



The Scottish Government
Energy Consents Unit

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

Craiginmoddie Wind Farm
Energiekontor UK Ltd

November 2020

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1. Introduction

This scoping opinion is issued by the Scottish Government Energy Consents Unit on behalf of Scottish Ministers to Energiekontor UK Ltd, a company incorporated under the Companies Acts with company number 04913493 and having its registered office at Beaufort Court Egg Farm Lane, Off Station Road, Kings Langley, Hertfordshire, WD4 8LR (“the company”). This is in response to a request dated 02 June 2020 for a scoping opinion under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 in relation to the proposed Craiginmoddie Wind Farm (“the proposed development”). The request was accompanied by a scoping report.

The proposed Site (“The Site”) is located within South Ayrshire Council and consists predominantly of rough grassland ground cover and extensive areas of plantation forestry. It is proposed to erect 16 wind turbines on the Site each up to a maximum of 180m to 230m in height to blade tip. The turbines would be of a typical modern design comprising a three bladed rotor hub mounted on a rotatable nacelle (containing a gearbox and a generator), tower and foundation subject to final design. The proposed Development will lie along an undulating ridge adjacent to the existing Hadyard Hill wind farm. The existing Hadyard Hill wind farm is an operational wind farm (commissioned in 2006) comprising 52 turbines.

The site is situated in the Carrick Hills in the south-east of South Ayrshire. It lies to the north of the Stinchar Valley and the south of the Girvan Valley in an upland area comprising low to medium sized hills, where land cover mostly comprises open moorland and coniferous forestry.

The Site formed part of larger area that was subject of the Section 36 Hadyard Hill windfarm Extension (ECU 00003118) submitted by SSE in 2015, comprising of 31 turbines (subsequently reduced to 22). SSE withdrew their application prior to its determination by Scottish Ministers.

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

- Site access;
- Site tracks;
- Temporary construction compound / storage area;
- Crane hardstanding’s and outrigger pads;
- Transformer housings;
- High voltage and control cables;
- Substation building & Compound;
- Energy Storage Compound;
- Off-site highway works; and
- Borrow pit(s).

The Company indicates the operational life of the proposed development is not known at this time, however Scottish Ministers are likely to apply time limit to any Consent granted.

The proposed development is solely within the planning authority of South Ayrshire Council.

2. Consultation

Following the request for a scoping opinion, a list of consultees was agreed between Energiekontor UK Ltd, and the Energy Consents Unit. Scottish Ministers undertook a consultation on the scoping report and this commenced on 15 June 2020. The consultation closed on 10 November 2020.

Extensions to this deadline were granted to:

- South Ayrshire Council;
- Ayrshire Rivers Trust;
- Crosshill, Straiton and Kirkmichael Community Council;
- Dailly Community Council; and
- Defence Infrastructure Organisation.

Scottish Ministers also requested responses from their internal advisors Marine Scotland, Transport Scotland and Scottish Forestry. A full list of consultees is set out at **Annex A**.

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.

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.

No responses were received from:

- Barr Community Council;
- British Horse Society;
- Civil Aviation Authority – Airspace;
- Fisheries Management Scotland;
- Galloway & Southern Ayrshire Biosphere;
- John Muir Trust;
- Network Rail;
- Scottish Wild Land Group (SWLG);
- Scottish Wildlife Trust;
- South Ayrshire Council (three internal advisor’s advice provided on landscape & visual, noise and environmental health)
- Stinchar District Salmon Fisheries Board;
- Visit Scotland; and
- West of Scotland Archaeology Service.

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.

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

This scoping opinion had been adopted following consultation with the relevant planning authority, South Ayrshire Council, within whose area the proposed development would be situated. Scottish Ministers to date have not received South Ayrshire Council's formal response to the scoping however have been provided with comments from three of South Ayrshire Council's internal advisors on landscape and visual matters, noise and environmental health. Any further comments received from South Ayrshire Council will be forwarded to the company.

Scottish Environment Protection Agency ("SEPA"), Scottish Natural Heritage ("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.

Scottish Ministers adopt this scoping opinion having taken into account the information provided by the applicant in its request dated 02 June 2020 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.

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

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**.

Scottish Ministers are satisfied with the scope of the EIA set out at Chapter 6 of the scoping report.

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.

The proposed development set out in the Scoping Report refers to wind turbines, and grid technologies including battery storage and/or solar panels.

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, solar panels, battery storage)
- components required for each generating station
- minimum and maximum export capacity of megawatts and megawatt hours of electricity for battery storage

Scottish Ministers request that the Company contacts Scottish Water and makes further enquires and includes details in the EIA report of any relevant mitigation measures provided.

Scottish Ministers request that the Company investigate private water supplies within close proximity to the proposed development, which may be impacted by the development. The EIA report should include details of these supplies identified by this investigation, the Company should provide an assessment of the potential impact, risks, and any mitigation which would be provided.

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.

It is recommended by the Scottish Ministers that the final list of viewpoints and visualisations should be agreed following discussion between the Company, South Ayrshire Council, Historic Environment Scotland and Scottish Natural Heritage. At this stage we would advise that the additional viewpoints as requested by South Ayrshire Council are included.

Scottish Ministers request the Company takes account of the advice provided by Marine Scotland Science (MSS) and please see the points raised in the response on Annex A32 – A33 and contact Girvan District Salmon Fishery Board and Stinchar Salmon Fishery Board and Ayrshire Rivers Trust for information on local fish stocks.

Since their response MSS now provide 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>)

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.

MSS also provide standing advice for onshore wind farms which has been appended at **Annex B** A88 – A96 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.

Aviation Lighting may be required due to the proposed scale and location of turbines. Further advice on aviation lighting is available from NatureScot. Scottish Ministers request the Company takes account of the advice provided by NatureScot and Defence Infrastructure Organisation and please see the points raised in the response at Annex A20 – A22.

Scottish Ministers request the Company takes account of the advice provided by Accon UK Environmental Consultants on behalf of South Ayrshire Council and please see the points raised in the response on Annex A1- A15. The noise assessment should be carried out in line with relevant legislation and standards as detailed in Chapter 5 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 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

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

This scoping opinion is based on information contained in the applicant'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 applicant information in

connection with an EIA report submitted in connection with any other application for section 36 consent for the proposed development.

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.

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.

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.

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

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.

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.

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 disc containing the EIA report and its associated documentation in electronic format will be required.

Carolanne Brown
Energy Consents Unit
November 2020

ANNEX A

Consultation

List of consultees

South Ayrshire Council	A1 – A15
Ayrshire River Trust	A16 – A17
British Horse Society;*	
BT;	A18
Civil Aviation Authority – Airspace;*	
Crown Estate Scotland;	A19
Defence Infrastructure Organisation;	A20 – A22
Fisheries Management Scotland;*	
Galloway & Southern Ayrshire Biosphere;*	
Glasgow Airport;	A23
Glasgow Prestwick Airport;	A24 – A25
Historic Environment Scotland (HES);	A26 – A29
John Muir Trust;*	
Joint Radio Company;	A30 – A31
Marine Scotland;	A32 – A33
Mountaineering Scotland;	A34 – A35
NATS Safeguarding;	A36
Nature Scotland;	A53 – A65
Network Rail;*	
RSPB Scotland;	A37
Scottish Environment Protection Agency (SEPA);	A45 – A52
Scottish Forestry;	A38 – A39
Scottish Rights of Way and Access Society (ScotWays);	A44
Scottish Water;	A40 – A43
Scottish Wild Land Group (SWLG);*	
Scottish Wildlife Trust;*	
Stinchar District Salmon Fisheries Board;*	
Transport Scotland;	A66 – A67
Visit Scotland; and*	
West of Scotland Archaeology Service.*	
Barr Community Council;*	
Crosshill, Straiton and Kirkmichael Community Council; and	A68 – A74
Dailly Community Council.	A75 – A87

Officials from Marine Science Scotland Transport Scotland and Scottish Forestry areas of the Scottish Government provided internal advice.

*No consultee responses were received.

South Ayrshire Council - *internal advisor's advice provided on landscape & visual, noise and environmental health*

Craiginmoddie Wind Farm – Scoping response on landscape and visual matters

October 7th 2020

The Scoping Report sets out the methodology and scope of the Landscape and Visual Impact Assessment (LVIA). I am in agreement with the methodology to be adopted for the LVIA and with the Study Area being defined as 45km from the proposal with a particular focus on an area within 20km of the wind farm where significant adverse landscape and visual impacts are most likely to occur.

The proposed development site largely lies in an area of forest. There is no mention of forestry removal, management and compensatory planting in paragraph 3.10 of the Scoping Report describing the proposal. 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 viewpoints.

I am in agreement with the stated scope of the LVIA in respect of assessing effects on landscape character and the Merrick WLA. Update is, however, needed on local landscape designations in South Ayrshire. The Scenic Area designation has been replaced by Local Landscape Areas and potential effects should be considered in detail on the special qualities and character of the Water of Girvan Valley, the Stinchar Valley and the High Carrick Hills LLAs. Citations and boundaries for these LLAs are available from South Ayrshire Council.

I note that the ZTV included with the Scoping Report is based on turbines 230m high to blade tip. A more 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 shown on the ZTV and listed in the Scoping Report should be supplemented with additional viewpoints from:

- The minor road between Straiton and Tairlaw within the Upper Girvan Valley (to assess potential effects on views and on the Girvan Valley LLA)
- The B741 west of the Ladyburn junction in the Girvan Valley (to assess potential effects on views to Kilkerran House and its Inventory listed Garden and Designed Landscape and to inform the assessment of effects on the Water of Girvan LLA)

It may not be necessary to consider both Viewpoints 2 and 5 in the LVIA as these are likely to be similar in nature although this should be tested by wireline visualisations. Consideration should be given to visibility and key views from the Barr Trails recreational routes in the Stinchar Valley.

Lighting effects should be assessed from each of the representative viewpoints and not just from the viewpoints selected to illustrate night-time effects. Effects on the Dark Sky Park should be additionally assessed. While the character of the landscape is not readily discernible during hours of darkness, lighting can affect perceptual qualities associated with landscape character and it is recommended that the effect on the sense of seclusion and naturalness (due to existing low lighting levels) are considered in the LVIA. These qualities should be addressed even if the viewpoint does not lie within the Dark Sky Park Core Area. The cumulative effects of lighting should be considered in relation to the nearby Clauchrie and Carrick wind farm proposals.

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.

Flaherty D (Debbie)

From: Steve Summers <steve.summers@accon-uk.com>
Sent: 30 September 2020 17:12
To: Edgar, Alan
Cc: Cooke, Austin
Subject: RE: Craiginmoddie Wind Farm Scoping Report

Hi Alan,

Our advice is as follows:

The proposed development site lies to the south of Straiton and immediately to the east of the existing Hadyard Hill wind farm. The closest proposed turbines are approximately 0.5 km from turbines forming part of the Hadyard Hill development.

In line with Scottish Government policy, the Scoping Report states that the operational noise assessment would follow the requirements of ETSU-R-97 and take account of 'A Good Practice Guidance to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise' (IOA GPG) published by the IOA. The assessment should also take account of 'Wind Turbine Development: Submission Guidance Note' (SGN) issued by South Ayrshire Council Environmental Health. The Scoping Report comments that there are a number of existing operational, consented and proposed wind farms in the vicinity of the development that will need to be considered as part of a cumulative assessment of wind turbine noise and proposes that only other wind farms that make 'a *significant (>1dB) contribution need to be assessed in terms of cumulative noise impact*'. This is at slight variance with the IOA GPG which advises that if predicted noise levels of another wind farm are within 10 dB of the predicted level of the proposed wind farm, then the other wind farm should be included in the cumulative assessment. It is therefore recommended that the noise assessment should follow the IOA GPG guidance on this matter. ACCON also note that the noise section of the Scoping Report has not at this stage identified the likely other existing operational, consented and proposed wind farms to be considered in the cumulative assessment.

At paragraph 5.160 noise limits applying to night-time and quiet daytime are discussed. The applicants should note that ETSU-R-97 methodology requires background noise survey data to be used to derive daytime noise limits. However, the noise limits derived in this way are subsequently applied in planning conditions to the usual daytime period of 07:00 to 23:00, not just the quiet daytime periods defined in ETSU-R-97.

The applicants should note that the planning consent for the Hadyard Hill wind farm includes a daytime noise limit of 38 dB L_{A90} for properties without a financial involvement in the wind farm. This daytime noise limit has subsequently been interpreted as a fixed minimum limit. That is, daytime noise levels are limited to 38 dB L_{A90} or the background noise level plus 5 dB, whichever is the higher. When the Hadyard Hill Extension wind farm was under consideration, this noise limit was adopted as a cumulative daytime noise limit. Taking the same approach to the cumulative noise limits for the Craiginmoddie wind farm would be recommended in order to protect the amenity of residents living nearby.

It is expected that noise measurement surveys will be necessary to obtain background noise levels for the wind turbine noise assessment. The applicant's acoustic consultants should consult with SAC on the proposed noise monitoring locations. In place of contacting the Environmental Health team, the Council's preferred approach for this is to submit proposals for noise monitoring to the Planning Officer so that the Council's consultants (ACCON) can advise on the suitability of the proposals. It is likely that directional filtering of noise monitoring data will be required when processing noise survey data given the proximity of other wind farms, in particular Hadyard Hill.

Noise from operational road traffic is considered unlikely to result in any significant effects according to the Scoping Report. ACCON agree with this point and consider that a detailed assessment of this aspect can be scoped out of the noise assessment.

The Scoping Report identifies correctly that noise from construction of the proposed development should be considered utilising the guidance in BS 5228 'Code of practice for noise and vibration control on construction and open sites'. ACCON advise that should the proposals include blasting for borrow pits, the potential effects of vibration and air over-pressure from these operations would need to be addressed.

Regards,
Steve

Steve Summers
Associate Director



EIA • Noise • Vibration • Air Quality • Lighting • Ecology

ACC [REDACTED], Citiba [redacted] g Road, Brighton, BN1 4ST
Tel: [REDACTED] Mob: [redacted]
We [\[redacted\]@con-uk.c](mailto:[redacted]@con-uk.c)

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Planning Application Consultation

A4

Environmental Health Reference:	
Planning Application Reference:	Ecu Reference - ECU00002080
Planning Case Officer:	Alan Edgar Email: Alan.edgar@south-ayrshire.gov.uk
Name/Address of Applicant:	Alan Edgar
Address of Proposed Works:	Proposed Craiginmoddie Windfarm Scoping Report South Ayrshire
Nature of Proposed Works:	<p>I refer to the above proposal and to your Service's consultation response which was received on 26th June. Connie and I had a discussion this morning and we have noted that there will likely be issues arising in respect to PWS. It would be very helpful if you could advise on what issues are and how you would wish to see them investigated through the EIA process.</p> <p>Details of the proposed wind farm are available on the Energy Consents Units website. The easiest way to find the details is to type "Craiginmoddie" into the search bar.</p> <p>As I explained to Connie, I have managed to agree a further extension from yesterday until the 15th September 2020, and would be very grateful if you are able to provide the PWS advice early next week.</p>
Date Received:	03.07.2020

OBSERVATIONS:

Existing Premises & Locality:	
Proposals:	

Implications:	NOISE	PRIVATE WATER SUPPLIES	PRIVATE WATER SOURCES
	POLLUTION	LIGHT POLLUTION	
Additional Comments:	Environmental Health Standard Conditions with specific PWS points from C Lobban Where Acoustic Consultant Procured by SAC Private Water Supplies/Operational Noise/Shadow Flicker		

1. Impact on Water - PRIVATE WATER SUPPLIES

The development should not adversely affect the private water supplies in the area (The Private Water Supplies (Scotland) Regulations 2006 and the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017.) The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017 The Housing Act 1987 Sect. 86, The Water (Scotland) Act 1980 (The Act), Protecting private water supplies during forestry activities – Guidance

www.Forestrywaterscotland.com

A report is required detailing how existing supplies will be maintained both qualitatively and quantitatively and sources and connections not adversely affected.

a) Prior to the commencement of works on the site, a water management plan covering water control and the means of drainage from all hard surfaces and structures within the site shall be submitted for approval of the planning authority and following approval shall be implemented by the company. For the purposes of this condition “hard surfaces” includes internal access tracks, construction and lay-down areas, turbine pads and crane pads. The details to be submitted shall include the means of protecting surface water and ground water and controlling surface water run-off. The management plan as approved shall then be implemented in full.

Reason: To minimise impacts on groundwater quality and hydrology.

b) The applicant shall submit to the planning authority a site-specific hydrogeological report (not desk top study), which contains a review of the risks to all private water sources, their catchment areas, and the supplies, that have the potential to be affected by the development. Work shall not commence on site prior to the written approval of the Planning Authority being obtained.

The report should include a field assessment of all private water sources and supplies and their catchment areas, and focus on the effects of the development on the quality and quantity of water supplied to all private water users both within and out-with the boundary of the proposed site that have the potential to be affected by the development.

A conceptual site model should be included as this is key to developing a robust assessment of all risks to all potentially affected private water supplies. Attention should also be given to possible leachate generation at any Borrow Pit excavations.

c) Forestry – Removal, Harvesting, Replanting, Compensatory Planting:

All Private Water Supply user properties, their Private Water Supply source uptakes and

catchment areas to be identified and shown as marked on maps, to scale, on minimum of 1:25000, in order to assess risk to catchment areas of the sources drawn from. This is to give realistic comparison to the siting's of the proposed construction, turbines, structures, over ground / underground, access tracks etc.

d) Emergency Action Plan

An EAP should be submitted stating clearly who would be responsible, when they would be required to take action, where this would be implemented and what action and mitigation will be implemented for any emergencies arising. The EAP should detail who the emergency contacts would be 24/7, with contact telephone numbers and email addresses, to be provided to PWS users and South Ayrshire council planning department.

Reason: In order to maintain a secure and adequate quality water supply to all properties with private water supplies that may be affected by the development.

Reason: To minimise impacts on groundwater quality and hydrology.

e) Specific concerns relating to private water supplies are as follows:

Following perusal of these plans the comments and representations I would advise that:

The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017

The Private Water Supplies (Scotland) Regulations 2006

The Water Supply (Water Quality) (Scotland) Regulations 2001

Protecting private water supplies during forestry activities – Guidance

www.forestrywaterscotland.com

The Housing (Scotland) Act 1987 – section 86

I have read through the scoping submission for Craiginmoddie Wind Farm, and am of the opinion that not enough information has been provided, and ask for further information to be provided.

I note that the application is “in perpetuity” and that the marked boundary of the site goes beyond the relative areas of the proposed turbines.

This would mean permission without time limit, with possible and potential upgrades, removal and installation in the future, which in turn would create further construction works, etc.

This could pose the potential to have adverse and possible irreversible effects, and be unacceptable or incompatible with Private Water Supplies and their often wide catchment areas feeds.

There is no clear indication of the proposed access entry route from roads to the proposed Craiginmoddie wind farm site, and no clear indications of where the proposed internal upgraded and new access roads will be.

There is no clear indication of proposed sites for borrow pits (quarries), or for water crossings that could have potential impact in catchment areas for private water supplies situated just out with the marked boundary on the provided map.

There is no clear indication of placement of proposed future construction of buildings, for example to house energy storage, etc.

In short, there is not enough detailed information provided.

South Ayrshire Council Environmental Health Department are the enforcing agency for

Private Water Legislation within South Ayrshire council local authority. Under the above legislation landowners, contractors and persons have Duty of Care under the above Regulations, which state “that a person must not take any action which has the effect of allowing deterioration of the quality of the water”, this being Regulation 16, and non-compliance is an offence, and enforcement action can be taken.

There are habited land areas within South Ayrshire Council Authority boundaries that do not, and probably never will have the opportunity to access mains water.

I note there may be such as along the Stinchar Valley, what appears to be several catchment areas which potentially feed the source uptakes lying within the marked boundary area, potentially supplying feeds which then supply the private water properties lying on or just outside the marked boundary.

I note that a number of the proposed turbines sites are on or very close to the marked boundary, and as such, a 1km buffer zone from the boundary is not sufficient to ensure the safety of private water supply.

Buffer zones around potential catchments for private water supply sources must ensure there is no potential for pollution or disruption. They must be of adequate distance to ensure this. This is imperative when operations are planned on terrain such as is described in this scoping report, such as steep sided gradients, narrow deep valleys, or side wash or water displacement, contaminated water runoff downhill potential from ground bog flow, for example. Drought is now also becoming a serious issue for private water supplies across Scotland at certain times of the year.

I require proof that problems will not occur due to introduced construction or forestry operations, and wind farm operations, such as further information on which private water supplies, sources, catchment areas for those sources, and properties that have been identified by the company which have the potential to be affected by forestry operations, and construction of the entrance supply road, upgrade of the access road/s into and within the proposed windfarm. This would also be considered as part of drought conditions related to private water supplies.

I require proof that problems will not occur, or be further compounded by the proximity to further or existing windfarms such as Carrick, Hadyard Hill, etc.

The above list or points are not exhaustive or finite in observations.

Prior to planning consent being granted the following comments and representations should be complied with to satisfy Environmental Health:

2. Shadow Flicker

Following a complaint to the Planning Authority the applicant will appoint a suitably qualified person to the satisfaction of the Local Authority, who will undertake an investigation into the incidence of shadow flicker at the compliant location. Where shadow flicker is confirmed to result in loss of amenity, then mitigation measures require to be implemented, to the satisfaction of the Local Authority.

Reason: to prevent nuisance to residents from shadow flicker

3. Construction Noise

a. Prior to the commencement of works on site, the company shall submit to the planning authority a management plan for minimising the emission of dust from the construction and operation of the development hereby authorised. The dust management

plan shall specify the following matters and, after its approval shall be implemented in full by the Company:-

- The water spraying of all internal roads and stockpiles of materials to suppress dust in periods of prolonged dry weather;
- The means to ensure that an adequate water supply is available at all times for dust suppression purposes;
- The operation of the site so as to ensure that adequate steps are taken at all times to minimise dust propagation from un-surfaced access tracks within the site.

Reason: To minimise dust to nearby residents.

c. Prior to the commencement of the development the company shall submit to the planning authority an assessment of the effects of the development on the quantity and quality of water supplied to all properties with private water supplies that may be affected by the development. Thereafter, any mitigation measures as identified in the risk assessment shall be implemented and agreed by the planning authority in order to maintain a secure and adequate quality of water supply to all properties with private water supplies that may be affected by the development.

Reason: In order to maintain a secure and adequate water supply to all properties with private water supplies that may be affected by the development.

d. Construction works require to be carried out in accordance the approved Code of Practice BS 5228-1 and 2:2009 Noise and Vibration Control on Construction and Open Sites or any subsequent code amending consolidating or replacing it as approved by the Secretary of State pursuant to Sections 71(2) and 104 of the Control of Pollution Act 1974.

As the development is in an area of existing low ambient noise levels and the construction activities continue for more than 1 month the following minimum criteria are applicable:-

Assessment category and threshold value period (LAeq) Threshold value in decibels (dB),

Category A

Night time (23.00-07.00) 45

Evenings and Weekends* 55

Daytime (07.00-19.00) and Saturdays (07.00-13.00) 65

*19.00-23.00 weekdays, 13.00-23.00 Saturdays and 07.00-23.00 Sundays. 5228-1

Annex E.

e. Prior to any works being undertaken a detailed method statement for the construction project will require to be undertaken for approval by South Ayrshire Council Planning Department. This shall include an assessment of potentially noisy operations and outline the noise mitigation measures proposed. This will also include a programme and phases for each stage of work.

The site contractors shall conduct all site operations in accordance with accredited documented procedures. This shall include a site complaint investigation procedure.

f. No Blasting shall take place until a monitoring scheme to address borrow pit blasting has been submitted to South Ayrshire Council and received the written approval of, the planning authority. The scheme shall be implemented as approved in writing by the planning authority. The scheme shall make provision for:

- Blasting monitoring locations (Nearest noise/vibration sensitive properties)
- Type of monitoring equipment to be used;
- Frequency of monitoring.
- The methods to be employed to minimise the effects of overpressure arising from blasting, having regard to blast design, methods of initiation and the weather conditions prevailing at the time;
- Limits of overpressure levels at specified properties; and
- Submission of blasting records to the planning authority.

Reason: To minimise disturbance to residents from noise and vibration.

g. No blasting shall take place except between the following times:-

- 10:00 – 12:00 and 14:00 – 16:00 Mondays to Fridays
- 10:00 – 12:00 Saturdays

Reason: To minimise disturbance to local residents.

h. Ground vibration from the blasting shall not exceed a peak particle velocity of 6mm /second at the blasting monitoring locations identified for condition 6 above. The measurement to be the maximum of three mutually perpendicular directions taken at the ground surface.

Reason: To minimise disturbance to residents in the vicinity of the wind farm.

4. Operational Noise

Operational Noise Levels:

This part of the ES is to be assessed by a 3rd party consultant and their findings suitably

implemented.

Complaint Procedure

a) Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

b) The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immisions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.

c) Where a dwelling to which a complaint is related has not previously had noise limits assigned against it, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from another property which has had noise limits assigned to it to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the

complainant's swelling. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

d) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set on in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions.

e) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

f) The rating level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the accompanying guidance notes (to this condition) shall not exceed the values for the relevant integer wind speed set out in, or derived from the table below at any dwelling which is lawfully existing or has planning permission at the date of this permission.

Guidance Notes for Noise Conditions

These notes are to be read with and form part of the noise conditions. They further explain the conditions and specify the methods to be deployed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Note 3. Reference to ETSU-R-97 refers to the publication entitled "The

Assessment and Rating of Noise from Wind Farms” (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Measured noise imission levels from the turbines must be referenced to standardised 10 metres height wind speeds.

Guidance Note 1

(a) Values of the LA90,10-minute noise index should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). If required, measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2 - 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall notify the Local Planning Authority in writing that access has been denied.

(c) The LA90,10-minute measurements should be synchronised with measurements of the 10-minute arithmetic average wind speed, standardised to a height of 10 metres at the wind farm site, and with operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second (m/s), arithmetic mean wind direction in degrees from north in each successive 10-minute periods from the supervisory control and data acquisition (SCADA) system to enable compliance with the conditions to be evaluated. Wind speed data shall also be standardised to a 10 meters height. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements determined as valid in accordance with Note 2(b), such

correlation to be undertaken in the manner described in Note 2(c). In addition, the wind farm operator shall continuously log the arithmetic mean power generated during each successive 10-minute period for each wind turbine on the wind farm. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time.

(e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

Guidance Note 2

(a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b).

(b) Valid data points are those measured in the conditions set out in the assessment protocol approved by the Local Planning Authority under Condition 3 of the noise condition but excluding any periods of rainfall measured at the complainants dwelling.

(c) Values of the LA90,10-minute noise measurements and corresponding values of the measured 10-minute standardised 10-metre height wind speed for those data points considered valid in accordance with Note 2 paragraph (b) shall be plotted on an XY chart with noise level on the Y-axis and wind speed on the X-axis. A least squares best fit curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

Guidance Note 3

(a) Where in accordance with the approved assessment protocol under condition 3, noise imissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(b) For each 10-minute interval for which LA90,10-minute data have been determined as valid in accordance with Note 2 a tonal assessment shall be performed on noise imissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from standard procedure shall be reported.

(c) For each of the 2-minute samples the tone level above audibility , shall be

calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 - 109 of ETSU-R-97 or future equivalent guidance for wind farm tonal noise assessment.

(d) The tonal level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(e) A least squares best fit linear regression shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line fitted to values within $\pm 0.5\text{m/s}$ of each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.

Guidance Note 4

(a) If a tonal penalty is to be applied in accordance with Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Note 3 above at each integer wind speed within the range set out in the approved assessment protocol under condition 3.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved by the Local Authority, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise emission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant or local planning authority requires undertaking the further assessment. The further assessment shall be undertaken in accordance with the following steps:

(e) Repeating the steps in Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range set out in the approved assessment protocol under Condition 3.

- (f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:
- (g) The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.
- (h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note (iii) above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the limits approved by the Local Planning Authority for a complainants dwelling then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainants dwelling then the development fails to comply with the conditions.

Recommendations:

Consultations:	Pollution Control	Light Pollution	Private Water Supplies
Others:			

Enforcement of Major Legislation	Health & Safety:	SAC	HSE
	Food Hygiene:	SAC	N/A

Attached Documents:

Letter to Applicant?	YES	NO
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Template:						Memo 6 Windfarms
Officer Name:	Connie Lobban, Enforcement Officer		Environmental Health South Ayrshire Council		Date: 01 September 2020	
	Matt Smith, Environmental Health Officer					



Ayrshire Rivers Trust
working to improve Ayrshire's rivers and lochs

20 CELEBRATING 20
YEARS
2000-2020

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

7th July 2020

Dear Sirs,

Re: Craiginmoddie Wind Farm Scoping Report

On behalf of the Ayrshire Rivers Trust (ART) and the River Stinchar District Salmon Fishery Board (DSFB) and River Girvan DSFB we would like to make the following comments on the above Scoping Report. Our comments relate only to 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 important tributaries of the River Stinchar and River Girvan. We therefore ask you consider the following comments.

Q11: Do you agree with the conclusions and recommendations of the ecology Reports summarised above?

We agree that fish surveys should be repeated to update the baseline. These fish surveys should be undertaken during construction and once the development is complete. Aquatic macroinvertebrate monitoring should also be undertaken before, during and after construction to supplement water quality monitoring.

Q12. Are there any other stakeholders that should be consulted as part of this process?

Yes, the River Girvan District Salmon Fishery Board

Additional Comments.

Construction and operation of the Craiginmoddie Wind Farm proposal has the potential to effect fish populations and fisheries within the River Stinchar and River Girvan catchments. We therefore request the updated Environmental Impact Assessment should assess (if they have not done so already) the following potential effects from the site preparation and construction and operational activities:

1. 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
2. Construction activities – impediment to fish movement. Construction activities should not impede movement of all migratory and resident fish populations. New water crossings (temporary or permanent) should only be installed using SEPA design and best practice guidelines. The River Stinchar DSFB, River Girvan DSFB and Ayrshire Rivers Trust should be consulted beforehand to assist with the design and necessary mitigation measures. There is

REDACTED

an opportunity for the development to have a positive impact on the water environment by upgrading old crossings within the development that may prevent or hinder fish migration.

3. Construction/operation activities - increased silt loading to watercourses. Potential impacts from soil stripping, track construction and vehicle/plant movements, dewatering on receptor watercourses and abstraction of water from watercourses.

A comprehensive mitigation and monitoring plan using the most up to date best practice guidelines should be included that will address the above potential negative impacts on watercourses.

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)

Gillian McIntyre
Biologist and Project Manager

Brown C (Carolanne)

From: lisa.4.smith@bt.com <lisa.4.smith@bt.com>

Sent: 29 June 2020 07:57

To: Brown C (Carolanne) <Carolanne.Brown@gov.scot>; Econsents Admin <Econsents_Admin@gov.scot>

Cc: radionetworkprotection@bt.com

Subject: FW: Request for Scoping Opinion - Craiginmoddie Wind Farm - WID11237

OUR REF; WID11237

Dear Sir/Madam

Thank you for your email dated 15/06/2020.

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 Project indicated should not cause interference to BT's current and presently planned radio network.

Please direct all queries to radionetworkprotection@bt.com

Regards

Lisa Smith

Engineering Services Radio Planning

Tel: REDACTED



This email contains information from BT that might be privileged or confidential. And it's only meant for the person above. If that's not you, we're sorry - we must have sent it to you by mistake. Please email us to let us know, and don't copy or forward it to anyone else. Thanks.

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British Telecommunications plc

R/O : 81 Newgate Street, London EC1A 7AJ

Melrose J (Joyce)

From: McGrogan, Joan <joan.mcgrogan@crownestatescotland.com>
Sent: 29 July 2020 08:09
To: Brown C (Carolanne); Econsents Admin
Subject: 20200729 - Request for Scoping Opinion - Craiginmoddie Wind Farm - CES interests not affected - reply to Scotgov
Attachments: Craiginmoddie Wind Farm - Combined Scoping Report Documents.pdf

Dear Carolanne

Thank you for your email.

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

Kind regards

R.E
E.A
D.T
Joan McGrogan
A.E.D
Portfolio Co-ordinator
C
Crown Estate Scotland
E
REDACTED
6 Bell's Brae, Edinburgh, EH4 3BJ
Tel: +44 (0) 131 260 6070
www.crownestatescotland.com
[@crownestatescot](https://twitter.com/crownestatescot)



Defence Infrastructure Organisation

Jill Roberts
Assistant Safeguarding Manager
Ministry of Defence
Safeguarding – Wind Energy
Kingston Road
Sutton Coldfield
West Midlands B75 7RL
United Kingdom

Mobile: REDACTED

E-mail: Jillian.roberts156@mod.gov.uk

Ms Carolanne Brown
Energy Consents Unit
Scottish Government
4th Floor
5 Atlantic Quay
150 Broomielaw
Scotland
G28LU

Your ref: ECU 00002080

Our ref: DIO10048280

13 July 2020

Dear Carolanne

Site Name: Craiginmoddie Wind Farm

Proposal: Section36 Scoping Opinion for 16 Turbines between 180 metres - 230 metres to blade tip

Site Address: Carrick Hills in the south-east of South Ayrshire. North of the Stinchar Valley and south of the Girvan Valley.

Thank you for consulting the Ministry of Defence (MOD) on the above Section 36 Scoping Opinion for the proposed construction and operation of a wind farm.

I am writing to tell you that, subject to the provision of appropriate lighting, the MOD has no concerns in relation to the proposal.

The applicant proposes 16 turbines each with a maximum tip height of 230 metres above ground level. The development has been assessed using the grid references below as submitted in the planning application or in the developers' or your pro-forma

Turbine	Easting	Northing
1	230,279	597,877
2	230,846	597,795
3	231,350	597,644
4	231,574	597,219
5	231,605	598,378
6	232,047	598,755
7	232,655	598,897

8	232,832	599,329
9	232,539	599,676
10	232,058	599,778
11	230,560	598,735
12	231,066	598,841
13	231,415	599,176
14	231,964	599,313
15	233,026	599,641
16	230,996	598,402

The principal safeguarding concern of the MOD with respect to the development of wind turbines relates to their potential to create a physical obstruction to air traffic movements and cause interference to Air Traffic Control and Air Defence radar installations.

The proposed development falls within an area used for military low flying training, and where the introduction of structures has the potential to compromise aviation safety. As such, it will be necessary for structures to be fitted with appropriate aviation lighting to maintain the safety of military aircraft.

Specifically, those wind turbines that will be installed with a total height (to blade tip) of 150 metres or more, should be fitted with aviation warning lighting in accordance with the requirements of the Air Navigation Order (2016) as directed by the Civil Aviation Authority (CAA). In addition, any structure that forms part of the development and has a height greater than 15.2m above ground level and less than 150m above ground level should be fitted with aviation warning lighting in accordance with MOD lighting specifications.

The Defence Infrastructure Organisation Safeguarding team wishes to be consulted and notified of the progression of planning applications and submissions relating to this proposal to verify that it will not adversely affect defence interests.

If planning permission is granted, we would like to be advised of the following prior to commencement of construction;

- the date construction starts and ends;
- the maximum height of construction equipment;
- the latitude and longitude of every turbine.

This information is vital as it will be plotted on flying charts to make sure that military aircraft avoid this area.

If the application is altered in any way we must be consulted again as even the slightest change could unacceptably affect us.

I hope this adequately explains our position on the matter. If you require further information or would like to discuss this matter further, please do not hesitate to contact me.

Further information about the effects of wind turbines on MOD interests can be obtained from the following websites:

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

Yours sincerely

REDACTED

Jill Roberts
Assistant Safeguarding Manager

Glasgow Airport - Consultation Response

Brown C (Carolanne)

From: #GLA Safeguarding <GLASafeguard@glasgowairport.com>
Sent: 07 July 2020 15:37
To: Brown C (Carolanne)
Subject: RE: Request for Scoping Opinion - Craiginmoddie Wind Farm

This proposal is located outwith the consultation zone for Glasgow Airport. As such we have no comment to make and need not be consulted further.

Regards

Kirsteen



#GLA Safeguarding
#GLA Safeguarding

REDACT
glasafeguard@glasgowairport.com
www.glasgowairport.com

Glasgow Airport, Erskine Court, St Andrews Drive, Paisley, PA3 2TJ

CURRENT HOLDER OF
FOLLOWING AWARDS

- Scottish Airport of the Year 2019
- Excellence in Transport Accessibility 2019

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Glasgow Prestwick Airport - Consultation Response

Melrose J (Joyce)

From: Steve Thomson <sthomson@glasgowprestwick.com>
Sent: 02 July 2020 16:06
To: Brown C (Carolanne); Econsents Admin
Cc: Safeguarding
Subject: RE: Request for Scoping Opinion - Craiginmoddie Wind Farm - Response - Glasgow Prestwick Airport Ltd - 2nd July 2020
Attachments: Craiginmoodie Windfarm - Response to Scoping Report submitted by Glasgow Prestwick Airport Ltd - 2nd July 2020.pdf

Carolanne

Please find attached Glasgow Prestwick Airport (GPA) Ltd's response to the scoping consultation (ECU EC00002080) for the proposed Craiginmoodie Windfarm.

Our principal response to this consultation is primarily aviation safety and impact on primary radar provision – and we have responded accordingly with that focus – but have suggested some additional areas of aviation assessment (ie, assessment against published Instrument Flight Procedures – IFP's) that we believe will also be require to be examined fully under the full EIA as part of any subsequent full planning application.

This proposed windfarm will be fully visibly to our primary radars – and as such will generate unacceptable radar display clutter – that will require to be mitigated for the life of the windfarm.

Kind Regards

Steve Thomson



Glasgow Prestwick Airport Ltd.
 Aviation House
 Prestwick
 KA9 2PL
 Scotland
 United Kingdom

Steve Thomson
 Manager Air Traffic Services
 Glasgow Prestwick Airport Ltd.

T: REDACTED
REDACTED

sthomson@glasgowprestwick.com
www.glasgowprestwick.com



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Disclaimer:

This message contains confidential information and is intended only for Carolanne.Brown@gov.scot, Econsents_Admin@gov.scot, Safeguarding@corp.gpia.co.uk. If you are not Carolanne.Brown@gov.scot, Econsents_Admin@gov.scot, Safeguarding@corp.gpia.co.uk you should not disseminate, distribute or copy this e-mail. Please notify Steve Thomson immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Glasgow Prestwick Airport Ltd. therefore does not accept liability for any errors or omissions in the contents of this message which arise as a result of e-mail transmission. If verification is required please request a hard-copy version. Additionally, the views, opinions, conclusions and other informations expressed in this message are not given or endorsed by the company unless otherwise indicated by an authorised representative independent of this message.

Craiginmoodie Windfarm Extension Summary of Questions	Glasgow Prestwick Airport (GPA) Ltd – response to Scoping Request – for Craiginmoodie Windfarm ECU00002080 2nd July 2020
Question Number	Question
	Q1 - Are there any potential significant impacts that have not been included? Glasgow Prestwick Airport (GPA) response: The EIAR intimates that it will consider the impact on military and civilian radars. GPA welcome this detailed assessment – and would be very keen to see the detailed output of such assessment. As stated in the Scoping Report – all turbines will be visible to GPA primary radars – and thus generate unacceptable radar display clutter – that will require to be mitigated for the life of the windfarm.
	Q2 - Is the intended method of assessment appropriate? While in general GPA consider the assessment methodology appropriate, GPA respectfully request that the aviation assessment should include any potential impact on published Instrument Flight Procedures both conventional and RNAV) for Glasgow Prestwick Airport as published in the UK AIP for EGPK – as the proposed windfarm is in an area of airspace close to our published IFP's.
	Q3 - Are there additional mitigation measures that should be considered? GPA consider aviation lighting needs to be consider in detail – particularly for any turbines in excess of 149.9m in height (AGL)
	Q4 - Are there any other landscape or visual receptors and viewpoint assessment locations that should be considered in the assessment? GPA make no comment on this question
	Q5 - Are there any other wind energy developments which should be included or excluded from the cumulative assessment? GPA make no comment on this question

HISTORIC
ENVIRONMENT
SCOTLANDÀRAINNEACHD
EACHDRAIDHEIL
ALBA

By email to: Carolanne.Brown@gov.scot

Ms Carolanne Brown
Case Officer
Energy Consents Unit

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: REDACTED
HMConsultations@hes.scot

Our case ID: 300043670
Your ref: ECU00002080

26 June 2020

Dear Ms Brown

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Proposed Section 36 application for Craiginmoddie Wind Farm, South Ayrshire

Scoping Report

Thank you for your consultation which we received on 15 June 2020 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).

WOSAS 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 a windfarm of 16 turbines, each between 180 - 230m blade tip heights. The nearest settlements are Barr (4km south), Dailly (4km north), Crosshill (6.5km north).

Scope of assessment

Potential direct physical impacts

We can confirm that there are no scheduled monuments, category A listed buildings, Inventory battlefields, gardens and designed landscapes or World Heritage Sites within the proposed development boundary.

Potential setting impacts

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

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/>.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Chloe Porter and they can be contacted by phone on REDACTED or by email on chloe.porter@hes.scot.

Yours faithfully

Historic Environment Scotland

ANNEX

EIA Scoping Report (May 2020)

We have reviewed the EIA Scoping Report (May 2020) submitted as part of this scoping request. We are content to agree the methodology and the proposed approach to field surveys. We are also content to agree on the extent of the study area proposed.

In your initial review of the cultural heritage in the wider landscape you have identified the following assets for our interest:

Schedule Monuments

- Mote Knowe, motte, Kilkerran (SM2863) which lies 1.5 km to the northwest of the Site boundary and lies low down within the narrow Lindsayston Burn.
- A group of enclosures: Knockinculloch (SM3357) (ca. 1.5km to the northeast) and a chambered cairn (Bencallen Hill, chambered cain (SM3890), in forestry ca. 3km to the southeast.
- Old Dalquharran Castle (SM316)

We would also mention at this stage the need to consider Maxwellston Hill fort (SM2201). It is around 4km west of the proposed site.

Gardens and Designed Landscapes

- Bargany (GDL00047)
- Kilkerran (GDL00238)
- Blairquhan (GDL00063)

A-listed buildings

- Bargany House (LB1171)
- Dalquharran Castle (LB125)
- Kilkerran House (LB1114)

We are content to agree with this first review of the cultural heritage.

We recommend that a ZTV is used to identify potential setting impacts which will also help establish if there are more assets to take into account. However, we would note that even where a ZTV indicates that no intervisibility would be possible from any such assets identified, the potential may remain for turbines to appear in the background of key views towards these assets, and this should be considered as part of the assessment.

It is important to note that some assets have settings that are particularly sensitive to impacts, and the likely sensitivity of the setting should be used to help determine which sites are assessed in more detail in the Environmental Impact Assessment Report.

We would also expect any assessment to contain a full appreciation of the setting of these historic environment assets and the likely impact on their settings.

We strongly recommend that our [Managing Change Guidance Note on Setting](#) is used to inform setting assessments and further information on good practice in cultural heritage assessment can be found in [Appendix 1 of the EIA Handbook](#).

It would be helpful if, where the assessment finds that significant impacts are likely, appropriate visualisations such as photomontage and wireframe views of the development in relation to the sites and their settings could be provided. Visualisations illustrating views both from the asset towards the proposed development and views towards the asset with the development in the background would be helpful.

We would be happy to agree a list of wireframes and visualisations if that would be helpful to you.

It would also be helpful if the assessment included an assessment of the cumulative impact of the development with the existing Hadyard Hill Wind farm. We would expect viewpoints where there may be significant impacts to be illustrated with a photomontage.

Historic Environment Scotland
26 June 2020

Brown C (Carolanne)

From: JRC Windfarm Coordinations <windfarms@jrc.co.uk>
Sent: 16 June 2020 14:46
To: Brown C (Carolanne)
Subject: Request for Scoping Opinion - Craiginmoddie Wind Farm [WF515134]

Dear carolanne,

A Windfarms Team member has replied to your coordination request, reference **WF515134** with the following response:

Dear Carolanne,

Name/Location: Craiginmoddie Wind Farm

Site Centre/Turbine at NGR/IGR:

230,279 597,877
230,846 597,795
231,350 597,644
231,574 597,219
231,605 598,378
232,047 598,755
232,655 598,897
232,832 599,329
232,539 599,676
232,058 599,778
230,560 598,735
231,066 598,841
231,415 599,176
231,964 599,313
233,026 599,641
230,996 598,402

Development Radius: 0.1KM

Hub Height: 148.5m Rotor Radius: 81.5m

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

Scottish Power and Scotia Gas Networks

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

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

In making this judgement, JRC has used its best endeavours with the available data, although we recognise

that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

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

Regards

Wind Farm Team

*The Joint Radio Company Limited
Delta House
175-177 Borough High Street
LONDON
SE1 1HR
United Kingdom*

Office: REDACTED

JRC Ltd. is a Joint Venture between the Energy Networks Association (on behalf of the UK Energy Industries) and National Grid.

Registered in England & Wales: 2990041

<http://www.jrc.co.uk/about-us>

JRC is working towards GDPR compliance. We maintain your personal contact details in accordance with GDPR requirements for the purpose of "Legitimate Interest" for communication with you. However you have the right to be removed from our contact database. If you would like to be removed, please contact anita.lad@jrc.co.uk.

We hope this response has sufficiently answered your query.

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

<https://breeze.jrc.co.uk/tickets/view.php?auth=01x2idqaagzjuaaam%2F13LPCJktyuYg%3D%3D>

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T: REDACTED
DD: REDACTED

e-mail: emily.bridcut@gov.scot

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

Our ref: FL/49-7

July 7th 2020

Dear Carolanne,

CRAIGINMODDIE WIND FARM, SOUTH AYRSHIRE

Thank you for seeking comment from Marine Scotland Science (MSS) in relation to freshwater and diadromous fish and fisheries on the scoping report for the proposed Craiginmoddie wind farm.

MSS recommend that the developer consults our generic scoping guidelines (<https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren>) and in line with our guidelines we highlight the following matters:

- that the developer carries out site characterisation surveys to assess the presence and abundance of fish species which could potentially be impacted by the proposed development. Further details regarding survey and monitoring work can be found in our generic monitoring guidelines at the above web site;
- that the developer draws up appropriate site specific mitigation plans including a robust integrated water quality and fish population monitoring programme;
- that the developer is aware of ongoing acidification problems in the area;
- that the developer considers the potential impact on the water quality and fish populations should felling be carried out;



- that the developer considers the potential cumulative impact on the water quality and fish populations as a result of other developments which are in hydrological connectivity with the present proposal; and
- to contact, if not already done so, the Girvan District Salmon Fishery Board, the Stinchar Salmon Fishery Board and the Ayrshire Rivers Trust for further information on local fish populations.

Kind regards,

Dr Emily E. Bridcut.



The Granary | West Mill Street | Perth | PH1 5QP
 T: REDACTED E: info@mountaineering.scot
www.mountaineering.scot

By email to: Econsents_Admin@gov.scot

Energy Consents Unit
 Directorate for Energy and Climate Change
 5 Atlantic Quay
 150 Broomielaw
 Glasgow
 G2 8LU

30 June 2020

Dear Sir/Madam

Craiginmoddie Wind Farm: Environmental Impact Assessment Scoping Report

ECU reference 00002080

Background and Context

Energiekontor has submitted a scoping report for a wind farm of up to 16 turbines of up to 230m BTH in South Ayrshire. The proposed site lies east of the operational Hadyard Hill wind farm (52 turbines of 100-110m BTH), and between it and the scoping site of Carrick wind farm (scoping based on 17 turbines of 200m BTH). It is around 7km north of the application site of Clauchrie wind farm (18 turbines of 200m BTH).

Mountaineering Scotland is a membership organisation with over 14,000 members and is the only recognised representative organisation for hill walkers, climbers, mountaineers and ski-tourers who live in Scotland or who enjoy Scotland's mountains, and acts to represent, support and promote Scottish mountaineering. Mountaineering Scotland also acts on behalf of the 85,000 members of the British Mountaineering Council (BMC) on matters related to landscape and access in Scotland, and provides training and information to mountain users to promote safety, self-reliance and the enjoyment of our mountain environment.

Assessment

Mountaineering Scotland is in general content with the proposed methodology in the Scoping Report. It has four observations which are set out below.

1. The principle of focussing on a 20km 'study area' is acceptable but that should not mean entirely ignoring visual impacts upon areas beyond 20km. Even the present assessment of the Scoping Report has been hindered by the restriction of the ZTV diagram to little more than the 20km radius from the site.
2. The Scoping Report states: "... there is little visibility beyond the 5-10km radius to the east and south because the bigger hills which sit behind the Foothills with Forest and Wind Farms LCT, would



screen visibility.”(Para 5.57) The Galloway Corbetts and most of the Donalds (hills >2000 feet) sit in the southeast quadrant from the proposed development site and summits at 11km to >27km distance are shown on the ZTV as having visibility of the site, mostly with 15-16 turbines in view. The LVIA supporting any future application should be more careful in its assertions.

3. Viewpoints on The Merrick, Shalloch on Minnoch, Cornish Hill and Cairnsmore of Carsphairn are appropriate. However, the absence of a viewpoint on the northern Rhinns of Kells – at the summit of Coran of Portmark, for example – is undesirable. If the number of viewpoints is an issue, we would regard Coran of Portmark (at c.19 km) as more important than Cairnsmore of Carsphairn (at 27km).

4. The visual relationship of the proposed development with the adjacent scoping site of Carrick wind farm and the application site of Clauchrie wind farm will be an important consideration in assessing the impact of any future Craiginmoddie planning application. Wirelines should clearly show these proposals unless they have been refused or withdrawn prior to an application for Craiginmoddie.

Yours sincerely

REDACTED

Davie Black
Access & Conservation Officer
Mountaineering Scotland

T: REDACTED

E: access@mountaineering.scot



NATS Safeguarding - Consultation Response

Brown C (Carolanne)

From: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Sent: 23 June 2020 15:25
To: Brown C (Carolanne)
Cc: NATS Safeguarding; Econsents Admin
Subject: RE: Request for Scoping Opinion - Craiginmoddie Wind Farm (SG20366)
OBJECTION

Dear Carolanne

We refer to the application above. The proposed development has been examined by our technical safeguarding teams. In the timeframe given to us we have been unable to thoroughly investigate the effects of the proposed development on our Operations, however, the relevant teams are being consulted.

Based on our preliminary technical findings, the proposed development does conflict with our safeguarding criteria. Accordingly, NATS (En Route) plc **objects to the proposal**. We will notify you within 4-6 weeks of the results of our operational assessment. Only if this assessment shows the impact to be acceptable will we be able to withdraw our objection.

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 for a wind farm. 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 further obliged to notify both NATS and the Civil Aviation Authority ("CAA") of that fact (which may lead to the decision made being subject to review whether by the CAA referring the matter for further scrutiny or by appropriate action being taken in the courts).

As this further notification is intended to allow the CAA sufficient time to consider whether further scrutiny is required, we understand that the notification should be provided prior to any granting of permission. You should be aware that a failure to consult NATS, or to take into account NATS's comments when deciding whether to approve a planning application, could cause serious safety risks for air traffic.

If you have any queries regarding this matter you can contact us using the details as below.

Kind regards

Emily



NATS Safeguarding

E: natssafeguarding@nats.co.uk

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



RSPB Scotland

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

30/06/2020

Dear Sir/Madam,

Scoping opinion for Craiginmoddie Wind Farm. Ref: ECU00002080

Many thanks for consulting RSPB Scotland on the above-referenced scoping opinion.

I am just writing to confirm that we are happy with the list of stakeholders to be consulted and with the proposed surveys and assessments methods set out in the ornithology section (5.90 to 5.110) and have no further comments to make.

Yours faithfully,

Ed Tooth
 Conservation Officer – Scottish Lowlands and Southern Uplands
 ed.tooth@rspb.org.uk

Dumfries & Galloway Office
 The Old School
 Crossmichael
 Castle Douglas
 Kirkcudbrightshire
 DG7 3AP

Tel REDACTE
Facebook: RSPBDumfriesandGalloway
Twitter: @RSPBDandG

rspb.org.uk





Scottish
Forestry
Coilltearachd
na h-Alba

South Scotland Conservancy
55/57 Moffat Road
Dumfries
DG1 1NP

Tel: REDACTED
Doug Howieson, Conservator
Email: southscotland.cons@forestry.gov.scot

29 June 2020

Carolanne Brown
Energy Consent Unit
Scottish Government
by email

Dear Ms Brown

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

**REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36 APPLICATION FOR
CRAIGINMODDIE FOREST WIND FARM**

Thank you for consulting Scottish Forestry on the on Scoping Report for the proposed Craiginmoddie Forest Wind Farm (proposed development). Scottish Forestry is the Scottish Government agency responsible for policy, support and regulation of the forestry sector in Scotland. As such we comment on the potential impact of development proposals on forests and woodlands.

Scottish Forestry welcomes the applicants commitment to ensure that the proposed changes to Craiginmoddie Forest as a result of the proposed development, address the requirements of Scottish Government's Policy on Control of Woodland Removal and other relevant guidance. However consultation on this matter should be undertaken with Scottish Forestry and not Forestry and Land Scotland (FLS), as stated in section 5.118 of the Scoping Report.

FLS are the executive agency of Scottish Government responsible for the management of Scotland's national forests and land. As integration of the proposed development into future forest design plans is a key part of the development process and as FLS manage Carrick Forest to the immediate north and east of the site boundary, it would however be appropriate for them to be included in any stakeholder engagement for the proposed development.

There is a strong presumption in favour of protecting Scotland's woodland resources. In line with Scottish Government's wider objective to protect and expand Scotland's woodland cover, applicants are expected to develop their proposal with minimal woodland removal. The first consideration for all woodland removal decisions should be whether the underlying purpose of the proposals can reasonably be met without resorting to woodland removal. Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits. In appropriate cases a proposal for compensatory planting may form part of this balance.

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



Scottish Government
Riaghaltas na h-Alba
gov.scot

S e Coilltearachd na h-Alba a' bhuidheann-ghnìomha aig Riaghaltas na h-Alba a tha an urra ri poileasaidh, taic agus riaghladh do choilltearachd

It would appear from Figure 2 Indicative Layout and the Forestry section of the Scoping Report that the proposed development falls within the category of woodland removal with a need for compensatory planting. Native Woodland, as identified in the Native Woodland Survey of Scotland (NWSS) is also present within the Site Boundary. Scottish Government's policy on control of woodland removal places a particularly strong presumption against its removal, this will need to be considered in the Forestry Impact Assessment.

Scottish Government's policy on control of woodland removal: implementation guidance February 2019 <https://forestry.gov.scot/publications/349-scottish-government-s-policy-on-control-of-woodland-removal-implementation-guidance/viewdocument> provides guidance on the level and detail of information Scottish Forestry will expect within the EIA Report, to help us reach an informed decision on the potential impact of the proposed development on forestry.

Annex 5 of this guidance provides information on calculating the area of compensatory planting, which will be required as the result of the proposed development. The applicant should note that any compensatory planting required as a result of the proposed development, may need to be considered under The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

<https://forestry.gov.scot/support-regulations/environmental-impact-assessment>

All felling, restocking, compensatory planting and future management proposals must be compliant with the most recent edition of the UK Forestry Standard (4th Edition 2017) and not the 3rd Edition 2011, as referenced in section 5.119 of the Scoping Report. <https://forestry.gov.scot/sustainable-forestry/ukfs-scotland>

Reference should also be made to Scotland's Forestry Strategy 2019-2029 (2019) and not The Scottish Forestry Strategy (2006).

<https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/>

The applicant should also note that a new fourth edition of the UKWAS was introduced on 1 April 2018.

<http://ukwas.org.uk/>

Please don't hesitate to contact me if you have any questions regarding Scottish Forestry's response.

Yours sincerely

REDACTED

Martin MacKinnon

Tuesday, 16 June 2020

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



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

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

Dear Sir/Madam

SITE: Site At, Craiginmoddie Wind Farm, South Ayrshire, KA26 9RR
PLANNING REF: ECU00002080
OUR REF: DSCAS-0016221-V2J
PROPOSAL: REQUEST FOR SCOPING OPINION FOR PROPOSED SECTION 36
APPLICATION FOR CRAIGINMODDIE WIND FARM

Please quote our reference in all future correspondence

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.



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Personal
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General notes:

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

Next Steps:

▶ All Proposed Developments

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

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

▶ Non Domestic/Commercial Property:

Since the introduction of the Water Services (Scotland) Act 2005 in April 2008 the water industry in Scotland has opened to market competition for non-domestic customers. All Non-domestic Household customers now require a Licensed Provider



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to act on their behalf for new water and waste water connections. Further details can be obtained at www.scotlandontap.gov.uk

▶ **Trade Effluent Discharge from Non Dom Property:**

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

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

Yours sincerely,

Planning Application Team
Development Operations Analyst
developmentoperations@scottishwater.co.uk



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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."



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Personal
To find out more about connecting your
property to the water and waste water supply visit:



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So, how are we doing?
We'd love to know what we're doing well or could do better. We promise we're listening, [click here](#) to tell us...

ScotWays - Consultation Response

Dalgleish K (Kieran)

From: Lynda Grant <lynda_grant@Scotways.com>
Sent: 06 July 2020 16:44
To: Econsents Admin
Cc: Brown C (Carolanne)
Subject: Re: Request for Scoping Opinion - Craiginmoddie Wind Farm

Categories: Category

Good afternoon,

Thank you for consulting ScotWays for a scoping opinion for the proposed section 36 application for the Craiginmoddie Wind Farm. We have no comments to make at this time.

Kind regards
Lynda

Lynda Grant
Access Officer
Scottish Rights of Way and Access Society (ScotWays)
24 Annandale Street, Edinburgh EH7 4AN
tel/fax: REDACTED
web: www.scotways.com
follow us on Twitter: @ScotWays
find us on Facebook: www.facebook.com/scotways

It's our 175th Anniversary! follow #ScotWays175 for details

Safeguarding Public Access in Scotland since 1845

A company limited by guarantee, registered in Scotland
Company number 24243
Registered office as above
Scottish Charity number SC015460

Our ref: PCS/171798

Your ref:

If telephoning ask for:
Jonathan Werritty

Carolanne Brown
Scottish Government
4th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

07 July 2020

By email only to: carolanne.brown@gov.scot

Dear Ms Brown

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

Thank you for consulting SEPA on the scoping opinion for the above development proposal by your email received on 15 June 2020.

Advice to the planning authority

We consider that the following key issues must be addressed in the Environmental Impact Assessment process. To **avoid delay and potential objection**, the information outlined below and in the attached appendix must be submitted in support of the application.

- a) Map and assessment of all engineering activities in or impacting on the water environment including proposed buffers, details of any flood risk assessment and details of any related CAR applications.
- b) Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems and buffers.
- c) Map and assessment of impacts upon groundwater abstractions and buffers.
- d) Peat depth survey and table detailing re-use proposals.
- e) Map and table detailing forest removal.
- f) Map and site layout of borrow pits.
- g) Schedule of mitigation including pollution prevention measures.



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

Angus Smith Building

6 Parklands Avenue, Eurocentral,
Holytown, North Lanarkshire ML1 4WQ
REDACTED

www.sepa.org.uk • customer enquiries 03000 99 66 99

- h) Borrow Pit Site Management Plan of pollution prevention measures.
- i) Map of proposed waste water drainage layout (if applicable).
- j) Map of proposed surface water drainage layout.
- k) Map of proposed water abstractions including details of the proposed operating regime.
- l) Decommissioning statement.

Further details on these information requirements and the form in which they must be submitted can be found in the attached appendix. We also provide site specific comments in the following section which can help the developer focus the scope of the assessment.

1 Site specific comments

1.1 Having reviewed the Environmental Impact Assessment Scoping Report (by Energie Kontor dated May 2020) we can offer the following comments:

- We can confirm that habitat survey information is not required for areas which are heavily forested or recently felled.
- Based on the information provided at this stage it seems unlikely that any development will take place within 250m of a groundwater supply source; if this is the case it would be helpful if the Environmental Statement (ES) provides evidence to confirm this.
- Provided watercourse crossings are designed to accommodate the 1 in 200 year event and other infrastructure is located well away from watercourses we do not foresee from current information a need for more detailed information on flood risk.

1.2 All three of the classified watercourses that drain the site - The Dalquhairn Burn (ID: 10477), The Dobbingsstone Burn/Lindsayston Burn (ID: 10459) and The Palmullan Burn (ID: 10463) - are currently classified as being at high status. Works on site will need to prioritise the protection of these watercourses from any potential downgrade.

Regulatory advice for the applicant

1 Regulatory requirements

- 1.1 Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs).
- 1.2 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.
- 1.3 A Controlled Activities Regulations (CAR) construction site licence will be required for management of surface water run-off from a construction site, including access tracks, which:

- is more than 4 hectares,
- is in excess of 5km, or
- includes an area of more than 1 hectare or length of more than 500m on ground with a slope in excess of 25°

See SEPA's [Sector Specific Guidance: Construction Sites \(WAT-SG-75\)](#) for details. Site design may be affected by pollution prevention requirements and hence we strongly encourage the applicant to engage in pre-CAR application discussions with a member of the regulatory services team in your local SEPA office.

- 1.4 Below these thresholds you will need to comply with [CAR General Binding Rule 10](#) which requires, amongst other things, that all reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment. The detail of how this is achieved may be required through a planning condition.
- 1.5 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the local Environmental Performance Team by email at SWS@sepa.org.uk.

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

Yours sincerely

Jonathan Werritty
Senior Planning Officer
Planning Service

Disclaimer

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

Appendix 1: Detailed scoping requirements

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

If there is a delay between scoping and the submission of the application then please refer to our website for our latest information requirements as they are regularly updated; current best practice must be followed.

We would welcome the opportunity to comment on the draft submission. As we can process files of a maximum size of only 25MB the submission must be divided into appropriately named sections of less than 25MB each.

1 Site layout

- 1.1 All maps must be based on an adequate scale with which to assess the information. This could range from OS 1: 10,000 to a more detailed scale in more sensitive locations. Each of the maps below must detail all proposed upgraded, temporary and permanent site infrastructure. This includes all tracks, excavations, buildings, borrow pits, pipelines, cabling, site compounds, laydown areas, storage areas and any other built elements. Existing built infrastructure must be re-used or upgraded wherever possible. The layout should be designed to minimise the extent of new works on previously undisturbed ground. 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 Appendix 2 of our [Standing Advice](#) for advice on flood risk. Watercourse crossings must be designed to accommodate the 0.5% Annual Exceedance Probability (AEP) flows, or information provided to justify smaller structures. If it is thought that the development could result in an increased risk of flooding to a nearby receptor then a Flood Risk Assessment must be submitted in support of the planning application. Our [Technical flood risk guidance for stakeholders](#) outlines the information we require to be submitted as part of a Flood Risk Assessment. Please also refer to [Controlled Activities Regulations \(CAR\) Flood Risk Standing Advice for Engineering, Discharge and Impoundment Activities](#).

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. 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. 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](#).



By e-mail only to: Econsents_Admin@gov.scot

Energy Consents Unit
The Scottish Government
5 Atlantic Quay
150 Brommielaw
Glasgow
G2 8LU

Date: 6 July 2020

Our ref: CNS/REN/WF/SA – Craiginmoddie (Hadyard) – CEA159545 – A3253894
Your ref: ECU00002080

FAO Carolanne Brown,

**Electricity Act 1989 Section 36
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations
2017
Request for Scoping Opinion for proposed Section 36 Application for Craiginmoddie
Wind Farm**

Many thanks for your email dated 15 June 2020 requesting a scoping opinion for the above development from Scottish Natural Heritage (SNH). The consultation is supported by the Craiginmoddie Wind Farm EIA Scoping Report (May 2020).

Background

We understand that the development being considered would comprise approximately 16 wind turbines each between 180-230m blade tip height with a generating capacity of around 90MW including associated infrastructure. The proposed development site is located within privately owned commercial forestry, located approximately 4km south east of the village Dailly, within the administrative boundary of South Ayrshire Council (SAC).

We are aware that the site formed part of a larger area that was part of the Hadyard Hill Wind Farm Extension Section 36 application (ECU00003118) submitted by Scottish Southern Energy in 2015, initially for 31 turbines reduced to 22. However this application was withdrawn by SSE prior to determination.

We provided pre-application advice to EnergieKontor in relation to ornithology baseline surveys for this proposal in an e-mail dated 13 January 2020. We also attended an Inception/Pre-scoping meeting with the applicant via Zoom on the 21 May 2020.

SNH's advice on issues to include in Environmental Impact Assessment

Scottish Natural Heritage, Caspian House, 2 Mariner Court,
Clydebank Business Park, Clydebank G81 2NR
Tel: 0131 314 6750 www.nature.scot

Dualchas Nàdair na h-Alba, Taigh Caspian, 2 Cùirt a' Mharaiche,
Pàirc Gnothachais Bhruach Chluaidh, Bruach Chluaidh G81 2NR
Fòn: 0131 314 6750 www.nature.scot

General advice

We refer the applicant to our “general pre-application/scoping advice to developers of onshore wind farms” which can be found via <https://www.nature.scot/professional-advice/planning-and-development/advice-planners-and-developers/renewable-energy-development/onshore-wind-energy/advice-wind-farm>

This provides guidance on 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. The checklist in Annex 1 of our guidance sets out our expectations of what should be included in the ES. 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.

Collecting and presenting information

We recommend that the ecological chapters of the Environmental Statement (ES), are split into topics, e.g. protected areas, protected species, habitats (terrestrial, freshwater) etc. The ES should include information and assessment of which activities associated with the construction and operations of the development are likely to have direct and indirect (including cumulative) significant environmental effects on the relevant natural heritage receptors, along with clear details of any mitigation. A schedule of environmental mitigation should be provided in an annex for developments with impacts on natural heritage interests. The schedule should compile all the environmental mitigation/enhancement measures into one list/table, for ease of reference.

Landscape and Visual Impact Assessment

The proposed Craiginmoddie Wind Farm would introduce a number of very tall turbines (16 x up to 230m), which would require lighting, into the South Ayrshire landscape, to be located in the Carrick Hills adjacent to the existing Hadyard Hill Wind Farm. The site is less than 8km from the north western boundary of the Merrick Wild Land Area (WLA) and is partly surrounded by the Galloway Dark Skies Park. This is a sensitive area for a wind farm of this scale. We advise that there are likely to be significant landscape and visual impacts arising from the proposed scheme on its own and in combination with existing, adjacent developments. The scale and layout of proposed turbines, the requirement for lighting, their relationship to other wind farms and key characteristics are likely to result in a complex and confusing pattern of development. It is our view that these issues are likely to be challenging to resolve.

The landscape and visual impact assessment (LVIA) should be carried out in accordance with ‘*Guidelines for Landscape and Visual Impact Assessment: Third Edition*’ (Landscape Institute and IEMA, (2013) (‘GLVIA3’). Please note that this guidance is a key document for LVIA and does not yet appear to be referenced in the scoping report.

With turbines proposed at 10.6km from Shalloch on Minnoch and 15.8km from the Merrick summit itself, the highest point on the southern Scotland mainland, we advise that likely impacts on the Merrick WLA should be fully considered and that viewpoints within the WLA are likely to be key design points. The EIAR should include a Wild Land Assessment and, considering the number of turbines, their height and location, we advise that the assessment should take into account both day and night time impacts on the WLA. Accordingly both the wild land assessment and the lighting assessment should take this into account. Importantly there should be night time viewpoint(s) located within the WLA and the wild land assessment should examine how the lighting would affect the wild land qualities at dusk and after dark.

Assessment for turbine lighting

Aviation lighting is a key issue for this proposal given the height of the turbines and the site's proximity to the Merrick WLA and the Galloway Dark Skies Park. Our advice on the assessment for turbine lighting is that it could result in adverse impacts on the wild land qualities of the Merrick WLA.

Turbines of 150m or more in height are required to be fitted with aviation lighting. This means that typically turbines would be lit with red aviation lighting mounted on each nacelle and also fitted with lower intensity lights at the mid-point of the towers. Approved mitigation set out in *CAP 764 – CAA Policy and Guidelines on Wind Turbines* guidance <https://publicapps.caa.co.uk/docs/33/CAP764%20Issue6%20FINAL%20Feb.pdf> means that lights can potentially be dimmed from 2000 candela (cd) to 200 cd in good visibility (greater than 5km). Tower lighting would typically be 32cd. The proposed development boundary lies less than 8km from the WLA boundary. A hub-height ZTV would have clarified likely visibility of lighting from elevated areas in the WLA.

Our experience is that 200cd lighting can be clearly visible and draw the eye within an unlit context at a distance of 20km. Therefore, based on the information we have and our understanding of aviation lighting, we advise that the proposal could introduce eye-catching and prominent lights into an area important for its dark skies. We advise that the study area should extend beyond the 10km proposed in the scoping report (para 5.78) to include, at least, the ridge as far south as the Merrick (15.8km).

We advise that the applicant assesses the potential for adverse impacts of aviation lighting on the wild land qualities of the Merrick WLA. The assessment should follow our draft guidance at <https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land/wild-land-area-descriptions-and-technical-guidance>.

More generally, the related landscape and visual assessment of turbine lighting should be informed by the scoping advice at Annex 2 of our recently updated '*general scoping and pre-application advice*' document at <https://www.nature.scot/general-pre-application-and-scoping-advice-onshore-wind-farms>.

The turbine lighting assessment should consider the cumulative effects of lights from other relevant consented or application stage schemes e.g. Clauchrie and Arecleoch Extension wind farms. It should also include the proposed Carrick Wind Farm which is currently at scoping. The proposed lighting of the cumulative schemes should be illustrated on the night time photomontage from e.g. Shalloch on Minnoch (or a suitable agreed viewpoint) and any other night time photomontages. Despite potential mitigation, we advise that lights should be shown at 2000cd on all 16 turbines, as this is the worst case scenario.

If directional lighting is to be employed as a form of mitigation, then it would also be useful to include a lighting intensity ZTV within the assessment (this ZTV should also show the boundaries for the Galloway Dark Skies Park and the Merrick WLA).

Statutory designated sites

Blair Farm SSSI

The proposed wind farm site lies approximately 2km from Blair Farm SSSI, which is of national importance and is designated for geological interests. Information on the SSSI can be found on the SiteLink pages of our website: <https://sitelink.nature.scot/site/224>

We do not consider there is connectivity between this SSSI and the proposed development site and therefore consider that Blair Farm SSSI can be scoped out of the EIA.

Auchalton SSSI

The proposed wind farm site lies, at the closest point, approximately 3.5km from Auchalton SSSI, which is of national importance and is designated for lowland neutral grassland. Information on the SSSI can be found on the SiteLink pages of our website: <https://sitelink.nature.scot/site/96>

We do not consider there is connectivity between this SSSI and the proposed development site and therefore consider that Auchalton SSSI can be scoped out of the EIA.

Knockgardner SSSI

The proposed wind farm site lies, approximately 4.4km from Knockgardner SSSI, which is of national importance and is designated for geological interests. Information on the SSSI can be found on the SiteLink pages of our website: <https://sitelink.nature.scot/site/879>

We do not consider there is connectivity between this SSSI and the proposed development site and therefore consider that Knockgardner SSSI can be scoped out of the EIA.

Statutory Protected Species – general

A number of protected species may be present and impacted by the development proposals. We advise that species surveys should have been completed no more than 18 months prior to submission of the application, to ensure that the survey results are a contemporary reflection of species activity at and around the site.

Details of species and associated legislation can be found on our website at <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-species/legal-framework> It is important that any licensing issues are fully established as part of the planning application. This is to avoid a situation where planning permission is secured but the lack of a species licence prevents the development from proceeding.

Full details of survey methodologies, areas surveyed and details of any limitations to survey efforts should be included within the Environmental Statement.

The ES should also report the survey results including figures showing the survey areas/results with infrastructure/turbine layout overlapping, evaluate impacts predicted to arise as a result of the development proposals, assess the significance of these impacts and recommend mitigation and/or compensation measures as is necessary and appropriate.

Where survey methods or other work deviates from published guidance, deviations should have been agreed in writing with SNH in advance of carrying out survey work. A full description of the methodology used should be provided in the ES (technical appendices should be used for this where appropriate), along with an explanation of why any deviations are considered appropriate.

European Protected Species

Otters

We understand from the scoping report that an Extended Phase 1 Habitat survey was undertaken that included a protected fauna walkover. It is not clear what time of year this walkover was undertaken.

No evidence of otter was identified during the protected fauna walkover but *Terrestrial & Aquatic Ecology* section 5.72 of the scoping report states that “*Otter will likely utilise the burns and water courses at certain times of year, particularly for foraging during spring/summer when food is abundant (i.e. frog spawning). Further protected mammal species surveys will be undertaken in 2020.*”

If this survey work finds that otter could be affected by the proposal an otter protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our recently published species guidance note for otters that brings together all the latest information and advice, including legal protection, survey methods, mitigation measures and licensing requirements – <https://www.nature.scot/species-planning-advice-otter>

Bats

Bat Roost Surveys

There is no mention of bat roost surveys having either been or proposed to be undertaken within the scoping report. We recommend that surveys to identify roosting features for bats should be undertaken prior to the application being submitted.

If any suitable roosting sites are identified then further survey work to identify presence or absence, species, numbers, roost function and flightlines should also be undertaken prior to the submission and determination of any planning application for this proposal.

We further advise that if any bat roosts are found to be present a bat protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our species guidance note for bats that brings together all the latest information and advice, including legal protection, survey methods, mitigation measures and licensing requirements – <https://www.nature.scot/species-planning-advice-bats>

Bat Activity Surveys

As detailed in *Terrestrial & Aquatic Ecology* section 5.61-5.63 of the scoping report bat activity surveys are proposed to be undertaken in line with our *Bats and Onshore Wind Turbines – Survey, Assessment and Mitigation* guidance (2019) <https://www.nature.scot/bats-and-onshore-wind-turbines-survey-assessment-and-mitigation> which we support.

Given that the turbines are likely to be key-holed, positioning of the automated detectors is important, but likely to be constrained by the existing pattern of tree cover. In practice this is likely to mean that detectors will be placed in forest rides/fire-breaks. This is likely to replicate where the majority of bats such as pipistrelles are currently concentrating their foraging, i.e. along forest edges.

However, *Nyctalus spp.* are much less constrained in this way and may be foraging over a wide area above the tree canopy, in which case ground-based detectors may miss some of their calls. Therefore, we recommend that if there are any met masts available on site they should be used for at-height monitoring, in line with the SNH guidance.

With regards to mitigation for bats, as a minimum, we would expect turbines to be located where no part of their structure or blades should fall within 50m of the nearest building, tree or hedgerow in line with Natural England's Bats and onshore wind turbines Interim guidance Technical Information note TIN059

<http://publications.naturalengland.org.uk/publication/35010> We may recommend further mitigation measures once we have considered the full survey results.

In line with our guidance we encourage the applicant to submit the static automated bat detector data for this proposal to the secure online tool *Ecobat*

<https://www.mammal.org.uk/science-research/ecostat/> This is likely to provide the most objective assessment of activity on which to base any further mitigation recommendations.

Great crested Newt (GCN)

There is no mention of great crested newt surveys having either been or proposed to be undertaken within the scoping report.

In line with our guidance note for great crested newts – <https://www.nature.scot/species-planning-advice-great-crested-newt> if the proposal is within 500m of potential GCN breeding ponds then we recommend that habitat suitability assessment, eDNA sampling and/or presence/absence surveys of ponds should be undertaken prior to the submission and determination of any planning application for this proposal.

If this survey work finds that great crested newts could be affected by the proposal a great crested newt protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

Nationally Protected Species

Water voles

No evidence of water vole was recorded during the protected fauna walkover but *Terrestrial & Aquatic Ecology* section 5.72 of the scoping report states that given the habitats present on site there is the potential for water vole to be present and further protected mammal species surveys will be undertaken in 2020.

If water vole and their habitat could be affected by the proposal a water vole protection plan should be prepared. If the implementation of mitigation measures is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our species guidance note for water voles that brings together all the latest information and advice, including legal protection, survey methods, mitigation measures and licensing requirements – <https://www.nature.scot/species-planning-advice-water-vole>

Badgers

Terrestrial & Aquatic Ecology section 5.68 of the scoping report states that “*the dense nature of the plantation limited survey through the majority of the site which limited accessibility to check for signs of badger. The plantation edge was walked to identify any tracks, territory boundary markings or outlier setts, however no evidence of either was recorded.*” However, *Terrestrial & Aquatic Ecology* section 5.72 of the scoping report states that given the habitats present on site there is the potential for badger to be present and further protected mammal species surveys will be undertaken in 2020.

If this survey work finds that badger could be affected by the proposal a badger protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our recently published species guidance note for badgers that brings together all the latest information and advice, including legal protection, survey methods, mitigation measures and licensing requirements:
<https://www.nature.scot/species-planning-advice-badger>

Red Squirrel

The desk study identified three records of red squirrel within 5km of the site however no evidence of red squirrel was recorded during the protected fauna walkover. *Terrestrial & Aquatic Ecology* section 5.72 of the scoping report states that given the habitats present on site there is the potential for red squirrel to be present and further protected mammal species surveys will be undertaken in 2020.

If this survey work finds that red squirrel could be affected by the proposal a red squirrel protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our guidance note for red squirrel that brings together all the latest information and advice, including legal protection, survey methods, mitigation measures and licensing requirements: <https://www.nature.scot/species-planning-advice-red-squirrel>

Pine Marten

The desk study identified one pine marten record of red within 5km of the site, however no evidence of pine marten was recorded during the protected fauna walkover. *Terrestrial & Aquatic Ecology* section 5.72 of the scoping report states that given the habitats present on site there is the potential for pine marten to be present and further protected mammal species surveys will be undertaken in 2020.

If this survey work finds that pine marten could be affected by the proposal a pine marten protection plan should be prepared. If the implementation of the identified mitigation measures within this plan is not sufficient to avoid offences under protected species legislation, a licence will be required from SNH before the works can proceed.

We refer the applicant to our species guidance note for pine marten that brings together all the latest information and advice, including legal protection, survey methods, and mitigation measures and licensing requirements: <https://www.nature.scot/species-planning-advice-pine-marten>

Fish and Freshwater Pearl Mussel (FWPM)

Section 5.49 *Terrestrial & Aquatic Ecology* of the scoping report confirms that watercourses draining from within the development boundary will be subject to a fish and freshwater pearl mussel (FWPM) habitat assessment.

In line with our “general pre-application/scoping advice to developers of onshore wind farms” <https://www.nature.scot/professional-advice/planning-and-development/renewable-energy-development/types-renewable-technologies/onshore-wind-energy/general-advice-wind-farm> We recommend that as a minimum, all areas directly (e.g. watercourse crossings) or indirectly (e.g. sediment run off) affected by the development and appropriate buffers up and downstream should have a habitat survey following the Scottish Fisheries Coordination Centre Method referenced below. This should inform the likelihood of the presence of salmonids, eels, freshwater pearl mussel and other protected/BAP species and so the need or otherwise for species specific surveys.

Our guidance on freshwater pearl mussel survey methods can be found on our website via <https://www.nature.scot/plants-animals-and-fungi/invertebrates/freshwater-invertebrates/freshwater-pearl-mussel> . The Scottish Fisheries Coordination Centre (SFCC) webpage <http://www.sfcc.co.uk/resources/habitat-surveying.html> provides links to the recommended SFCC habitat survey method (*Habitat Surveys Training Course Manual, Revised August 2007*), as well as other useful survey method information for fish. Note that where there is suitable habitat for freshwater pearl mussel, and particularly where salmonids are present, we would expect a freshwater pearl mussel survey to be carried out following our guidance.

Where the proposed development site has permanent watercourses or water bodies in it or connected to it, you should seek advice from SEPA regarding water crossings and the adequacy of any hydrological work undertaken as part of the EIA.

We agree that all works should be carried out in accordance with relevant hydrological legislation (such as EC Water Framework Directive (2000/60/EC) and The Water Environment (Controlled Activities)) and SEPA's Pollution Prevention Guidelines to prevent negative impacts from the discharge of surface water into any watercourses within the site.

Deer

We recommend that if deer are present on or will use the development site, an assessment of the potential impacts on deer welfare, habitats, neighbouring and other interests (e.g. access and recreation, road safety, etc.) should be presented. If the development would, or could, result in significant impacts, a draft deer management statement should be provided, setting out how the impacts will be addressed. There's advice on this in SNH's Guidance "*What to consider and include in deer assessments and management at development sites*", which is available on our website at: <https://www.nature.scot/guidance-planning-and-development-what-consider-and-include-deer-assessment-and-management>

Ornithology

We provided pre-application advice to EnergieKontor in relation to ornithology baseline surveys for this proposal in an e-mail dated 13 January 2020 and confirmed that we are content with the survey work as proposed. We continue to recommend that the VP view shed figures should make it clear at what height the view-shed for each VP has been calculated and how the presence of trees has affected this.

We may make specific comment on the ornithology survey work once full details are available to us. Any deviations from published guidance during the course of survey work should be fully explained and justified in the ES.

Wider Countryside/Nesting birds

Our advice with regards to breeding birds is that the following mitigation is required to minimise the impact of the development.

- Ground or vegetation clearance works should be undertaken out with the main bird nesting season (March-August inclusive). If this is not possible, a suitably experienced ecologist should check the development site before work commences to determine the presence of any nesting birds. If nesting birds are found, a suitably sized buffer zone should be set up around the nest and no work within this zone should commence until the young have fledged or the nest is no longer in use. This will ensure that no nests are destroyed during the site construction works and no offences are committed under the Wildlife and Countryside Act 1981 (as amended).

If the development is not carried out in accordance with this mitigation measure, the applicant may risk committing an offence.

Habitats

We note from section 3 "*Site Description and description of the proposed development*" of the scoping report that the site is described as comprising predominantly rough grassland and extensive areas of plantation forestry. *Terrestrial & Aquatic Ecology* section 5.49 of the scoping report confirms that a Phase 1 habitat survey and NVC assessment of habitats within a 300m buffer of proposed turbine locations, borrow pits and a 100m buffer from proposed tracks will be undertaken. We recommend that the ES should include a map of the NVC survey results with the wind farm boundary, proposed turbines, tracks and infrastructure

layout overlapping. Records of any rare or scarce plant species recorded within the site should also be included within the ES.

The proposed development site is located within privately owned commercial forestry. As felling will be required for this development, we recommend continued consultation with Forestry and Land Scotland regarding requirements for compensatory planting according to the Scottish Government's policy on the control of woodland removal available via <https://forestry.gov.scot/publications/349-scottish-government-s-policy-on-control-of-woodland-removal-implementation-guidance/download>

Peat

The proposed Craiginmoddie Wind Farm site includes areas mapped as 'Class 1' on SNH's Carbon and Peatland map 2016, see <https://www.nature.scot/professional-advice/planning-and-development/advice-planners-and-developers/soils/carbon-and-peatland-2016-map> Class 1 areas are nationally important carbon-rich soils, deep peat and priority peatland habitat and are likely to be of high conservation value.

While Scottish Planning Policy identifies such areas as 'areas of significant protection', a proposal located in the mapped area would not, in itself, mean that the proposal is unacceptable, or that carbon rich soils, deep peat and priority peatland habitat would be adversely affected. However the proposal will need to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.

The scoping report states that "*Where necessary, peat depth survey will be undertaken, in accordance with Scottish Government guidance*". We advise that detailed peat surveys of the site, measuring the peat deposit to full depth, should be undertaken in accordance with Scottish Government guidance (see <https://www.gov.scot/publications/peatland-survey-guidance/>). The probing results should be used to inform a Peat Stability Risk Assessment (PSRA).

We recommend that peat survey results should also be used to inform the design and layout process, so that the development avoids, where possible, fragile and priority habitats and other sensitive areas e.g. blanket bog and peat. Where this is not possible, suitable restoration and/or compensation measures should be presented in the EIA Report in the form of a draft Habitat Management Plan (HMP). HMPs should follow our guidance on "*What to consider and include in Habitat Management Plans*" available via <https://www.nature.scot/guidance-planning-development-what-consider-and-include-habitat-management-plans> We recommend that the HMP for this site should tie in with any relevant bog (and other) habitat restoration proposals for nearby sites in the area.

We recommend that the applicant should consult with SEPA regarding excavated peat reuse and disposal.

Concluding remarks

Please see our detailed comments on the targeted questions, listed within the scoping report in the Annex attached to this letter. 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.

Should you have any queries about this letter, in the first instance, please contact me at Natalie.Ward@nature.scot

Yours sincerely

[By e-mail]

Natalie Ward
Operations Officer
Strathclyde & Ayrshire

Annex – Scoping Report Questions – SNH comments:

i) Landscape and Visual Amenity

Q3: Can it be confirmed that a 45km study area for the LVIA is considered to be appropriate starting point for the LVIA, but that approximately 20km is suitable for the detailed assessment of likely landscape and visual significant effects?

For turbines of this height a 45km study area is appropriate. However, given that turbines of 230m are potentially visible up to more than 70km we advise that a 20km detailed study area might be too restrictive given the cumulative baseline and the landscape context. Accordingly, the applicant should ensure that the detailed study area contains relevant sensitive receptors likely to have potential for significant effects.

Q4: Are the proposed viewpoint locations considered to be suitable for the LVIA?

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 suggest that a further viewpoint location is investigated on Arran from where the turbines might be seen in the foreground of views to the high tops of the Merrick WLA.

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.

The proposed night time lighting viewpoints have not yet been indicated. We advise that there should also be at least one viewpoint within the WLA from which a lighting assessment is carried out and photomontages produced. We advise that Shalloch on Minnoch should be considered and we are happy to discuss alternative viewpoints which could clearly represent the likely impact on the northern parts of the WLA.

Q5: Confirmation on the approach to the assessment of likely effects on wild land is Requested

The scoping report contains limited information on the proposed approach to the assessment of likely effects on the Merrick WLA. We acknowledge that the wild land assessment is likely to focus on the northern part of the WLA but advise that this should be presented in the context of the WLA overall, with all qualities considered at the outset. The wild land assessment should follow SNH's 2017 *Draft 'Assessing Impacts on Wild Land Technical Guidance'* available at: <https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land/wild-land-area-descriptions-and-technical-guidance>.

The wild land assessment should include an assessment of lighting on the wild land qualities. The 16 pairs of red turbine lights would be new, incongruous and potentially dominant focal points in the darkness clearly representing contemporary, human artefacts and activity which could detract from and weaken the qualities of wildness. The proposal could greatly diminish the wild land experience sought by those who walk into the hills before dawn and those who intentionally stay on the hills after dark to encounter the sunset and dark skies within the Merrick WLA.

Please see the landscape advice provided in our recent (28/5/20) response to the section 36 Application for Clauchrie wind farm, which should be available under reference no: ECU00002001 on the Energy Consents website at: <https://www.energyconsents.scot/Default.aspx>

Q6: Can it be confirmed that this approach to the methodology and inclusion of schemes for the cumulative assessment is considered to be appropriate?

The outline approach to cumulative LVIA is appropriate. We advise that Carrick Wind Farm currently at scoping should also be included. We also advise that the applicant includes any further relevant schemes that are scoped prior to the submission of Craiginmoddie.

Regarding paired ZTVs – whilst this provides a very helpful illustration of additional visibility we recommend that the LVIA includes all relevant schemes as well as those close to the site. For example it would be helpful to show the combined and additional visibility of more distant wind farms which would require aviation lighting and where both schemes might be visible from key viewpoints within the Merrick WLA and the Galloway Dark Skies Park.

Q7: Is the proposed study area and approach to the RVAA set out above (*in section 5.74 Residential Visual Amenity Assessment*) considered to be appropriate?

N/A.

Q8: Are there any other relevant consultees who should be consulted about the LVIA process?

Not that we are aware of.

ii) Hydrology, Hydrogeology and Geology

Q9: Is the proposed scope of assessment set out above deemed to be appropriate?

As mentioned above, we advise that detailed peat surveys of the site measuring the peat deposit to full depth, should be undertaken in accordance with Scottish Government guidance (see <https://www.gov.scot/publications/peatland-survey-guidance/>) and the results used to inform a Peat Stability Risk Assessment (PSRA).

iii) Biodiversity

Q11: Do you agree with the conclusions and recommendations of the ecology reports summarised above?

In relation to the ecology surveys proposed for this development on the basis of the information provided we are broadly content with the proposed approach (see our advice in the covering letter). While the survey work is therefore likely to be sufficient to inform the EIA, we reserve full judgement until we have considered the full survey findings.

The applicant should be aware that we may make specific comment on the survey work once full details are available to us. Any deviations from published guidance during the course of survey work should be fully explained and justified in the ES.

Q12: Are there any other stakeholders that should be consulted as part of this process?

Not that we are aware of.

Ornithology

Q13: Are there any other stakeholders that should be consulted as part of ornithology assessment?

As advised in our 13 January 2020 e-mail to EnergieKontor we recommend that the raptor study groups/black grouse surveyors (such as RSPB) should be contacted for any historical

raptor and black grouse records within the vicinity of the proposal and this information should be included within the final ornithology report.

Development Management and Strategic Road Safety
Roads Directorate

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



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

Your ref:
 ECU00002080

Our ref:

Date:
 06/07/2020

econsentsadmin@gov.scot
Carolanne.Brown@gov.scot

Dear Sirs,

ELECTRICITY ACT 1989

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

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

With reference to your recent correspondence on the above development, we acknowledge receipt of the Environmental Impact Assessment Scoping Report (SR) prepared by EnergieKontor in support of the above development.

This information has been passed to our advisors 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

We understand that EnergieKontor UK Ltd is seeking to construct and operate a wind farm comprising 16 turbines with blade tip heights between 180 and 230m and a generating capacity of around 90MW. The site is located at Craiginmoddie in South Ayrshire, with the nearest trunk road being the A77(T) which lies approximately 12km to west. The SR states that the site forms part of a larger area which was the subject of the S36 application to extend the existing Hadyard Hill wind farm. That application was withdrawn.

Assessment of Environmental Impacts

The scoping for potential environmental impacts associated with Traffic and Transport are dealt with in Section vi of the SR. This states that the thresholds indicated within the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic are to be used as a screening process for the assessment.

The Environmental Impact Assessment (EIA) Report will also be undertaken in accordance with the Transport Assessment Guidance (Transport Scotland 2012). Transport Scotland is in agreement with this approach.

We note that the SR also states that the study area for the traffic and transport assessment will effectively be the public highway network in the vicinity of the site which would be used during the construction and operation of the wind farm. We note, however, that the access route to the site is identified as being the A77(T) and then onto the B7023. As the trunk road forms part of the route to site, Transport Scotland will require potential trunk road related environmental impacts such as driver delay, pedestrian amenity, severance, safety etc to be considered and assessed where appropriate (i.e. where IEMA Guidelines for further assessment are breached).

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

Abnormal Load Route Assessment

The SR states that the applicant is looking at a number of options for the transportation of Abnormal Loads, including utilising the A77(T) and then onto the B7023 to access the Site from the north. We also note that the proposed blade length is approximately 81.5m. Transport Scotland will require to be satisfied that the size of turbines and blades proposed can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path.

A full Abnormal Loads Assessment report should be provided with the EIA Report that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken and details provided with regard to any required changes to street furniture or structures along the route. We would also state that any proposed changes to the trunk road network must be discussed and approved (via a technical approval process) by the appropriate Area Manager prior to the movement of any abnormal load.

I trust that the above is satisfactory and should you wish to discuss any issues raised in greater detail, please do not hesitate to give me a call.

Yours faithfully
REDACTED

John McDonald

**Transport Scotland
Roads Directorate**

Crosshill, Straiton and Kirkmichael Community Council - Consultation Response

Melrose J (Joyce)

From: John Haston <REDACTED >
Sent: 20 July 2020 18:59
To: Econsents Admin
Cc: Brown C (Carolanne); Patrick Lorimer
Subject: Request for Scoping Opinion - Craiginmoddie Wind Farm
Attachments: Craiginmoddie Scoping Response 1.pdf

Dear Econsents Unit

Please find attached our community council's response to the scoping report for Craiginmoddie wind farm.

For openness, we had two versions of our response, and this one was chosen by a majority vote of 4 votes to 3.

Kind regards
John Haston
Secretary
Crosshill, Straiton and Kirkmichael Community Council

This email has been scanned by the Symantec Email Security.cloud service.

Craiginmoddie Wind Farm Scoping Report Responses from Crosshill, Straiton and Kirkmichael Community Council

We welcome the opportunity to be involved in the early stages of the Proposal as it is located partly within our area and has impacts on our residents, the landscape, wildlife and many other aspects.

Q1: Confirmation is sought that the identified development plan policies are appropriate.

We agree that the National Planning Framework 3 and Scottish Planning Policy (SPP) 2014 should be considered. We also agree that consideration be given to the South Ayrshire Local Development Plan (SALDP) and the Proposed South Ayrshire Local Development Plan (PLDP2).

Q2: Are there any further policies which would be considered likely to be material to the determination of the application?

The Ayrshire Joint Structure Plan. Although this was published in 2009 it is clear it was intended as a long term policy as it contains a vision for Ayrshire in 2025 and there are numerous references to 2020 and beyond.

South Ayrshire Wind Capacity Study (amended 2018)

The policies of the UNESCO Galloway and Southern Ayrshire Biosphere. The Proposal is in the Transition Zone of the Biosphere.

The height of turbines means there must be lighting. Therefore the criteria required to be awarded Gold Tier status for the Galloway Forest Dark Sky Park should be examined.

Q3: Can it be confirmed that a 45km study area for the LVIA is considered to be appropriate starting point for the LVIA, but that approximately 20km is suitable for the detailed assessment of likely landscape and visual significant effects?

SNH recommends that an initial study of 45km be considered and we agree with this. The size of turbines would suggest to us that a detailed assessment of landscape and visual effects should be extended to 30km.

In addition to the above we have noted the following:

- At points 5.44, 5.45 and 5.47 there are references to screening by trees and forest cover. It is not appropriate to use trees or forest as screening as by their very nature these are not permanent features in the landscape. For this reason planning guidance explicitly rules out using vegetation as screening.
- The Applicant also states that Bargany and Kilkerran have woodlands which would help screen. These are likely to be policy woodlands and therefore deciduous trees which would therefore only give screening for approximately six months of the year.
- At 5.48 The Applicant states: *"Beyond 10km to the east, the study area covers a large part of the Irish Sea where there are few visual receptors"*
The receptors could include those on fishing trips, sightseers to Ailsa Craig, passengers on the Waverley, cruise ship passengers, the sailing fraternity and the tourists on ferries arriving in the area. The impact could be seen as significant.

Q4: Are the proposed viewpoint locations considered to be suitable for the LVIA?

No. As the Applicant concedes these are only provisional viewpoints and consultation requires to be undertaken

with South Ayrshire Council and SNH. In addition we would recommend that local consultation be undertaken prior to agreeing the final list. We agree with the Applicant that night time viewpoints also need consideration as do views from the coast.

Q5: Confirmation on the approach to the assessment of likely effects on wild land is requested

At point 5.26 The Applicant states that: *“There are only three WLAs to the south of the Highland Boundary Fault line and only one partly within the 20km radius of the proposed development, namely Merrick WLA. This is located to the south-east of the study area, at a range of approximately 8km from the proposed development and covering a large part of the Galloway Hills. While there is already an influence on the WLA from existing Hadyard Hill, Dersalloch, Arecleoch, Kilgallioch, Mark Hill and Tralorg wind farms, the cumulative effect of the proposed development will be assessed as part of the EIAR.”*

The cumulative effect is likely to be significant.

At point 5.27 The Applicant states that: *“As the proposed development is located outside the WLA, it would not be possible for it to give rise to direct effects on the wildness qualities of the WLA. It may, however, have adverse effects on how these qualities are experienced from within the WLA and this will be evaluated in the context of the existing influence from baseline wind farms noted above. The cumulative effect on wildness qualities will also be evaluated as part of the EIAR.”*

Again the cumulative effect is likely to be significant.

Q6: Can it be confirmed that this approach to the methodology and inclusion of schemes for the cumulative assessment is considered to be appropriate?

Point 5.72 Scenario 4 would be the preferred one.

Q7: Is the proposed study area and approach to the RVAA set out above considered to be appropriate?

Given the height of the proposed turbines we consider 2km to be too small an area of study. Our initial research indicated many properties will be impacted by the Proposal. Impacts include ‘Overbearing’ and Shadow Flicker.

The Applicant should consider Overbearing (a term used by Reporters when the impacts are unacceptable). Using the algorithm derived from 53 determinations from 14 Decision Notices involving 13 Reporters in Scotland between 2009 and 2017, it was possible to quantify which properties would suffer from the proposed wind farm being overbearing and result in unacceptable impacts to the quality of life at the property. There are 24 properties which have a high probability that the wind farm would be overbearing (based on a model of 53 Reporters’ findings). These are to south along the Balloch valley, and to the north west towards Dailly. The village of Dailly is on the margin of ‘overbearing’ but the 27 properties on the southern edge would be directly impacted by open views of nearly all the turbines (Annex 1). This combined impact should be highlighted and considered, as well as the cumulative effect on the rest of the houses in Dailly.

Shadow Flicker; there are 4 properties that would fall into ‘unacceptable Shadow Flicker’ by agreed definitions, 3 of which are outside of the 10x rotor limit. The 10x rotor limit is based on research undertaken in the Netherlands on flat surfaces and does not take into account the undulating nature of the landscape and the positioning of the turbines on ridge lines. Modern wind farm planning software is capable of calculation beyond the 10x rotor limits, and the cost is low, so the Applicant should undertake full analysis. Furthermore, the ‘narrow window’ statement is equally based on out-of-date research. While narrow apertures intensify shadow flicker, the effects can be experienced in open land without any apertures. Indeed the aperture effect also needs to be taken into account when considering screening/foilage as their presence can intensify the shadow flicker impacts rather than reduce them, as it often implied. (Papers available).

There are an additional 4 properties that would have marginal shadow flicker impacts and also need to be taken into account as they are beyond 10x rotor diameters. (Annex 2)

Q8: Are there any other relevant consultees who should be consulted about the LVIA process?

The Galloway and Southern Ayrshire Biosphere. Staff at the Biosphere are familiar with the area and are therefore ideally placed to offer informed observations.

Save Straiton for Scotland. Board members have intimate knowledge of the area and can call on the services of key supporters (also local) to provide expert analysis. They have been invited by Reporters to co-ordinate local representation and played an equal role to that of the local council at Public Inquiry.

The owners of the Walled Garden Camping and Caravan site at Kilkerran.

Straiton Village Cooperative.

The Galloway National Park Association. Again this organisation has intimate knowledge of the area and their members are from a variety of local businesses and organisations. This group should be asked if construction of Craiginmoddie Wind Farm would jeopardise the chances of achieving National Park status and becoming Scotland's third National Park.

John Muir Trust. They should be consulted regarding the impacts to the Merrick Area of Wild Land.

Mountaineering Scotland

The Scottish Dark Sky Observatory

VisitScotland

Q9: Is the proposed scope of assessment set out above deemed to be appropriate?

Consultation with the Ayrshire Rivers Trust should also be undertaken.

Q10. Are the distances set out above sufficient for survey purposes?

No. Given the height of the proposed turbines (up to 230m) and that they would sit alongside turbines approximately half their height (Hadyard Hill) the cumulative impact on cultural assets has the potential to be very significant. We would like to see the distances extended (as a minimum) from 2km to 5km; from 5km to 12km; and from 20km to 30km. (This would ensure important assets in Alloway and Ayr, and Glenapp Castle and gardens are included) The Applicant again refers to trees providing screening; *"Other assets are enclosed within wooded landscape settings and would not be readily visible and seen together with the proposed development."* Vegetation cannot be relied upon to provide screening, woodland can be felled, decimated by forest fires or disease (Larch disease and Ash die back).

Q11: Do you agree with the conclusions and recommendations of the ecology Reports?

Broadly agree.

Q12. Are there any other stakeholders that should be consulted as part of this process?

Scottish Wildlife Trust

Saving Scotland's Red Squirrels.

Q13. Are there any other stakeholders that should be consulted as part of the ornithology assessment?

In addition to the South Strathclyde Raptor Study Group the Dumfries and Galloway Raptor Study Group should be consulted as the Proposal is close to the border of Dumfries and Galloway.

Q14. Please confirm if the above can be scoped out of further assessments.

Definitely not. The traffic route is unclear but should it use the road U27 from Cloyntie to Dalwyne, it passes by Auchalton Meadow SSSI Site and areas of ancient woodland. The road is narrow and would almost certainly require widening which could have serious impacts for the aforementioned.

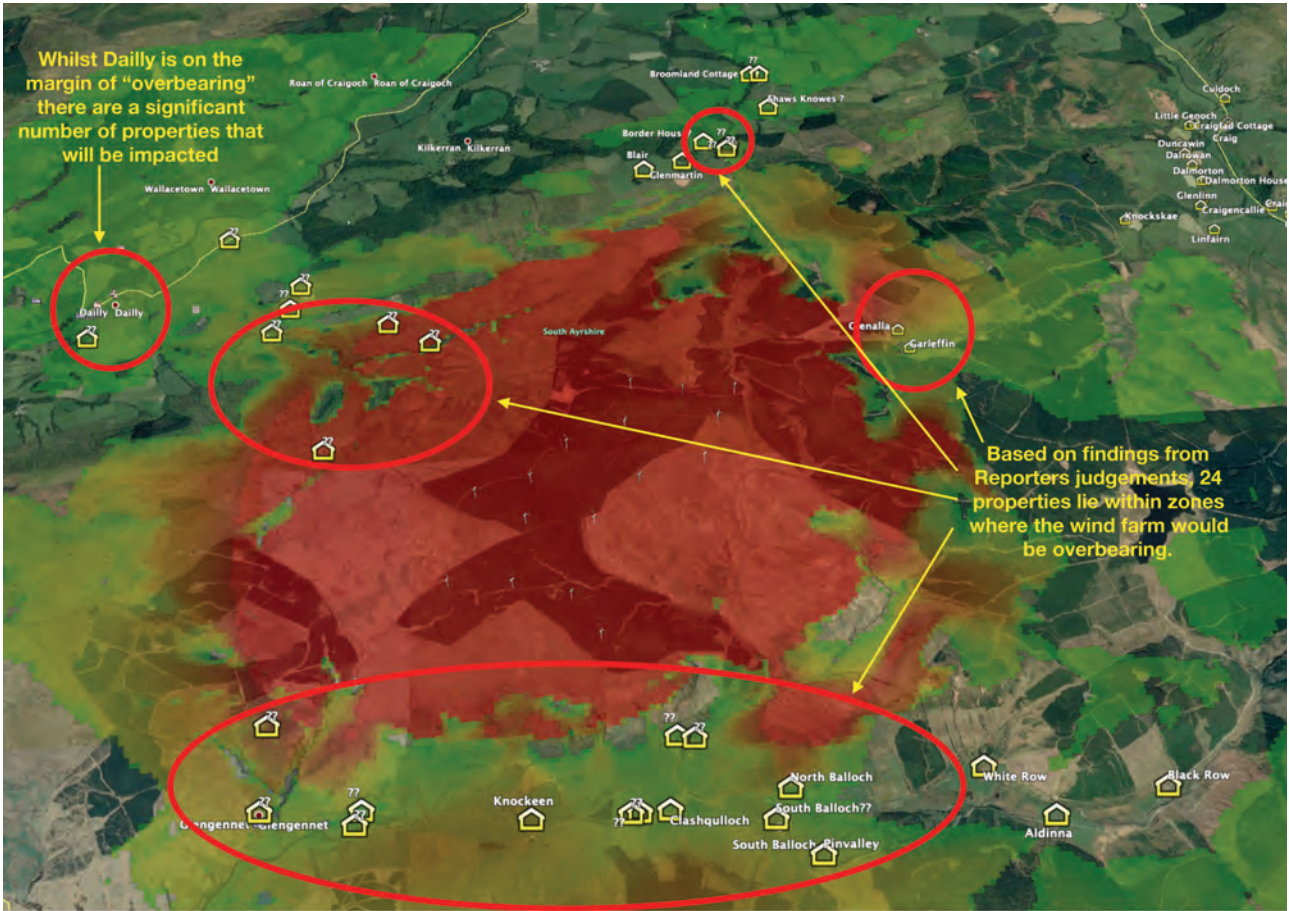
Q15: Are there any other relevant consultees who should be contacted with respect to the other environmental issues?

The Scoping Report has concentrated on Landscape and Environmental issues. We would like to know how the Applicant would assess the impacts on tourism and recreation, in particular National Cycle Route 7. The Applicant states *"At its closest it comes within very close proximity of the proposed development, following the minor road between South Balloch and Crosshill."* In fact the boundary of the Proposal follows NCR7 for several kilometres. This is a popular road for cyclists and tourists and may suffer from shadow flicker which the Applicant incorrectly states *"only occurs inside buildings"*. It is possible to see turbine blade shadows moving across roads when the recognised orientation occurs and the sun is low. Given that there are a number of the proposed Craiginmoddie turbines that would be very close to the NCR7 cycle route and to its south west it is likely that this effect may occur along this stretch of the cycle route and creating a disconcerting optical event to visiting tourists using this route.

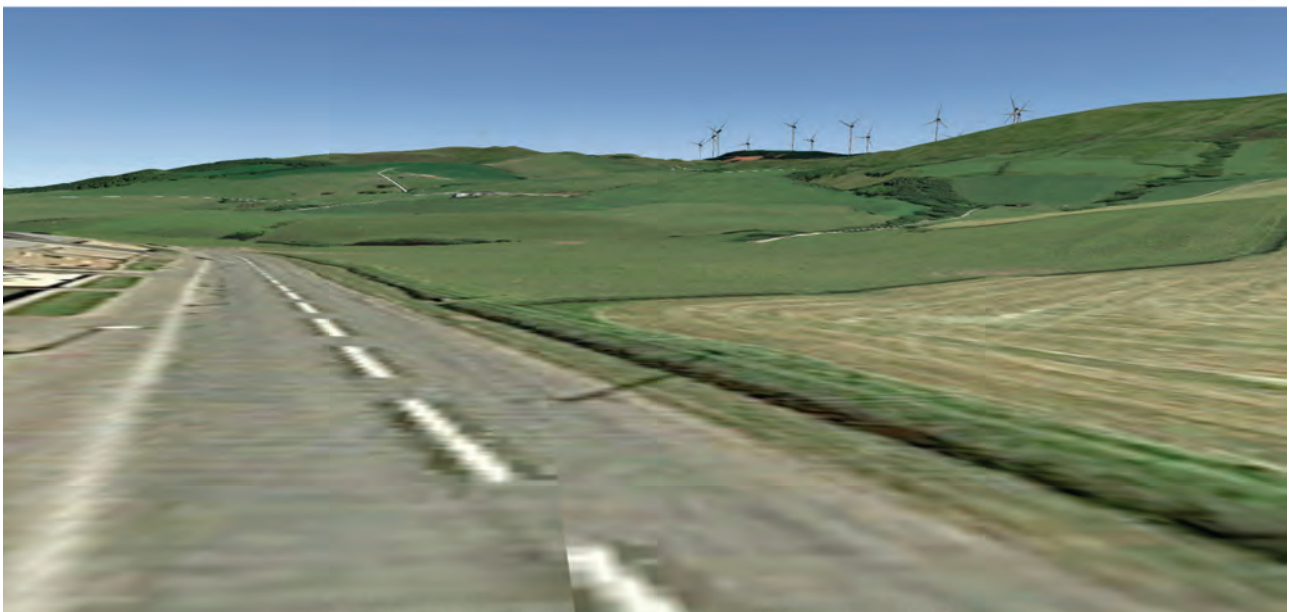
The Applicant also states that the rail line from Maybole to Stranraer would not be impacted by their Proposal. We would disagree with that and suggest it is not scoped out of the EIA Report.

In addition the access route has not been adequately described so we are unable to comment in detail on this.

Annex 1

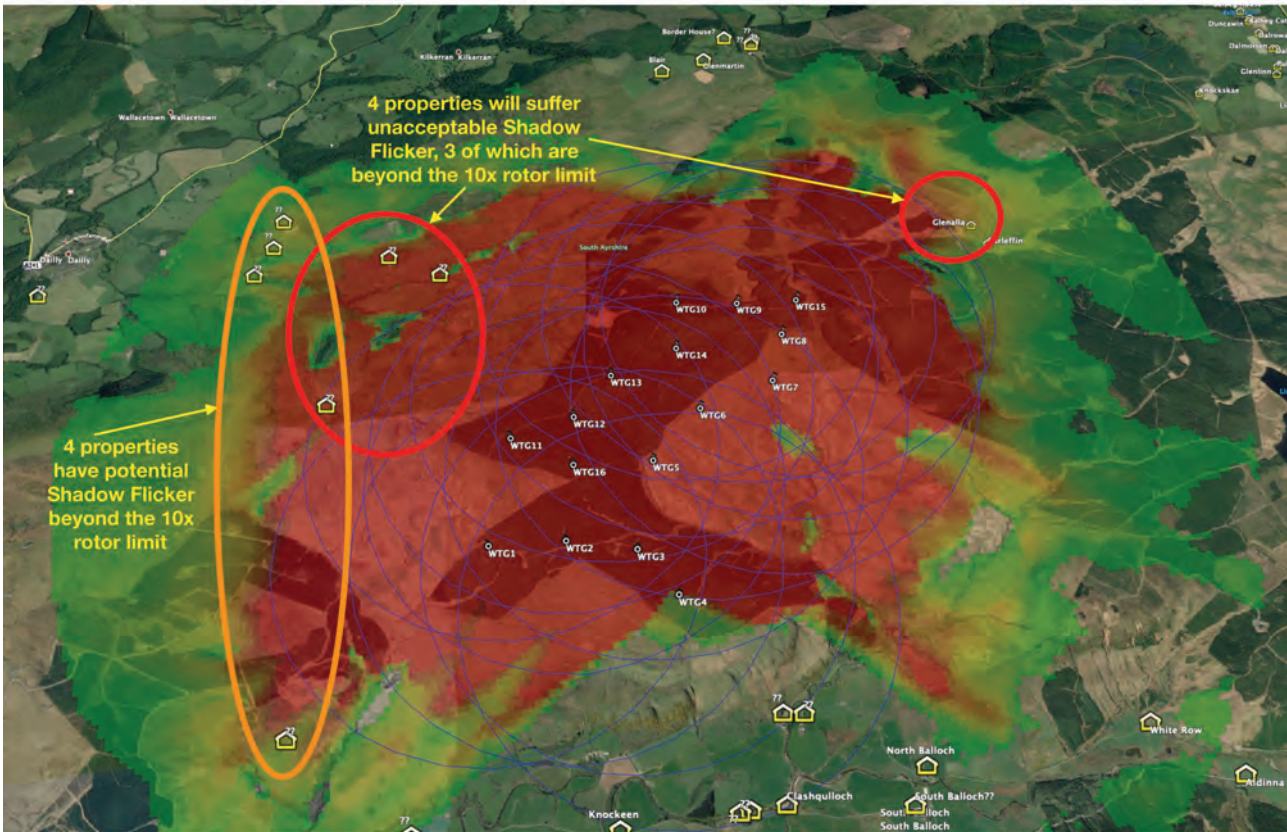


Overbearing Impact diagram. Red is area where there is no argument there is an overbearing impact, through to Green where some Reporters have found that the overbearing nature of similar wind farms' impact was unacceptable



**Turbines viewed from Eldinton Terrace, Dailly (road from Maybole to Girvan)
This is on the margin of being considered "overbearing" however, there are 27 properties on this road with similar visual impact**

Annex 2
Shadow Flicker



Shadow Flicker diagram. **Red** is area with levels above recommended limits, to **green** where Shadow Flicker will occur but below recommended limits. **Blue** circles are 10x rotor limits

Daily Community Council - Consultation Response

Melrose J (Joyce)

From: Secretary Dailly <daillycc@outlook.com>
Sent: 20 July 2020 12:52
To: Econsents Admin
Cc: Brown C (Carolanne)
Subject: Request for Scoping Opinion for Craiginmoddie Wind Farm - ECU00002080
Attachments: Craiginmoddie WF ECU00002080.pdf

Good Afternoon

Please find attached our response to your Request for Scoping Opinion for Craiginmoddie Wind Farm - ECU00002080.

Please do not hesitate to contact the undersigned if there are any questions.

Kind regards
REDACTED

Secretary – Dailly Community Council

This email has been scanned by the Symantec Email Security.cloud service.

CRAIGINMODDIE WIND FARM SCOPING REPORT RESPONSE FROM DAILY COMMUNITY COUNCIL

Q1: Confirmation is sought that the identified development plan policies are appropriate.

POLICY PLANS

In the first instance, we do not feel that this Scoping EIA is complete.

Referring to 2.8 of the Scoping:

2.8 In this case, the Proposed Development (as detailed within Section 4 of this Report) is of a type described within Schedule 2 as an installation for the harnessing of wind power for energy productions. It is not located within a 'sensitive area' as defined by the EIA Regulations, however, the project would exceed both of the applicable thresholds as it involves more than two wind turbines with hub heights of more than fifteen metres.

Under Schedule 2 Developments: An electric line installed above ground (a)with a voltage of 132 kilovolts or more; (b)in a sensitive area; or (c)the purpose of which installation is to connect the electric line to a generating station the construction or operation.

Per 3.9 of the Scoping - Grid connection:

3.9 A grid connection would be required to feed the electricity generated by the wind farm into the electricity network for the operational period of the project. The final details of the grid connection, including the precise route and an assessment of any impacts on the environment would be determined by the local Network Operator at a later date. The new grid connection may be subject to a separate design and consent process under Section 37 of the Electricity Act 1989.

A wind farm array with no timeously designed connection detail, to deliver what it produces, to the end users, is negligent in relation to the project definition. It is our choice to fully inform this Scoping Report in accordance with Prince2 Project Management techniques and protocols that all information required to make a fully informed business case must be included before a project scope can be defined.

We agree to National Planning Framework 3, Scottish Planning Policy (SPP) 2014 being used. Also, that South Ayrshire Local Development Plan (SALDP) and the upcoming Proposed South Ayrshire Local Development Plan (PLDP2) be used.

Regarding Spatial Frameworks (Table 4.1) we note that should the National Park be approved this would take the Proposed Development from a Group 3 site to a Group 1 site and this should be **scoped-in**.

Q2: Are there any further policies which would be considered likely to be material to the determination of the application?

POLICY PLANS

How does the proposed development impact on Scotland's 'Place Principle' and other headline governmental policies including how it impacts on opportunities to deliver Inclusive Growth and Wellbeing in the local settlements and communities.

Inevitably, we will see an updated and revised version of the May 2019 Scottish Government's National Performance Framework (NPF) released or refocussed to reflect such fundamental publications as Benny Higgins' "Towards a Robust, resilient wellbeing economy for Scotland", June 2020.

This pivotal work by Benny Higgins indeed deploys the latest ideas and techniques that adopt the NPF and draws out fundamental issues and themes. Our response to this Scoping EIA turns on Benny Higgins' commentary – part cited here – and the Report's Implementation section 5.25, as highlighted:

Moreover, to make our carbon targets realistic we must address the emissions related to transport and agriculture. We must also recognise that natural capital goes beyond carbon related dimensions to encompass the natural beauty of our country that we must protect and develop. By doing so we can underpin the recovery of tourism and hospitality which is a fundamental characteristic of Scotland's brand.

Trust must lie at the heart of a robust, resilient wellbeing economy. Since the global financial crisis, trust in many components of society has been diminished. During this crisis some have restored trust while others have eroded it further. It is the glue which binds the pillars of capital together and reinforces our sense of belonging. Our approach to economic recovery must reflect the importance of economic growth, but in a manner that builds trust. Together, we can pursue our aims with a level of confidence that is pivotal to sustainable prosperity in Scotland.

Section 5.25 Implementation

The economic recovery will be a long haul. But the action needs to start now. The Scottish Government needs to define and execute its recovery plan with purpose and urgency, in partnership with business and other key stakeholders. The Scottish Government should publish its response to our proposals and set out its strategy and initial action plan for economic recovery by the end of July. In order to maintain momentum, it should publish regular updates on that strategy and its execution over at least the next year.

Our recommendations are diverse and wide-ranging. Implementing them will create many workstreams and involve multiple partners and stakeholders. It is not for us to prescribe in detail of how each one should be taken forward. But, pace, alignment and coherence in the execution of the recovery plan will be required. We hope that the Scottish Government will adopt a streamlined and strategic approach and will take the opportunity to revisit any structures and processes which may stand in the way of the focused, thoughtful but urgent action that the recovery demands.

Taking above into account and aligning ourselves with the New Normal (post Covid Pandemic) situation, we must focus on the Assessment of Value and Costs as Outcomes of the Proposed Development.

Consideration should be given to the UK Green Book Investment Appraisal (2018 edition) used by the Scottish Government. This highlights the more recent informed complete asset

value and cost of development with the increase or decrease in value attributable to a single development that is under appraisal. Deferring to established Economic techniques we need to internalise externalities in a project: this means that the downside aspects of a project MUST be reflected and considered within the whole project. In conjunction, Prince2 Project techniques, demand that they cannot simply be ignored.

In context, the aggregate effect of a Major National and International Development of this magnitude – with visual impacts of 30km or more distance, to cite one example – is to diminish the asset value of every property adversely affected by the development and more acutely in this Scoping Report the asset value of Scotland's Natural Assets is diminished by the development.

This must then be assessed with reference to "The Green Book" because it reflects the loss of Tourism, Local Business, Leisure, Destination Visits and negatively impacts on some types of SME businesses (such as Wilderness Trails training, vacations and SME Team Building); Airbnb vacations stays, hotel, golf and culturally-focused visits must all be assessed and offset against the proposed benefits.

Relating to Prince2, we know the size of the battery storage containers and how far apart they must be - Section 3.8 - we know how many and how high the windmills are to be and the height of the nacelle – 148.5m – plus we know turbines would generate power for all wind speeds between 4m/s and 25m/s. Yet, nowhere is stated the total designed electricity generation envisaged.

Therefore, there is no Prince2 Project outcome that can be set against a negative outcome of the project. A fundamental failure to comply with The Green Book principles.

Per 4.9 of the Scoping – *A successful, sustainable place* – "we have a growing low carbon economy which provides opportunities...". More emphasis is required on 'successful' and 'place', and opportunities for 'inclusive growth' as well as a broader description of 'sustainable' – ie long-term survival and resilience of the communities affected.

Per 4.13 – *'...recognised as an opportunity to improve the long-term resilience of rural communities.'* How will the development impact on the long-term resilience of this community?

Other policies to consider include Ayrshire Joint Structure Plan 2009 – valid vision to 2025, South Ayrshire Wind Capacity Study – amended 2018, UNESCO Galloway and Southern Ayrshire Biosphere Policies.

Q3: Can it be confirmed that a 45km study area for the LVIA is considered to be appropriate starting point for the LVIA, but that approximately 20km is suitable for the detailed assessment of likely landscape and visual significant effects?

No. We agree to the 45km study area for the LVIA, however due to height of the turbines, up to 230m, we feel that 30km for landscape and visual effects is more appropriate. We do not agree to the ZTV at 20km.

We understand that for turbines 150m and over, SNH recommends detailed night-time lighting assessment. Lighting can be visible for considerable distances, and for these 230m high turbines a distance of probably 30km should be considered - Galloway Dark Skies Park must therefore be consulted.

Visual policy and good practice guidelines require to be followed, however, the EIA should also reflect the impact on local residents and communities that might fall outwith the parameters of these guidelines. For example, the people of Arran will have full sight of the Proposed Development. For your guidance, the turbines on the Mull of Kintyre are visible from Barony Hill and Hadyard Hill areas.

Per 5.11 of the Scoping - The LWCS describes the host landscape as follows;
'Although the large scale and simple landform and land cover of these uplands could relate in principle to larger turbine typologies, the narrowness of parts of this landscape and its proximity to the well settled Stinchar and Girvan valleys and the sensitive Rugged Hills, Lochs and Forest (21) are key constraints especially to very large turbines.'

The implication at several stages within the Scoping is that the Proposed Development will 'fit in' with the existing Hadyard Hill turbines. No - they will not. The new turbines are much taller and on much higher elevations. The existing turbines are 110m and generally located within a basin.

We note that there are several references to tree and forestry cover – this should not be relevant in any of the Scoping, for example 5.44 – trees are not permanent fixtures, they should not be used as screening and mitigation purposes.

There is concern that the railway lines per 5.62 are being scoped out, these should be **scoped-in**.

Q4: Are the proposed viewpoint locations considered to be suitable for the LVIA?

VISUAL VIEWPOINTS

No. How were these viewpoints decided? Some of the locations do not appear relevant. Some of the views are obscured by vegetation or buildings. Positions are not relevant to the people living in, or visiting, the area. Please consult with SAC, SNH, and local communities regarding viewpoint locations.

Per 5.66 of the Scoping the visual receptors are inadequately defined – they must include all thresholds/points of entry to the two valleys – Stinchar and Girvan.

We understand that these are only provisional but there must be relevance and meaning in the choice. Night-time viewpoints should also be included.

There seems limited reference to views from offshore which are important given the international reputation of this area as one of the world's finest environments for sailing.

Per 5.48 of the Scoping *'Beyond 10km to the east,...'* – this is obviously an error, should read west – to the Firth of Clyde and then the Irish Sea. Visual receptors would include all activity

on the water such as fishing, ferry boat/cruise passengers (Ailsa Craig, Waverley, Glen App), general pleasure boats, sailing.

Also, no consideration has been given to views from the air – airlines to/from Prestwick/ Glasgow, private helicopters/light aircraft.

Per 5.52 '*A **bespoke methodology** will be applied to the assessment of visual effects that may arise from visible aviation lighting, to meet CAA requirements*' – this must be made explicit.

To assist with a better understanding of the visual impact it would be more appropriate to have a 3D scale model of the site showing the proposed turbines within the local landscape in relation to cumulative impact with the other wind farms in the area. Wirelines and photomontages do not convey the actual real-world impact of turbines of this 'magnitude' or their 'overbearing' nature (as described by Reporters on occasion). Turbine size as represented on wirelines actually appear double the size when directly viewed within the landscape.

From our perspective being on the west side of the Proposed Development, other viewpoints should be considered incorporating the Coastal areas such as Turnberry and Culzean, both of which are major visitor attractions.

As per 5.51 *visual effects are experienced by people at different locations around the study area, at static locations (for example settlements or viewpoints) and from sequential locations when travelling along routes. Visual receptors are the people who will be affected by changes in views at these places, and they are usually grouped by what they are doing at those places (for example residents, motorists, recreational users etc.)* – this should assist in locating suitable viewpoints.

Per 5.62 regarding the railways – this should **not** be scoped out – sequential locations.

Q5: Confirmation on the approach to the assessment of likely effects on wild land is requested

WILD LAND

Per 5.26, 5.27 and 5.28, as previously stated we believe that the 20km radius should be extended to 30km – this would take into account features such as the WLAs. The cumulative effect from the existing Wind Farms mentioned together with the Proposed Development, and other wind farms in Scoping or Consultation will be significant and must be **scoped-in**.

Q6: Can it be confirmed that this approach to the methodology and inclusion of schemes for the cumulative assessment is considered to be appropriate?

CUMULATIVE VISUAL

Per 5.68 regarding *'Scale disparity'* – again this must be made explicit. As mentioned under Question 3 the existing turbines are 110m on lower elevations and generally within a basin, and the proposed are higher at 230m on higher elevations on ridgelines and near hilltops.

There are now too many wind farms being Scoped or Consulted upon as well as those currently in operation, therefore, **Scenario 4 is appropriate under 5.72 and it is essential that it is scoped-in.**

Q7: Is the proposed study area and approach to the RVAA set out above considered to be appropriate?

RESIDENTIAL VISUAL AMENITY

No. We do not consider the approach to the RVAA appropriate. With heights of this 'magnitude' at 230m the study distance should be greater at say 5km.

The Applicant should consider Overbearing (a term used by Reporters when the impacts are unacceptable). Using the algorithm derived from 53 determinations from 14 Decision Notices involving 13 Reporters in Scotland between 2009 and 2017, it was possible to quantify which properties would suffer from the proposed wind farm being overbearing and result in unacceptable impacts to the quality of life at the property. There are 24 properties which have a high probability that the wind farm would be overbearing (based on a model of 53 Reporters' findings). Properties particularly in the Stinchar Valley – for example, and in particular, Glengennet along to Balloch will be very susceptible to detrimental visual amenity. Glenalla in the north-east will also be severely affected.

The village of Dailly is on the margin of 'overbearing' but the 27 properties on the southern edge would be directly impacted by open views of nearly all the turbines (Annex 1). This combined impact should be highlighted and considered, as well as the cumulative effect on the rest of the houses in Dailly.

An RVAA should be carried out particularly for those in Dailly for example along Eldinton and Hadyard Terraces, Linfern Road, the outlying farms of say Dobbingstone, Knockrochar, all properties on the other side of the valley towards the coast for example at Wallacetown, Blair, Dalquharran, Newlands, Kilgrammie and Farden.

Q8: Are there any other relevant consultees who should be consulted about the LVIA process?

UNESCO Galloway & Southern Ayrshire Biosphere

Mountaineering Scotland

Galloway National Park Association

John Muir Trust

Dark Sky Observatory

Ayrshire Alps and Ayr Burners (cyclists)

South Ayrshire Local Access Forum

British Horse Society - Scotland

Q9: Is the proposed scope of assessment set out above deemed to be appropriate?

HYDROLOGY/HYDROGEOLOGY/GEOLOGY

No. The proposed scope of assessment is not appropriate.

Ayrshire Rivers Trust must also be consulted as they are very familiar with the area and coordinate with SEPA on a range of issues.

There is limited reference to water contamination and flow rates to private water supply. Through experience we know that this is a very relevant and concerning issue. There is also the issue of dirty/contaminated water run-off from turbines/nacelles.

Borrow pit assessment must be addressed with rigour, again through experience borrow pit size and location can be an issue.

Full hydrogeological assessments are essential for all private water supplies (PWS) within approx. 2km. This should include all types of sources and catchment. Local properties with PWS have no alternative supplies available and this type of development can result in reduction in quality and quantity, lower water tables and possibly complete destruction of supply. Mitigation for this is crucial – the use of bowsers and helicopters (as previously suggested by other companies) is unacceptable.

Q10. Are the distances set out above sufficient for survey purposes?

ARCHAEOLOGY/CULTURAL HERITAGE

No. As previously mentioned, due to the 'magnitude' of the turbine height at 230m we suggest increasing the study areas as follows: 2km increased to 5km, 5km increased to 10km, 20km increased to 30km. Other historical sites relevant to this area of South West Scotland would then be included in the study area such as NTS Culzean Castle and Gardens, NTS Souter Johnnie's cottage, NTS Alloway Robert Burns Centre, HES Crossraugel Abbey, Glenapp Castle, HES Loch Castle at Loch Doon.

Q11: Do you agree with the conclusions and recommendations of the ecology Reports summarised above?

ECOLOGY

No. We require information regarding the date these surveys were undertaken. More detail is required regarding Gavia Environmental and its status as an independent organisation.

Q12. Are there any other stakeholders that should be consulted as part of this process?

Ayrshire Bat Group and Bat Conservation Trust Scotland Branch

Forestry and Land Scotland

Saving Scotland's Red Squirrels

Scottish Badger

Scottish Wildlife Trust

South West Scotland Environmental Information Centre (SWSEIC)

Q13. Are there any other stakeholders that should be consulted as part of the ornithology assessment?

ORNITHOLOGY

Galloway & Southern Ayrshire Biosphere would be able to advise on others, say Scottish Raptor Study Group and Hen Harrier Society.
South of Scotland Golden Eagle Project.

A desk study and search of publicly available information has been carried out, what were the dates of said studies, and is the distance of 5km sufficient for the height of the turbines. The surveys carried out between October 2011 and April 2013 to inform the proposed Hadyard Hill extension (SSE, 2015) are over 7 years old and should be updated, turbine heights were significantly lower. There does not appear to be any mention of Golden Eagles, even though there is a population of Eagles centred on Straiton.

Q14. Please confirm if the above can be scoped out of further assessments.

TRAFFIC

No to the scoping out request of: *the effects of operational traffic on existing traffic flows; the environmental effects of any physical works required to facilitate turbine component delivery; and the environmental effects of traffic generated by the Proposed Development during decommissioning. The volume of decommissioning-related traffic is anticipated to be less than the level experienced during the construction phase and could more accurately be estimated at a later date.*

The routes have not yet been defined. Construction work is in close proximity to properties on both Barr and Dailly sides. All roads off the main 'A' and 'B' roads are generally narrow, badly maintained and not fit for heavy loads and increased traffic flow. We have experience of issues relating to operational traffic whether before, during or after construction. We would therefore include decommissioning traffic as well. Construction traffic noise assessments should also be **scoped-in**.

Location of borrow pits should also be included, as there might be an issue with blasting and transportation.

Per 5.148 indicating that a formal Transport Assessment is not anticipated to be required for temporary construction works – under what criteria? Construction and operational traffic assessment must be **scoped-in**.

Q15: Are there any other relevant consultees who should be contacted with respect to the other environmental issues?

SOCIO-ECONOMICS

Per 5.123 Socio-economics – the indication is that *there are no recognised standards or methodologies for assessing the socio-economic, recreation and tourism effects of windfarms, and therefore the Study Areas will be defined based on professional judgement –*

We require detailed information on who will provide professional judgement regarding this? We believe this statement to be untrue, cynical and wholly inadequate, there are methodologies applying to all other aspects of investment – this must be revisited including in relation to impact on opportunities for Inclusive Growth, Visitor Economy, Wellbeing and the economy generally.

There is insufficient emphasis on the positive and negative impacts for local residents, businesses, jobs, services, and visitors. There is acknowledgement of Potential Significant Effects under 5.131, 5.132, 5.133 of the Scoping Report – these must be quantified, with an explanation of how, and to what extent, the local communities will benefit or be negatively impacted. Revenue and profit produced by the wind power generated should be compared with its impact on the economic prospects for the local communities, and a formula for amelioration commensurate with this should be provided.

NOISE AND VIBRATION, AND SHADOW FLICKER

Per 5.155 *Vibration effects from construction activities and during operation will not be perceptible at residential properties and will be scoped out of the EIA.* No. This is incorrect. Vibration Impact Assessments for both construction and operational activities require to be included and must be **scoped-in**.

Per 5.165 We understand that the actual turbine model has not been agreed, however, we do not believe that enough emphasis has been given to the increased noise impact. Any assessment must recognise the impact of varying wind directions, speeds, distance from turbines and different topographies, not just random samples.

Experience of living with the existing Hadyard Hill for approx. 16 years has demonstrated that LOW wind speed conditions can give greatest disruption to near residents. Excessive noise is experienced at properties that are not necessarily downwind of existing turbines. Residents of Dailly, Wallacetown and Lindsayston experience noise issues from the existing Hadyard Hill wind farm depending on strength of wind and direction. Due to the increased height and turbine elevations relative to the Hadyard Hill turbines, this noise impact will be more severe and affect a much wider area.

More detail is required for cumulative assessments particularly regarding noise in all forms, and shadow flicker. There is already mitigation in place for existing Hadyard Hill wind farm. The array closest to Delamford and Dobbingsstone is switched off under certain conditions due to unacceptable noise levels.

How will this be included in any assessments?

Due to increased size and elevations, impact of noise will be more severe. Local knowledge and experience are key to the correct identification of assessment locations for noise sensitive receptors.

Per 5.183 of the Scoping states *'It only occurs inside buildings where the flicker appears through a narrow window opening.'* Local experience clearly demonstrates that this is untrue – it can be experienced through large windows, in gardens, on roads, etc.

Per 5.184 *'... Flicker effects are generally only expected to occur within a distance of ten rotor diameters of the wind turbines, therefore, the assessment will only consider residential properties within this distance.'*

Previous experience of Hadyard Hill Wind Farm and Hadyard Hill Wind Farm Extension Proposal demonstrates that properties outside 10 rotors will be exposed to shadow flicker. South Ayrshire Council recommends 2.5km for shadow flicker. Assessments need to be done for all properties and roads within 2.5km.

There are 4 properties that would fall into 'unacceptable Shadow Flicker' by agreed definitions, 3 of which are outside of the 10x rotor limit. The 10x rotor limit is based on research undertaken in the Netherlands on flat surfaces and does not take into account the undulating nature of the landscape and the positioning of the turbines on ridge lines. Modern wind farm planning software is capable of calculation beyond the 10x rotor limits, and the cost is low, so the Applicant should undertake full analysis.

Furthermore, the 'narrow window' statement is equally based on out-of-date research. While narrow apertures intensify shadow flicker, the effects can be experienced in open land without any apertures. Indeed the aperture effect also needs to be taken into account when considering screening/foilage as their presence can intensify the shadow flicker impacts rather than reduce them, as it often implied. (Papers available). There are an additional 4 properties that would have marginal shadow flicker impacts and also need to be taken into account as they are beyond 10x rotor diameters. (Annex 2)

HEALTH

Per 5.191 *'...Where no significant effects are likely these are scoped out of the assessment.'* Local experience shows there are significant health issues due to noise and shadow flicker and this must be **scoped-in**.

PROPERTY VALUE

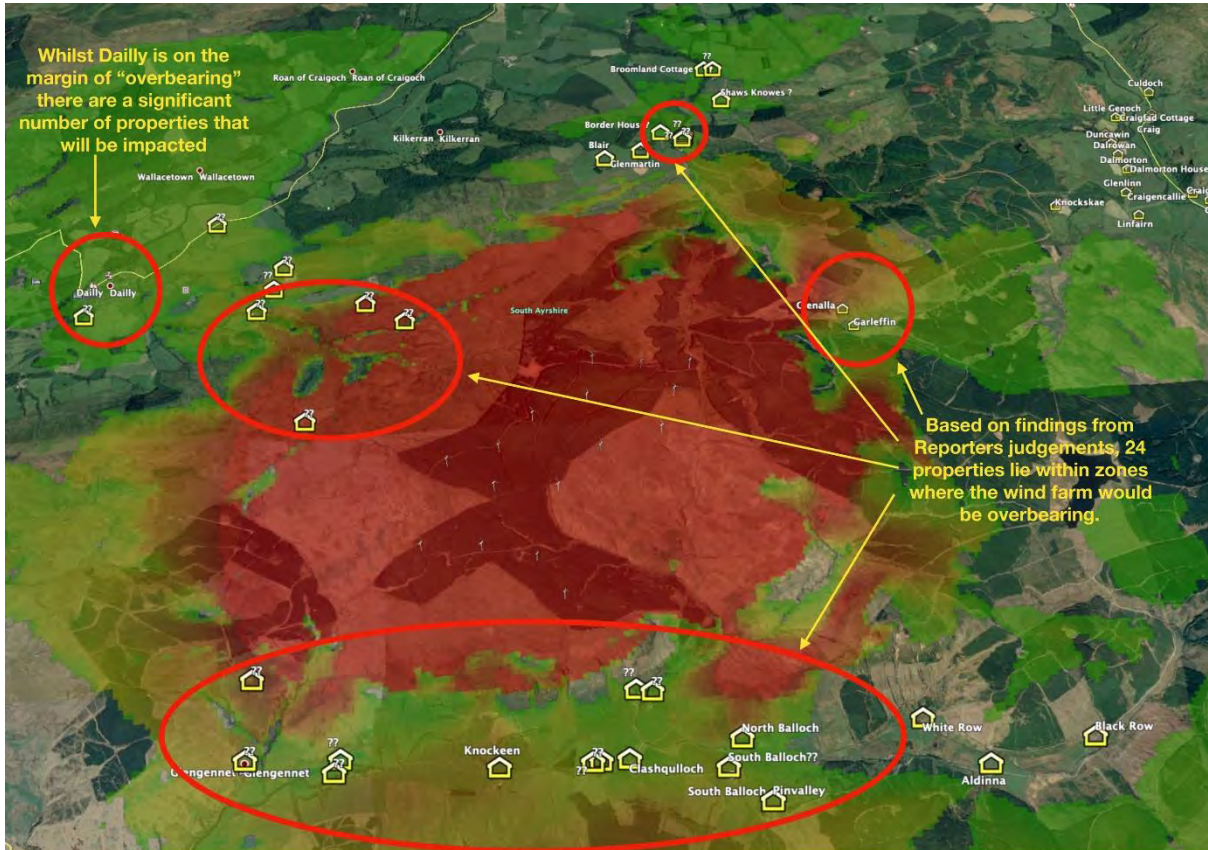
No mention has been made on the negative impact on land and property values. Again through experience it is now known that a number of local properties have been made uninhabitable due to noise and shadow flicker impacts – they are now derelict and their value practically eliminated. Property value must therefore be **scoped-in**.

CONNECTIVITY

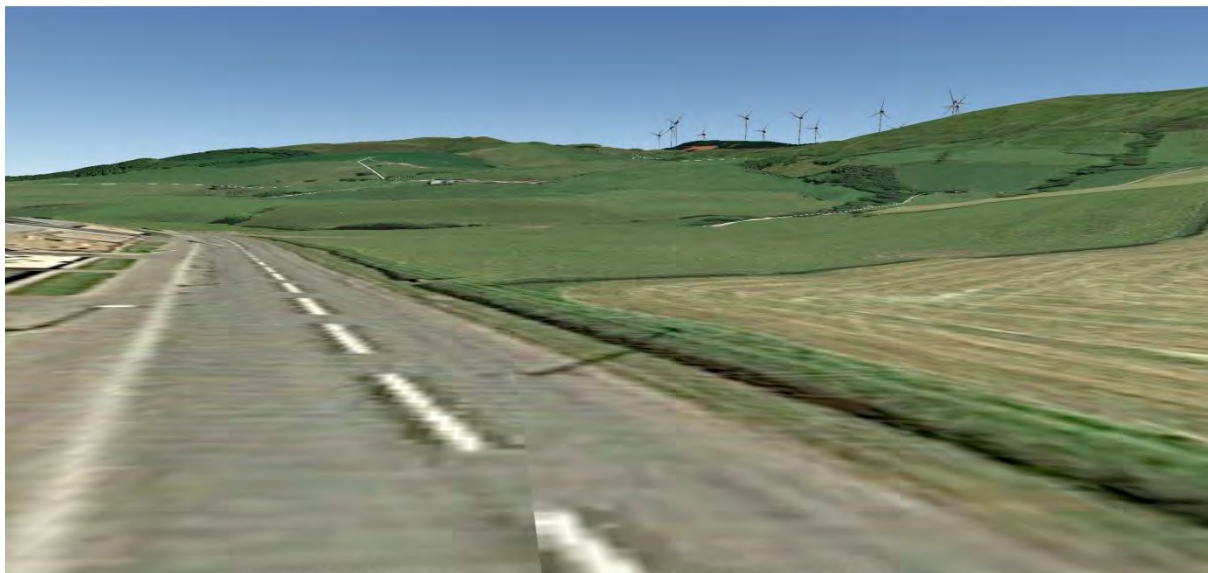
Potential and actual effects on communications including television, radio, internet and telephone connectivity must be **scoped-in**.

Per 5.134 Other consultees should include Mountaineering Scotland, National Trust, Galloway National Park Association, South of Scotland Enterprise (SoSE), South West Scotland Environmental Information Centre (SWSEIC), Southern Uplands Partnership with SHAPE – Sustainable Heritage Areas: Partnerships for Ecotourism.

APPENDIX 1

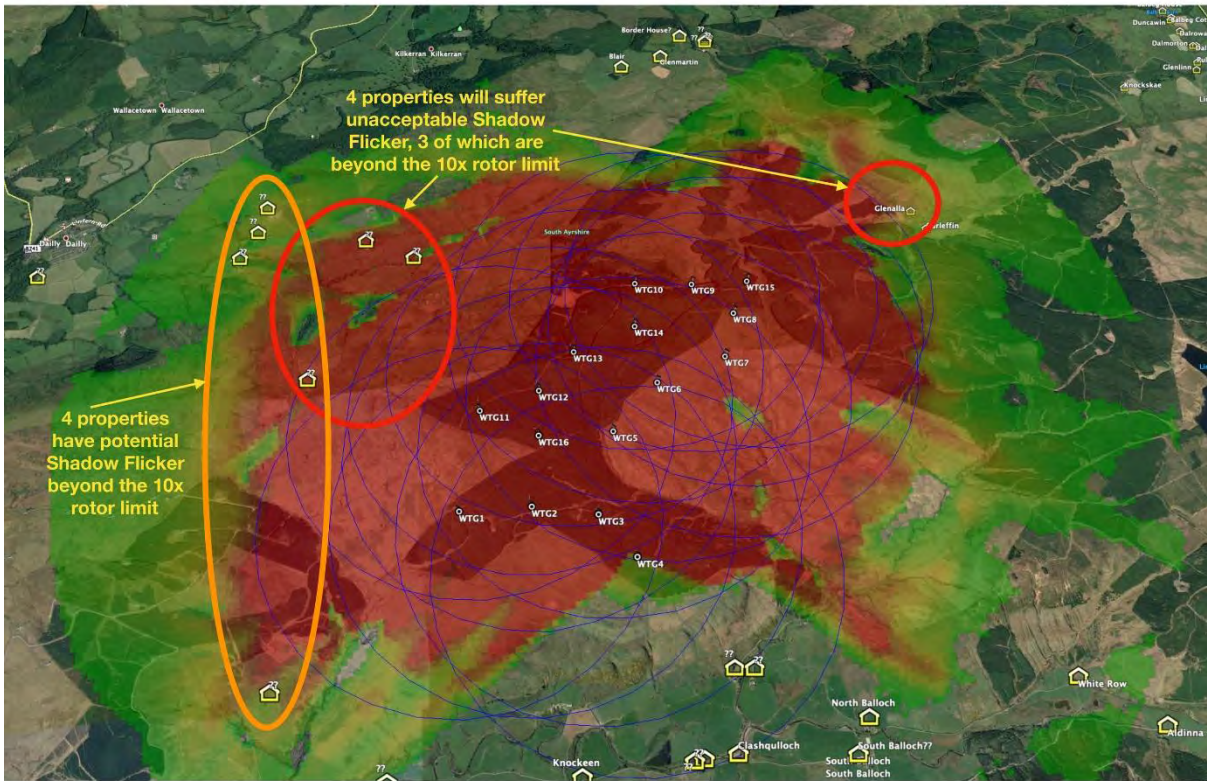


Overbearing Impact diagram. Red is area where there is no argument there is an overbearing impact, through to Green where some Reporters have found that the overbearing nature of similar wind farms' impact was unacceptable



Turbines viewed from Eldinton Terrace, Dailly (road from Maybole to Girvan)
This is on the margin of being considered "overbearing" however, there are 27 properties on this road with similar visual impact

APPENDIX 2



Shadow Flicker diagram. Red is area with levels above recommended limits, to green where Shadow Flicker will occur but below recommended limits. Blue circles are 10x rotor limits

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.

July 2020

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.			