Scottish Natural Heritage
All of nature for all of Scotland

Lorraine Brown
Energy Consents Unit
Scottish Government
Meridian Court
5 Cadogan Street
Glasgow
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18 June 2009
Our ref: CNS/REN/WF/Dorenell

Dear Ms Brown

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 Section 36 application for the Dorenell wind farm on the Glenfiddich Estate, south east of Dufftown, Moray for Infinergy.

I write to provide SNH's formal and full response to the Dorenell wind farm proposal following from our previous response of 09 October 2008. I will refer to this letter and have attached a copy for ease of reference.

1. Background

I refer back to your letter of 14 May 2008 consulting Scottish Natural Heritage (SNH) on the above development proposal in Moray. SNH responded to this consultation on 09 October 2008. In this response SNH highlighted areas of concern (bullet points below). These concerns were with regard to natural heritage interests of sufficient importance for SNH to object to the proposal as submitted. These concerns, and a series of points that required clarification, were detailed in this letter and the attached annexes (1 - 4). SNH explained that if further information could be provided to address these concerns, SNH would reconsider its position and advise accordingly.

Since October 2008, SNH and Infinergy have met on 4 occasions (04 December, 11 February, 03 March and 19 May) to discuss the issues that SNH raised. This close liaison has proved extremely helpful in working towards resolution.

On the 01 May 2009, Infinergy submitted their response to SNH's objection and further points. Having had time to consider the information provided, SNH is now able to advise fully on the impacts and provide a revised position to the Scottish Government to assist in decision making.

2. SNH position

SNH submitted the following position on 09 October 2008; -

- *SNH objected to the proposal in October 2008 because of concerns regarding the potential impact on the River Spey Special Area of Conservation (SAC). SNH stated that it would review this position in the light of any additional information presented in response to our questions.*

- *SNH reserved its position with respect to the potential risk of impacts on a plant which has the status of a European Protected Species.*

- *SNH reserved its position with respect to concerns over the potential impact on golden plover and golden eagle and the lack of clarity on the method used to assess the impacts on these species.*

- *Due to the number of turbines and scale of the farm SNH also had concerns relating to the visual impact of the current layout of turbines.*

Infinergy has provided a response dated 01 May 2009. This comprised the following documents;

- Appendix A – Infinergy's response to SNH
- Annex 1.A - Dr Douglas Nichol (curriculum vitae)
- Annex 1.B – Dorenell Outline Drainage Design Management Plan
- Annex 2 .0 – Additional Information Ecology/Ornithology

Infinergy's response provides a comprehensive and clear response to each of SNH's points of objection and requests for clarification. Taken together with the detail within the Environmental Statement (ES), this further information and clarification supports and provides additional confidence in the ES's conclusions.

Most importantly SNH is now confident that the wind farm proposal, developed in the manner that has been set out by the applicant, will not create a risk to the water environment, and in particular to the River Spey Special Area of Conservation (SAC).

SNH is now therefore of the opinion that the proposal, submitted by Infinergy, with a commitment to implement all mitigation and philosophies presented within the ES, and the additional information subsequently submitted, will have no adverse affect on the integrity of the River Spey SAC.

SNH therefore withdraws its objection made in its letter of 09 October 2008.

Infinergy has also provided sufficient information to allow SNH to be able to state its position with respect to impacts on European Protected Species, ornithological and landscape and visual interests. SNH's overall position is that we do not object to this proposal as submitted.

To ensure that the correct mitigation and appropriate habitat enhancement can be implemented to offset the impacts of construction, operation and decommissioning of the project, SNH would strongly advise that conditions are placed on any consent. I advise below on those issues that SNH consider should be subject to condition(s) and/or legal agreements under the heading '*recommendations with respect to conditions'*.

The reasoning behind SNH's position is set out in the following section.

3. SNH advice

3.1 European Protected sites (Natura 2000)

In annex 1 of our previous letter we specified a number of points (1.1 – 1.44) seeking additional information relating primarily to concern for the impact on the River Spey SAC and peatland habitats. We indicated that we would require further detail and explanation of how some mitigation works could be implemented on the site, in particular those relating to drainage and run off. We also stated that we considered it a serious omission that the peat slide risk assessment did not appear to assign a higher level of risk to those locations within the catchment of the River Spey SAC on account of its ecological importance.

With respect to this latter point, SNH now has the following advice;

During our meetings with Infinergy, and in their response to us, they have been able to provide SNH with a clearer understanding of the process of peat slide risk assessment. SNH is now entirely satisfied by Infinergy's response to the points we raised on the peat slide risk assessment. From an ecological perspective we highlighted concerns with respect to the purpose and interpretation of the peat slide risk assessment. SNH is now clear that the primary purpose of the assessment is to look at slope stability and relies on professional geotechnical expertise and experience to ensure that slope stability does not become an issue that could lead to ecological impacts amongst others. SNH also now fully appreciates that slope stability has been a key driver for the overall design of the wind farm. Ecological issues are covered fully within other chapters of the ES.

SNH wishes to acknowledge and thank Infinergy and their consultant, Dr. Douglas Nichol, for their goodwill and time given to help clarify these issues and to help SNH to appreciate the low level of peat slide risk that has been achieved at Dorenell as a result of all the iterative work that has gone into the current layout .

Returning to the former point that relates to site drainage issues, Infinergy have provided a detailed 'Outline Drainage Management Plan' that describes the mitigation and philosophy and a range of methods that would be used to manage drainage at Dorenell. Combining the detail in this document with all the mitigation and methods provided in the chapters of the ES, SNH is now satisfied that the construction, operation and decommissioning of this wind farm can be achieved with minimal risk to the River Spey SAC. A sound philosophy for on site drainage has been provided that gives SNH a significant degree of confidence that it is possible for each area of the wind farm to be designed and 'micro-managed' to minimise risk in terms of run off. The time taken to provide this additional detail is justified if it enables a higher level confidence in the scheme's sustainable delivery.

To summarise SNH's advice with respect to the River Spey SAC, in accordance with the process of consideration set out in Regulation 48 of the Conservation (Natural habitats &c.) Regulations 1994 (as amended), this proposal is likely to have a significant effect on the qualifying interests of the site owing to the scale of the development and the potential risks that can occur when constructing and operating a site in an extreme environment like Dorenell. This risk arises from the potential for sediment and pollutants to reach burns that flow into the River Spey SAC. Disturbance to habitats, hydrology and peat on the site could also lead to implications for the SAC.

The concern for the maintenance of the conservation objectives for River Spey SAC arises therefore from a theoretical or potential risk. The risks detailed above could impact primarily on Atlantic salmon that are present within the River Fiddich that lies adjacent to the development site.

Owing to this risk, more assessment has been required. Infinergy have worked closely with SNH and the Spey Fishery Board and Spey Research Trust and have provided sufficient information to enable SNH to be confident that the risk of peat slide, uncontrolled sediment run off and habitat degradation can be avoided throughout all stages of the development. Provided all the mitigation measures presented within the ES and the additional information, that includes the 'Outline Drainage Management Plan', are implemented there should be no risk of such impacts occurring.

SNH can therefore further advise that, on the basis of the appraisal carried out to date (see Annex A), we are of the opinion that **the proposal will not adversely affect the integrity of the site. SNH withdraws its objection accordingly.**

You will be aware that the Scottish Government is required to undertake an appropriate assessment of the implications of the proposal for the site in view of the site's conservation

objectives for its qualifying interests. This assessment may be based on the appraisal by SNH (attached at the end of this letter – annex A) but you may wish to carry out further appraisal before completing the appropriate assessment.

3.2 European Protected Species (EPS)
Survey work (Phase 1 habitat and NVC surveys), in addition to that already carried out has confirmed that there is no evidence of yellow marsh saxifrage (*Saxifraga hirculus*) within the development area. If the mitigation measures designed to minimise the impacts on species and habitats are fully implemented then there will be no adverse impact on any plant or animals species of EPS. Accordingly **SNH has no objection with respect to EPS.**

3.3 Ornithology
SNH had significant concerns regarding the methods used to assess the impact on key bird species, specifically golden eagle and golden plover. SNH's concerns were detailed within annex 3 of our previous letter. Further survey work has been carried out since the submission of the ES and Infinergy have reported on this in their submission to SNH of 01 May 2009.

I can confirm that Infinergy's response to SNH's points (3.1 – 3.15) have addressed the issues we raised. The further survey work supports the conclusions drawn within the ES.

The survey work did however pick up pink-footed geese flight activity. The timing of this activity would suggest that this was migratory movement and not daily foraging activity. SNH agrees that the land surrounding Dorenell does not afford good foraging for geese and that it is most likely to be migratory movements that were observed.

The collision risk assessment predicts 11.5 pink-feet collision per annum. Goose movements can be inherently unpredictable and can vary significantly from year to year over a set location. A figure like this is not likely to be significant in terms of maintaining the population of geese nationally. Within Moray, the pink-foot geese collision risk for operational and proposed wind farms is relatively low. Aultmore wind farm (13 turbines proposed) has been the highest collision risk assessed at around 15 pink-feet per annum. Here though, flight activity related probably both to migratory and daily movement between foraging areas and roosts. The presence of the Moray and Nairn Coast Special Protection Area (SPA) relatively close to Aultmore meant that an appropriate assessment was carried out for the figure of 15 geese. This assessment concluded that there would be no adverse impact on the integrity of the SPA.

Dorenell is a greater distance from this SPA and the evidence suggests that movements are migratory and not daily. It would be difficult to assign these geese to the Moray and Nairn Coast SPA population. Adopting a precautionary approach by accepting these geese as part of this or another SPA population and also considering the effect in combination with known collision risk assessments for other wind farms in the area, SNH would advise that the risk is still not significant to the viability of the population. **SNH does not consider that the Dorenell wind farm proposal would have a likely significant effect on the Moray and Nairn Coast SPA.**

SNH's concerns with respect to golden eagle and golden plover have been addressed and the additional survey work has not raised any new unresolved concerns, therefore SNH has no objection with respect to the impacts on ornithology.

3.4 Landscape and visual
The Dorenell wind farm will have a significant visual impact from a few locations that we highlighted within our previous response. However, SNH remains of the opinion that this is a suitable location for a wind farm of this scale. SNH appreciates the iterative work that has gone into balancing the needs of the scheme and remains in agreement with Infinergy that a key objective of the scheme is to ensure adequate protection to the River Spey SAC.

Infinergy have explained that a significant reworking of the overall layout would be required to reduce the impact from key viewpoints, and that it is not as simple as removing a few turbines to

lessen an impact for one viewpoint. SNH accepts this explanation and appreciates that Infinergy have investigated the opportunities for improving key viewpoints.

Infinergy have explained that the current layout represents the best design visually that can be achieved within the tolerances of all other constraints within the site that include the River Spey SAC, slope stability, species and habitats. SNH would agree that it is unfeasible to reduce the impact further for key viewpoints without potentially putting at risk more important natural heritage assets or loss of a significant number of turbines.

SNH is not so strongly opposed to the visual impact to warrant an objection or to pursue a significant reduction in the overall size of the wind farm and accepts the current design and layout. Accordingly **SNH has no objection to the proposal as submitted on grounds of landscape or visual impact.**

4. Positive habitat management (Habitat Management Plan)

SNH fully supports plans to include a range of positive measures to help improve habitats and help support and encourage certain species as part of a Habitat Management Plan (HMP). SNH is also aware of the proactive work Infinergy and the Spey Fishery Board and Spey Research Trust and the Deveron Isla and Bogie Fisheries Trust have been involved in in trying to secure positive management plans for the watercourses adjacent to Dorenell.

In addition to all the mitigation proposed, these plans will ensure positive actions to protect and enhance areas directly for the benefit of key species and habitats whilst helping to securing future biodiversity. It is important that these plans are realised as part of the development as they represent the best opportunities for the renewables industry to work with landowners and agencies to help secure Scotland's natural heritage now and for the future.

5. Recommendations with respect to conditions

The Dorenell wind farm proposal, as submitted, has provided a commitment to a series of mitigation measures that will be adopted through integration into the Health and Safety Environmental Management System (HSEMS).

The Health and Safety Environmental Management System (HSEMS) incorporates the following;

- Pre-construction investigations and additional consents
- Construction Contract Management to include both the Environmental Management Plan* and Construction Method Statement
- HSE Monitoring and Reporting

A flow chart detailing the HSEMS is provided within chapter 25 of the ES (section 25.10)

*The Environmental Management Plan will include the Habitat Management Plan and the Fisheries Management Plan and also an Abstraction Management Plan

Infinergy have stated that the recently submitted 'Dorenell Outline Drainage Design Management Plan' will also become integral to the overall mitigation measures and will be incorporated within the HSEMS.

Table 25.1 in chapter 25 of the ES lists the commitments and summary of mitigation measures made by Infinergy throughout the ES in relation to the HSEMS.

SNH strongly recommends that the Scottish Government attach conditions, or where appropriate enter into legal agreements, to ensure that all the mitigation measures and the Habitat Management Plan incorporated within the HSEMS , committed to by Infinergy, are implemented fully as part of the development.

SNH will be happy to provide comments and/or its approval for any element of the HSEMS as it relates to our remit. Specifically this would include agreeing the content of the finalised Habitat Management Plan and several elements of the Construction Method Statement.

I hope you will find this response helpful. If you have any queries, please do not hesitate to contact Jennifer Heatley at our Elgin office on 01343 541 551 or by email jennifer.heatley@snh.gov.uk

Yours sincerely

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cc: Mark van Rij, Infinergy Ltd.
Jim Martin, Principal Planning Officer, Moray Council

Encs.

- Annex A - SNH appraisal of the impact on River Spey SAC
- Copy of SNH's response of 09 October 2008 including (annexes 1-5)

Annex A - SNH appraisal (in accordance with the Habitats Regulations (48).

1. SITE DETAILS

1a. Name of Natura 2000 site(s) affected

- River Spey Special Area of Conservation (SAC)

1b. European qualifying interest(s) & whether priority*/non-priority:

River Spey SAC

- Freshwater pearl mussel
- Otter
- Sea lamprey
- Atlantic Salmon

1d. Conservation objectives for SAC's qualifying interests:

To avoid deterioration of the qualifying habitats thus ensuring that the integrity of the sites are maintained and the sites make an appropriate contribution to achieving favourable conservation status for each of the qualifying features;

To ensure for the qualifying habitat(s) that the following are maintained in the long term:

- Extent of the habitat on site
- Distribution of the habitat within site
- Structure and function of the habitat
- Processes supporting the habitat
- Distribution of typical species of the habitat
- Viability of typical species as components of the habitat
- No significant disturbance of typical species of the habitat

2. *PROPOSAL DETAILS*

2a. Proposal title: Dorenell wind farm - Glenfiddich Estate - Moray

2b. Details of proposed operation (inc. location, timing, methods):

The wind farm proposed by Infinergy Limited is sited within Glenfiddich Estate in an open upland area forming part of the area known as The Cabrach.

The proposal is to erect 59 turbines, each with a likely output of 3 megawatts therefore giving a maximum output of 177 megawatts for the farm. Turbine dimensions are given as a maximum in metres; hub height – 85m; rotor diameter – 90m and; tip height – 126m. The proposal includes all construction, material requirements, facilities and site reinstatement. Associated infrastructure includes public road junction access work, access tracks (2.2 upgraded FCS track; 34.8km new; 5.3km upgraded estate track) including 9 water crossings, 59 turbine foundations, 59 crane hardstandings, 2 permanent anemometer monitoring masts, 1 sub-station and 1 control and maintenance building housed in same compound, 1 borrow pit, 1 temporary site compound area with 1 concrete batching plant and cable trenches (40.1km). The farm will require to be connected to the national grid. This requires a separate section 37 of the Electricity Act 1989 application.

3. APPRAISAL IN RELATION TO REGULATION 48

3a. Is the operation directly connected with or necessary to conservation management of the site? YES/NO *If YES give details:*

No

3b. Is the operation likely to have a significant effect on the qualifying interest? Consider each qualifying interest in relation to the conservation objectives.

The wind farm proposal lies within the catchment of the River Spey Special Area of Conservation (SAC) and is close to the boundary of the SAC.

Owing to the scale of construction and operation of this proposal and its relative close proximity to the SAC, the application could create a risk of impacts to the SAC's interests.

This risk arises from the potential for sediment and pollutants to reach burns that flow into the River Spey SAC. This could happen during the construction and operational life of the development, and could originate from run-off from bare surfaces and new access tracks throughout the development area within the catchment of the SAC.

Disturbance to habitats, hydrology and peat on the site may also lead to implications for the SAC downstream, especially if there is a risk of peat slide.

This assessment should look in particular at the conservation objectives for Atlantic salmon. Freshwater pearl mussels and sea lamprey are only found within the main stem of the River Spey that is sufficiently far downstream for the impact of any potential risks to be minimal. SNH considers that it is unlikely that otters will be impacted upon significantly.

SNH advises that a likely significant effect on Atlantic salmon is possible due to the risks a large scale development such as this could introduce. **Accordingly, an appropriate assessment is required in accordance with the requirements of Regulations.**

3c. Appraisal of the implications for the site in view of the site's conservation objectives.

The applicant has provided information to assist in the assessment of the impacts on the SAC. This is provided in Chapter 12 of the ES – '*Aquatic Ecology, assessment of the River Spey SAC conservation objectives'*. The applicant has provided additional detail in its response, dated 01 May 2009, to SNH's objection of 09 October 2008. This includes clarification on a number of points and has addressed all of SNH's outstanding concerns with respect to the River Spey SAC and other interests.

The concern for the maintenance of the conservation objectives for River Spey SAC arises from the theoretical risks that a large scale development can produce in an environment like Dorenell. These risks are detailed above and could impact primarily on Atlantic salmon that are present within the River Fiddich that lies adjacent to the development site.

Infinergy have worked closely with SNH and the Spey Fishery Board and Trust and have provided sufficient information to enable SNH to be confident that the risk of peat slide, uncontrolled sediment run off and habitat degradation can be avoided throughout all stages of the development. If all the mitigation measures presented within the ES and the additional information that includes an 'Outline Drainage Management Plan' are implemented there should be no risk of such impacts occurring.

SNH can therefore advise that it considers that the conservation objectives will be met and that the proposal will not adversely affect the integrity of the River Spey SAC.