKC11)/ local path which runs through the western corner of the site. There is an ideal opportunity to connect the tracks/ access routes which may be constructed within the site to this route and the wider paths network.

It would be greatly appreciated if the developer would give full consideration to my above comments.



South Ayrshire Council Heritage Officer

I am fairly content with the scope of the EIA and the methodology. However, an additional viewpoint from within Straiton Conservation Area would assist in understanding the full extent of the impact of the proposed wind farm on this area of historic importance.



Ayrshire Rivers Trust

working to improve Ayrshire's rivers and lochs

A19

Carolanne Brown
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Ayrshire Rivers Trust
Braeside
Burnbrae Lodge
Mauchline
KA5 5HE

22nd September 2021

Dear Carolanne,

Re: ECU00003318 Scienteuch Windfarm Scoping Report Response

On behalf of the Ayrshire Rivers Trust (ART), the River Doon District Salmon Fishery Board and the River Girvan District Salmon Fishery Board we would like to make the following comments on the above Scoping Report. Our comments relate only to impacts on the water environment and riparian habitat and take no account of other potential impacts. The proposed wind farm development has the potential to impact on the water environment due to its close proximity to the River Doon and River Girvan. We therefore ask you consider the following comments.

In general, the proposed development should have the appropriate risk assessments, relevant monitoring programmes and a suitable mitigation strategy in place to protect fish and fisheries before any onsite work commences.

We request the impact assessment should assess the following potential effects from the site preparation and construction and operational activities on watercourses and fish populations:

- Watercourse crossing installation/upgrading
- Obstruction to fish migration
- Road Construction/upgrading
- Forest Felling and subsequent effects of this activity e.g. acidification of watercourses, rates of surface drainage run-off, sediment-laden surface drainage water, input of hydrocarbons
- Construction/operation activities - increased silt loading to watercourses. Potential impacts from soil stripping, track construction and vehicle/plant movements, dewatering on receptor watercourses
- abstraction of water from watercourses, cable laying, hydrological regime changes, excavation of borrow pits and turbine foundations

Consequently, it is important to undertake baseline fish population, macroinvertebrate and Freshwater Pearl Mussel surveys to inform the EIA. Fish habitat surveys alone do not detail what fish species are present or at what density. To fully understand the impacts the development may potentially have on the ecology of the receptor watercourses and present a contemporary reflection of the current species, a full electrofishing survey should be undertaken in order to detail the distribution and abundance of the fish populations within and downstream of the development. Only this would provide a robust baseline to inform the EIA. Surveys should be undertaken to Scottish Fisheries Co-Ordination Centre (SFCC) standards and designed in accordance with Marine Scotland Science guidance. <https://www.gov.scot/publications/monitoring-watercourses-in-relation-to-onshore-wind-farm-developments-generic-monitoring-programme/>

We note fish and FWPM surveys are planned but no mention of macroinvertebrate surveys – these should be added for the ecological assessment as per the Marine Scotland Science guidance noted above.

ART would welcome the opportunity to provide comments and assist with the proposed baseline survey methodology and survey site locations for fish, macroinvertebrates and FWPM's.

Do consultees agree with the list of receptors and impacts to be included within the EIA Report?

We note water voles have been scoped out as no signs of water vole were found within the watercourse study area. ART occasionally encounter live water voles within the watercourse study area whilst undertaking fish surveys. We therefore request water voles are not scoped out as precaution due to their rarity within the area.

Forestry

The felling of forestry plantation and ground preparation phase has the potential to severely degrade or destroy watercourses. We also have concerns with nutrient input and acidification of watercourses as a result of these activities. Therefore, we stress that adequate robust planning and mitigation measures are produced which protect all watercourse and fish populations including the small burns within the site and the larger receptor watercourses downstream. We would be happy to comment on the CEMP and proposed site-specific measures. We would also be happy to comment on replanting schemes that affect watercourses as the correct riparian buffer strips with broadleaf planting are essential to protect future fish populations in light of future climate change predictions and increasing river temperatures. The opportunity to enhance these important headwaters with riparian woodland should not be missed.

Finally, we refer you to Fisheries Management Scotland advice on terrestrial windfarms issued to District Salmon Fishery Boards and Fishery Trusts and request you fully consider the guidelines in relation to this development and add it to the Legislation, Policy and Guidance section. <http://fms.scot/wp-content/uploads/2012/04/Advice-on-Terrestrial-Windfarm-Planning-Process.pdf>

We hope these comments are helpful. Should you require further information or clarification of any points, please don't hesitate to contact the undersigned.

Yours sincerely

REDACTED

Muir Glendinning
Fisheries Biologist



Patron Her Majesty The Queen

The British Horse Society Scotland

Email Helene.Mauchlen@bhs.org.uk

Suite A3

Website www.bhs.org/scotland

Stirling Agricultural Centre

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Mob REDACT

Fulfilling your passion for horses

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By email to:

Econsents_admin@gov.scot

Carolanne.Brown@gov.scot

06 September 2021

Dear Sir/Madam

**ELECTRICITY ACT 1989
 THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND)
 REGULATIONS 2017**

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR
 SCLENTEUCH WIND FARM**

I refer to the above scoping opinion request for the proposed Scienteuch Wind Farm, in the planning authority areas of East Ayrshire Council and South Ayrshire Council.

The British Horse Society (BHS) is always pleased to be consulted on transport, planning and development matters and where possible or necessary we are able to engage local riders to get a locally based response. Thank you very much for consulting with us, horses are important and good for people so their safety and capacity to access safe off road hacking is a key consideration in terms of their welfare and the wellbeing of their riders and those who look after them.

A project, like the one you are carrying out is an excellent opportunity to improve connections in a community and hopefully resolve any problems in terms of countryside access, transport and travel.

The BHS is here to help, so please do not consider this response the final word, we hope to work with you on an on-going basis to ensure horses and horse riders get as good a deal as they can out of any proposed improvements, so please do not hesitate to contact us in the future.

The Importance of Off-Road Riding

Scotland's equestrian industry is important with the horse being a major rural economic driver, recent joint research between SRUC and BHS showed:

Current trends in the sector point to a continued increase in horse numbers and riding activity in all geographical areas of Scotland and across a wide cross section of society. The expenditure on direct upkeep averages £3,105 per horse per annum.

This report also showed:

A concern for all riders, including tourists, is diminishing access to safe off-road riding. Most riding accidents happen on minor roads in the countryside. With increasing numbers of horses and riders requiring access to the countryside, more formal access to off-road riding will be a priority in areas considered of higher risk.

The full report can be accessed at:

http://www.sruc.ac.uk/downloads/file/2391/2015_scoping_study_on_the_equine_industry_in_scotland

Scotland has a duty to get horse riders off busy roads; few riders access busy roads by choice (and the horse has as much right to be on the public highway as cars, bikes and pedestrians) - but they often have no choice as that is the only way they can access their safe off road hacking.

I can also refer you to:

<http://www.rospa.com/road-safety/advice/horse-riders>

Equestrian road users are vulnerable - that means they are more likely to be involved in a road accident and also more likely to suffer the worst consequences.

Horses and their riders (as well as carriage drivers) are vulnerable on the road network. A collision between a horse and a vehicle can have life threatening consequences for the horse, rider and those in a vehicle. There is evidence to suggest that the number of road traffic collisions involving horses is underreported in casualty data.

Horse riding is more prevalent (particularly on roads) in certain parts of the country. Rural areas have larger numbers of horse riders, who make a significant contribution to the rural economy. Yet according to Road Safety Scotland 70% of road accidents happen on country roads.

<http://dontriskit.info/country-roads/view-the-campaign>

The BHS expects developers to work with representatives of the local horse riding community to understand their road safety and countryside access concerns and facilitate engagement with other partners and consider whether any road safety interventions should be introduced, where there are significant numbers of horse riders and/or road traffic collisions involving horses.

Under the Land Reform (Scotland) Act 2003, horse-riders and carriage drivers enjoy a right of access to most land in Scotland, provided that they behave responsibly. Land managers in turn are obliged to respect equestrian access rights and take proper account of the right of responsible access in managing their land. The Scottish Outdoor Access Code gives guidance on how the requirements to behave responsibly can be met. Please refer to:

www.outdooraccess-scotland.com

This access legislation, which is over a decade old now gives horse riders the same rights of responsible access as walkers and cyclists. It is vital that any off road tracks or non-motorised user's tracks or paths are multi-use catering for all including horse riders and carriage drivers.

Active Travel and Suitable infrastructure

Whilst the active travel movement does not consider equestrian travel to be a form of active travel there are many people for whom riding is an attractive mode of travel whether that be for travel purposes or leisure purposes, and the delivery of Active Travel should not discourage this, just as it should not discourage the use of micro-scooters, roller blades, skateboards and other similar modes of travel. In urban areas, many riding horses are kept within the 10 mile journey distance

and they must not be disadvantaged by new facilities that may be put in place for the cyclists. Level crossings which are currently used by equestrians should not be replaced by alternatives which would preclude the use by equestrians, for example, a footbridge. Similarly, other infrastructure like gates, bridges, cattle grids and slippery surfaces should all be installed with equestrians in mind. Access control must always be the least restrictive option.

The British Horse Society (BHS) represents the interests of the 3.4 million people in the UK who ride or who drive horse-drawn vehicles. With the membership of its Affiliated Riding Clubs and Bridleway Groups, the BHS is the largest and most influential equestrian charity in the UK. The BHS is committed to promoting the interests of all equestrians and the welfare of horses and ponies through education and training.

Please see attached an information sheet on equestrian access.

<https://www.pathsforall.org.uk/resource/outdoor-access-design-guide>

With over 70k equines in Scotland, equestrianism is worth £650 million to the Scottish economy annually with the Scottish Racing industry contributing £300 million and the rest of the industry generating £355 million according to recent research (Developing Benchmarks & Trends to Measure Equestrian Activity in Scotland - A report produced by the British Equestrian Trade Association August 2019 And Scottish Racing Annual Review and 2019 Outlook)

I trust that the above information is of assistance.

REDACTED

**HELENE MAUCHLEN
SCOTTISH NATIONAL MANAGER
THE BRITISH HORSE SOCIETY**

BT - Consultation Response

From: radionetworkprotection@bt.com
Sent: 21 September 2021 09:50
To: Econsents Admin; Brown C (Carolanne)
Cc: radionetworkprotection@bt.com
Subject: Request for Scoping Opinion for Scienteuch Wind Farm - WID11636T1-T9
ECU00003318

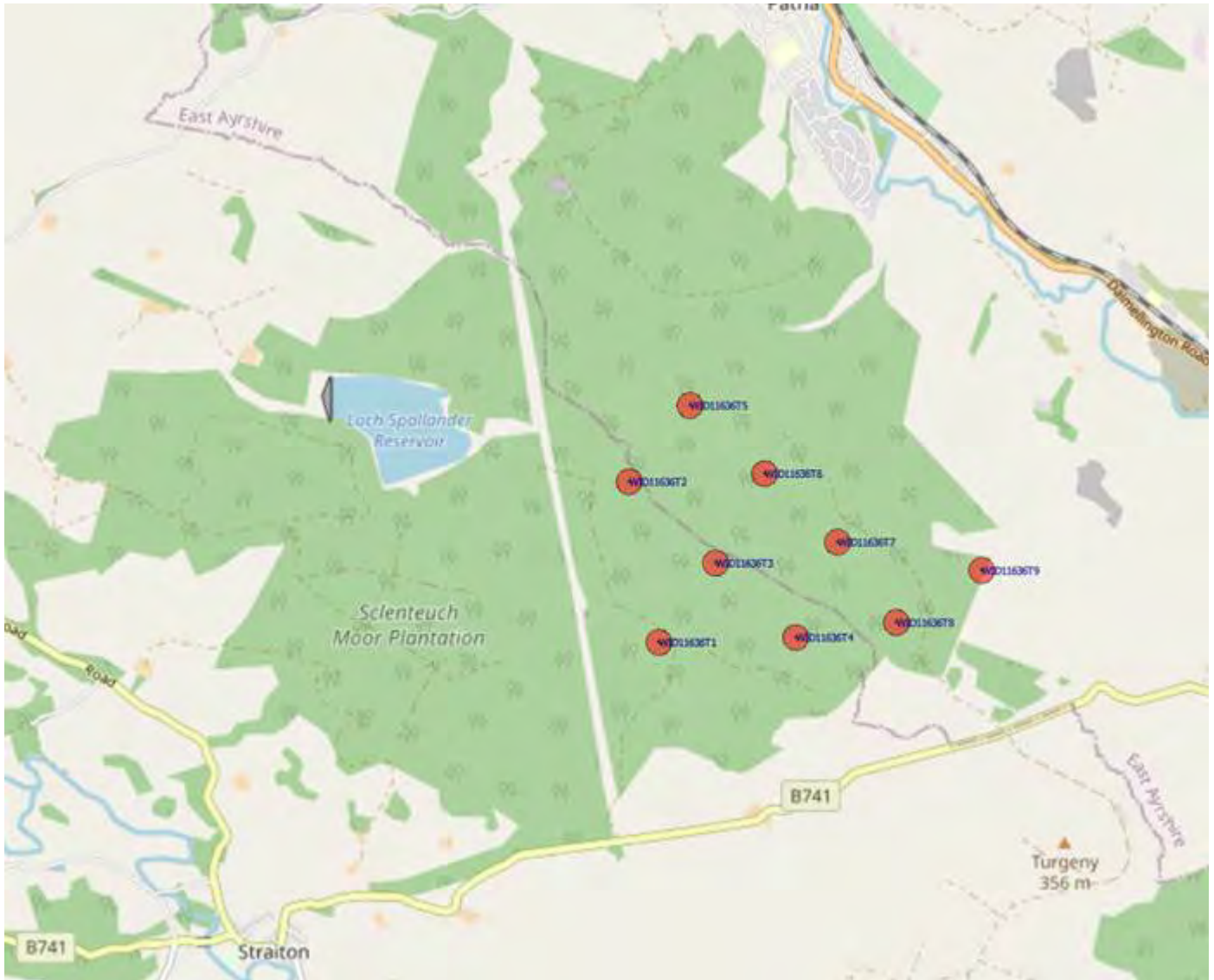


OUR REF; WID11636T1-T9

Thank you for your email dated 01/09/21 Ref ECU00003318.

We have studied this Windfarm proposal with respect to EMC and related problems to BT point-to-point microwave radio links.

The conclusion is that the proposal for 9 Turbine Locations as per Figure 3.2 should not cause interference to BT's current and presently planned radio network.



Please direct all queries to radionetworkprotection@bt.com

Regards
RED
ACTE

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Defence Infrastructure Organisation

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Carolanne Brown
Energy Consents Unit,
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4th Floor,
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G2 8LU

MOD Telephone: REDACTED
E-mail: teena.oulaghan100@mod.gov.uk

Application Ref: ECU00003318
Our Reference: DIO10050801

20 September 2021

Dear Carolanne,

Site Name Scienteuch Wind Farm.

Site Address Nr Dalmellington, East Ayrshire, Scotland.

Proposal Electricity Act 1989 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. Request for Scoping Opinion for Proposed Section 36 Application for Scienteuch Wind Farm.

Thank you for consulting the Ministry of Defence (MOD) on the above request for a Scoping Opinion for the proposed construction and operation of Bunloinn wind farm which was received by our office on 01st September 2021.

I am writing to inform you that the MOD has concerns about this proposed development.

We have assessed this proposal on the basis that there will be 9 turbines at 200.00 metres in height from ground level to blade tip and located at the grid references detailed in the table below:

Turbine	Easting	Northing
1	240576	606715
2	240428	607711
3	240944	607191
4	241423	606714
5	240821	608168
6	241267	607731
7	241702	607293
8	242048	606784
9	242596	607086

It has been identified that this development will have the following impacts upon defence operations:

Military Low Flying Training

The airspace over the UK land mass is used to provide the UK Military Low Flying System to deliver essential military low flying training. The proposed development will occupy Low Flying Area 14 within which military fixed wing aircraft are permitted to fly down to 250 feet (76.2 metres) above terrain features. The development proposed will cause a potential obstruction hazard to these military low flying training activities. To address this impact, it would be necessary for the development to be fitted with aviation safety lighting. Therefore, in the interests of air safety, the MOD would request that the development be fitted with MOD accredited aviation safety lighting in accordance with the requirements of the Air Navigation Order 2016.

MOD Safeguarding wishes to be consulted and notified about the progression of this proposal and any subsequent application(s) that may be submitted relating to it to verify that it will not adversely affect defence interests.

I trust this adequately explains our position on this matter. Further information about the effects of wind turbines on MOD interests can be obtained from the following website:

<https://www.gov.uk/government/publications/wind-farms-ministry-of-defence-safeguarding>

Yours sincerely

REDACTED

Teena Oulaghan
Safeguarding Manager

Edinburgh Airport - Consultation Response

From: Safe Guarding <safeguarding@edinburghairport.com>
Sent: 07 September 2021 15:10
To: Econsents Admin
Cc: Safe Guarding
Subject: Scienteuch - ECU00003318

Good afternoon,

In respect of the above, I can confirm the location of this development falls out with our Aerodrome Safeguarding zone for Edinburgh Airport therefore we have no objection/comment.

With best regards,
RED
ACT

Claire Brown | Aerodrome Safeguarding & Compliance Officer



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Edinburgh Airport Limited
Room 3/54 Terminal Building (2nd Floor)
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FAO Carolanne Brown
Energy Consents Unit
By Email

20th September 2021

Dear Carolanne Brown

**Re: REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR
SCLENTEUCH WIND FARM**
Our reference: GLA4039

I refer to your request for scoping opinion received in this office on 1st September 2021.

The scoping report submitted has been examined from an aerodrome safeguarding perspective and we would make the following observations:

- The site is located outwith obstacle limitation surfaces and radar consultation area for Glasgow Airport;
- It is within the Instrument Flight Procedure area for Glasgow Airport and may require detailed assessment at the planning stage.

Our position with regard to this proposal will only be confirmed once the turbine details are finalized and we have been consulted on a full planning application. At that time we will carry out a full radar impact assessment and will consider our position in light of, inter alia, operational impact and cumulative effects.

Yours sincerely
REDACTED

Kirsteen MacDonald

Safeguarding Manager
Glasgow Airport
REDACTED

Kirsteen.MacDonald@glasgowairport.com

Glasgow Prestwick Airport (GPA) Ltd - Consultation Response

From: Steve Thomson <sthomson@glasgowprestwick.com>
Sent: 17 September 2021 10:08
To: Econsents Admin; Brown C (Carolanne)
Cc: Windfarm; Safeguarding
Subject: Request for Scoping Opinion for Scienteuch Wind Farm - formal response from Glasgow Prestwick Airport (GPA) Ltd - 17th Sept 2021

Follow Up Flag: Follow up
Flag Status: Flagged

Carolanne,

1. On behalf of Glasgow Prestwick Airport (GPA) Ltd – we have reviewed the scoping consultation documents available on the Energy Consents Unit portal for the proposed Scienteuch Windfarm (ECU00003318).
2. GPA respond here to the Environmental Impact Assessment (EIA) Scoping Report purely on aviation matters.
3. The proposed scope of the Environmental Impact Assessment (EIA) and Aviation Assessment seems appropriate and GPA would welcome early engagement with the Developer to address the aviation matters detailed below.
4. GPA note there will be a detailed design to address the aviation warning obstruction lighting scheme as required by UK CAA for obstacles greater than 150m in height above local ground level in accordance with Article 222 of the UK Air Navigation Order (ANO) 2016 and in particular how the Developer will address aviation night lighting in the vicinity of a dark sky area.

While solely a matter for the CAA to consider, should the final aviation lighting scheme consider the use of Aircraft Detection Lighting System (ADLS) dependent upon Electronic Conspicuity (EC) Equipment(s) and be part of any alternate proposed lighting scheme, GPA respectfully request to be consulted with.

5. Preliminary Radar Line of Sight (LOS) analysis at the proposed maximum turbine tip heights of 200m for the Scienteuch Windfarm – indicates that there is the potential that all turbines would be visible to the GPA primary radars.

It will be necessary for further detailed radar modelling assessments/flight trials be undertaken to confirm the exact number of turbines visible to GPA primary radars – and whether the clutter from the visible turbines can be mitigated for the lifetime of the windfarm via an appropriate radar technology solution and associated mitigation agreement.

6. Furthermore, given the proposed maximum tip height (200m) of the turbines, we also request that the Developer engages with GPA to establish fully if the proposed development is likely to have any impact on our published Instrument Flight Procedures (IFP's) – both conventional and RNAV/RNP published IFP's as published in the UK Aeronautical Information Publication (AIP) for GPA (EGPK).
7. A preliminary ATC Operational Assessment indicates that this proposed development lies on the edge of Prestwick Airport's Controlled Airspace and in an area where GPA provide an air traffic service, and as such if some (or all) of the turbines are confirmed visible to our primary radar then mitigation will be required.
8. In line with CAP764 – '*Policy & Guideline on Wind Farms*', GPA would welcome early dialogue and engagement with the Developer to address the aviation concerns raised above and to allow a full ATC Operational Impact Assessment to be conducted against the proposed development, together with a

Technical Safeguarding Assessment against all Communications, Navigation and Surveillance (CNS) equipment(s) installed at GPA.

9. Consequently should this proposal come forward as a full Section 36 Planning Application, it is likely that GPA would require to **object** to the development until such times as the aviation safety matters detailed above are appropriately addressed.

With Kind Regards

Steve Thomson



By email: econsents_admin@gov.scot

Carolanne Brown
Case Officer - Energy Consents Unit
Energy Consents Unit

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

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

Our case ID: 300053762
Your ref: ECU00003318
04 October 2021

Dear Carolanne Brown

[The Electricity Works \(Environmental Impact Assessment\) \(Scotland\) Regulations 2017
Scienteuch Wind Farm, East Ayrshire and South Ayrshire
Scoping Report](#)

Thank you for your consultation which we received on 01 September 2021 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

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

We understand that the proposed development comprises up to nine three-bladed horizontal axis wind turbines of up to 200m tip height, located on land, in the area of both East Ayrshire and South Ayrshire councils, near Waterside.

In 2014, our predecessor body, Historic Scotland, commented on the Keirs Hill Wind Farm proposals, located in the same area. They identified a number of potential impacts but did not object to the scheme. The proposals were for 17 turbines with height to tip of 149.5m.

Scope of assessment

The proposed development is unlikely to have direct physical impacts on our interests, as set above. However, it has the potential to have significant adverse impacts on the setting of heritage assets in the vicinity.

The scoping report identifies a search area of 10km to identify impacts. Given the scale of the proposed development, we recommend that the area of search is not finalised until ZTV analysis has been undertaken. This should take into account impacts on heritage



assets inside and outside the ZTV. Assets outside the ZTV can still be affected by the proposed development if turbines appear in sensitive views of the asset itself.

We welcome the reference in the report to our [Managing Change guidance note on Setting](#). Reference should also be made to the [EIA Handbook](#), which sets out best practice guidance for assessing cultural heritage impacts, focussing on impacts on cultural significance.

Paragraph 6.3.8 states that impacts on cultural heritage will be assessed following design freeze. It is important that setting impacts are taken into account before this stage. The only effective mitigation of setting impacts is likely to be through design, so design freeze is often too late for effective mitigation to be identified.

For the earlier proposed schemes in this area, our key interests were on three scheduled monuments, three category A listed buildings, and two GDLs. Details of these are given below:

- Waterside, Dalmellington Ironworks ([SM 4345](#))
- Waterside Bing, iron slag bing, Dalmellington Ironworks ([SM 7544](#))
- Waterside, miners' villages & mineral railways N of ([SM 7863](#))
- Craigengillan House ([LB 18793](#))
- Craigengillan Stables ([LB 18794](#))
- Blairquhan House ([LB 19094](#))
- Craigengillan ([GDL 00111](#))
- Blairquhan ([GDL 00063](#))

It is likely that these assets will still be important considerations in the design process. Given the increase in height, we cannot rule out significant impacts on other assets, as well, so it is important that this list is not treated as exhaustive.

We recommend that the applicant undertakes an initial assessment of potential impacts at an early stage and consults us once this has been undertaken. This will allow us to agree the assets to be assessed, and the supporting information to be provided, including wirelines and photomontages.

Further information

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes. Technical advice is available on our Technical Conservation website at <http://conservation.historic-scotland.gov.uk/>.



HISTORIC
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ALBA

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Ruth Cameron, who can be contacted by phone on REDACTED or by email on Ruth.Cameron@hes.scot.

Yours sincerely

Historic Environment Scotland

Historic Environment Scotland – Longmore House, Salisbury Place, Edinburgh, EH9 1SH

Scottish Charity No. **SC045925**

VAT No. **GB 221 8680 15**

John Muir Trust - Consultation Response

From: Rosie Simpson <rosie.simpson@johnmuirtrust.org>
Sent: 17 September 2021 09:38
To: Brown C (Carolanne)
Cc: Cecilie Dohm
Subject: RE: Request for Scoping Opinion for Scienteuch Wind Farm

Dear Carolanne,

Thank you for this reminder of the deadline for comments.

Our only comments on reviewing the Scoping Report and accompanying documents are to request that impacts on the Merrick Wild Land Area to be considered through a Wild Land Area Impact Assessment. The Merrick Wild Land Area is relatively small in scale compared to other Wild Land Areas. It is also isolated. Its smaller size and isolation from other Wild Land Areas mean that, although at approximately 12km away, the visibility extent in the northern part of this Wild Land Area could have a disproportionately bigger impact on the area. We recognise that Dersalloch wind farm is between the proposed development and the Merrick Wild Land Area but for that reason a cumulative impact assessment of both developments on the Wild Land Area (which would be part of the WLA Impact Assessment) seems prudent. We note that this proposal has taken into consideration the concerns raised in respect of the previous Keirs Hill Wind Farm application, for 17 wind turbines.

I hope this is a useful contribution to the Scoping Opinion process.

With best wishes,
Rosie

NATS Safeguarding - Consultation Response

From: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Sent: 07 September 2021 13:55
To: Econsents Admin
Cc: Brown C (Carolanne)
Subject: RE: Request for Scoping Opinion for Scienteuch Wind Farm [SG31251]
Attachments: SG31251 Scienteuch Wind Farm - TOPA (Issue 2).pdf

Our Ref: SG31251

Dear Sir/Madam

We refer to the application above. The proposed development has been examined by our technical safeguarding teams and conflicts with our safeguarding criteria.

Accordingly, NATS (En Route) plc **objects to the proposal**. The reasons for NATS's objection are outlined in the attached report TOPA SG31251.

We would like to take this opportunity to draw your attention to the legal obligation of local authorities to consult NATS before granting planning permission. The obligation to consult arises in respect of certain applications that would affect a technical site operated by or on behalf of NATS (such sites being identified by safeguarding plans that are issued to local planning authorities).

In the event that any recommendations made by NATS are not accepted, local authorities are obliged to follow the relevant directions within Planning Circular 2 2003 - Scottish Planning Series: Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003 or Annex 1 - The Town And Country Planning (Safeguarded Aerodromes, Technical Sites And Military Explosives Storage Areas) Direction 2002.

These directions require that the planning authority notify both NATS and the Civil Aviation Authority ("CAA") of their intention. As this further notification is intended to allow the CAA to consider whether further scrutiny is required, the notification should be provided prior to any granting of permission.

It should also be noted that the failure to consult NATS, or to take into account NATS's comments when determining a planning application, could cause serious safety risks for air traffic.

Should you have any queries, please contact us using the details below.

Yours faithfully



NATS Safeguarding
E: natssafeguarding@nats.co.uk
4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk



NATS Public

Prepared by:

NATS Safeguarding Office

Unmarked



Technical and Operational Assessment (TOPA)

For Scienteuch

Wind Farm Development

NATS ref: SG31251

Issue 2

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Publication History

Issue	Month/Year	Change Requests and summary
1	March 2021	En-route pre-planning Assessment
2	September 2021	Full planning Assessment

Document Use

External use: Yes

Referenced Documents

1. Background

1.1. En-route Consultation

NATS en-route plc is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility it has a comprehensive infrastructure of RADAR's, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm.

In this respect NATS is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC).

In order to discharge this responsibility NATS is a statutory consultee for all wind farm applications, and as such assesses the potential impact of every proposed development in the UK.

The technical assessment sections of this document define the assessments carried out against the development proposed in section 3.

2. Scope

This report provides NATS En-Route plc's view on the proposed application in respect of the impact upon its own operations and in respect of the application details contained within this report.

Where an impact is also anticipated on users of a shared asset (e.g. a NATS RADAR used by airports or other customers), additional relevant information may be included for information only. While an endeavour is made to give an insight in respect of any impact on other aviation stakeholders, it should be noted that this is outside of NATS' statutory obligations and that any engagement in respect of planning objections or mitigation should be had with the relevant stakeholder, although NATS as the asset owner may assist where possible.

3. Application Details

Renewable Energy Systems Limited submitted a request for a NATS technical and operational assessment (TOPA) for the development at Scienteuch Wind Farm. It will comprise turbines as detailed in Table 1 and contained within an area as shown in the diagrams contained in Appendix B.

Turbine	Lat	Long	East	North	Hub (m)	Tip (m)
1	55.3286	-4.5146	240576	606715	0	200
2	55.3375	-4.5175	240428	607711	0	200
3	55.3330	-4.5090	240944	607191	0	200
4	55.3288	-4.5012	241423	606714	0	200
5	55.3417	-4.5115	240821	608168	0	200
6	55.3379	-4.5043	241267	607731	0	200
7	55.3341	-4.4972	241702	607293	0	200
8	55.3297	-4.4914	242048	606784	0	200
9	55.3325	-4.4831	242586	607086	0	200

Table 1 – Turbine Details

4. Assessments Required

The proposed development falls within the assessment area of the following systems:

RADAR	Lat	Long	nm	km	Az (deg)	Type
Great Dun Fell Radar	54.6841	-2.4509	80.3	148.7	299.7	CMB
Lowther Hill Radar	55.3778	-3.7530	25.2	46.6	264.4	CMB
Perwinnes Radar	57.2123	-2.1309	137.7	255.0	216.1	CMB
Tiree Radar	56.4556	-6.9230	105.4	195.3	128.5	CMB
Nav	Lat	Long	nm	km	Az (deg)	Type
None						
Comms	Lat	Long	nm	km	Az (deg)	Type
None						

Table 2 – Impacted Infrastructure

4.1. En-route RADAR Technical Assessment

4.1.1. Predicted Impact on Lowther RADAR

Using the theory as described in Appendix A and development specific propagation profile it has been determined that the terrain screening available will not adequately attenuate the signal, and therefore this development is likely to cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated.

4.1.2. En-route operational assessment of RADAR impact

Where an assessment reveals a technical impact on a specific NATS' RADAR, the users of that RADAR are consulted to ascertain whether the anticipated impact is acceptable to their operations or not.

Unit or role	Comment
Prestwick ATC	Unacceptable

Note: The technical impact, as detailed above, has also been passed to non-NATS users of the affected RADAR, this may have included other planning consultees such as the MOD or other airports. Should these users consider the impact to be unacceptable it is expected that they will contact the planning authority directly to raise their concerns.

4.2. En-route Navigational Aid Assessment

4.2.1. Predicted Impact on Navigation Aids

No impact is anticipated on NATS' navigation aids.

4.3. En-route Radio Communication Assessment

4.3.1. Predicted Impact on the Radio Communications Infrastructure

No impact is anticipated on NATS' radio communications infrastructure.

5. Conclusions

5.1. En-route Consultation

The proposed development has been examined by technical and operational safeguarding teams. A technical impact is anticipated, this has been deemed to be **unacceptable**.

Appendix A – Background RADAR Theory

Primary RADAR False Plots

When RADAR transmits a pulse of energy with a power of P_t the power density, P , at a range of r is given by the equation:

$$P = \frac{G_t P_t}{4\pi r^2}$$

Where G_t is the gain of the RADAR's antenna in the direction in question.

If an object at this point in space has a RADAR cross section of σ , this can be treated as if the object re-radiates the pulse with a gain of σ and therefore the power density of the reflected signal at the RADAR is given by the equation:

$$P_a = \frac{\sigma P}{4\pi r^2} = \frac{\sigma G_t P_t}{(4\pi)^2 r^4}$$

The RADAR's ability to collect this power and feed it to its receiver is a function of its antenna's effective area, A_e , and is given by the equation:

$$P_r = P_a A_e = \frac{P_a G_r \lambda^2}{4\pi} = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4}$$

Where G_r is the RADAR antenna's receive gain in the direction of the object and λ is the RADAR's wavelength.

In a real world environment this equation must be augmented to include losses due to a variety of factors both internal to the RADAR system as well as external losses due to terrain and atmospheric absorption.

For simplicity these losses are generally combined in a single variable L

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r^4 L}$$

Secondary RADAR Reflections

When modelling the impact on SSR the probability that an indirect signal reflected from a wind turbine has the signal strength to be confused for a real interrogation or reply can be determined from a similar equation:

$$P_r = \frac{\sigma G_t G_r \lambda^2 P_t}{(4\pi)^3 r_t^2 r_r^2 L}$$

Where r_t and r_r are the range from RADAR-to-turbine and turbine-to-aircraft respectively. This equation can be rearranged to give the radius from the turbine within which an aircraft must be for reflections to become a problem.

$$r_r = \sqrt{\frac{\lambda^2}{(4\pi)^3}} \sqrt{\frac{\sigma G_t G_r P_t}{r_t^2 P_r L}}$$

Shadowing

When turbines lie directly between a RADAR and an aircraft not only do they have the potential to absorb or deflect, enough power such that the signal is of insufficient level to be detected on arrival.

It is also possible that azimuth determination, whether this done via sliding window or monopulse, can be distorted giving rise to inaccurate position reporting.

Terrain and Propagation Modelling

All terrain and propagation modelling is carried out by a software tool called ICS Telecom (version 11.1.7). All calculations of propagation losses are carried out with ICS Telecom configured to use the ITU-R 526 propagation model.

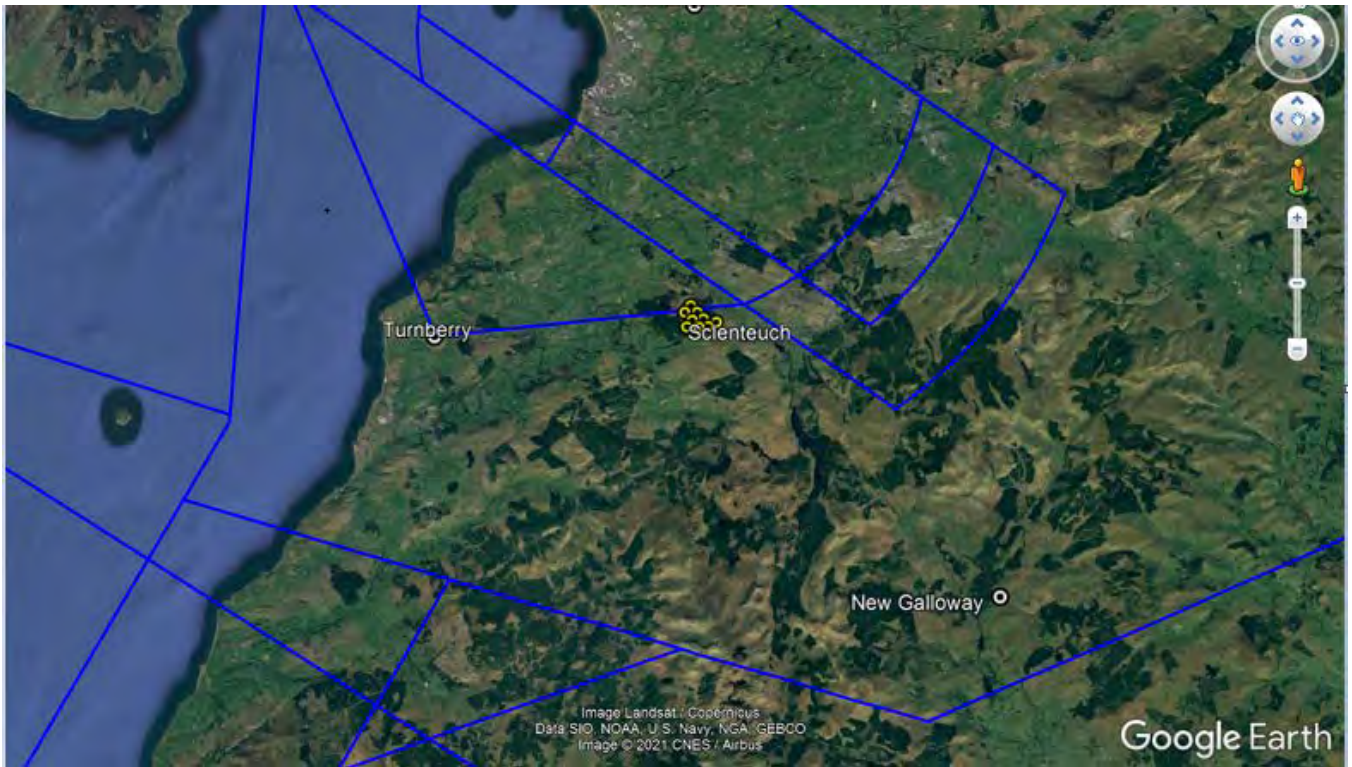


Figure 1: Proposed development location shown on an airways chart



Carolanne Brown
Energy Consents
Directorate for Energy and Climate Change
Scottish Government
5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU
By email: carolanne.brown@gov.scot

30 September 2021

Dear Carolanne,

REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR SCLENTEUCH WIND FARM (YOUR REF: ECU00003318)

Thank you for your consultation dated 11 September 2020 on the scope of the Environmental Impact Assessment (EIA) for the proposed Scienteuch Wind Farm, South and East Ayrshire.

1. Background

- 1.1 The proposed development would comprise up to 9 turbines, with tip heights of up to 200m, and associated infrastructure. The proposed application site lies within the South and East Ayrshire Council areas, approximately 2km from Waterside and Patna.
- 1.2 As referenced in section 8 of the Scoping Report, we have previously provided the applicant's consultants with advice related primarily to proposed approaches to ornithology in emails dated 11 May 2021, 21 May 2019 and 17 December 2018. A copy of the advice provided in May 2021 is included as Annex 2 to this response.

2. General scoping advice

- 2.1 The applicant should refer to our [General pre-application and scoping advice for onshore wind farms](#). This provides guidance on the issues that developers and their consultants should consider for wind farm developments and includes information on recommended survey methods, sources of further information and guidance, and data presentation. Attention should be given to the full range of advice included in the guidance note. The checklist in Annex 1 of the guidance note sets out our expectations of what should be included in the EIA Report, while Annex 2 provides advice on assessing the effects of turbine lighting on landscape and visual interests and birds.

31 Miller Road, Ayr KA7 2AX
31 Rathad a' Mhùilneir, Inbhir Àir KA7 2AX
01292 294048 nature.scot

- 2.2 The guidance document will be updated over time to reflect any changes to available information and our guidance, so users should ensure they download the most up to date version before use.
- 2.3 The applicant should also refer to our [general guidance on onshore wind farm development](#) and ensure relevant guidance is fully considered when undertaking the EIA Report. All of our current standing advice for planners and developers is also listed [here](#).

3. Key natural heritage interests of national importance

Landscape and Visual Amenity

Merrick Wild Land Area (WLA)

- 3.1 As recognised in the Scoping Report, the proposal has the potential to be visible from the Merrick Wild Land Area (WLA). The scoping report scopes out the effects on the WLA due to the proposal's location 'behind' Dersalloch wind farm.
- 3.3 The Zone of Theoretical Visibility (ZTV) provided with the Scoping Report indicates that the turbines would be visible from the northern hills of the WLA. We agree that their location behind Dersalloch wind farm would likely scope out the requirement for a day time WLA assessment. However, we would welcome sight of the photomontages / wirelines from Cornish Hill and other viewpoints to clarify and confirm this, as is it the overall context of the view that is relevant. The submitted ZTV is not clear enough to indicate the theoretical visibility from within the north eastern part of the WLA. This should also be clarified and, if necessary, a further viewpoint should be selected from within this interior. We would be happy to view indicative wirelines and advise further.
- 3.4 At 200m the turbines will require night time lighting. Lights would be seen at dusk and at night from Cornish Hill as well as from other elevated locations in the northern part of the WLA. Accordingly we advise that a night time WLA assessment is carried out for this proposal using Cornish Hill as a representative night time viewpoint. As above, the detailed ZTV for the north eastern interior and requested indicative wirelines will clarify whether an additional viewpoint should be used to assess night time lighting impacts on the wild land qualities of the WLA. Again, we would be happy to comment further.

Carbon-rich soils, deep peat and priority peatland habitat

- 3.5 Parts of the site are mapped as Class 1 peat on the [Carbon & Peatland Map 2016](#). Class 1 areas are nationally important carbon-rich soils, deep peat and priority peatland habitat and are likely to be of high conservation value.
- 3.6 While Scottish Planning Policy identifies such areas as 'areas of significant protection', the location of a proposal in the mapped area does not, in itself, mean that the proposal is unacceptable, or that carbon rich soils, deep peat and priority peatland habitat will be

adversely affected. However, how any significant effects on the qualities of the area can be substantially overcome by siting, design or other mitigation must be demonstrated.

- 3.7 The Carbon and Peatland Map 2016 is a strategic tool based on historical habitat and peat depth information. It is for the applicant to carry out relevant surveys to provide contemporary, site-specific information on the location of the different peat classes to inform site management.
- 3.8 We therefore welcome the applicant's proposals to review existing peat depth data and to undertake peat probing to establish the presence and depth of peat within the site. While noting the existence of data for the Kiers Hill proposal, to inform the assessment of impacts and identification of appropriate mitigation we advise that detailed peat surveys of the site (including access routes where necessary), measuring the peat deposit to full depth, should be undertaken in accordance with the Scottish Government's updated 2017 guidance (see <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energy-sources/19185/17852-1/CSavings/PSG2011>). The results should also be used to inform a peat slide assessment and peat management plan. We recommend early engagement with SEPA with regard to excavated peat reuse and disposal.
- 3.9 The final siting and design of the proposed development (notably turbines 4 and 9 of the current proposed layout) and how this may affect peatland must be fully described and assessed in the EIA Report. How significant effects will be mitigated must also be fully described.

Protected areas

- 3.10 The Scoping Report notes that the development lies within 10 km of six Sites of Special Scientific Interest.
- 3.11 As noted in the Scoping Report, the 5 sites designated for habitat features (Dalmellington Moss, Bogton Loch, Ness Glen, Auchalton and Martnaham Loch and Wood) are not hydrologically linked to the Proposed Development and are outwith the Zone of Influence for dust impacts, and are scoped out of the EIA Report. Our advice is that it is unlikely that the proposal will have a significant effect on any of the objectives of designation and the overall integrity of the qualifying interests of the SSSIs, either directly or indirectly.
- 3.12 As highlighted in the Scoping Report, the access track for the proposed development crosses the River Doon, which is connected to the Loch Doon SSSI. However, as the river crossing is downstream of Loch Doon, we are in agreement that there is unlikely to be any impact on the loch habitat and therefore the objectives of designation and the overall integrity of the area will not be compromised.
- 3.13 Bogton Loch SSSI lies within 5km of the proposed development site, and is designated for its breeding bird assemblage. As passerine birds form the primary component of the objectives of designation we are satisfied that the development will not have any significant effect on the qualifying interest of the SSSI.

4. Responses to specific questions detailed in the Scoping Report

- 4.1 Where not covered above, our responses to the specific questions included in the Scoping Report are given in Annex 1.

Concluding remarks

I hope that this response will assist you in your consideration of this scoping request. However, please contact me should you wish to discuss our advice. Please note that while we are supportive of the principle of renewable energy, our advice is given without prejudice to a full and detailed consideration of the impacts of the proposal if it is submitted as a formal application.

Finally, this advice is provided by NatureScot, the operating name of Scottish Natural Heritage.

Yours sincerely,
REDACTED

Siân Williams

Area Officer, Strathclyde & Ayrshire
sian.williams@nature.scot

Annex 1

Responses to specific questions included in the Scoping Report

Landscape and Visual Amenity

Considering the findings in the determination of Keirs Hill Wind Farm application, and the proposed changes to the scheme, do you agree with the overall methodology proposed to assess effects on landscape and visual receptors, including cumulative effects?

We recommend that the assessment also considers the advice and guidance given in the following:

- South Ayrshire Landscape Wind Capacity Study (August 2018)
- East Ayrshire Landscape Wind Capacity Study (June 2018)

For turbines of the height proposed, a 45km study area is appropriate. While we agree that a more detailed study area (anticipated to be within 15-20km of the site in the Scoping Report), will be appropriate in focussing the assessment on potentially significant effects, the applicant should ensure that the detailed study area contains all relevant sensitive receptors likely to have potential for significant effects.

We note that the assessment of landscape and visual effects, including cumulative effects, will be undertaken in accordance with the Guidelines For Landscape & Visual Impact Assessment: Third Edition' (Landscape Institute and IEMA, (2013) ('GLVIA3'), and also draw on other good practice guidance issued by the Landscape Institute and NatureScot. We consider this appropriate.

Do you agree that the proposed list of viewpoint locations is a representative selection of views from receptors most likely to experience significant effects?

The scoping report seems to provide a reasonable spread of viewpoints. However the final list of viewpoints is the responsibility of the applicant's landscape consultant and each should be micro-sited to show the worst case scenario. We reserve the option to request additional viewpoints as the application progresses should we consider it necessary.

We would welcome clear numbering of all turbines on at least one visualisation for each viewpoint. We also suggest that forestry felling is shown in any visualisation from a high level viewpoint that looks down into the site.

We also refer the applicant to our comments in our covering letter in respect of viewpoints and the Merrick WLA.

Do you agree that the wind farms listed in Table 5-2 and shown on Figure 5.5 comprise the cumulative baseline to inform the cumulative assessment?

We agree that the developments shown on Figure 5.5 and listed in Table 5.2 appears to be an accurate representation of existing, consented and application-stage developments within 25km

of the proposed development. However, the relevant local authorities should be contacted to confirm that this is an up-to-date list of projects.

We note that schemes at scoping stage and which lie near to the Proposed Development, where there is potential for significant effects, will only be included in the cumulative assessment where it is deemed appropriate and when sufficient design information is available in the public domain. In this respect, we advise that Carrick Wind Farm currently at scoping should be included. We also advise that applicant includes any further relevant schemes that are scoped prior to the submission of Scienteuch.

Do you agree that all relevant landscape or visual receptors have been identified (i.e. those where it is possible that significant effects may occur)?

Yes, on the basis of the information currently available in the Scoping Report.

Are there any other relevant consultees who should be consulted with respect to the LVIA?

Not that we are aware of.

Ecology

Do consultees agree that the EIA should concentrate on those receptors which may be subject to significant effects from the Proposed Development (either directly or indirectly)?

Yes.

Do consultees agree with the list of receptors and impacts to be included within the EIA Report?

While we consider the embedded mitigation measures identified in the Scoping Report to be appropriate, the applicant should also consider the direct and indirect impact any proposed forestry mitigation (as outlined in section 10.5.2 of the Scoping Report) may have for protected species prior to scoping these out of detailed assessment. Where particular species are scoped out of the assessment, this should be fully justified in the EIA Report.

Ornithology

Do consultees agree that the EIA should only concentrate on those features which may be subject to significant effects from the Proposed Development (either directly or indirectly)?

Yes.

Table 8.14 notes the features and potential impacts proposed to be included within the EIA. Do consultees agree with the list of features and impacts to be included within the EIA Report?

Yes, subject to consideration of the detailed information provided in the EIA Report.

Annex 2- previous advice provided re surveys

Claudia,

I have spoken to a couple of colleagues now, so this is a quick email to confirm that we have previously accepted that:

- Only one year of survey would be required if the survey work demonstrated that there has been no significant changes in flight activity levels since 2011/2012. This is most applicable to the breeding season, as the survey work outlined in the method statement means that you have 2 years of non-breeding survey data (non-breeding surveys having also been done in 2018/19 in addition to that done in 2020/21) and one year of breeding season data.
- The scope of survey work outlined at the time was appropriate, although any COVID restrictions may have meant that it would need be extended into 2021.

On examining the documents you have provided:

- The flight activity survey effort in June 2020 is lower than was proposed in the method statement, but other breeding season months meet or exceeded what was proposed.
- Flight activity appears to be low – 8 curlew flights, 2 red kite and 12 goshawk being the only target species flights recorded in the breeding season, and not all within the collision risk area (although we would like to query why the collision risk area has been identified as 275m rather than 500m as outlined in guidance?)
- Other bird surveys have been completed in line with the relevant guidance and we note you propose to repeat these in 2021.

On this basis, another year of breeding season flight survey isn't required.

I hope this is satisfactory. Please get in touch if you require further information.

Best wishes,

Siân

Siân Williams | Operations Officer

Nature Scot | 31 Miller Road, Ayr, KA7 2AX | 01292 294048 | m: REDACTED

[nature.scot](https://www.nature.scot) | [@nature_scot](https://twitter.com/nature_scot) | Scotland's Nature Agency | Buidheann Nàdair na h-Alba

31 Miller Road, Ayr KA7 2AX
31 Rathad a' Mhùilneir, Inbhir Àir KA7 2AX
01292 294048 [nature.scot](https://www.nature.scot)

NatureScot is the operating name of Scottish Natural Heritage

RSPB Scotland - Consultation Response

From: Ed Tooth <Ed.Tooth@rspb.org.uk>
Sent: 08 October 2021 14:41
To: Econsents Admin
Subject: Request for Scoping Opinion for Scienteuch Wind Farm

Dear Carolanne,

ELECTRICITY ACT 1989**THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017
REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR SCLENTEUCH WIND FARM**

I am just writing to confirm that RSPB Scotland has no comments to make regarding the above-referenced scoping opinion.

All the best,

Ed Tooth

Conservation Officer – Scottish Lowlands and Southern Uplands (Dumfries & Galloway, East Ayrshire, Scottish Borders, South Ayrshire and South Lanarkshire)

Please note that I am currently working from home where mobile signal is very poor. Email is the best way to contact me at this time.

Dumfries and Galloway Office – RSPB, The Old Schoolhouse, Crossmichael, Castle Douglas, DG7 3AP
Mobile REDACTED

rspb.org.uk

Let's give nature a home in Scotland



RSPB Scotland is part of the RSPB, the UK's largest nature conservation charity, inspiring everyone to give nature a home. Together with our partners, we protect threatened birds and wildlife so our towns, coast and countryside will teem with life once again. We play a leading role in BirdLife International, a worldwide partnership of nature conservation organisations.

The Royal Society for the Protection of Birds (RSPB) is a registered charity: England and Wales no. 207076, Scotland no. SC037654



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Our ref: 2584
Your ref: ECU00003388

If telephoning ask for:
Julie Gerc

Carolanne Brown
Energy Consents Directorate for Energy and Climate Change
Scottish Government
4th Floor, 5 Atlantic Quay, 150 Broomielaw
Glasgow
G2 8LU

29 September 2021

By email only to: Econsents_Admin@gov.scot

Dear Madam

**Environmental Impact Assessment) (Scotland) Regulations 2017
Planning Application: Scienteuch Wind farm, approximately 9 turbines and
associated infrastructure.
Near Waterside, east of A713
SEPA Reference: 2584**

Thank you for consulting SEPA on the scoping opinion for the above development proposal by your email received on 1 September 2021.

The issues set out in the appendix below are those which from experience often arise in windfarm projects. They will not all be relevant in a specific case. If an issue can be scoped out then, provided the evidence as to why it has been scoped out is provided in the subsequent Environmental Impact Assessment Report, you are encouraged to do so.

From SEPA's experience, the following key issues will usually need to be addressed. To **avoid delay and potential objection**, the information outlined below and relevant issues in the attached appendix must be submitted in support of the application.

a) Map and assessment of all engineering works within and near the water environment including buffers, details of any flood risk assessment and details of any related applications made under the Controlled Activities Regulations (CAR). With relation to flood risk, if, having considered the site and potential for flood risk, it appears that the only apparent issue could relate to design of watercourse crossing, then provided crossings are designed to accommodate the 1 in 200 year event and other infrastructure is located well away from watercourses it is unlikely that there will be a need for detailed information on flood risk

b) Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems and buffers. Where it is clear that much of the site is likely to be peatland and/or wetland, we suggest you may wish to go straight to carrying out NVC survey without carrying out Phase 1 and Sniffer assessments (see appendix for details).



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

Angus Smith Building

6 Parklands Avenue, Eurocentral,
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www.sepa.org.uk • customer enquiries 03000 99 66 99

- c) Map and assessment of impacts upon groundwater abstractions and buffers. Where there are no abstractions within 250 m of excavations then this should be confirmed in the EIA Report.
- d) Peat depth survey and table detailing re-use proposals. Where much of the site is on peat, we expect the application to be supported by a comprehensive site specific Peat Management Plan.
- e) Map and table detailing forest removal if on afforested area. Note that habitat survey information is not required for areas which are heavily forested or recently felled.
- f) Map and site layout of borrow pits.
- g) Schedule of mitigation including pollution prevention measures.
- h) Quarry or Borrow Pit Site Management Plan of pollution prevention measures.
- i) Map of proposed waste water drainage layout.
- j) Map of proposed surface water drainage layout.
- k) Map of proposed water abstractions including details of the proposed operating regime.
- l) Decommissioning statement.

Regulatory advice for the applicant

- 1.1. Engineering works within the water environment may require authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). Management of surplus peat or soils may require an exemption under The Waste Management Licensing (Scotland) Regulations 2011. Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012. Consider if other environmental licences may be required for any installations or processes.
- 1.2. Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website.

If you have any queries relating to this letter, please contact me by e-mail at planning.sw@sepa.org.uk.

Yours faithfully

Julie Gerc
Senior Planning Officer
Planning Service

In line with government guidance a number of SEPA's SW planning service are now home working. Please do not leave telephone messages but email planning.sw@sepa.org.uk, not individual email addresses, and we will respond where possible by email. Please note that due to revised working arrangements because of the Covid -19 (Corona virus) outbreak we may take longer to respond to your email than usual.

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. For example, a layout which makes use of lots of spurs or loops is unlikely to be acceptable. 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. Engineering activities which may have adverse effects on the water environment

- 2.1. The site layout 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 minimum buffer of 50m 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.
- 2.2. If water abstractions or dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided.
- 2.3. 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](#).

- 2.4. Refer to our flood risk [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. The proposed simple screening of potential flooding sources (fluvial, coastal, pluvial, groundwater etc.) being presented in the EIA Report is considered acceptable

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

- 3.1. Scottish Planning Policy states (Paragraph 205) that "Where peat and other carbon rich soils are present, applicants must assess the likely effects of development on carbon dioxide (CO₂) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO₂ to the atmosphere. Developments must aim to minimise this release."
- 3.2. The planning submission must a) demonstrate how the layout has been designed to minimise disturbance of peat and consequential release of CO₂ 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.
- 3.3. 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.
- 3.4. 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](#).
- 3.5. 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.
- 3.6. 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.

4. Disruption to Groundwater Dependent Terrestrial Ecosystems (GWDTE)

- 4.1. 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.
- 4.2. 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.

5. Existing groundwater abstractions

- 5.1. 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.
- 5.2. 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.

6. Forest removal and forest waste

- 6.1. Key holing must be used wherever possible as large scale felling can result in large amounts of waste material and in a peak release of nutrients which can affect local water quality. The supporting information should refer to the current Forest Plan if one exists and measures should comply with the Plan where possible.
- 6.2. Clear felling may be acceptable only in cases where planting took place on deep peat and it is proposed through a Habitat Management Plan to reinstate peat-forming habitats. The submission must include:
- a) A map demarcating the areas to be subject to different felling techniques.
 - b) Photography of general timber condition in each of these areas.

- c) A table of approximate volumes of timber which will be removed from site and volumes, sizes of chips or brash and depths that will be re-used on site.
- d) A plan showing how and where any timber residues will be re-used for ecological benefit within that area, supported by a Habitat Management Plan. Further guidance on this can be found in [Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS](#).

7. Borrow pits

- 7.1. 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.
- 7.2. 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.
- 7.3. 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 CO₂.
- 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.

8. Pollution prevention and environmental management

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

9. Life extension, repowering and decommissioning

- 9.1. Proposals for life extension, repowering and/or decommissioning must demonstrate accordance with SEPA Guidance on the [life extension and decommissioning of onshore wind farms](#). Table 1 of the guidance provides a hierarchical framework of environmental impact based upon the principles of sustainable resource use, effective mitigation of environmental risk (including climate change) and optimisation of long term ecological restoration. The submission must demonstrate how the hierarchy of environmental impact has been applied, within the context of latest knowledge and best practice, including justification for not selecting lower impact options when life extension is not proposed.
- 9.2. 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](#).



Econsents_Admin@gov.scot

Carolanne Brown
Energy Consents
Directorate for Energy and Climate Change
The Scottish Government
4th Floor, 5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Our Ref: 04777
22/09/2021

Dear Ms Brown

ECU ref: ECU00003318
ELECTRICITY ACT 1989

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

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR
SCLENTEUCH WIND FARM**

Thank you for your email of 1 September 2021 seeking comments on the scoping report for the above proposal.

ScotWays records

The enclosed map shows that right of way SKC11 as recorded in the National Catalogue of Rights of Way (CROW) crosses or is close to the application site as shown on Figure 3.1 *Site Boundary*.

The enclosed map shows the Heritage Paths project promotes a route, *Old Road through Straiton*, for its historic interest. This old route crosses or is close to the application site as shown on Figure 3.1 *Site Boundary*.

The enclosed map shows that our book *Scottish Hill Tracks* describes a route 82 Barr to Straiton and Patna [HT385] which crosses or is close to the application site as shown on Figure 3.1 *Site Boundary*.

In searching our records at this scoping stage, we have focussed solely on the immediate area of the proposed application. If required by the applicant to inform their Environmental Impact Assessment (EIA), maps of a wider search area are available from the Society, alongside a more detailed response.

Other Access to Land

You should be aware that other forms of public access to land may affect the proposed application site. More detail about these other types of access is set out in the enclosed Catalogue of Rights of Way Guidance Notes.

Wind Farms and public access

It is our understanding that there is very little guidance regarding the siting of turbines in relation to established paths and rights of way, so we draw your attention to the following:

Extract from the Welsh Assembly Government's Technical Advice Note on Renewable Energy (TAN 8)

Proximity to Highways and Railways

2.25 It is advisable to set back all wind turbines a minimum distance, equivalent to the height of the blade tip, from the edge of any public highway (road or other public right of way) or railway line.

ScotWays considers the above Note sets out a reasonable principle for a recommended minimum separation distance. There could also be site specific factors which would lead us to prefer a larger minimum separation distance; these could include the affected route being one of Scotland's Great Trails or it being known for equestrian use, for example. ScotWays is likely to object to any proposal where the above principle is not followed, including where a micro-siting allowance could lead to turbine encroachment upon a route because it has been insufficiently buffered.

Recreational amenity

As well as direct impacts of development upon public access, ScotWays has an interest in impacts on recreational amenity, so this includes the impact of wind farm development on the wider landscape. We anticipate that the applicant will take into account both recreational amenity and landscape impacts in developing their proposals for this site. We will consider these issues further should this scoping stage lead to a planning application.

Comment

Under section 3 of the Land Reform (Scotland) Act 2003, there is a duty upon landowners to use and manage land responsibly in a way which respects public access rights. Under section 14 of the same Act, access authorities have a duty to uphold access rights. Accordingly, we suggest that the applicant may wish to approach the relevant authority's access team for their input when drawing up their Access Management Plan for their proposed development.

I hope the information provided is useful to you. Please do not hesitate to contact us if you have any further queries.

Yours sincerely,

REDACTED

Lynda Grant
Access Officer



Catalogue of Rights of Way Scoping Comment Guidance Notes

These notes explain what is shown on the map(s) provided with scoping comments and provide information about the public right of access to land in Scotland. All maps are provided on a 1:50,000 scale base.

What is the Catalogue of Rights of Way (CROW)?

CROW was created by ScotWays in the early 1990s with the help of Scottish Natural Heritage (now NatureScot) and local authorities and is an amalgamation of rights of way information from a number of different sources. Mapped at 1:50,000 scale, the catalogue does not include all rights of way – many of these are known only to local people and come to ScotWays' notice only when a problem arises.

CROW is continually updated to take account of new information as it comes to ScotWays' attention.

Catalogue of Rights of Way maps

What is a Recorded Right of Way?

Any right of way that we record in the Catalogue of Rights of Way.

Where any Recorded Rights of Way pass through or close to the wind farm application site a map will be provided showing these.

What is an Other Route?

Any path that we record in the Catalogue of Rights of Way that does not appear to meet the criteria to be a right of way.

Where any Other Routes pass through or close to the wind farm application site a map will be provided showing these.

What is a Heritage Path?

These are historic routes that form part of the transport heritage of Scotland. They reflect our cultural and social development and include drove roads, military roads, Roman roads, pilgrim routes and trade routes.

These routes may or may not be rights of way, core paths or carry some other type of designation.

Find out more about the Heritage Paths project at <http://www.heritagepaths.co.uk>

Where any Heritage Paths pass through or close to the wind farm application site a map will be provided showing these.

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

What is a Scottish Hill Track route?

First published in 1924, our book *Scottish Hill Tracks* is a record of the network of paths, old roads and rights of way which criss-cross Scotland's hill country, from the Borders to Caithness.

These publicised routes may or may not be rights of way, core paths or carry some other type of designation.

Copies of our book *Scottish Hill Tracks* can be purchased from the ScotWays webshop: <https://www.scotways.com/shop>

Where any *Scottish Hill Tracks* routes pass through or close to the wind farm application site a map will be provided showing these.

Disclaimer

The routes shown on the CROW maps provided have been prepared from information contained in the records of ScotWays, local authorities, judicial and other records. The inclusion of a route in CROW is not in itself declarative of its legal status.

Other Public Access Information

Unrecorded Rights of Way

Our records only show the rights of way that we are aware of. Scots law does not require a right of way to be recorded in a specific document. Any route that meets the following criteria will be a right of way. This could include any paths, tracks or desire lines within your area of interest. A right of way:

1. Connects public places.
2. Has been used for at least 20 years.
3. Follows a more or less defined route.
4. Has been used by the public without judicial interruption or the landowner's permission.

Core Paths

The Land Reform (Scotland) Act 2003 requires all access authorities to create a system of routes within their area. These are known as core paths and are recorded in the authority's core paths plan. It is anticipated that applicants will have consulted the relevant access authority's core paths plan to check whether any core paths cross or are close to the wind farm application site, and will also have consulted the authority's access team.

The General Right of Access

Irrespective of the presence or absence of rights of way and core paths, the land in question may be subject to the access rights created by Section 1 of the Land Reform (Scotland) Act 2003. Unless the land falls into an excluded category in Section 6 of this Act then the public has a right of access to the land, and land owners/managers have a duty under the Act's Section 3 to consider this in any decisions made about the use/management of the land.

Other Promoted Routes

There may be part of a promoted route running through or close to any wind farm application site. These will usually be obviously signed with signposts or waymarking and

may feature in guidebooks, leaflets, on local information boards and on websites. The two main types of nationally promoted routes are:

Scotland's Great Trails: <https://www.scotlandsgreattrails.com>

National Cycle Network: <https://www.sustrans.org.uk/map-ncn>

Public and Private Roads

The Roads (Scotland) Act 1984 created the terms public road and private road. Public Roads are those roads which are on the List of Public Roads and, importantly, the roads authority is required to manage and maintain. Private Roads are those roads which are not on the List of Public Roads and thus there is no duty on the roads authority to manage or maintain them. There is a public right of passage over these roads and the owner(s) of a private road may not restrict or prevent the public's right of passage over the road.

If required, the local roads authority should be contacted by the applicant for more information on public and private roads that may cross or pass close to the application site.

More Information on Outdoor Access Law

If you would like to know more about outdoor access law, why not get a copy of our book *The ScotWays Guide to the Law of Access to Land in Scotland* by Malcolm Combe? Visit our website, <https://www.scotways.com/shop> for more information.

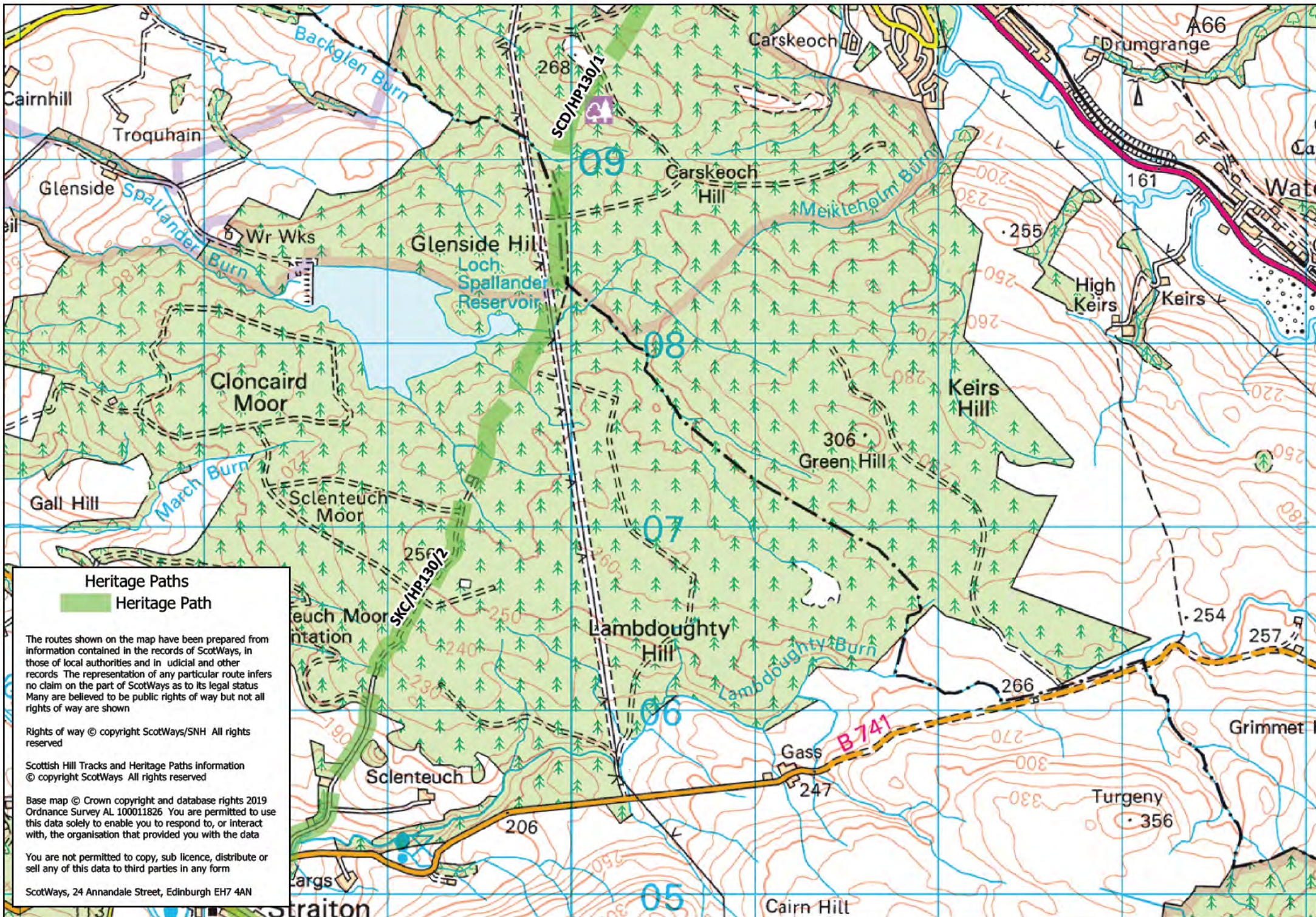
Development and Planning Applications

When proposing to develop a site, it is advisable that the applicant reviews the current amount and type of public access across it and presents this as an access management plan as part of their application. This should include rights of way, core paths, other paths and tracks, and take account of how the statutory right of access currently affects the site.

The plan should then consider the effect that the proposed works, during construction and upon completion, would have on any patterns of public access identified. Any good practice guidance associated with the proposed type of development should be considered, e.g. for windfarms the Welsh Assembly Government's Technical Advice Note on Renewable Energy (TAN 8) Proximity to Highways and Railways paragraph 2.25 and the policies contained within any local statutory plans.

Depending upon the proposals there may be specific legal processes that are required to be followed to divert any paths or tracks either temporarily or permanently. These will be in addition to getting planning consent for the proposal. We recommend that applicants contact the access team at the relevant access authority for advice in this regard.

Published October 2019, updated March 2021



Cairnhill
Troquhain

Glenside
Spallander Burn

Wk
Wr Wks

Cloncaird Moor

Gall Hill

March Burn

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Backglen Burn

Glenside Hill

Loch Spallander Reservoir

Cloncaird Moor

March Burn

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

Scienteuch Moor

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Scienteuch Moor

268
SCD/HP130/1

09

Carskeoch Hill

Meikleholm Burn

255

250

260

270

280

290

300

310

320

330

340

350

360

370

380

390

400

410

Carskeoch

08

255

250

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270

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310

320

330

340

350

360

370

380

390

400

410

420

430

A66
Drumgrange

161

255

250

260

270

280

290

300

310

320

330

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370

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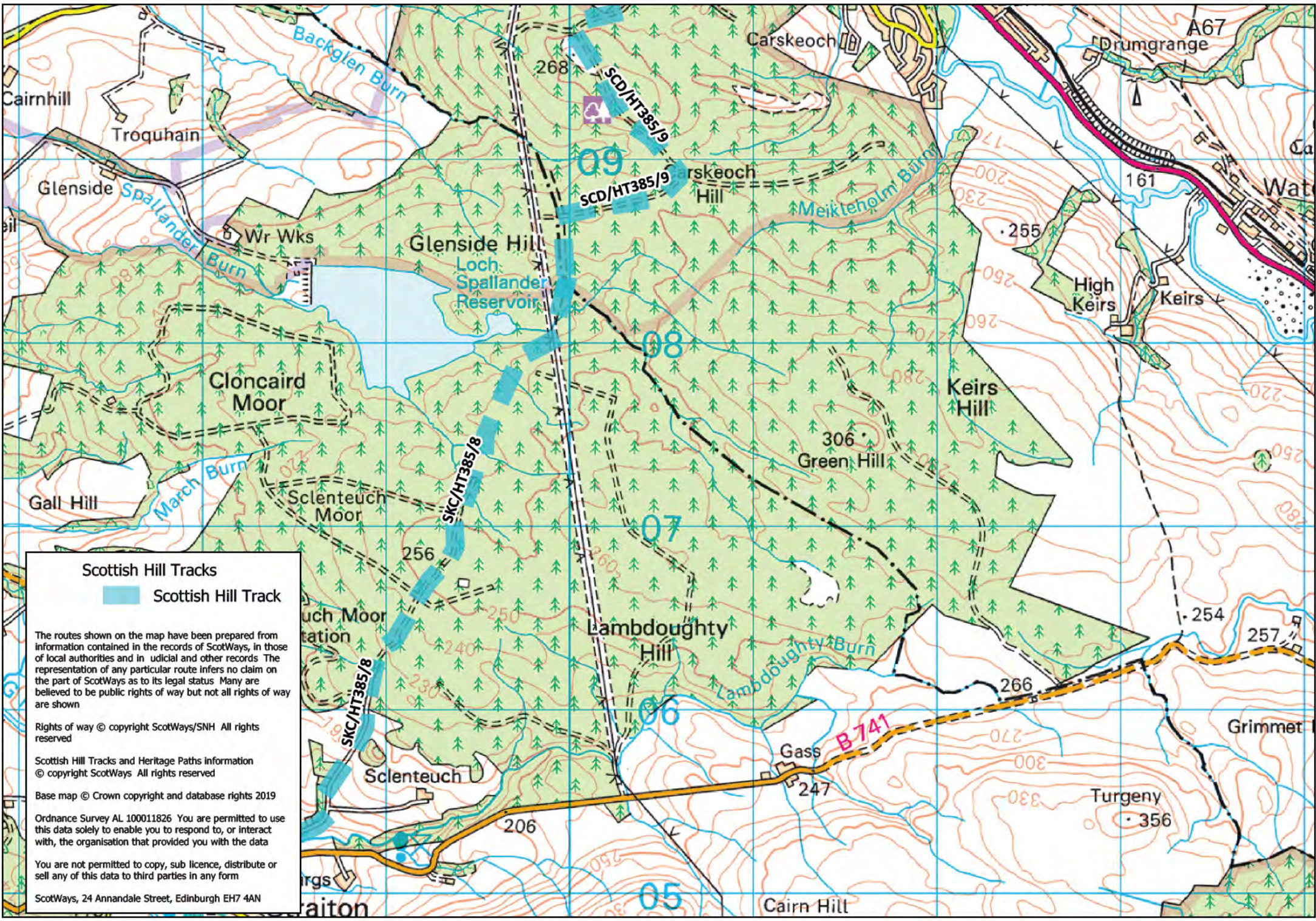
400

410

420

430

05
Cairn Hill



Scottish Hill Tracks

 Scottish Hill Track

The routes shown on the map have been prepared from information contained in the records of ScotWays, in those of local authorities and in judicial and other records. The representation of any particular route infers no claim on the part of ScotWays as to its legal status. Many are believed to be public rights of way but not all rights of way are shown.

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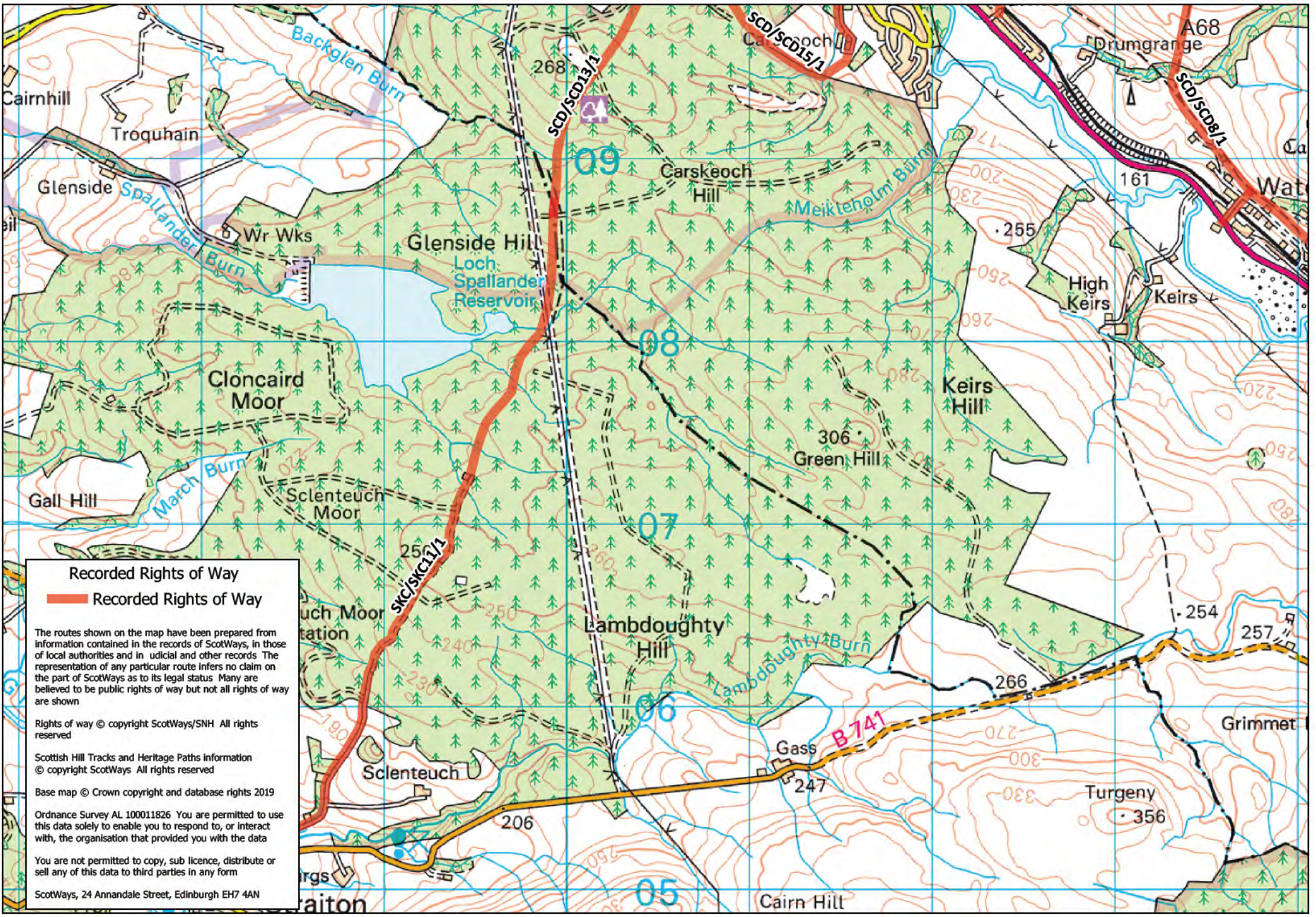
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ScotWays, 24 Annandale Street, Edinburgh EH7 4AN



Recorded Rights of Way

 Recorded Rights of Way

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ScotWays, 24 Annandale Street, Edinburgh EH7 4AN

Thursday, 02 September 2021



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

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

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



Dear Customer,

Scienteuch Wind Farm, Patna, KA6 7EZ
Planning Ref: ECU00003318
Our Ref: DSCAS-0047783-9P7
Proposal: Wind Farm (Generating station of >50 < 100 MW Capacity)

Please quote our reference in all future correspondence

Audit of Proposal

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

Drinking Water Protected Areas

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

Surface Water

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

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

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- ▶ Scottish Water asset plans can be obtained from our appointed asset plan providers:
 - ▶ Site Investigation Services (UK) Ltd
 - ▶ Tel: 0333 123 1223
 - ▶ Email: sw@sisplan.co.uk
 - ▶ www.sisplan.co.uk

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

Yours sincerely,

Angela Allison

Development Operations Analyst
developmentoperations@scottishwater.co.uk

Scottish Water Disclaimer:

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

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

Your ref:
ECU00003318

Our ref:
GB01T19K05

Date:
21/09/2021

econsents_admin@gov.scot

Dear Sirs,

ELECTRICITY ACT 1989

THE ELECTRICITY (APPLICATIONS FOR CONSENT) REGULATIONS 2017

REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR SCLENTEUCH WIND FARM

With reference to your recent correspondence on the above development, we acknowledge receipt of the Scoping Report (SR) prepared by Renewable Energy Systems Ltd (RES) in support of the above development.

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

Proposed Development

The proposed development comprises up to 9 turbines with a blade tip height of up to 200m on a site approximately 3km south of Patna in Ayrshire. The site will be accessed from the A713 at the east of the site, whilst the A77(T) lies approximately 12km to the west and the A76(T) approximately 12km due north.

Assessment of Environmental Impacts

Section 11 of the SR presents the proposed methodology for the assessment of Transport and Access issues associated with the construction of the development. This indicates that the study area for the assessment will include the A713 to the north and south of Patna, the A77(T), A70 and A76(T). We note that both Transport Assessment Guidance (Transport Scotland, 2012) and the Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment (IEMA), 1993) will be used to inform the EIA Report Chapter.

We note that baseline traffic data for the A77(T) and A76(T) will be obtained from UK Government Department for Transport (DfT) traffic count data or the Traffic Scotland database. National Road Traffic Forecast (NRTF) Low Growth factors will be used to provide a future year baseline. Transport Scotland is satisfied with this approach.

The SR states that potential trunk road related environmental impacts such as driver delay, pedestrian amenity, severance, safety etc will be considered and assessed where appropriate (i.e. where IEMA Guidelines for further assessment are breached). These specify that road links should be taken forward for further detailed assessment if:

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

This approach is considered acceptable and we are content that no further trunk road assessment is required if the above thresholds are not exceeded.

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

Abnormal Loads Assessment

The SR states that the Traffic and Transport EIA Report Chapter will be supported by an Abnormal Load Route Survey. In addition, detailed swept path analyses will be undertaken for the main constraint points on the route from the port of entry through to the site entrance to demonstrate that the turbine components can be delivered to site and to identify any temporary road works which may be necessary. Transport Scotland is satisfied with this approach but would add that any proposed changes to the trunk road network must be discussed and approved (via a technical approval process) by the appropriate Area Managers.

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 me or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on REDACTED .

Yours faithfully

REDACTED

Iain Clement

**Transport Scotland
Roads Directorate**

cc Alan DeVenny – SYSTRA Ltd.

Crosshill, Straiton and Kirkmichael community council - Consultation Response

From: John Haston REDACTED
Sent: 08 October 2021 16:21
To: Brown C (Carolanne)
Subject: Re: Request for Scoping Opinion for Scienteuch Wind Farm
Attachments: Scienteuch scoping questions.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Carolanne

Attached is our community council's response to the scoping opinion.

Kind regards
John Haston
Secretary
Crosshill, Straiton and Kirkmichael community council

4.5 Questions

Do consultees agree with the extent of the planning policy and energy documents described above?

The documents referred to would seem to be appropriate.

Are there any additional planning and energy documents that consultees wish to be considered?

Cannot think of any.

5.6 Questions 5.6.1 Considering the findings in the determination of Keirs Hill Wind Farm application, and the proposed changes to the scheme, do you agree with the overall methodology proposed to assess effects on landscape and visual receptors, including cumulative effects?

Considering that one of the determining factors in the Keirs Hill Wind Farm PLI was the height of the turbines and that 149m high turbines could not be accommodated in the landscape, it beggars belief that you now are or the opinion that turbines up to 200m high could be acceptable.

5.6.2 Do you agree that the proposed list of viewpoint locations is a representative selection of views from receptors most likely to experience significant effects?

This selection of viewpoint locations will most certainly experience significant effects.

5.6.3 Do you agree that the wind farms listed in Table 5-2 and shown on Figure 5.5 comprise the cumulative baseline to inform the cumulative assessment?

You have missed out Carrick Wind Farm for which scoping has been done and also Knockcronal on the former Linfairn site for which scoping has also been done.

More significantly, Knockkippen has no mention although that is in scoping on the opposite side of the A713.

5.6.4 Do you agree that all relevant landscape or visual receptors have been identified (i.e. those where it is possible that significant effects may occur)?

Craigengillan House and estate has not been included.

5.6.5 Are there any other relevant consultees who should be consulted with respect to the LVIA

Galloway and Southern Ayrshire Biosphere

DarkSky Park

Scottish Mountaineering

Ramblers' Association to mention just a few.

6.6 Questions

6.6.1 Do you agree the proposed study areas are sufficient to facilitate a robust assessment of potential impacts arising from the Proposed Development?

While the inner study area of 500 metres would seem to be acceptable, the 10 km is not. The very height of these turbines means that their significant impact will be much wider.

6.6.2 Do you agree the range of proposed sources is sufficient to enable a comprehensive baseline study to be undertaken?

While printed resources would seem to be adequate there is no mention of having local historians or archaeologists to assist with walkover. Local knowledge can be much more valuable than selections from printed matters.

6.6.3 Do you agree the selection criteria for identifying developments to be included in the cumulative assessment is appropriate to the scale of the Proposed Development?

As at 6.6.1 the outer study area is not wide enough, although there is enough evidence of the significant impact on the range of listed buildings, scheduled monuments, garden and designed landscapes and conservation areas to show that a wind farm in this location is not appropriate.

7.6 Questions

7.6.1 Do consultees agree that the EIA should concentrate on those receptors which may be subject to significant effects from the Proposed Development (either directly or indirectly)?

Since there are several surveys still to be completed and therefore the results are not yet available this would suggest that this scoping report is premature and incomplete.

7.6.2 Do consultees agree with the list of receptors and impacts to be included within the EIA Report

As 7.6.1

8.6 Questions

8.6.1 The questions below are for consultees regarding the information provided in this Scoping chapter, for which it would be useful to receive feedback. Not all questions will be relevant to all consultees, therefore the Applicant request that consultees provide feedback only on those questions appropriate to them. The questions should not be considered an exhaustive list, and consequently consultees are welcome to provide feedback on any issue they consider relevant to the Proposed Development. If consultees elect not to respond, the Applicant will assume that consultees are satisfied with the approach adopted/proposed.

8.6.2 Do consultees agree that the EIA should only concentrate on those features which may be subject to significant effects from the Proposed Development (either directly or indirectly)?

Not in agreement that kestrel and buzzard be scoped out. In common with other windfarm applicants the risk to birds and especially raptors is underplayed.

8.6.3 Table 8.14 notes the features and potential impacts proposed to be included within the EIA. Do consultees agree with the list of features and impacts to be included within the EIA

Agree with the ones listed but would say that others should also be included.

9.6 Questions

9.6.1 Published mapping confirms that most of Site is not identified as being at flood risk. It is proposed, therefore, that a simple screening of potential flooding sources (fluvial, coastal, pluvial, groundwater etc.) is presented in the EIA Report. Is this approach acceptable?

While **most** of the site is identified as not being at flood risk, what about the areas which are?

9.6.2 It is not proposed to prepare a detailed drainage design. Rather measures that would be used to control the rate and quality of runoff will be specified in the EIA Report. Again, is this acceptable?

The River Doon is important as a salmon river so runoff would not be acceptable as it could contain contaminants.

9.6.3 Site investigations, including detailed peat probing and private water survey as outlined in Section 9.3, will be undertaken as part of the proposed assessment. Should any additional investigation or data sources be considered when assessing baseline conditions?

Private water should be a priority. If homes lose their private water supply for any reason, or it becomes impotable, they become uninhabitable.

9.6.4 It is not proposed to undertake any water quality sampling, establish groundwater monitoring points, surface water monitoring points or undertake leachability trials of any rock in the proposed borrow pit as there is published data that can be used to characterise baseline conditions and complete the impact. Is this acceptable?

To what published data do you refer?

9.6.5 Please advise if there is any specific information or methodology that should be used / followed as part of the Private Water Supply risk assessment?

South Ayrshire Council and East Ayrshire Council should be the first ports of call as regards risk assessment for Private Water Supply.

9.6.6 Do you agree that the scope of the proposed assessment is appropriate?

No.

10.6 Questions

10.6.1 The following questions have been designed to ensure that the proposed methodologies and assessment are carried out in a robust manner and to the satisfaction of the determining authorities.

10.6.2 Are consultees content with the proposed methodology and scope for the forestry assessment?

There is too little information here on which to base an opinion, and there is nothing to suggest that assessment would be "robust".

10.6.3 Do the consultees have any information, particularly with reference to new guidance, which should be taken into account?

Consult with the forest managers and/or Forestry and Land Scotland – they are the experts in this field.

11.6 Questions

11.6.1 Is the proposed methodology accepted?

11.6.2 Are the methods proposed for obtaining traffic flow data accepted?

11.6.3 It is accepted that traffic surveys can be undertaken on the local road network following the end of the 2021 summer holiday season (excluding a further national Covid 19 lockdown) and that such flows would be considered acceptable for use in the assessment?

11.6.4 Is the use of Low National Road Traffic Forecasts (NRTF) acceptable for the whole of the study?

11.6.5 What developments should be included as committed developments within the baseline traffic flows in the assessment, noting that these should have planning consent at the time of scoping?

11.6.6 Can consultees provide details of any upgrades or network changes that may be undertaken to the study area network within the next five years

These questions cannot be answered as the information given is thin and not helpful. There is no indication of where the traffic would originate or how it would access the site from the A713. There is certainly no suitable bridge crossing the River Doon which could be used. Much more information is required.

12.6 Questions

12.6.1 Do the consultees agree with the proposed assessment methodology?

12.6.2 Do the consultees agree with the use of the baseline noise data gathered in 2012, and that it is not necessary to undertake a further survey?

12.6.3 Do the consultees agree that, where significant headroom exists between the predicted noise levels and conditioned noise limits for Dersalloch Wind Farm, a margin of 3dB is appropriate?

12.6.4 Do the consultees agree with the use of conditioned noise limits for Dersalloch Wind Farm as the cumulative noise limit where necessary in the cumulative assessment

Again, the information is sparse and not helpful to give an understanding of what exactly will be done. I do not agree that low frequency noise is scoped out.

12.6.5 Do the consultees agree that a higher lower limit can be used where necessary in the cumulative assessment due to the increased planning merit of the cumulative development into account

No

13.6 Questions

13.6.1 Do you agree with the proposed approach to scope out an assessment of potential effects on television?

It seems appropriate.

13.6.2 Do you agree with the proposed approach to scope out an assessment of potential effects on broadcast radio?

Yes

13.6.3 Do you agree with the proposed approach to scope out an assessment of potential effects on ice throw

This should be a matter for health and safety and therefore should not be scoped out.

14.2 Questions

14.2.1 Do you agree that the proposed approach with respect to the potential grid connection is appropriate?

Grid connection will mean yet another set of industrial infrastructure in the rural landscape.

15.3 Questions

15.3.1 Do you agree that the proposed approach with respect to the socio-economic assessment is appropriate?

Data for tourists/visitors to the area should not include 2020 as numbers then would have been at an all-time low. Many people who visit this area come for the walking, hills, cycling etc and are put off by the proliferation of wind farms. These visitors appreciate the pastoral scene and do not want to have an industrialisation of the countryside.

It has always been stated by applicants for wind farms that there would be economic benefit to local businesses during construction but this has never come to fruition. Local jobs is another area which is never realised. E.g. The workforce for Dersalloch came from Ireland; accommodation was not local; the workforce was brought in by buses so local shops did not benefit from them either.

16.4 Questions

16.4.1 Do you agree that the proposed approach with respect to climate change assessment is appropriate?

I find it ironic that you talk about carbon reduction yet the very plants which store carbon –i.e. trees – will be taken out and therefore the carbon released.

It is also a matter of concern that, while climate change is being cited, there is no notice taken of the carbon footprint which is generated by the production and transportation of the turbines. The raw materials, too, pose a question. Is it really ok to destroy other environments in other countries just so that we can boast that we are carbon neutral?

16.4.2 Do you agree the climate vulnerability and risk assessment can be scoped out of further assessment

I do not like the format for your questions which are of a closed nature inviting a yes/no answer.

Marine Scotland Science advice on freshwater and diadromous fish and fisheries in relation to onshore wind farm developments.

July 2020

Marine Scotland Science (MSS) provides internal, non-statutory, advice in relation to freshwater and diadromous fish and fisheries to the Scottish Government's Energy Consents Unit (ECU) for onshore wind farm developments in Scotland.

Atlantic salmon (*Salmo salar*), sea trout and brown trout (*Salmo trutta*) are of high economic value and conservation interest in Scotland and for which MSS has in-house expertise. Onshore wind farms are often located in upland areas where salmon and trout spawning and rearing grounds may also be found. MSS aims, through our provision of advice to ECU, to ensure that the construction and operation of these onshore developments do not have a detrimental impact on the freshwater life stages of these fish populations.

The Electricity Works (Environmental Impact Assessment) (EIA) (Scotland) Regulations (2017) state that the EIA must assess the direct and indirect significant effects of the proposed development on water and biodiversity, and in particular species (such as Atlantic salmon) and habitats protected under the EU Habitats Directive. Salmon and trout are listed as priority species of high conservation interest in the Scottish Biodiversity Index and support valuable recreational fisheries.

A good working relationship has been developed over the years between ECU and MSS, which ensures that these fish species are considered by ECU during all stages of the application process of onshore wind farm developments and are similarly considered during the construction and operation of future onshore wind farms. It is important that matters relating to freshwater and diadromous fish and fisheries, particularly salmon and trout, continue to be considered during the construction and operation of future onshore wind farms.

In the current document, MSS sets out a revised, more efficient approach to the provision of our advice, which utilises our generic scoping and monitoring programme guidelines (<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren>). This standing advice provides regulators (e.g. ECU, local planning authorities), developers and consultants with the information required at all stages of the application process for onshore wind farm developments, such that matters relating to freshwater and diadromous fish and fisheries are addressed in the same rigorous manner as is currently being carried out and continue to be fully in line with EIA regulations. At the request of ECU, MSS will still be able to provide further and/or bespoke advice relevant to freshwater and diadromous fish and fisheries e.g. site specific advice, at any stage of the application process for a proposed development, particularly where a development may be considered sensitive or contentious in nature.

MSS will continue undertaking research, identifying additional research requirements, and keep up to date with the latest published knowledge relating to the impacts of onshore wind farms on freshwater and diadromous fish populations. This

will be used to ensure that our guidelines and standing advice are based on the best available evidence and also to continue the publication of the relevant findings and knowledge to all stakeholders including regulators, developers and consultants.

MSS provision of advice to ECU

- MSS should not be asked for advice on pre application and application consultations (including screening, scoping, gate checks and EIA applications). Instead, the MSS scoping guidelines and standing advice (outlined below) should be provided to the developer as they set out what information should be included in the EIA report;
- if new issues arise which are not dealt with in our guidance or in our previous responses relating to respective developments, MSS can be asked to provide advice in relation to proposed mitigation measures and monitoring programmes which should be outlined in the EIA Report (further details below);
- if new issues arise which are not dealt with in our guidance or in our previous responses, MSS can be asked to provide advice on suitable wording, within a planning condition, to secure proposed monitoring programmes, should the development be granted consent;
- MSS cannot provide advice to developers or consultants, our advice is to ECU and/or other regulatory bodies.
- if ECU has identified specific issues during any part of the application process that the standing advice does not address, MSS should be contacted.

MSS Standing Advice for each stage of the EIA process

Scoping

MSS issued generic scoping guidelines

(<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren>) which outline how fish populations can be impacted during the construction, operation and decommissioning of a wind farm development and informs developers as to what should be considered, in relation to freshwater and diadromous fish and fisheries, during the EIA process.

In addition to identifying the main watercourses and waterbodies within and downstream of the proposed development area, developers should identify and consider, at this early stage, any areas of Special Areas of Conservation where fish are a qualifying feature and proposed felling operations particularly in acid sensitive areas.

If a developer identifies new issues or has a technical query in respect of MSS generic scoping guidelines then ECU should be informed who will then co-ordinate a response from MSS.

Gate check

The detail within the generic scoping guidelines already provides sufficient information relating to water quality and salmon and trout populations for developers at this stage of the application.

Developers will be required to provide a gate check checklist (annex 1) in advance of their application submission which should signpost ECU to where all matters relevant to freshwater and diadromous fish and fisheries have been presented in the EIA report. Where matters have not been addressed or a different approach, to that specified in the advice, has been adopted the developer will be required to set out why.

EIA Report

MSS will focus on those developments which may be more sensitive and/or where there are known existing pressures on fish populations (<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/fishreform/licence/status/Pressures>). The generic scoping guidelines should ensure that the developer has addressed all matters relevant to freshwater and diadromous fish and fisheries and presented them in the appropriate chapters of the EIA report. Use of the gate check checklist should ensure that the EIA report contains the required information; the absence of such information may necessitate requesting additional information which may delay the process:

Developers should specifically discuss and assess potential impacts and appropriate mitigation measures associated with the following:

- any designated area, for which fish is a qualifying feature, within and/or downstream of the proposed development area;
- the presence of a large density of watercourses;
- the presence of large areas of deep peat deposits;
- known acidification problems and/or other existing pressures on fish populations in the area; and
- proposed felling operations.

Post-Consent Monitoring

MSS recommends that a water quality and fish population monitoring programme is carried out to ensure that the proposed mitigation measures are effective. A robust, strategically designed and site specific monitoring programme conducted before, during and after construction can help to identify any changes, should they occur, and assist in implementing rapid remediation before long term ecological impacts occur.

MSS has published guidance on survey/monitoring programmes associated with onshore wind farm developments (<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren>) which developers should follow when drawing up survey and/or monitoring programmes.

If a developer considers that such a monitoring programme is not required then a clear justification should be provided.

Planning Conditions

MSS advises that planning conditions are drawn up to ensure appropriate provision for mitigation measures and monitoring programmes, should the development be given consent. We recommend, where required, that a Water Quality Monitoring Programme, Fisheries Monitoring Programme and the appointment of an Ecological Clerk of Works, specifically in overseeing the above monitoring programmes, is outlined within these conditions and that MSS is consulted on these programmes.

Wording suggested by MSS in relation to water quality, fish populations and fisheries for incorporation into planning consents:

1. No development shall commence unless a Water Quality and Fish Monitoring Plan (WQFMP) has been submitted to and approved in writing by the Planning Authority in consultation with Marine Scotland Science and any such other advisors or organisations.
2. The WQFMP must take account of the Scottish Government's Marine Scotland Science's guidelines and standing advice and shall include:
 - a. water quality sampling should be carried out at least 12 months prior to construction commencing, during construction and for at least 12 months after construction is complete. The water quality monitoring plan should include key hydrochemical parameters, turbidity, and flow data, the identification of sampling locations (including control sites), frequency of sampling, sampling methodology, data analysis and reporting etc.;
 - b. the fish monitoring plan should include fully quantitative electrofishing surveys at sites potentially impacted and at control sites for at least 12 months before construction commences, during construction and for at least 12 months after construction is completed to detect any changes in fish populations; and
 - c. appropriate site specific mitigation measures detailed in the Environmental Impact Assessment and in agreement with the Planning Authority and Marine Scotland Science.
3. Thereafter, the WQFMP shall be implemented within the timescales set out to the satisfaction of the Planning Authority in consultation with Marine Scotland Science and the results of such monitoring shall be submitted to the Planning Authority on a 6 monthly basis or on request.

Reason: To ensure no deterioration of water quality and to protect fish populations within and downstream of the development area.

Sources of further information

Scottish Natural Heritage (SNH) guidance on wind farm developments - <https://www.nature.scot/professional-advice/planning-and-development/advice-planners-and-developers/renewable-energy-development/onshore-wind-energy/advice-wind-farm>

Scottish Environment Protection Agency (SEPA) guidance on wind farm developments – <https://www.sepa.org.uk/environment/energy/renewable/#wind>

A joint publication by Scottish Renewables, SNH, SEPA, Forestry Commission Scotland, Historic Environment Scotland, MSS and Association of Environmental and Ecological Clerks of Works (2019) Good Practice during Wind Farm Construction - <https://www.nature.scot/guidance-good-practice-during-wind-farm-construction>.

Marine Scotland Science advice on freshwater and diadromous fish and fisheries in relation to onshore wind farm developments.

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Annex 1

MSS – EIA Checklist

The generic scoping guidelines should ensure that all matters relevant to freshwater and diadromous fish and fisheries have been addressed and presented in the appropriate chapters of the EIA report. Use of the checklist below should ensure that the EIA report contains the following information; the absence of such information **may necessitate requesting additional information** which could delay the process:

MSS Standard EIA Report Requirements	Provided in application YES/NO	If YES – please signpost to relevant chapter of EIA Report	If not provided or provided different to MSS advice, please set out reasons.
1. A map outlining the proposed development area and the proposed location of: <ul style="list-style-type: none"> ○ the turbines, ○ associated crane hard standing areas, ○ borrow pits, ○ permanent meteorological masts, ○ access tracks including watercourse crossings, ○ all buildings including substation, battery storage; 			

<ul style="list-style-type: none"> ○ permanent and temporary construction compounds; ○ all watercourses; and ○ contour lines; 			
<p>2. A description and results of the site characterisation surveys for fish (including fully quantitative electrofishing surveys) and water quality including the location of the electrofishing and fish habitat survey sites and water quality sampling sites on the map outlining the proposed turbines and associated infrastructure;</p>			
<p>3. An outline of the potential impacts on fish populations and water quality within and downstream of the proposed development area;</p>			
<p>4. Any potential cumulative impacts on the water quality and fish populations associated with adjacent (operational and consented) developments including wind farms, hydro schemes, aquaculture and mining;</p>			
<p>5. Any proposed site specific mitigation measures as outlined in MSS generic scoping guidelines and the joint publication “Good Practice</p>			

during Wind Farm Construction” (https://www.nature.scot/guidance-good-practice-during-wind-farm-construction);			
6. Full details of proposed monitoring programmes using guidelines issued by MSS and accompanied by a map outlining the proposed sampling and control sites in addition to the location of all turbines and associated infrastructure			
7. A decommissioning and restoration plan outlining proposed mitigation/monitoring for water quality and fish populations.			

Developers should specifically discuss and assess potential impacts and appropriate mitigation measures associated with the following:	Provided in application YES/NO	If YES – please signpost to relevant chapter of EIA Report	If not provided or provided different to MSS advice, please set out reasons.
1. Any designated area, for which fish is a qualifying feature, within and/or downstream of the proposed development area;			
2. The presence of a large density of watercourses;			
3. The presence of large areas of deep peat deposits;			

4. Known acidification problems and/or other existing pressures on fish populations in the area; and			
5. Proposed felling operations.			