

Debbie Flaherty
Renewable Energy Division
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

28 April 2010

Dear Ms Flaherty,

Your Ref: 09/00364/FUL

Proposal: SECTION 36 APPLICATION FOR KILGALLIOCH WINDFARM, SOUTH OF BARHILL, SOUTH AYRSHIRE AND DUMFRIES AND GALLOWAY

I write with reference to the planning application above, the Scottish Wildlife Trust (SWT) wishes to lodge an **OBJECTION** to the submission from Scottish Power Renewables for the creation of 132 wind turbines and ancillary development at Kilgallioch.

KEY POINTS

SWT objects to the Kilgallioch Windfarm proposal on the grounds that there has been insufficient information provided in the Environmental Statement to give us confidence that the proposed windfarm would not have a detrimental impact on the notable interests contained within the development boundary. Notwithstanding this, we also believe there will be a significant negative impact on the Kirkcowan Flow Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) which abuts the proposed windfarm. This issue has not been given due consideration in the EIA.

In general, we are dissatisfied with the quality of information in the Environmental Statement (e.g. the ecology and ornithology chapters) and we do not think the level of detail provided in the report adequately reflects the scale of the proposed windfarm or is mindful of the international and nationally designated sites that are within or close to the boundary of the development.

We would also like to state that SWT is generally supportive of onshore windfarm proposals and we support their development as part of Scotland's energy portfolio. But they must avoid sites where there would be unacceptable modification, loss or fragmentation of important species, habitats or ecosystems.

Below we set out the environmental factors which should be considered in the planning application for the proposed windfarm and give details of our main areas of concern.

LEGISLATIVE CONTEXT

Nature Conservation (Scotland) Act 2004

The Nature Conservation (Scotland) Act 2004 places the following biodiversity duty on every public body and office-holder:

S1 (1) It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.

International designations

Special Area of Conservation

The proposed windfarm development abuts a site designated under Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (The Habitats Directive):



Protecting Scotland's wildlife for the future

Kirkcowan Flow SAC, which covers approximately 777 ha, is adjacent to the windfarm proposal along its north western and south western boundary. The blanket bog habitat which is an Annex I habitat, is the priority feature. The SAC citation states: *Kirkcowan Flow is the largest of the four relicts of the former flow-ground in south-west Scotland and is most representative of this geographic region. The site contains a number of features not found on the other three sites, including extensive surface patterning with Sphagnum cuspidatum hollows. The core of the site displays a mixture of partially-patterned watershed bog and extensive flushed slopes very similar to Feur Lochain on Islay.*

In scoping (12/02/09) we expressed our concern regarding: *the proximity of the proposed development to the Kirkcowan Flow SAC. The proposed development could potentially have a significant impact on blanket bog, through changes to the hydrology as well as through a pollution event – we would expect a through exploration of the likely impacts of the proposed development on the integrity of the blanket bog as part of the Environmental Impact Assessment (EIA) process. We believe our comments have not been adequately addressed in the EIA (see below).*

In the EIA, some of the blanket mire and wet modified bog within the site boundary, but outwith the SAC, have been classified into separate 'mesotopes'. It is not clear why all of the blanket mire and wet modified blanket bog present in the development area has not been classified in the same way. In the EIA, the SAC has been described at a higher level i.e. the macrotope. Although this level of 'analysis' is to be commended to some extent, we believe it muddles the issue somewhat and is incomplete. The result of this 'analysis' does not present a clear case stating why the hydrological unit of the blanket bog in the SAC should be considered an entirely distinct unit which is separated from the blanket bog/ wet modified bog of the adjoining windfarm proposal. We believe the blanket bog within the SAC and that outwith (but contained within the windfarm proposal) are connected to some extent hydrologically. Therefore the integrity of the priority feature of the SAC will be affected by the proximity of the development due to the 'zone of influence' effect. Furthermore it is stated that the nearest wind turbine is greater than 150 m from the SAC boundary (so there will be no effect [sic]), however, turbines 88, 89 131 and 132 appear to be closer from examining the figures provided. Also, there is not mention of the effect on the priority feature of the SAC, from construction of the access track and accompanying on site underground electric cables, both of which run very close to the SAC boundary near turbines 80 and 130-131.

Section 119 (Chapter 9) of the EIA states: *Thus no potential effects are predicted for the Kirkcowan Flow SAC arising from the Development alone and, therefore, no potential effects in combination with any other developments. Accordingly there is no evidence to suggest that an appropriate assessment should be undertaken by the Scottish Ministers.*

It is disingenuous to state: *there is no evidence to suggest that an appropriate assessment should be undertaken.* Notwithstanding the fact that the Habitats Regulations require competent authorities to undertake appropriate assessments when a plan or project affecting a Natura site:

- o is not connected with management of the site for nature conservation, and
- o is likely to have a significant effect on the site (either alone or in combination with other plans or projects)

and, applies to any plan or project which has the potential to affect a Natura site, no matter how far away from that site, we believe that an appropriate assessment would most likely reveal that there would be a significant negative effect from the windfarm proposal (although we believe further information is still needed provided to inform the decision making process).

National designations

Sites of Special Scientific Interest

SSSIs form a series of nationally important sites in Great Britain which are of interest by reason of their flora, fauna or geological or physiographical features. In Scotland SSSIs are notified by Scottish Natural Heritage (SNH) under the Nature Conservation (Scotland) Act 2004. SNH has a statutory duty to notify and seek appropriate protection for such sites which are identified in accordance with guidelines developed and applied on a Great Britain basis. SSSIs provide the foundation for a range of additional natural heritage designations, including Natura 2000 areas and National Nature Reserves. They are therefore at the core of national and international arrangements for the protection of species, habitats and geological or geomorphological features.

The proposed development is adjacent to the within Kirkcowan Flow SSSI which is noted for its blanket bog (which has the same boundary as the SAC). The citation states:

Protecting Scotland's wildlife for the future

An extensive area of blanket and basin mire overlying Ordovician greywackies and shales, which form a number of major outcrops. On level plateaux, cols and valley flats extensive bog moss *Sphagnum* carpets have formed, in places giving rise to areas of patterned surface ridge and pool systems, while in others producing a hummock-hollow microtopography. Quaking *Sphagnum* mats support a variety of sedge species, while extensive areas of valley mire dominated by purple moor grass *Molinia caerulea* also occur within the site, adding to the diversity of mire types represented here. Relatively few examples of this habitat, with its variety of mire formations, have escaped afforestation or agricultural reclamation in the Wigtownshire area.

Biodiversity action plans (BAPs)

Ayrshire Local BAP

Priority habitat for Ayrshire includes blanket bog

Priority species for Ayrshire include water vole, brown hare, pipistrelle bat and hen harrier.

Dumfries and Galloway BAP

Priority habitat for Dumfries and Galloway includes blanket bog: Kirkcowan Flow is identified in the Dumfries and Galloway Biodiversity Action Plan.

Priority species for Dumfries and Galloway include otter, red squirrel, water vole and pipistrelle bat.

ENVIRONMENTAL STATEMENT

General point:

Assessment of impact

Environmental Impact Assessment Guidance (SNH, 2005) recommends that assessment of ecological impacts is carried out by following three steps:

- o identifying the receptors
- o identifying and predicting the impacts
- o assessing the impacts of the changes so the appraisal may contribute to the decision whether the proposal should be allowed to proceed, be modified or prohibited

and that the significance of effect depends upon:

- o the importance of the receptor
- o the timing magnitude and duration of the impact

The ecological significance of impact is usually presented in a matrix table of the importance of impact versus the importance of the receptor. From this, the outcome (magnitude of effect or impact significance) is presented as exceptional, high, moderate, low or negligible. Mitigating adverse significant impacts is usually required for 'moderate' significance or above.

The assessment of impact process has not been conducted in chapter 9 of the EIA, nor has it been adhered to in the ornithology chapter (11). Therefore it is difficult to ascertain from the report how it was decided (apart from plucking a value out of thin air) whether an impact was significant or not and importantly, if mitigation was required.

Specific points:

Red Squirrel

We stated in scoping that red squirrel are likely to be present in the study area and surveys should be conducted to map dreys and estimate red squirrel density within the afforested area. Neither procedure has been carried out. Furthermore the mitigation suggested in the EIA does not give us confidence that the author understands the ecology of the red squirrel e.g. embedded mitigation recommends: planting of broadleaved mix (*this will encourage grey squirrels*) which includes berry crops (*berries are not considered a key component of a red squirrel's diet*).

Location of vantage points

Some of the vantage points are located too far apart e.g. ≥ 2 km. It would be difficult to use any data collected to accurately predict collision risk. Errors will be present due to inaccurate mapping of flight lines for birds flying through the collision risk zone which are seen at a distance of 2 km or more from the VP. Furthermore small

Protecting Scotland's wildlife for the future

raptors (merlin, kestrel, male sparrowhawk) will be difficult to detect over such distances, whilst others will be difficult to tell apart (e.g. female sparrowhawk versus male goshawk).

National vegetation survey

To fully assess the impacts of the development footprint on Annex I habitat (i.e. blanket bog), a National Vegetation Classification (NVC) of the access track and location of turbines (with appropriate buffer zones) should have been conducted and mapped. Figures in Chapter 9 present habitats surveyed to Phase I only.

Effects on blanket mire/wet modified bog

When assessing the construction effects on blanket mire (which we presume includes wet modified bog), the potential impacts were only considered for the mesotopes identified from the survey. We are puzzled why effects are not considered for the **all** of the blanket mire and wet modified bog which falls within the development footprint. Regardless of this, there is no estimate of the amount of blanket bog/ wet modified blanket bog affected by the proposed development footprint. The calculation should have included an estimate of the 'zone of influence' effect.

Avoidance of deep peat

Although the peat depth was comprehensively recorded across the site, we are unsure if areas of deep peat (i.e. > 1 m) have been avoided. We would have expected that the 'embedded mitigation' would have included micro-siting wind turbines (and where possible access track) to avoid areas of deep peat - but this does not appear to have been the case.

To summarise, SWT believe the quality of information given in the Environmental Statement (e.g. the ecology and ornithology chapters) has been inadequate and does not reflect the scale of the proposed windfarm or is mindful of the international and nationally designated sites that are close to the boundary of the development. On this basis we have no choice but to OBJECT to the windfarm. Notwithstanding this, we believe the likely significant negative impacts on the Kirkcowan Flow SAC have been overlooked.

On this basis we recommend that planning permission is refused.

We would be minded to withdraw our objection to the proposed windfarm if our specific points regarding the inadequacy of the EIA are addressed (and further mitigation provided) AND turbines and access track close to the Kirkcowan SAC are removed.

If you wish to discuss any issue or item contained within this letter then please do not hesitate to contact SWT on the details provided.

Yours sincerely,

**Dr Maggie Keegan
Conservation Officer**