

# AGENDA ITEM 8

## APPENDIX 3

2015/0014/PAC

SNH COMMENTS  
OBJECTION



## Scottish Natural Heritage Dualchas Nàdair na h-Alba

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

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Our ref: CNS/REN/WF/Dorenell Qa121626

Dear Madam

### **The Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 – Dorenell Wind Farm, Dorenell Hill, near Dufftown.**

### **The Electricity Act 1989 The Electricity Works (Environmental Impact Assessment)(Scotland) Regulations 2000 Section 36 Application for the proposed Dorenell Wind Farm Extension, Dorenell Hill, near Dufftown.**

Thank you for consulting Scottish Natural Heritage (SNH) on the Dorenell wind farm proposal which is a revision and extension to the scheme consented in December 2011. The consented scheme is for 59 turbines 126m to tip height and the new proposal is for 63 turbines with 48 turbines 150m to tip and 15 turbines to 125m to tip. Thank you also for granting SNH an extension to the consultation period.

As requested, we have framed our response around both an assessment of a wholly new proposal and against the baseline of the consented scheme. In accordance with the Agreement on roles in advisory casework between Scottish Natural Heritage and Scottish National Park Authorities (2013) we now lead on impacts on the National Park designation arising from proposals outside the Park. This is a change from the arrangements that were in place during the consultation process for the consented Dorenell scheme.

### **Summary**

#### **SNH objects to the revised and extended Dorenell wind farm proposal due to significant adverse impacts on the Cairngorms National Park.**

- As a new proposal - whilst this location can support a commercial scale wind farm in principle, the current proposal would physically and visually dominate the scale of the landscape to the extent that it would result in significant adverse landscape and visual effects upon the special landscape qualities of areas of the Park which are contiguous with the wind farm site. In particular, it would have adverse effects upon the special



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landscape qualities of the Braes of Glenlivet and the Ladder Hills which form part of the lower lying areas on the north eastern margins of the Park.

- Against the baseline of the consented scheme - when compared with the existing consented scheme, the impact of this proposed scheme is considerably greater. The apparent density of turbines, substantial increase in visual presence and its poor relationship with the land form would intensify the magnitude of change and the consequent effects on the special qualities of the Park beyond that of the consented scheme.

We offer this advice with respect to: Scottish Planning Policy set out for National Designations (para 212-213) and (para 83 - 84) which aim to conserve and enhance the natural and cultural heritage of the National Park; and the Cairngorms Park Partnership Plan Policies 1.3 and 2.3 with regard to conserving the special landscape qualities of the Park.

With regard to implications for the River Spey Special Area of Conservation, this proposal could be progressed if subject to appropriate mitigation to avoid an adverse impact arising from pollution or sedimentation. However, because it could affect internationally important natural heritage interests, **we object to this proposal unless it was made subject to conditions to ensure that the works were done strictly in accordance with the mitigation detailed in the applicant's Environmental Statement (ES).**

**We also object due to the potential for significant impact on golden eagles associated with the Cairngorms Massif Natural Heritage (NHZ Zone 11).** The population of golden eagles in this NHZ is already at unfavourable conservation status due largely to low survival rates. The predicted collision mortality rate arising from this proposal would likely exacerbate the situation. We could withdraw our objection if a Section 75 agreement was entered into covering the entire ownership of Glenfiddich and Cabrach Estates. This would develop on the commitments in Aim 3 of the Outline Habitat Management Plan for satellite tracking and restorative management to promote greater prey availability. In addition, it should target conservation management on increasing sub-adult survival of golden eagle and nest occupancy. Management should include population modelling to establish main factors constraining population expansion (and an appropriate response), and include golden eagle surveillance, nest checks, and deer management to improve habitat condition.

## **Appraisal of the impacts**

- **Landscape and visual impacts**

The landscape character of the site (Open Uplands with Settled Glens -) has a medium to high sensitivity for the development of 'Large' turbines between 80m-130m in height (Moray Council Wind Energy Capacity Study 2012). Nevertheless, the extensive sweeping scale of this landscape character type; the generally smooth landform, often with gentle gradients; the overall extent of the uplands and the simple landcover pattern, all combine to create some scope for wind farm development in this area.

We consider however that the scale of this proposed development would exceed the capacity of the site. The introduction of turbines with a height of 150m to tip onto the hills of the site would physically and visually dominate the scale of the landscape. SNH's Siting and Designing Wind farm guidance (2014) recommends that a wind farm should be "of minor vertical scale in relation to the key features of the landscape (typically less than one third)". The consented scheme is at the top end of this range, as the apparent hill height is around 300m. The revised proposal, at 150m, is closer to half the apparent hill height which creates a considerably greater impact compared to the consented scheme. In addition, the footprint of the proposed wind farm extends beyond the containing landform of the ridgeline, encroaching

onto and over the 'terminating' hills of Scout Hill and Thief's Bush Hill. In many views the turbines would appear to be overlapping and/or uneven in spacing across the wind farm. This contributes to an unbalanced composition with respect to the underlying simplicity of the landscape. The proposal is thus contrary to fundamental design principles and the consideration of scale within the SNH guidance.

Within the Cairngorms National Park, the proposal would significantly affect the character of the Ladder Hills and Glenlivet areas. These more settled lowlands and transitional upland landscapes around the edge of the Park are important as they contribute to the rich natural and cultural diversity of the Park. Both areas retain their character and historical continuity with the core of the Park. They are also remote from the transport corridors and visitor hotspots of Deeside and Speyside and the mountain cores.

The Ladder Hills is an extensive range of moorland hills that, in their simplicity and lower elevations, contrast with the busier and more dramatic mountains and glens of the core of the Park. The importance of this contrast is recognised as one of the Park's Special Landscape Qualities – 'the surrounding hills'. From the Ladder Hills the upland character of the landform, land cover and altitude continue across the Park boundary into the Blackwater and Glenfiddich landscape of the proposed site. This contiguity and consistency of landscape character across the Park boundary means that the viewer perceives a continuous landscape. Thus large structures beyond the imperceptible Park boundary could have a significant effect on the viewer's experience from within the Park.

In views from the Ladder Hills, and in comparison to the consented scheme, the proposed scheme would introduce a slightly increased number of turbines of significantly greater height. It would exacerbate the extent of adverse significant impacts on five Special Landscape Qualities evident in these parts of the National Park, largely as the result of the increased turbine height. The visual prominence of the wind farm would be increased considerably, due to the greater visual density of the development. This would interrupt the appreciation of the 'expansive open moorland' and 'wildness' which are both Special Landscape Qualities contiguous with those of the Ladder Hills. The increased visual density or mass of the proposed development is marked, when compared with the greater transparency of the underlying landform offered by the looser arrangement of the consented scheme. This increased visual density and prominence of the wind farm would impact on the Special Qualities 'dominance of the natural landforms' and the 'grand panorama and framed views', reducing the dominance and experience of the landform and mountainous scenery in this location. Where the proposed turbines would wrap around Cook's Cairn, they would appear similar in scale to the Cairn, and diminish its prominence when compared to the consented scheme.

In contrast, the Braes of Glenlivet has a rich cultural heritage associated with the Scalan seminary and Glenlivet settlement. These are strongly contained by the surrounding hills which fundamentally contribute to their experience of seclusion. This balanced but contrasting character between the cultural heritage of Glenlivet and the pronounced containment afforded by the hills is reflected in the Special Landscape Quality of 'Landscape both cultural and natural' which would be adversely affected by an increase in scale of the development. From within the National Park, and from the edge of the defined bowl of Braes of Glenlivet, the consented scheme would be visible primarily as 13 turbines. Of these, the hubs of 7 turbines would appear at, or close to, the skyline. In addition there would be the potential visibility of a number of barely perceptible blade tips. By comparison, the proposed scheme would result in an increased number and height of turbines visible, with 21 turbine hubs visible. Consequently, the proposed scheme would become a dominant focus on the sensitive and currently undisturbed skyline. The perception of this effect would extend into the centre of this low lying, historically complex landscape. The marked increase in the scale of development and the evident introduction into the landscape of moving structures on the

skyline would, therefore, undermine the current balance between the long-inhabited secluded, settled Glen and the confining undeveloped rim of hills evident in this landscape.

We consider that the Environmental Statement underestimates the significance of effects for these areas of the Cairngorms National Park, as the assessment of sensitivity attributed to several of the sensitive visual receptors is underplayed.

Beyond the Ladder Hills and Glenlivet within the wider National Park, the proposed development would be visible on the skyline from a number of elevated viewpoints including, but not limited to, Morven, the Ben Avon ridgeline, and the Hills of Cromdale. With the range of distances involved, the increased scale of the turbines and visual density would contribute to a heightened prominence, creating a new focus in the views. From some of these more distant viewpoints, such as the assessment of effects on views from Morven, we consider these visual effects to be significant.

Our advice on the impacts that would arise from the “step change” in turbine height and overall wind farm scale is consistent with the findings of the Moray Wind Energy Landscape Capacity Study. As part of the analysis, the Study assessed development scenarios of turbines up to 130m height and concluded that extensions to Dorenell wind farm are likely to be difficult to accommodate without creating visual confusion.

- **River Spey SAC**

We advise that this proposal is likely to have a significant effect on the qualifying interests of the River Spey SAC. This risk arises from the possibility of pollution or sedimentation of watercourses within the proposed development site that feed into the River Spey. Consequently, the ECDU is required to carry out an appropriate assessment in view of the site’s conservation objectives for its qualifying interests. We further advise that on the basis of the comprehensive and well compiled Habitats Regulations Appraisal provided by the applicant, the proposal would not adversely affect the integrity of the site if undertaken strictly in accordance with the mitigation presented in the applicant’s Environmental Statement.

To achieve the above, the development would need to be undertaken in accordance with the mitigation identified in the following chapters and appendices within the Proposed Development’s ES: -

- Appendix 12 A – Habitats Regulations Appraisal, section 12.8
- Chapter 11 of the ES - Terrestrial Ecology, section 11.12
- Chapter 12 of the ES - Aquatic Ecology, section 12.11

The proposed mitigation work to reduce sources of pollution/sedimentation reaching the watercourses is comprehensive and would ensure that the proposed layout, construction methods and ongoing monitoring and maintenance minimised the risk to the SAC.

We are concerned that there is the stated intention that on-site tracks would be left for use by the Estate following decommissioning. This would presumably include the main access to site and all water-crossings. This would total around 46.3 km of access tracks. It would also include 18 water-crossings (not all of which would fall within the catchment of the SAC). No detail has been provided regarding the proposed re-use by the Estate, making it difficult to appraise whether this aspect of the proposal could lead to an impact on the River Spey SAC, e.g. from future deterioration and erosion of the extensive track network because it was beyond the capacity of the Estate to maintain in good condition. We recommend that during consultation on any decommissioning phase this issue is investigated carefully to ensure no risk to the SAC following the removal of the wind farm interests.

- **Golden eagle**

Golden eagles forage regularly over the proposal area. These are mainly sub-adult birds but a consistently occupied nest site lies less than 3km from the site. The nest is currently occupied by young birds. They are probably too inexperienced to raise young successfully at present, but this territory has fledged birds in the past. The affected territory is an edge-of-range location for golden eagle in Scotland.

The wind farm proposal site lies in Natural Heritage Zone 11 – Cairngorms Massif. At the last golden eagle national survey in 2003, there were 71 golden eagle home ranges in this NHZ but only 28 were occupied (39%). Like the adjacent NHZs 10, 12 and 15, this zone has unfavourable conservation status for golden eagles due to this low occupancy level. The SNH commissioned *Golden Eagle Conservation Framework Report (2006)* cites the main factor for very low territory occupancy in the central and eastern Highlands being poor sub-adult and adult survival, arising from persecution. A more up to date picture will be available following a further national survey of golden eagles scheduled for this year.

The ES predicted collision rate of 0.31 golden eagles per year equates to 7.75 birds during the life time of the wind farm. In our view, this additional mortality would be significant. It would impede the chances of recovery of a population already thought to be in decline and so reduce likelihood of returning to favourable conservation status. We also believe that the ES could underestimate the scale of collision risk. We conclude this because of the implications of some of the methods used to ascertain information on golden eagle use of the area: i) the selection of some vantage points close to turbines may have reduced flight activity across the proposed site, ii) observations were limited to one year only during which the resident eagles were thought not to have raised young, iii) collision risks were only modelled for one turbine type and, iv) calculated rates incorporate a 25% down-time but no justification is provided for such a high figure. These aspects suggest that the predicted collision rate should be regarded as a minimum.

Comparing the Environmental Statements associated with the consented and proposed schemes, it would appear that the activity of golden eagles in this area has increased since the original survey work was undertaken. There is no available information in the ES on the predicted collision rate for the consented scheme using current golden eagle activity. However, we estimate that the collision risk from the consented scheme would be slightly less than for the proposed scheme at approximately 5 birds over the lifetime of the wind farm. This would still be significant. We recommend that the developer re-visit this and consider further compensatory measures in line with what we recommend below for the proposed scheme.

We advise that the most effective compensatory measures to help address the golden eagle loss from predicted collision risk would be to undertake work akin to the Durnaglass Wind Farm Regional Eagle Conservation Management Plan (2014). This seeks to reduce persecution in the area in order to compensate for collisions through population modelling, nest checks and surveillance, including satellite tracking. We advise that we would be able to withdraw our objection on this matter if any consent was made subject to a legally binding Golden Eagle Conservation Plan covering both Glen Fiddich and Cabrach Estates which focused on measures to increase survival and nest occupancy. We would also advise that there would be a requirement for the implementation of an agreed sustainable deer management plan to improve habitat condition.

- **Terrestrial Ecology**

The detailed survey work reported within Appendix 4A, Phase 2 Detailed Peat Depth Survey: Factual Ground investigation Report (November 2014), identifies areas of the site that are experiencing significant peat erosion. The proposed infrastructure largely avoids these areas except where a few turbine access tracks cross an area of hagged peat north-east of Knox's Cairn.

We consider it likely that this erosion (down to bare peat in some locations) is the result of a combination of the effects of heavy grazing by deer, muirburn practice and natural occurring peat erosion. The probable high deer numbers (referred to in ES paragraph 11.4.64) would also have the potential to impact upon the effectiveness of proposed restoration works on site following construction.

We therefore welcome the applicant's proposal to include a deer management plan either standalone or in combination with the Habitat Management Plan (paragraph 11.12.18).

- We recommend that any consent should be made subject to a condition that required the implementation of an agreed a deer management plan to ensure that deer numbers across the wind farm site and in areas where habitat enhancement works were proposed, be managed sustainably in accordance with best practice. This would provide the best opportunity for the successful restoration of habitats disturbed by construction, and also the successful enhancement of other habitats to help compensate for those lost.

Any opportunities to help tackle the areas of significant peat erosion on site would also be welcomed where this would not conflict with the aim to keep golden eagles away from the turbine area.

- **Ecological Clerk of Works (ECoW)**

We welcome the proposed appointment of an ECoW. We recommend that the role of the ECoW should include provision of ecological advice to inform micro-siting of turbines and detailed on-site construction activity. This would help to reduce or avoid impacts on sensitive habitats and species. We also advise that the ECoW should have power to stop works if an unexpected event occurred (for example discovery of unknown otter holt, heavy rainfall increasing the risk of sediment control measure failure, etc).

- **Decommissioning**

We recommend that an additional consultation is carried out well in advance (e.g. 3-5 years) of decommissioning to ensure all natural heritage considerations are taken into account. We advise that further survey work may be required prior to decommissioning to fully assess the likely impacts, particularly on legally protected species and protected areas.

## **CONCLUSION**

In terms of the landscape and visual impacts, and associated impacts upon the special landscape qualities of the Cairngorms National Park, we recommend the applicants revert to the consented scheme. The smaller turbine height is better suited to this prominent and sensitive location.

We welcome the iterations of the revised track and turbine layout as they would help reduce risks of peat slide and sediment contamination of the Allt a Chlaignn Burn which flows into the River Fiddich, a tributary of the River Spey Special Area of Conservation (SAC). We

recommend that, should the proposal go ahead, the decommissioning plan should appraise the impacts of the reuse of onsite tracks following the removal of wind farm infrastructure and the reversion of maintenance responsibilities to the landowner

Given that the activity of golden eagles using the site appears to have increased in recent years, we advise that the golden eagle collision risk will also have increased since the consented scheme was assessed. We further advise that if the current consented scheme was to proceed rather than the current proposal, it would be in the applicant's interest to commit to take forward a golden eagle conservation plan (as per our advice above) to help to compensate.

Please do not hesitate to contact us if you have any queries over this advice.

Yours faithfully

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