



Over Hill Wind Farm
Technical Appendix 6.2

SNH & RSPB CORRESPONDENCE

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Date: 07 March 2018

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1. SCOTTISH NATURAL HERITAGE

1.1 SNH RESPONSE, 31 AUGUST 2017



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Graham Mitchell
Planning & Economic Development
East Ayrshire Council

By email only to: submittoplanning@east-ayrshire.gov.uk

Our Ref: CNS/RENWF/EA/OH/CDM146207
Your Ref: 17/0395/PP
Date: 31 August 2017

Dear Sir

**Erection of 11 turbines (up to 149.9m to blade tip) and associated infrastructure
Overhill Wind Farm, Dalmellington**

Thank you for your consultation on the above proposal, dated 5 June 2017. We would also like to thank the Council for agreeing to an extension to our consultation deadline.

1. Summary

- 1.1 We object to this proposal due to its impacts on the nationally important carbon-rich soils, deep peat and priority peatland habitat which are present on the site. In our view the significant effects of the proposal on this area have not been substantially overcome through siting, design or other mitigation, as required by Scottish Planning Policy. We set out our reasons in paragraphs 3.2 – 3.13 below.
- 1.2 We will however reconsider our position if the proposal is amended to safeguard more of the nationally important resource. We believe that this may be achieved through review and alteration of the infrastructure and construction requirements in areas of peat and peatland habitats, balanced with revised habitat management proposals which increase the area of peatland habitat to be restored. Our advice on these matters is provided in paragraph 3.14 below and in Annex 1.
- 1.3 We would welcome further discussion with the applicant and planning authority regarding this proposal. The applicant has indicated that they are prepared to engage in such discussions. If the planning authority however intends to grant planning permission against this advice, there is no need to notify Scottish Ministers.
- 1.4 We also provide our advice on other natural heritage interests, including landscape and visual impacts, habitats and species, in paragraphs 3.15 – 3.23 below, with supporting commentary included in Annex 2.

2. Background

Scottish Natural Heritage, Cadzow Court, 3 Wellhall Road, Hamilton, ML3 9BG Tel: 01698 421668
www.snh.gov.uk

Dualchas Nàdair na h-Alba, Cùirt Cadzow, 3 Rathad Wellhall, Hamilton, ML3 9BG
Fòn: 01698 421 668 www.snh.gov.uk/gaelic

- 2.1 The proposed development comprises 11 turbines, each up to 149.9m to blade tip, and associated infrastructure. The proposed development site lies across the summits of Over Hill, Lingie Hill and Mid Hill, approximately 6.5km to the north east of Dalmellington, East Ayrshire.

3. Appraisal of the impacts and advice

The Environmental Statement (ES)

- 3.1 Combined with our knowledge of the natural heritage interests in the area, the ES contains sufficient information to enable us to advise you on the impacts on the natural heritage. We do however note that there is a difference between the turbine numbering/co-ordinates given in Figure 1.2 and the turbine numbering/co-ordinates given in Table 3.3 of the main ES text. For the purposes of this response, we have adopted the turbine numbering given in Table 3.3 of the ES.

Carbon rich soil, deep peat & priority peatland habitats

- 3.2 The Carbon & Peatland Map 2016 (<http://www.snh.gov.uk/docs/A2009248.pdf>) identifies a large area within the application site as being 'Class 1 nationally important carbon-rich soils, deep peat and priority peatland habitat' ('the mapped area'). These areas are also identified as being likely to be of high conservation value. They form part of the nationally important carbon-rich soil, deep peat and priority peatland habitat resource referred to in Table 1 of Scottish Planning Policy (SPP) as "areas of significant protection".
- 3.3 While all eleven proposed turbines, along with the majority of their associated access tracks, lie within the mapped area this does not, in itself, mean that the proposal is unacceptable, nor that carbon rich soils, deep peat and priority peatland habitat will be adversely affected. The quality of peatland tends to be highly variable across an application site and a detailed assessment is therefore required to identify the actual effects of the proposal.
- 3.4 Examination of aerial photographs suggest that the mapped area extends to approximately 328ha of the approximately 670ha application site. Of this 328ha, approximately 113ha is afforested. Detailed peat surveys of the site show that peat depths across the mapped area range from <1m to >5m, with a general trend of deepening peat depths on the open bog towards the centre and north of the application site. Areas of mineral soils, made ground and peat supporting conifer plantation are also present within the application site boundary both within and outwith the mapped area.
- 3.5 The Phase 1 habitat survey of the site categorises the majority of the unplanted peatland in the mapped area as being blanket bog, with smaller areas of wet modified bog also present. Technical Appendix 9.1 of the ES (Over Hill Wind Farm National

Vegetation Classification & Habitats Survey) notes that the open blanket bog habitat retains a good condition, despite the planting of conifers. The earlier Over Hill Wind Farm Ecological Appraisal presented in Appendix 9.6 further notes that the unplanted areas of bog surface retain a high degree of integrity, evidenced in the frequent appearance of extensive lawns of *Sphagnum* and frequent bog pools. This assessment considers that in the active form present at Over Hill (i.e. *Sphagnum*-rich and capable of accumulating peat) the blanket bog qualifies as a Priority Habitat within Annex I of the Habitats Directive.

- 3.6 Peat hydrology within the mapped area is identified in the ES as being a receptor of high sensitivity. Table 9-31 of the ES identifies the blanket bog and associated wet modified bog which it supports as being of regional value based on its extent, quality and being one of the best examples of this type of habitat within the wider area. This aspect of the assessment does not take sufficient account of the importance given in SPP to carbon-rich soils, deep peat and priority peatland habitats, nor to the additional context and information provided by documents such as the Scottish Government's Draft Climate Change Plan and Draft Peatland and Energy policy statement or in Scotland's National Peatland Plan. In this context, and for the reasons identified in the ES, taken together we consider the area of Class 1 peatland and the blanket bog habitat it supports to be a nationally-important resource.
- 3.7 The ES concludes that the impacts of the proposal, taking into account assumed and in-built mitigation would be significant for both peat hydrology and blanket bog/wet modified bog. We agree with this conclusion and note that virtually all of the blanket bog predicted to be impacted by the proposal lies within the mapped area.
- 3.8 As an "area of significant protection", SPP requires that significant effects on the mapped area be "substantially overcome by siting, design or other mitigation." The ES considers that no further mitigation is possible for the effects on peat hydrology. The residual impacts of the proposal on this receptor therefore remain significant. However, the ES goes on to conclude that implementation of an Outline Habitat Management Plan (OHMP) will reduce effects on blanket bog/wet modified bog to 'not significant' through compensatory measures to maintain/enhance the existing area of open bog and restore areas of currently afforested peat to open bog habitat.
- 3.9 The ES notes that the design considerations for the project included avoidance, as far as practicable, of wet modified/blanket bog for the locations of turbines and areas of deeper peat for siting infrastructure. The Phase 1 habitat survey indicates that blanket bog accounts for 36% of the application site while the 100m metre grid data for peat presented at Appendix 12.6 Peat Landslide Hazard and Risk Assessment, Appendix A Peat Risk Data illustrate that 49% of the grid points support peat less than 2m deep. Despite this, six of the eleven turbines (55%) are proposed to be located on peat which supports peatland vegetation, and only two turbines (18%) would be located in areas with a maximum peat depth less than 2m.

- 3.10 In our view, the proposal is therefore disproportionately weighted towards a valued carbon store, much of which also supports a priority habitat. We do not believe that this is justified particularly as, while lower quality areas are present within the application site, the proposal as currently submitted has been assessed as having significant impacts which cannot be mitigated (as opposed to compensated) beyond the already in-built and assumed measures. While we recognise the difficulty of prioritising different constraints and reconciling these with the range of impacts associated with a development (as discussed in paragraph 12.96 of the ES), we do not believe that this should be at the expense of a nationally-important resource, in this case an area of high quality habitat, carbon storage and carbon sequestration potential, particularly when other lower quality areas occur within the site.
- 3.11 In relation to the OHMP, we consider that the compensatory measures proposed are not sufficient to off-set the predicted impacts and that more active management proposals will be required. In particular, we note that it is proposed to remove approximately 20 – 22ha (minus the area of 'wind farm open ground' associated with turbine 5) of woodland for the purpose of bog restoration. Given that approximately 16.5ha of a nationally important resource are predicted to be significantly impacted directly and indirectly by the proposals, we consider this is inadequate. A more extensive area of habitat restoration is required to off-set the impacts of the proposal. Further comments on the submitted OHMP are given in Annex 1.
- 3.12 Allied to this, we note that the ES proposes that the borrow pit be used for peatland restoration. However, it is clear from Technical Appendix 12.4 Phase 2 Peatland Coring Survey and Appendix 12.6 Peat Landslide and Hazard Risk Assessment that the borrow pit is not in a peatland area. It is therefore inappropriate to consider this site for peatland 'restoration'. We advise that peatland creation in a non-peatland area should not be considered as part of the mitigation for peatland loss and damage arising from the proposal.
- 3.13 In view of the above, we do not believe that the proposal has demonstrated that the significant effects which are predicted to occur within the areas of Class 1 peatland on the site have been substantially overcome through siting, design or other mitigation. We therefore object to the proposal as currently submitted on this basis.
- 3.14 While we agree with the conclusion that the in-built and assumed mitigation measures will themselves not be sufficient to avoid significant impacts on the mapped area from the proposal as currently submitted, we have identified several issues regarding the appropriateness and adequacy of some of the measures proposed in relation to peat and peatland issues in the ES, or the assumptions and assessments underpinning these. We advise that these issues should be addressed through:
- Further pre-determination peat survey to inform the siting of key infrastructure (substation).

- The submission of a revised Draft Peat Management Plan and Peat Landslide Hazard & Risk Assessment before the application is determined.
- A condition to the effect that any wind farm development permitted on the site is carried out in accordance with a Construction Environmental Management Plan / Construction Method Statement and a Decommissioning & Restoration Plan approved by the planning authority in consultation with other stakeholders as appropriate.

Our detailed comments on these matters are also given in Annex 1.

Landscape and Visual Impact

- 3.15 The current layout broadly results in a coherent and well-designed scheme in most views. The turbines are generally well-spaced in a clearly horizontal layout. However we advise that a reduction in height of the proposed turbines could be noticeable and would be particularly beneficial from the following locations:
- VP5: Burnside - where turbines would be seen behind/above the trees on the skyline of the low hill behind Sunnyside/Whitehill. This is a smaller-scale, more intimate part of the landscape which has been somewhat underplayed in the LVIA. Where visible above the trees, the turbine blades would dominate these smaller-scale features. This would also remove potential cumulative visibility along this road in combination with the existing schemes at Hare Hill / Afton and with recently consented South Kyle wind farm located roughly 5 – 10km from Overhill.
 - VP6: Rankinson – from where part-blades would be seen above the eastern skyline. A small reduction in height would likely remove turbines in views from this settlement
- 3.16 Should redesign of the scheme be necessary due to natural heritage or other constraints then we advise that any subsequent design iteration is subject to a revised / updated Landscape & Visual Impact Assessment.

Protected species

Protected species – General

- 3.17 We advise that, if the development is permitted, potential impacts on protected species should be controlled through:
- A requirement for the mitigation measures set out in the ES to be implemented.
 - A requirement for the development to be carried out in accordance with an approved Species Protection Plan (SPP).

- 3.18 With regard the SPP submitted as part of the application, we are generally content with the measures detailed in the document. We would however highlight that in respect of section 6.2.1 of the plan, it is for the Ecological Clerk of Works, not SNH, to determine whether disturbance, obstruction, damage or destruction of a protected feature is likely to occur and to advise their client of any mitigation and licensing requirements accordingly. The SPP should be amended to reflect this.

Protected species - Bats

- 3.19 We welcome the proposed implementation of a stand-off between the turbines and woodland edges to reduce potential impacts on commuting and foraging bats. We also welcome the intention to undertake pre and post construction monitoring of bat activity to refine the need for any additional mitigation. We advise that the scope of this monitoring should be submitted to and approved by the planning authority, in consultation with SNH, prior to any works beginning on site. Our detailed comments on these matters are given in Annex 2.
- 3.20 We additionally advise that the rotation of turbine blades below cut in-speed should be minimised through feathering to further reduce the potential for the development to significantly impact on bats.

Birds

- 3.21 We advise that provided a Breeding Bird Protection Plan and appropriate mitigation in respect of black grouse is adopted, the development is unlikely to result in any significant adverse impacts on birds. We also advise that further information on hen harrier and peregrine should be obtained from the local Raptor Study Group prior to monitoring of the site, should the proposal receive planning permission. Our detailed comments are provided in Annex 2.

Deer

- 3.22 Should the proposal receive planning permission, we advise that an assessment of the potential impacts on deer welfare, habitats, neighbouring and other interests (e.g. access and recreation, road safety, etc.) should be submitted for approval by the planning authority, in consultation with SNH. Where significant impacts may be caused, a draft deer management statement setting out how any impacts will be addressed should also be submitted for approval. Advice on *what to consider and include in deer assessments and management at development sites* is available on our website via <http://www.snh.gov.uk/planning-and-development/renewable-energy/onshore-wind/general-advice-and-information/>.

Freshwater interests

- 3.23 Before the application is determined, we advise that supporting data should be sought from the relevant District Salmon Fisheries Boards and Fishery/River Trusts to support the observations made in the ES that fish habitats are either absent or that watercourses do not support fish. If such data are absent, we further advise that measures to determine what fish species are present (if the data provided suggest this may be the case) beyond the observational information provided in the ES should be taken. Should it be determined that the proposal has the potential to impact on fish populations within the development site or in receiving waters outwith it, appropriate mitigation measures should be identified.

Concluding remarks

We hope that you will find these comments helpful in your consideration of this application. Should you wish to discuss this response further, please contact David Kelly on 01698 421668 or at david.kelly@snh.gov.uk.

Yours faithfully

Kerry Wallace
Unit Manager
Strathclyde & Ayrshire

cc Finlay Becks-Phelps, Energie Kontor

Annex 1

Carbon-rich soil, deep peat and priority peatland habitats

Outline Habitat Management Plan

We advise that the following matters should be taken into account in producing revised habitat management proposals for the site.

— *Management Unit A – Wet Modified Bog and Blanket Bog - Unplanted*

In the proposals for this management unit, we particularly note that prescription 1.2 appears to be focused on not doing things, i.e. prohibiting certain activities. Given the previously noted good condition of this area of habitat, it is not clear to what extent these activities are taking place at present, or indeed are likely to in the future, nor as to how the measures proposed will help achieve objectives 1.1 and 1.2 (in respect of which we note that the objective of increasing *Sphagnum* and the objective of increasing dwarf shrubs may be incompatible as they have opposing habitat requirements – wetter for *Sphagnum* and drier for dwarf shrubs).

We also advise that an objective to remove self-seeded trees from areas of open bog should be included in the plan. We recommend that this is carried out every five years over the lifetime of the development.

— *Management Unit B – Wet Modified Bog and Blanket Bog - Planted*

In respect of Management Unit B, the extent of the proposed management unit appears to be in the region of approximately 20-22ha minus the area of wind farm open ground associated with turbine 5 [6]. We do not believe this is sufficient to compensate for not only the predicted loss of habitat area, but also the loss of habitat structure, function and resilience. We therefore advise that the extent of habitat restoration proposed should be proportionately greater than the extent of habitat impacted by the proposal. When considering an appropriate extent of habitat restoration, considerations should be given to likelihood of success and the time taken for compensation to achieve its goal. We would be happy to offer further advice on this matter.

We also note that much of the vegetation under those trees which are currently proposed for removal appears to be in relatively good condition. Care will be required to ensure that brash, chipped material etc. arising from the management proposals does not damage it. Material may have to be removed from the site.

— *Management Unit C – Native Broadleaved Woodland*

We advise that the area identified as Management Unit C in Figure 9.11 Outline Habitat Management and Research Plan appears to be incorrect as it is a simple rectangle in an area of, and surrounded by *Sphagnum*-rich blanket bog (NVC

community M18a). This would not be an appropriate area for woodland creation and the intentions here should be clarified.

- *Research proposal on the impact of wind farm infrastructure on peatland.*
We welcome this proposal. There may be benefits from linking with an academic or other research institution to benefit from their expertise and perhaps having access to, for example, a series of MSc students undertaking projects.

In-built and assumed mitigation

Proposed construction methods

For the construction of crane hard standings and laydown areas, a “punched-in rock method” is identified in the ES as being preferred in areas of peat more than 1m deep. We also note the proposal to excavate the substation, although no peat depths other than those from the 100m² systematic grid have been measured at the new location for the substation.

The method for the reinstatement of cable trenches in paragraphs 3.83 and 3.84 of the ES differ from the design illustrated in Figure 3.9 Typical Trench Design. The methods described in paragraph 3.83 and 3.84 would be less damaging to the peatland environment.

We therefore advise that:

- The “punched-in rock method” is inappropriate for these purposes and creates great uncertainty for the hydrological stability of these areas. Appendix 12.6 Peat Landslide Hazard and Risk Assessment makes no reference to the use of this method. An assessment of its implications in a revised Peat Landslide & Hazard Risk Assessment should be requested.
- A full peat survey of the proposed substation site should be undertaken before confirming its location.
- Should permission ultimately be granted for development on this site, construction methods should be detailed in a Construction Environmental Management Plan / Construction Method Statement. This should be approved by the planning authority in consultation with relevant stakeholders prior to any works beginning.

Re-use of excavated peat

Given the limited peat calculated to be available, the ES indicates that all of it will be used to restore the borrow pit. However, we note that there appear to be a number of uncertainties and inconsistencies in respect of this proposal. In particular we note that:

- Paragraph 3.95 of the ES states that while there *may* be suitable road building material on site, the EIA has been undertaken on the assumption of import of the Type 1 material and other general road construction material.

- Tables 1 and 2 of the Draft Peat Management Plan appear to ignore the excavation of peat for piled turbine construction. This has potential implications for the quantity of peat available for re-use.
- In other areas, the ES suggests peat will be replaced, as far as is practicable, in the location from which it was removed or that it will be used to dress the sides of access tracks. These statements do not appear to be consistent with the proposal that all peat will be used to restore the borrow pit.
- In Table 3 of the Draft Peat Management Plan, it is not clear why the 'demand' for borrow pit restoration matches exactly with that considered available, nor what will be done if more, or indeed less, peat becomes available.

In view of the above, we advise that:

- The issue of whether the development will include one or more borrow pits should be clarified at the earliest opportunity as it has significant implications for the management of peat and peatland habitats.
- The objectives and opportunities for peat re-use should be clarified and a revised and more authoritative Draft Peat Management Plan prepared.

Post-construction site restoration

Much of the content of this section of the ES appears to depend on the proposals on how to re-use peat. In our view, this emphasises the importance of clarifying this issue through a revised Draft Peat Management Plan and to subsequently adhering to an agreed CEMP or CMS.

Peat Landslide Hazard & Risk Assessment

In addition to giving consideration to the "punched-in rock method" referred to above, we advise that the Peat Landslide Hazard & Risk Assessment be revised to give consideration to the following matters:

- *Table 4-1 Depth of Acrotelm in Peat Core Samples*
The definition of the acrotelm given in the 4th paragraph of Section 2.1 is "...the fibrous surface to the peat bog, typically less than 0.5 m thick; which exists between the growing bog surface and the lowest position of the water table in dry summers". We advise that at least some of the data given in Table 4.1 are not compatible with this definition. An acrotelm on a bog in Scotland cannot be only 1, 3 or even 7 cm thick. This error can become significant when considering re-use purposes for excavated peat.
- *Section 4.3.2: Substrate*
Given the small sample size and the assessment results described in this section, it is not clear to why the Substrate Coefficient assigned to all Peat Depth locations listed

in Appendix A Peat Risk Data is given as "1", which according to Table 5-4 Coefficients for Substrate, indicates "Sand/Gravel". Given the role of the Coefficients for Substrate in determining Peat Slide Hazard and Risk, we advise that a more precautionary approach would be appropriate, or should at least be tested to determine if it makes any significant difference to the overall Hazard and Risk Assessment.

— *Section 5.11: Results & Section 5.12: Hazard Rated Locations*

We advise that consideration should not only be given to the proximity of medium risk areas to proposed infrastructure, but also to activities such as tree removal which will probably require the use of heavy equipment on sensitive areas of peatland.

We welcome the mitigation measures described in Chapter 6.0: Construction Issues and Mitigation Measures. We advise that these should be incorporated into the CEMP / CMS for the site should development ultimately be permitted.

Decommissioning & Restoration

Should the proposed wind farm be given permission, we advise that a decommissioning and restoration plan (DRP), following our guidance (<http://www.snh.gov.uk/planning-and-development/renewable-energy/onshore-wind/general-advice-and-information/>), should be submitted for approval prior to construction commencing, in consultation with the planning authority and other relevant stakeholders as appropriate.

Annex 2

Landscape & Visual Impacts

Located in the extensive upland plateau landscape between New Cumnock and Dalmellington this wind farm would be the first commercial scheme in an area that is currently wind farm free. The landscape is characterised by forestry and open cast, and Overhill would add new key elements into this area. This is a changing landscape and will evolve further as forest removal and restructuring and restoration of open cast workings continue.

The Overhill wind farm would be located in the '*Foothills with Forestry and Open Cast Mining*' landscape character type (LCT 17a) as classified in the East Ayrshire Landscape Wind Capacity Study 2013. Overhill would be the first wind farm in this LCT, potentially changing the character to *Foothills with Forestry, Open Cast Mining with Wind Turbines*.

The eleven 149.5m turbines would be seen as large-scale and prominent features from much of the surrounding area up to 5km distant. In longer views up to 15km [from the east (including the upper Nith Valley and New Cumnock), the north (including the A76, Cumnock, Auchinleck, the A70); the north-west (Drongan / Hillhead); and hills to the south (such as Blackcraig Hill and Cairnsmore of Carsphairn)], they would be noticeable features and blade movement would be evident in these views. In more distant views over 15km they would be part of the wider landscape context.

The large-scale and simple landform of gently rounded hills in a wider upland plateau means that the turbines are generally seen as a level row of turbines that relates well to the landscape context. This is especially evident in longer distance views where the turbines would match the strongly horizontal form of both the forestry and the landforms of open cast restoration.

There are several groupings of existing and consented wind farms to the south east of the site which are / will be distinctive features on the relatively complex landform at the northern edge of the Southern Uplands. Overhill is clearly separate to these wind farms due to its location on the slightly lower, more horizontal landform of the upland foothills to the north. Cumulatively however Overhill would be perceived as part of these groups in many views from the north and would further enclose the upland basin - which is centred on New Cumnock and the upper Nith valley - with large scale turbines. The Overhill turbines would be seen from New Cumnock in a part of the view that is currently wind farm free.

The surrounding forest and undulating topography certainly provides some containment for the scheme and largely screens the bases and lower parts of the towers in most views from the surrounding areas. The turbines would mostly be seen in the context of relatively simple landscape cover - forestry or mining - with few landscape elements to indicate turbines size.

Bats

Stand-off between turbines and habitat features of value to bats

We note that there is some discrepancy regarding the minimum extent of the stand-off proposed in the ES (i.e. 78.23m in paragraph 9.121 vs. 73.25m in paragraph 9.175 and elsewhere). Paragraph 9.175 also suggests that this stand-off should apply between turbine blade tips to forestry edge features.

For the avoidance of doubt, a minimum stand-off of 50m should be maintained between turbine blade tips and adjacent woodland edges. To achieve this in this case, based on the candidate turbine dimensions referred in the ES and a woodland height of 20m, we advise that the centre of the turbine towers should not be located closer than 78.23m to adjacent woodland edges. The minimum stand-off of 50m should also apply between turbine blade tips and the Black Water, given the findings of the 2014 and 2016 bat surveys, but it is likely that this can be achieved.

Pre and Post-construction monitoring

We would be pleased to discuss the development of an appropriate monitoring programme with the applicant prior to its formal submission to the planning authority for approval if this would be of assistance. We offer the following advice at this stage:

- One year of pre-construction monitoring would allow a comparison of bat activity pre and post construction to be made. This will require an identical acoustic monitoring methodology to be employed as that to be used during post-construction monitoring.
- The programme of post-construction bat monitoring should span a minimum of 3 years. Carcass searches and acoustic monitoring will be required, along with simultaneous monitoring of key weather parameters (wind speed and temperature). If repeated casualties are detected during operation, a trial curtailment regime informed by bat activity, temperature and wind speed data should be implemented – the SCADA system on the turbines can be programmed to switch the turbines to be feathered during periods of high risk (high bat activity), i.e. at above the normal cut-in speed and up to the appropriate wind speed above which bat activity drops off.

We recommend that use is made of the 'Ecobat' online database (<http://www.ecobat.org.uk>) in relation to the monitoring data, as this may help give a clearer picture of whether curtailment will ultimately be required.

Birds

Black grouse

Survey work has identified two discernable lek locations: a northern one in 2014 and a more southerly one in 2015 and 2016. Both locations are close to access tracks and so there is potential for disturbance to lekking birds, especially during construction.

Should the proposal receive planning permission, we therefore advise that:

- Mitigation measures to reduce the potential for disturbance to black grouse are adopted as set out in the ES. Temporal restrictions should be applied for the period two hours after sunset/up to 9am during April and May.
- The specific management for black grouse proposed in the outline HMP seems appropriate. If the proposal is given planning permission, a 'final' HMP incorporating management measures for black grouse should be approved by the planning authority in consultation with members of a Habitat Management Group (HMG) for the site. The 'final' HMP should be implemented in full, subject to any necessary amendments agreed with the HMG in the future.

Hen harrier

The relatively high number of hen harrier flights (relative to other species) in winter suggests that there may be a winter roost nearby. Given the number of flights observed in the 2014/15 non-breeding season, we advise that, should the proposal receive planning permission, any available information on the location of hen harrier winter roosts in the surrounding area is sought from the local RSG. This information may assist in future monitoring, should the proposal gain consent.

Peregrine

No impacts on peregrine falcon are considered likely on the basis of survey data. However, we advise that confirmation should be obtained from the local RSG on the location of the peregrine falcon breeding site, and that there are no alternative nest sites within or close to the development site. Again, this information may assist with future monitoring, should the proposal gain consent.

Monitoring

We advise that a programme of post-construction monitoring be implemented should the proposal receive planning permission.

1.2 MacArthur Green Letter, 6th September 2017



Mr David Kelly
Scottish Natural Heritage
By email only to: david.kelly@snh.gov.uk

E-mail: david@macarthurgreen.com
Date: 06 September 2017

Dear David,

**RE: Erection of 11 turbines (up to 149.9m to blade tip) and associated infrastructure
Overhill Wind Farm, Dalmellington**

This letter provides our initial response to SNH's letter of 31st August 2017 with regards to the above subject and is intended to inform discussions at our upcoming meeting.

The following topics raised in SNH's letter are considered in Annex 1 to this letter:

- Blanket Bog;
- In Built and Assumed Mitigation;
- Re-use of Excavated Peat;
- Protected Species, Bats, Birds, Deer and Freshwater Interests.

Please let me know if you have any queries on the attached.

Yours sincerely,

David H. MacArthur
Director

Registered office: 95 South Woodside Road, Glasgow, G20 6NT.
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ANNEX 1

BLANKET BOG

SNH's letter notes that, 'in our view the significant effects of the proposal on this area have not been substantially overcome through siting, design or other mitigation'. The letter goes on to state that, 'we will however reconsider our position if the proposal is amended to safeguard more of the nationally important resource. We believe that this may be achieved through review and alteration of the infrastructure and construction requirements in areas of peat and peatland habitats, balanced with revised habitat management proposals which increase the area of peatland habitat to be restored'. We welcome the opportunity to discuss this with SNH and this letter outlines revised mitigation and compensation proposals for Over Hill as the basis for further discussion.

Mitigation and Habitat Management Proposed in the ES

Before outlining the proposed revisions to the mitigation and compensation proposals, a recap of the mitigation and compensation (habitat management) proposed in the ES to mitigate and compensate for the loss of blanket bog habitat is summarised below:

Mitigation

- Detailed design to locate turbines and related infrastructure off deeper peat areas and adhere to 50m water course buffers.
- Piling of 8 turbine foundations in peat depths over 2m (see Figure 1).
- Use of floating tracks in peat over 0.5m deep (see Figure 1).
- Proposals to punch/pile turbine crane pads.

Compensation through Habitat Management

Habitat management is proposed in the ES to compensate for the predicted direct and indirect loss of 16.7 of blanket bog and wet modified bog habitat (4ha from direct loss and 12.7ha from assumed indirect loss). The habitat management proposals are detailed below and illustrated in Figure 9.11 of the ES:

- **Management Unit A (Maintain and Enhance Existing Blanket Bog):** Management of 204.3 ha of open bog habitat to maintain its integrity and ensure the entire blanket bog area is managed as a coherent ecological unit.
- **Management Unit B (Forestry Removal & Restoration of Blanket Bog):** 30.91 ha of forestry removal and restoration to blanket bog habitat (17.17ha in MUB and 13.74ha within the windfarm open ground element).

Revised Mitigation and Habitat Management Proposals

Mitigation

- SNH's letter notes that the wind farm layout appears to be 'disproportionately weighted towards a valued carbon store, much of which also supports a priority habitat. We do not believe that this is justified particularly as, while lower quality areas are present within the application site the proposal as currently submitted has been assessed as having significant impacts which cannot be mitigated (as opposed to compensated) beyond the already in-built and assumed measures'.

Figure 1 to this letter shows the required 1.75km noise buffer on Upper Beoch which turbines need to avoid. This buffer rules out the southern area of the site where the non-peat habitats exists.

Habitat Management

Figure 1 to this letter details revised Habitat Management Proposals that we would like to discuss further with SNH. These comprise:

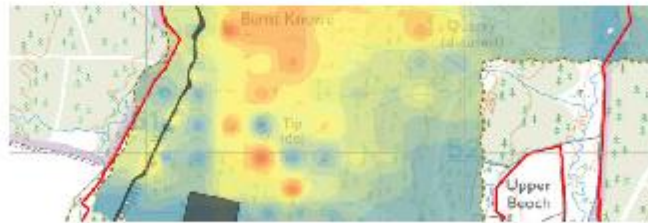
- **Management Unit A (Maintain and Enhance Existing Blanket Bog):** Management unit A has been extended to ensure that the open areas surrounding the forestry are subject to appropriate management also (an additional 49.6 ha is included in MUA).
- **Management Unit B (Forestry Removal & Restoration of Blanket Bog):** These proposals have been revised to increase the area of blanket bog to be restored by removing commercial forestry from the site. Management Unit B – Additional shows a further 57.25ha to be included in the bog restoration proposal.
- In total therefore, 341.45ha of area will be included in the HMP for blanket bog management. This will comprise 253.29ha of existing blanket bog (Management Unit A*) and 88.16ha of bog restoration through the removal of commercial conifers (Management Unit B).
- The restoration of 88.16ha of blanket bog (71.46ha if indirect loss of habitat is assumed as a total loss) from commercial forestry plantation to compensate for the loss of 17.17ha represents a compensation ratio of 1:5 (for every 1ha lost 5ha is restored) or 1:4 if total indirect loss is assumed.

Other Comments on Habitat Management

- SNH's advice with regards to the removal of self-seeded conifers from the blanket bog every 5 years is noted. This will be included in the revised HMP.

- Felling of conifers and subsequent material should be managed sensitively to minimise damage to remaining bog vegetation under the forest. These details will be included in the revised HMP.
- The Management Unit C area for native broadleaved woodland planting to benefit black grouse is correct. The peat depth surveys recorded depths of below 50cm (1-20cm) in these locations which would be suitable for planting. More detailed survey would be required to determine the exact extent of this area and that is why a rectangle has been included at present.

Excerpt from Figure 12.9 of ES



IN-BUILT AND ASSUMED MITIGATION

SNH's advice on the following is noted:

- The requirement for the 'punched rock' method to be considered in the PLSHRA (this will be addressed separately by SLR).
- A full peat survey of the substation site. This will be completed in the coming weeks and provided to SNH in due course.
- A Construction Environmental Management Plan / Construction Method Statement should be approved by the planning authority and relevant stakeholders in advance of works commencing.

RE-USE OF EXCAVATED PEAT

- SNH note that 'Tables 1 and 2 of the Draft Peat Management Plan appear to ignore the excavation of peat for piled turbine construction. This has potential implications for the quantity of peat available for re-use.'

Tables 1 and 2 consider the peat volume to be excavated from piled turbines in the estimated volumes (the volumes are correct). There is an error however in that a row was hidden in the xls and therefore not shown in the draft PMP. This does not affect the volume calculations as shown in the refreshed Tables below:

Table 1, Peat excavation by construction category – total peat generated

Infrastructure	Estimated Peat Volume to be Excavated (m3)
8 Turbines Bases (Piled)	7,038
3 Turbine Bases (Excavated)	1,672
8 Crane Pads and Service Areas (Piled)	0
3 Crane Pads and Service Areas (Punched)	0
1 Substation	237
Floating Track	0
Cut Tracks & Passing Places	0
Borrow Pit	5,460
Total	14,407
Contingency 5%	720
Total with contingency	15,127

Table 2, Peat excavation by construction category – Fibrous Peat (1m maximum depth)

Infrastructure	Estimated Peat Volume to be Excavated (m3)
8 Turbines Bases (Piled)	3,519
3 Turbine Bases (Excavated)	1,096
8 Crane Pads and Service Areas (Piled)	0
3 Crane Pads and Service Areas (Punched)	0
1 Substation	150
Floating Track	0
Cut Tracks & Passing Places	0
Borrow Pit	5,460
Total	10,225
Contingency 5%	511
Total with contingency	10,736

- 'In Table 3 of the Draft Peat Management Plan, it is not clear why the 'demand' for borrow pit restoration matches exactly with that considered available, nor what will be done if more, or indeed less, peat becomes available'.

This is because the demand from the borrow pit can be varied in the calculations by adjusting the depth of catotelm and acrotelm assumed to be required. At present the draft PMP assumes a depth of catotelm of 0.74m and acrotelm of 0.23m. These depths can vary depending on the exact quantities however the draft PMP assumes a 5% contingency so it is unlikely to be more than these estimated volumes.

- 'we note that the ES proposes that the borrow pit be used for peatland restoration. However, it is clear from Technical Appendix 12.4 Phase 2 Peatland Coring Survey and Appendix 12.6 Peat Landslide and Hazard Risk Assessment that the borrow pit is not in a peatland area. It is therefore inappropriate to consider this site for peatland 'restoration'. We advise that peatland creation in a non-peatland area should not be considered as part of the mitigation for peatland loss and damage arising from the proposal'.

This will be considered further by SLR and MacArthur Green.

PROTECTED SPECIES

SNH's advice is noted with regards to:

- A requirement for the mitigation measures set out in the ES to be implemented.
- A requirement for the development to be carried out in accordance with an approved Species Protection Plan (SPP).
- The SPP will be updated to amend the role of the ECOW as requested.

PROTECTED SPECIES – BATS

SNH's advice is noted with regards to:

- Acknowledging the stand-off distance between turbines and woodland edges. This is confirmed as 78.23m.
- Pre and post-construction monitoring of bat activity to refine mitigation requirements. These will be approved by SNH and the Local Authority in advance of construction.
- That the rotation of turbine blades below cut in-speed should be minimised through feathering to further reduce the potential for the development to significantly impact on bats.

BIRDS

SNH's advice is noted with regards to:

- Completion of a Breeding Bird Protection Plan to safeguard breeding bird interests including black grouse.
- Further consultation with the Raptor Study Group prior to construction.

DEER

SNH's advice is noted with regards to:

- Submission of a Deer Management Statement prior to construction for consultation with SNH.

FRESHWATER INTERESTS

SNH's advice is noted with regards to:

- Supporting data should be sought from the relevant District Salmon Fisheries Boards and Fishery/River Trusts to support the observations made in the ES that fish habitats are either absent or that watercourses do not support fish.

Through recent correspondence with the Nith District Salmon Fishery Board it has been agreed that a full fisheries audit of watercourses within the River Nith catchment will be carried out to establish current data for the provision of ongoing fisheries monitoring pre-construction, we will also be discussing this with Ayr Fishery Trust.

1.3 SNH Response, 6th October 2017

From: David Kelly [<mailto:David.Kelly@snh.gov.uk>]
Sent: 06 October 2017 15:10
To: Finley Becks-Phelps
Cc: Michael Briggs
Subject: RE: Over Hill

Fin / Michael

Thanks again for sending your revised Habitat Management & Research Plan to us for comment before we meet up on the 25th. I've let our peatland and landscape advisers have a look at what you're proposing and we'd offer the following comments to help inform our discussion. I haven't made any comments on the other points raised in David McArthur's letter of 5th September but we can have a quick chat through them at the meeting – details of times etc. for the meeting at the end of this email.

Peatland issues

In general terms, the proposal to increase the area of bog to be maintained / enhanced and the area of forest plantation to be restored to bog is welcome.

Inevitably though, there is a lot of detail that will need to be teased out:

As currently proposed, the area of 'forest-to-bog' restoration is largely determined by the boundary of 'Class 1 Carbon and Peatland Habitat'. At a strategic level this is appropriate, given the indicative nature of the classification. However, at a site management level, it should be based on peat depth, habitats and habitat management requirements, including hydrology. This may require some further assessment of the compartments to the east of the site. The revised proposals for the centre and west of the site would appear to be appropriate.

We're assuming that the forestry which appears on OS maps and aerial imagery (e.g. on Bing maps) to the west of Turbine 8 and immediately adjacent to the application boundary has already been felled as part of the work for the South West Scotland Connector. Has this area been restored? If not, then we would really want to see specific proposals for this area too (subject to any constraints the presence of the power line might impose).

Management Unit A is still mostly focused on 'preventing' things rather than 'doing' things. However, there are some things that we think should be done. For example:

- Blocking drains at north end of site
- Blocking erosion gullies – even if vegetated - to raise water table of adjacent peatland
- Removal of regenerating trees (we note that this is now included in the plan though and we welcome that)
- As above, addressing restoration needs of felled forestry in the west of site as appropriate

All of these measures are ones which could be carried out through Forestry Commission and SNH grants if there was no proposal for a wind farm (that's not to say that they would be, but they *could* be). As such, the impact of the wind farm is additional to what could be achieved,

even if just in theory, in its absence. It would therefore seem appropriate that, in addition to the above measures, effort is made to reduce the impact of the wind farm. The most obvious way to do this is to reduce the amount or nature of infrastructure currently proposed to be sited on high quality peatland habitat with a good carbon store.

Given that we're aware of the different constraints acting on the proposed development, it's probably not helpful for us to be overly prescriptive in this regard, but essentially it comes down to seeing what can be done by way of altering the location and/or number of turbines and/or the route and/or length of track. There may also be opportunities within generic design types (e.g. piled foundations, floating to tracks) to reduce impacts still further.

Landscape issues

On the basis of a desk-based appraisal of the original visualisations, the current mitigation /enhancement proposals would not significantly change our original advice on landscape and visual impacts. There would be a change in perceived landscape context (from forested to open landscape) in a limited number of views such as from Maneight on the B741 (VP1) and in longer distance, elevated views from Blackcraig Hill (VP 16) and Cairnsmore of Carsphairn (VP18). Locally the containment provided by the existing, surrounding forestry would certainly be reduced but this would generally not be perceived widely beyond VP 1.

In most views there would be no discernable change to the landscape context of the wind farm. From VP 1 (Maneigh) the most north-easterly turbines (numbered 1, 4, 6, 3 and 11 on Wireline 1b in the ES) would be clearly seen in the context of open ground whilst the remaining turbines would appear located within the forest. Hence in this view the overall design context of wind farm would be perceived as ambiguous / not clear. The more open landscape context might also be discernable from more elevated viewpoint in the south such as Blackcraig Hill (VP 16) and Cairnsmore of Carsphairn (VP 18) from where viewers would be looking down in to the site – albeit obliquely.

Meeting

In terms of the meeting, I've booked a room in the SNH Hamilton office for 1.30pm on Wednesday the 25th. It would be helpful if we could have sight of anything else you prepare for discussion at the meeting beforehand – the earlier the better if possible.

Going by the number of people who get slightly lost on the way, our office is apparently not the easiest place to find or get into (and apparently SatNav is no real help either!), so if you can let me let me know who's coming from where and how they're planning on getting here, I'll send out some appropriate maps with directions.

I hope this is helpful for the moment, but please let me know if there's anything you want to discuss further prior to meeting up.

Regards

David



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

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Meeting Minutes



Subject	Over Hill Wind Farm proposal – peat
Date & Time	25 th October 2017 – 13.30
Location	Scottish Natural Heritage, Cadzow Court, 3 Wellhall Road, Hamilton, ML3 9BG
Attendees	David Kelly – Scottish Natural Heritage Andrew Coupar – Scottish Natural Heritage Toby Wilson – RSPB Graham Mitchell – East Ayrshire Council David Wilson – East Ayrshire Council David MacArthur – MacArthur Green Colin Duncan – SLR Finley Becks-Phelps – Energiekontor UK Ltd Michael Briggs – Energiekontor UK Ltd Justin Reid – Energiekontor UK Ltd

MEETING PURPOSE: To discuss the issue of peat in relation to the Over Hill Wind Farm application

1. FBP - Introduction

- 1.1. A welcome was passed to everyone and the agenda for the meeting was discussed and agreed.
- 1.2. The structure would be to discuss planning policy, the project design iteration, site build, habitat enhancement, followed by open discussion to understand how the project can be best delivered.
- 1.3. The project was introduced as currently being in planning with all statutory consultee responses received. The reason for this meeting was to try to address and resolve SNH's objection on the nationally important carbon-rich soils, deep peat and priority peatland habitat which are present on the site. RSPB's consultation response echoed this hence their interest.

2. MB – Planning policy

- 2.1. The Energiekontor paper titled; "Planning Policy and Mitigation Topic Paper" was introduced and discussed in outline. The paper set out that the mitigation hierarchy is, avoid, reduce, and then offset.
- 2.2. It was agreed by all that mitigation and offset/compensation is mitigation and counts towards the consideration of whether significant effects have been substantially overcome.

3. FBP – Design Iteration

- 3.1. The design iteration process, that took place as part of the initial pre-application site design, was described in detail and the reasoning as to why the developable area was to the north of the site; acoustic issues on the property known as Upper Beoch Farm, avoiding water courses and the transmission line.
- 3.2. The positioning of the turbines was discussed in more detail, in particular information was provided on minimum separation distances between wind turbines required to prevent manufacturer warranty issues and acceptable wake losses.
- 3.3. A description was provided of how the infrastructure and turbine locations have sought to avoid the areas of deepest peat.
- 3.4. The site was also selected due to it being within an area identified of medium sensitivity to large typology turbines, the least sensitive area in East Ayrshire. The landscape character type also supports the opportunity for large typology turbines and this is further supported with commercially viable wind speeds.

4. CD – In-built mitigation

- 4.1. Certain elements of the proposed construction methods for the site were described in detail.
- 4.2. All new tracks proposed off the newly formed track built to service the transmission line will be of floating track construction, the CEMP could include details of the floating road construction to help ensure that it does not sink.

Energie Kontor UK Ltd. 11 Somerset Place, Glasgow, G3 7JT Tel: +44 141 354 6544

Meeting Note:
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- 4.3. 8 out of 11 turbines will be built using piled foundations.
- 4.4. Tracks and foundations have been designed to minimise peat excavation and disturbance to existing drainage.
- 5. **DM – Habitat Enhancement**
 - 5.1. The updated proposal sent to Scottish Natural Heritage on the 6th of September was discussed.
 - 5.2. The updated proposals have increased the area of forest felling by 57.25ha and open blanket bog by 48.99ha.
 - 5.3. DM explained that the direct loss of 4ha and indirect of 12.7ha would be compensated for by restoring 88.16ha of conifer plantation to blanket bog. This equates to a high compensation ratio of 1:4. In addition to this, 253.29ha of surrounding open blanket bog would be managed to ensure that the bog is managed as a coherent ecological unit. In total therefore, 341.45ha of bog would be managed to mitigate for a loss of 16.7ha of bog.
 - 5.4. The carbon calculator estimated that the carbon pay-back time of the scheme would be between 0.4-2.8years. This is likely to be reduced further due to the increased habitat management proposals. .
- 6. **Issues raised**
 - 6.1. **TW – RSPB raised a number of issues**
 - 6.1.1. Concerns over deep peat
 - 6.1.2. The area is a local designation
 - 6.1.3. Like for like enhancement is not sufficient to overcome direct impacts
 - 6.1.4. Emphasis needs to be placed on avoidance before other mitigation measures can be explored
 - 6.1.5. The issue of carbon is not the only issue, it is also a very important habitat
 - 6.1.6. Martyr's Moss is of particular concern – suggested that this Turbine and associated track is one of the most sensitive.
 - 6.1.7. Is there a net benefit to the forestry being removed?
 - 6.2. **DW – EAC raised a number of issues**
 - 6.2.1. ETSU could potentially allow up to 40dB where this proposal has used 35dB, this could potentially allow a decreased separation distance from Upper Beoch.
 - 6.2.2. Despite design intentions and site constraints, there remains a significant impact on the peat resource, so, without further evidence is not yet convinced that the proposed enhancement measures substantially overcome the significant impact. Avoidance needs to be the priority mitigation and the new proposals (8, below) went some way to achieving this.
 - 6.3. **DK – SNH raised a number of issues**
 - 6.3.1. This area is under group 2 protection
 - 6.3.2. The dressing of peat on tracks and borrow pits needs to be set out more clearly
 - 6.4. **AC – SNH raised a number of issues**
 - 6.4.1. Questioned why peat wasn't treated like a hard constraint similar to that of noise and water course buffers. It was suggested that under group 2 didn't negate the area being suitable for development, whereas the aforementioned constraints were in fact hard constraints.
 - 6.4.2. Habitat and biodiversity is of more importance than the deep peat (as a carbon store). Queried whether a comparison could be made, in terms of impact of foundation and deep peat vs track habitat directly affected as a result of floating tracks.
 - 6.4.3. Not sure if increasing the habitat management plan offsets the damage created by the proposal, and that avoid the more sensitive area needs to take precedence over enhancement.

2

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- 6.4.4. Turbine 4 within the Martyr's Moss is most sensitive
- 6.4.5. The hardstanding and track both have a footprint that will damage habitat, is there any way of decreasing this. It was suggested that if appropriate, more sensitive areas could try and be avoided.
- 6.4.6. It would be helpful to include some diagrams within the application to illustrate the piling construction techniques.

7. Additional measures

7.1. TW – RSPB

- 7.1.1. Possibility of removing turbines
- 7.1.2. Possibly going further into the forestry to allow the areas of deepest peat to be avoided with the assumption that forestry removal would be acceptable for peat restoration.

7.2. DK – SNH

- 7.2.1. The new proposed enhancement measures go some way in justifying the proposal, however there will still be a significant impact on the blanket bog.
- 7.2.2. Forestry reduction would be acceptable, however this can only be acceptable if it is for restoration purposes.

7.3. AC – SNH

- 7.3.1. Concerned that the do nothing scenario would allow the site to be restored naturally following forestry removal. However, it was noted that 'do nothing' would also not accelerate or allow suitable management to restore blanket bog.

7.4. TW – RSPB

- 7.4.1. Would like to have some confidence that proposed measures would be properly managed
- 7.4.2. Would like to see grazing agreement put into place to ensure that appropriate measures are being taken to support restoration.

7.5. DW – EAC

- 7.5.1. Habitat Enhancement could be covered by planning conditions to ensure compliance

7.6. JR – EK

- 7.6.1. EK had successfully deployed and were aware of a number of construction techniques that reduced the impact of developing on peat. Suggested submitted a draft CEMP ahead of determination setting out these techniques.

7.7. CD – SLR

- 7.7.1. TW raised a concern over the build of floating tracks, however CD described that with proper management they can be built correctly.
- 7.7.2. SNH would welcome a commitment to monitoring activities on site during and post-construction.

8. New proposals

- 8.1. FBP described a new layout that further addressed the issues that had been raised; the removal of turbine 4 from the Martyr's Moss area; and, the relocation of the track infrastructure to avoid crossing this area of bog. The new track could potentially access the last three turbines from turbine 10 rather than from the north and this would further minimise development on the more sensitive ground.

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- 8.2. The above changes to the layout would be incorporated alongside the increased enhancement measures described by DM.
- 8.3. The removal of turbine 4 could potentially allow the 3 easternmost turbines to be slightly repositioned further north east allowing turbine 10 to come out of the area of deep peat. This was to be explored further by EK.
- 8.4. SNH conceded that, in terms of balance it was difficult to assess whether the enhancement plans went far enough to overcome their concerns. Acknowledgment on this point was made to EAC officers and that the proposal was finely balanced, without weighing the (renewable energy) benefits of the proposal.
- 8.5. If the above measures are incorporated it was agreed that these could potentially be acceptable to RSPB, SNH and EAC.
- 8.6. EK to prepare revised proposals for circulation amongst the group prior to an FEI being submitted.

9. Action points

Action	Who
Update Planning Processing Agreement	FBP & GM
Update turbine infrastructure map and circulate it to all for comment	FBP
FEI needs to include	Project team
Clearer piled foundation drawings	CD
All enhancement measures need to be included in the new HMP, including bog restoration techniques and not just management	DM
Grazing agreements need to be applied as conditions	GM
Revised PHMP	DM
Revised DPMP	DM
Revised PRSA including queries	CD
Peat survey on new locations	DM
Update queries on CMRA	CD
Assessment of borrow pit on GWDTEs	DM

1.5 SNH Response to EK email (1st December 17), 19 December, 2017

Hi Alan

Thanks again for sending the revised Over Hill proposals to us for review.

In summary, while the proposed changes are welcome, they do not go far enough to enable SNH to withdraw its objection. Our detailed comments, including what further changes we wish to see, are as follows:

Access Route Options

Intuitively our preference is for Option 1, as the east-west track is further away from the main area of bog. However, we have no particular reason to object to Option 2 and so would be content for the application to progress on that basis.

The reference to “the access to the historic settlements in this area in the late 1600s or before” does, however, make us wonder whether HES has an interest in this area (which would affect both Options 1 & 2). Have these proposals been discussed with them?

Turbine Layout

We welcome the removal of turbine 4. We would however like to see T7 (in particular) and some or all of T6, T9, T10 and T11 pulled back further from the bog.

Habitat Management

We consider that further tree removal is required as an important aspect of managing the peatland to retain its interest in the long term. It is not just that case that trees planted on deep peat are damaging. Adjacent trees provide a seed source which will readily find a seed bed on ground disturbed by wind farm construction, particularly along tracks and around crane hardstandings etc.

I hope this is helpful, but happy to discuss - I'll be on leave from midday tomorrow until 5th of January.

Regards

David



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1.6 SNH Response to EK email (17th January 18), 07 February 2018

Michael

Thanks for sending through your proposed revision to Over Hill for comment and thanks for your patience. Having reviewed the drawings from both the peatland and landscape & visual perspective, we'd offer the following initial feedback:

Peatland issues

Together with the earlier revision, what is now being proposed would be a significant improvement on the original layout from a peatland perspective. In particular:

- Turbine 6: The proposed relocation of T6 on to shallower peat and the associated reduction in access track length would be welcome.
- Turbine 7: The proposed relocation of T7, and its access track, from the bog into adjacent forestry on shallower peat would be welcome.
- Turbine 10: The proposed relocation of T10 on to shallower peat and the associated reduction in access track length would be welcome.
- Turbine 1: The proposed withdrawal of T11 from the edge of the bog would be welcome, although it is not obvious from the peat depth map that the peat is any shallower there.

However, we do have a few queries that we would welcome further clarification on:

1. We have assumed that further forest clearance will be associated with the relocation of Turbines 7 & 11. Is there still scope for more forest clearance from areas of peat?
2. Is it still the intention to use pile, rather gravity, foundations for all turbines in deep peat?
3. Given the presumption in SPP (para. 170) that areas identified for wind farms should be suitable for use in perpetuity, what assurances can be given that subsequent generations of wind farm at this site would not encroach in the bog? Currently, most repowering assumes new turbine foundations, with associated access track adjustments. Turbines 6 and 9 and, to a lesser extent Turbine 3 appear to be highly constrained as regards location. We're concerned that much of the layout, particularly on the west side, is so constrained by water courses and the power line, that future repowering will be very difficult unless the same turbine bases are used.

Landscape and Visual issues

On the basis of the wirelines that we requested, the redesign would slightly reduce the number of visible blades in views from the Burnside and Rankinson viewpoints, which would be a slight improvement with regard to these particular views. However in middle-distance views (approx. 8km – 15km) the layout would have noticeably more gaps which would result in an overall less clear design. This may draw attention to the height of the turbines in comparison to the adjacent landscape features and emphasise the large scale of the turbines in this landscape.

We'd need to see full visualisations in order to be able to provide detailed comments on issues such as containment (i.e. how much containment is provided by the surrounding forest and topography or what would be perceived as the main landscape context) and how the turbines would appear in the landscape at varying distances from the development.

I hope that these comments will be helpful in focussing further discussion of the scheme. In terms of meeting dates, could you let me know what your availability would be between 21st and 28th Feb and we can firm up a date on my return to work next week? I've copied this to Graeme at EAC as I think it would be useful if he could make it along too.

Regards

David



David Kelly | Operations Officer – Strathclyde & Ayrshire

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2. RSPB

2.1 RSPB Response to Over Hill ES, 27 July 2017



RSPB Scotland

David McDowall
Operations Manager
Building Standards and Development Management
East Ayrshire Council
Neighbourhood Services
The Johnnie Walker Bond
15 Strand Street
KILMARNOCK
KA1 1HU

27th July 2017

APPLICATION NO: 17/0395/PP
PROPOSAL: Erection of 11 no turbines with a maximum height of 150m and associated infrastructure.
ADDRESS: Overhill Wind Farm Dalmellington

Dear Mr McDowall

We wish to **object** to the proposed development for the following reasons:

1. Loss and damage to blanket bog habitat

The windfarm infrastructure is sited on blanket bog habitat that is of high biodiversity value and is accorded priority status in the UK BAP and in Annex 1 of the Habitats Directive. The proposal is likely to lead to both direct loss and indirect damage to this irreplaceable habitat, resulting in significant adverse ecological impacts.

2. Loss and damage to Martyrs Moss Provisional Wildlife Site (pWS)

The proposal is likely to lead to the loss and damage to Martyrs Moss provisional Wildlife Site (pWS). Little effort seems to have been given to avoiding/ mitigating the impacts on the pWS and so the development does not accord with Policy ENV6 of the adopted East Ayrshire Local Development Plan.

3. Impact on deep peat/ carbon rich soils

The peatland habitats at the site also have an important value as a carbon store. The predicted significant impacts on peat undermine the climate benefits of the windfarm. All the proposed turbines and the proposed substation are located on deep peat (over 0.5m), with the majority of turbines located on peat over 2m. The proposal has not demonstrated how impacts will be substantially overcome by siting, design or other mitigation, and therefore is not compliant with Policies RE3 and ENV 10 of the adopted East Ayrshire Local Development Plan or Scottish Planning Policy with regard

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Patron: Her Majesty the Queen Chairman of Council: Professor Steve Ormerod, FIEEM President: Miranda Krestovnikoff
Chairman, Committee for Scotland: Professor Colin Galbraith Director, RSPB Scotland: Anne McCall Regional Director: Dave Beaumont
The RSPB is a registered Charity: England & Wales no 207076, Scotland no SC037654

to its location within an 'Area of significant protection'.

In addition to the above, we have **concerns** about the potential for the proposed windfarm to adversely affect local populations of black grouse and snipe, however we are content that these may be mitigated for through a Habitat Management Plan.

For further information, please see Annex 1.

We would be prepared to reconsider our objection should the following measures be undertaken:

- Removal or re-siting of turbines 1, 3, 4, 6, 7, 9 and 10 (Fig 12.1A) and their accompanying access roads away from areas of blanket bog habitat and deep peat. For some of the turbines, this might only involve setting them further back from the peatland, so it is concerning that this hasn't already been done as part of the site selection process;
- Revisit the Outline Habitat Management Plan with the aim of managing the wider peatland site as a whole, to include removing significant additional areas of forestry from deep peat. Of particular importance would be the potential to remove the forestry block around proposed turbine 6 in its entirety.

In addition to our comments above, should East Ayrshire Council be minded to grant consent we would wish to see the conditions and measures put in place as described in Annex 2.

I hope these comments are useful. Please do not hesitate to contact me should you require any further information or explanation.

Yours sincerely



Senior Conservation Officer – Strathclyde and Ayrshire

Cc David Kelly Scottish Natural Heritage
 Bruce Wilson Scottish Wildlife Trust

ANNEX 1

1. Loss of Blanket Bog Habitat, Damage to Martyrs Moss Provisional Wildlife Site and impacts on Deep Peat/ Carbon Rich Soils

Active blanket bog is a priority habitat in Annex 1 of the Habitats Directive, defined because they are considered to be particularly vulnerable to loss or damage and requires enhanced levels of protection.

Blanket bog is also a priority habitat for conservation within the UK Biodiversity Action Plan (UKBAP). The UK BAP has set a target to maintain the current extent of blanket bog habitat throughout the UK and an improvement in the condition of what remains.

Table 9.9 of the Environmental Statement notes that *“Due to the extent, the quality and as one of the best examples of this type of habitat within the wider area, this (wet modified bog and blanket bog) feature has been considered as of Regional Nature Conservation Value”*. Despite this, most of the turbines and access roads have been sited on the blanket bog habitat. Table 9-10 of the Environmental Statement suggests that 16ha will be directly or indirectly lost as a result of the proposed development. We believe that the impacts might be greater than this; a report commissioned by Natural England (2010)¹ suggests that at sites where the permeability of peat is high, the impacts of infrastructure can be much higher than the 10m buffer used to create the figures presented in the Environmental Statement.

The destruction of the blanket bog resulting from the proposed Overhill Windfarm would be a significant adverse ecological impact and a loss of irreplaceable habitat. It would come at a point where serious efforts are being made to reverse the historic loss and damage to this habitat. A number of projects supported by East Ayrshire Council are currently underway to restore areas of degraded bog throughout East Ayrshire, including on the adjacent Tappethill Moss.

The Environmental Statement suggests that there were efforts to avoid areas of blanket bog habitat and deep peat, however it does not appear that this was the case, with all the proposed turbines sited on deep peat (over 0.5 m), with the majority of turbines on peat over 2m. Five of the proposed turbines also on blanket bog habitat. What is particularly concerning is that it appears that for a number of those turbines, **a degree of micro-siting may have removed or substantially lessened the impacts.**

The Outline Habitat Management Plan indicates that approximately 17 – 18ha of degraded bog habitat will be restored to off-set some of the losses resulting from the windfarm development, which are conservatively (see above) estimated at 16ha. This is inadequate. Due to complexities and timescales required for habitat restoration, particularly bog habitats, when attempting to off-set habitat loss the size of the area restored should be proportionately greater than that lost. The Outline Habitat Management Plan should be revisited with the aim of managing the wider peatland site as a whole, to include removing significant additional areas of forestry from deep peat. Of particular importance would be the potential to remove the forestry block around proposed turbine 6 in its entirety

With regard to carbon emissions, the Environmental Statement (paragraph 3.19) refers to savings of up to ‘119,725 tonnes of CO₂ each year for the operational life of the wind farm’. The presentation of these emissions savings is misleading as the figures are based on a coal fired generation mix scenario. There are also various issues with the inputs to carbon assessment (Appendix 3.1). The peat depth information is inconsistent with Table 12.10 of the Environmental Statement. The minimum (0) and expected (1.59 m) peat values do not reflect the peat depths at the proposed

¹ Natural England (2010) *Investigating the impacts of windfarm development on peatlands in England: Part 1 Final Report- Natural England Commissioned Report NECR032* Natural England, Sheffield

turbine locations (only one turbine location has a depth of less than 1.59 m). As highlighted above, the indirect drainage impacts may be much greater than the 10m assumed by the calculator.

In light of the above comments, we **object** to the proposed Overhill Windfarm and believe it should not be granted consent as it is contrary to the adopted East Ayrshire Local Development Plan (2017) policies:

- ENV6: Nature Conservation iii) - in that it has not been demonstrated how any impacts on the provisional Wildlife Site can be avoided or mitigated;

- ENV 10: Carbon rich soils and Policy RE3: Wind energy proposals over 50 metres in height - in that it has not been demonstrated that the balance of advantage in terms of climate change mitigation lies with the energy generation proposal, and that any significant effects on these areas can be substantially overcome by siting, design or other mitigation.

- Policy RE3: Wind energy proposals over 50 metres in height – in that it has not been demonstrated that the proposal is acceptable in terms of all applicable renewable energy criteria set out in Schedule 1.

In addition, the proposal is also contrary to Scottish Planning Policy (SPP) (2014) with regard to impact on 'carbon rich soils, deep peat and priority peatland habitat'.

SPP is a material consideration for planning authorities. 'Carbon rich soils, deep peat and priority peatland habitat' are included in 'Group 2: Areas of significant protection' in Table 1 of SPP. SPP says that for areas in Group 2 *'further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.'* As described above, it has not been demonstrated that the significant effects have been overcome for the proposed Overhill Windfarm and therefore the proposal is contrary to SPP.

2. Impacts on black grouse and snipe

We note that there is the potential for the windfarm to have an adverse effect on a black grouse lek of up to four birds. Similarly there are locally important numbers of breeding snipe in the area, which may suffer from displacement, should the windfarm go ahead. This is of concern; however we believe that the impacts can be mitigated through the delivery of a Habitat Management Plan and would be willing to advise on measures to achieve this.

ANNEX 2

In addition to our comments above, should East Ayrshire Council be minded to grant consent we would wish to see

1. The following being secured through planning conditions:

a) A minimum of three months prior to the date of the commencement of development, the developer shall submit a finalised HMP to the planning authority for approval in consultation with the Habitat Management Group (HMG), of which RSPB Scotland should be a member. Commissioning of the turbines shall not occur until such approval has been obtained. The HMP should operate for the full lifespan of the windfarm, including decommissioning. The developer must be able to demonstrate that they have the ability to control management over the area offered for mitigation and the management must be tied to the land for the duration of the windfarm. The HMP should include a programme of monitoring, carried out following methodology agreed with the HMG. The HMP should include ;

b) Establishment of a HMG to oversee the preparation and delivery of the HMP and to review and assess the information from the ongoing monitoring/ surveillance results. The HMG should have powers to make reasonable changes to the HMP necessary to deliver its agreed aims;

c) Annual reports should be submitted to the HMG on the monitoring/ surveillance results. Information on Schedule 1 species should remain confidential, supplied only to the local raptor study group, SNH and RSPB Scotland;

d) Vegetation clearance should not be carried out between April to July inclusive, to avoid impacts on breeding birds.

and...

2. Delivery of the HMP and decommissioning of the site secured through a Section 75 agreement, with an attached financial bond.

No work should start on site until a legal agreement is in place to provide a financial guarantee with East Ayrshire Council to secure delivery of the HMP as well proper decommissioning and site restoration. This agreement shall include i) the maximum sum required ii) details of the financial guarantee which can either be by way of an ESCROW facility, restoration bond or bank guarantee, iii) requirement for periodic review of the maximum sum to ensure sufficient funds.

2.2 RSPB Response to EK email (1st December 17), 19 December, 2017



By e-mail

Alan Macintyre
Project Manager
EnergieKontor UK Ltd

Alan.Macintyre@energiekontor.co.uk

19th December 2017

Dear Alan

Over Hill Proposed Draft Layout Amendment for Comment

Thank you for consulting us on the proposed draft amendments to the plans for Overhill Windfarm. We recognise that this is not part of a formal consultation and that further plans may be provided in the form of an FEI submission. As it stands, we believe the proposed amendments do not go far enough to remove the impacts on the high-quality peatland site and so are **mindful to maintain our objection**.

We wish to make the following specific comments:

1. Whilst we welcome the proposal to remove turbine 4, we note that there continues to be nine other turbines on peat of 50cm or more in depth and at least six turbines on peat of 2m or more in depth. As described in our response to the original proposal (dated 27.7.17), we wish to see the removal or re-siting of turbines 1, 3, 4, 6, 7, 9 and 10. Of these, we believe turbine 10, followed by 7 and 6 would be priorities for removal or re-siting;
2. We welcome the proposed increase in forestry removal and peatland restoration in the revised Habitat Management Plan. However would wish to see additional forestry clearance from the peatland edge to remove the seed source and reduce the issue of conifers spreading onto the bog;
3. We are concerned at the potential impacts on peatland of the revised route options, which appear to increase the length, if not the quality, of peatland crossed by the tracks. We note that the impacts of these options need to be properly assessed and included in any revised carbon calculations. We would wish to see a comparison of the amount of peat removal required for each option along with an updated carbon assessment using the carbon calculator. Without having seen this information, we tentatively have preference for proposed Route 1 over Route 2, however we will review our position once the information requested above is available for these options and any additional ones which come forward.
4. We note that the carbon assessment of any revised plans should use the new version of the carbon calculator, due to a fault in the original version (this has resulted in an error in the outputs for ratio of carbon loss to gain).

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The Royal Society for the Protection of Birds (RSPB) is a registered charity: England and Wales no. 207 076, Scotland no. SC037634



The RSPB is part of BirdLife International,
a partnership of conservation organisations
working to give nature a home around the world.

I hope these comments are useful. Please do not hesitate to contact me should you require any further information or explanation.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Toby Wilson'.

Toby Wilson
Senior Conservation Officer – Strathclyde and Ayrshire