Scottish Natural Heritage
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Mark Ashton
Consents Manager
Energy Consents Unit
The Scottish Government
By email to EconsentsAdmin@gov.scot

Date: 30 April 2020
Our ref: CEA158059

Dear Mark

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Electricity Act 1989 Section 36 and Schedule 8: Application for the Proposed Clashindarroch II Wind Farm in the Planning Authority Area of Aberdeenshire Council.

Thank you for your consultation dated 15 January 2020 on the application and associated Environmental Impact Assessment Report (EIAR) for the Clashindarroch II wind farm proposal. Thank you also for agreeing to an extended response time.

The application is for a wind farm comprising of up to 14 wind turbines with associated infrastructure located approximately 6 km south-west of Huntly in Aberdeenshire. The maximum height of the turbines to blade tip will be 180 metres. Total installed capacity would be between 56 MW and 84 MW. A full description of the proposal is provided in chapter 3, 'description of the development' in the applicant's EIAR.

1. Summary

We advise that there are important wildlife interests on site but these will not be adversely affected following the implementation of mitigation and a Habitat Management Plan proposed by the applicant.

Significant landscape and visual effects of the proposed turbines are limited in extent due to screening by surrounding topography and forestry and by the existing effect of the Clashindarroch turbines, with which the proposed scheme would usually be seen.

Significant adverse landscape and visual effects remain particularly to the southeast including both the setting and appreciation of Tap o' North as a landmark in the wider landscape and in views from its summit. There are potential significant adverse effects on dark rural skies due to the proposed aviation lighting. Our recommendation is that improvements to the design could help to reduce these effects.

2. Advice on natural heritage impacts

2.1 Protected areas

Tips of Corsemaul and Tom Mor Special Protection Area (SPA)

In our view, this proposal is likely to have a significant effect on breeding common gull at the above SPA site because of the potential for collision mortality and barrier effects. Consequently, Scottish Government, as competent authority, is required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest.

To help you do this we advise that, in our view, based on the information provided, the proposal will not adversely affect the integrity of the site. We are in agreement with the applicant's appraisal that focuses on the following key aspects and can be reviewed in full in EIAR technical appendix 8.3; -

- There will be no direct or indirect effects on SPA habitats.
- The evidence gathering and assessment therefore focuses on the potential for the project to result in collision mortality and barrier effects for breeding common gulls ranging from and returning to the SPA colony sites.
- The predicted collision mortality rates are well below any reasonable threshold of importance. It is also judged that barrier effects are very unlikely.

2.2 Protected species

2.2.1 European Protected Species (EPS)

2.2.1.1 Wildcat (*Felis silvestris*) and the Habitat Management Plan

Clashindarroch Forest and the proposed wind farm are located in an area identified as a Wildcat Priority Area (WPA), referred to as the Strathbogie WPA.

The main threat to Scottish wildcats is genetic extinction due to hybridisation with feral cats, domestic cats and existing hybrids. Scottish Wildcat Action[1] (SWA) and partner work to date has shown that, unfortunately, the level of hybridisation in Scottish animals is higher than was originally suspected, even in cats that score relatively well on the basis of pelage. However, SNH takes the precautionary approach of assuming that an animal defined as a wildcat based on pelage, and for which genetic information is not available or insufficient, be categorised as a wildcat in the absence of any direct evidence to the contrary.

Based on the work of SWA specialists working with key partners, we estimate there are four-five wildcats, defined by pelage (coat markings), regularly using the Clashindarroch area at any one time. No cats at Clashindarroch for which complete genotype profiles have been obtained, or within any of the SWA Priority Areas, have passed both the pelage and genetic threshold tests of a wildcat to date.

[1] Scottish Wildcat Action is a multi-partner project, funded primarily via the National Lottery Heritage Fund. It runs from April 2015 to May 2020. The SWA has been largely focussed on five 'Priority Areas' in northern Scotland, with wider and coordinated work to underpin wildcat conservation, in particular a conservation breeding programme that may form the basis of future releases. It has informed the design of a new EU LIFE-funded project, 'Saving Wildcats', which runs from 2019-2025.

The applicant's ecologist has liaised closely with us and species specialists in Scottish Wildcat Action and have prepared a Species Protection Plan and an outline Habitat Management Plan (EIAR technical appendices 9.4 and 9.5 respectively) primarily aimed at mitigation measures to minimise risk and creating and enhancing habitats for wildcat.

The presence of wildcat within the Clashindarroch Forest does not preclude ongoing forestry operations and other developments but does require stringent measures to ensure that any proposal does not adversely affect individual animals, their places of shelter and breeding and does not prevent the species and population within the forest from recovering favourable conservation status in the future.

The combination of the species protection plan and the outline habitat management plan will afford the species protection and ensure practical positive conservation measures can be delivered within the forest to help support wildcat during a critical period in the species existence. The potential impacts of the wind farm proposal are mitigated and compensated for by the applicant's proposed wildcat conservation measures.

Based on the current information if the species protection plan is implemented the proposal is unlikely to require a species licence under protected species legislation. However, if the development is not carried out in accordance with the species protection plan, the applicant may risk committing an offence.

2.2.1.2 Bats

Several species of bat, not uncommon to the region, were recorded during the applicant's surveys. No bat roosts have been found to date that are close enough to infrastructure to be impacted upon. Pre-works surveys will be done to ensure up to date and relevant species protection plans are produced prior to construction to minimise the risk to all bats.

The risk of bat mortality during the operational phase of the wind farm is likely to be low and has been reduced through the design of the wind farm, the felling plans and a commitment to maintaining forest edges at least 50 m from the turbine blade tips.

If the mitigation proposed by the applicant is implemented the proposal will not adversely affect the local bat populations.

2.1.2 Other protected species

The applicant's EIAR describes the presence of several other protected species including schedule 1 and other bird species. Their assessment has not identified any significant effects on these following the implementation of mitigation. We agree with these conclusions and suggest that if the following plans can be secured potential negative effects can be fully mitigated.

Species protection plans (EIAR technical appendix 9.4) have been prepared for the protected animals and a bird protection plan has been outlined in EIAR technical appendix 8.4. Mitigation for birds includes pre-construction surveys, adjusting the timing of works to avoid breeding birds and post-construction monitoring of breeding birds and habitats to ensure ongoing protection.

3. Landscape, visual and cumulative impacts

3.1 Effects on Landscape and Visual Receptors

Significant landscape and visual effects of the proposed turbines would be limited in extent due to screening by surrounding topography and forestry and by the existing effect of the Clashindarroch turbines, with which the proposed scheme would usually be seen.

All of the potentially significant landscape effects would be located within a few kilometres of the proposed turbines, mainly in the area of Moorland Plateaux/ Grampian Outliers Landscape Character Type (LCT) in which the site is located and in the immediately adjacent area of Northern Rolling Lowlands LCT around Tillathrowie to the east. The effects would not be significant for Landscape Character Areas (LCAs) or LCTs as a whole.

The extent of visual effects would be limited due to screening by topography and forestry surrounding the site and by topography and belts of trees across the wider area. However there are some significant visual effects on elevated locations and to the east and north with clear views towards the site.

3.2 Cumulative Effects

The key cumulative relationship would be with the 18 existing Clashindarroch turbines immediately to the southwest and the 59 turbines at Dorenell, just under 10 km distant in the west-southwest. While there would be some cumulative effects with other schemes, these would tend to be specific to the receptors located near the other schemes.

The main additional cumulative effects of Clashindarroch II, when considered in addition to the existing baseline, would be to:

- Significantly extend the cumulative effects of wind energy on the area of Grampian Outliers LCA within which the existing Clashindarroch scheme lies. The cumulative effect would not be significant in the neighbouring Open Uplands LCA to the west, as this is already affected by the existing wind farm which lies closer to the area.

- Significantly affect views from higher areas in the east, and southeast in particular. The proposed wind farm would, due to its closer proximity, appear as a prominent extension to existing wind energy schemes in upland areas further west; with much larger turbines and close proximity to the distinctive landmark and viewpoint of Tap o' Noth.

- The disparity between turbine sizes would be less apparent from viewpoints to the south and west due to a different visual relationship between the turbines seen from this direction.

3.3 Aviation Lighting

The proposed scheme will require all 14 turbines to have aviation warning lighting fitted on the nacelle and tower. We note that the main lighting on the nacelle would be medium intensity (2000 cd), visible for up to 20 km. However, potential mitigation measures are described including:

- Variable lights which reduce intensity to 200 cd in good visibility conditions, detected by visibility sensors on the turbines

- Use of radar-activated aircraft proximity detectors such that the proposed turbines would only be lit when aircraft approach them.

We note that it is also possible to design lights with shielding to limit the vertical spread of the lighting above or below the horizontal, which would again limit the intensity of lighting when seen from lower areas.

The assessment of aviation lighting effects concludes that, in what is a generally dark rural environment, there would be significant visual effects at closer viewpoints that normally experience dark skies.

3.4 Potential for Mitigation

The proposed wind farm has been designed by the applicant in respect of turbine location, height and numbers to minimise the potential for significant adverse effects, these are stated as:

- Selection of a turbine height suitable for the scale of landform and to be reasonably compatible with the existing Clashindarroch turbines

- Achieving a layout which relates to the landforms across the site and to the existing turbines when seen from surrounding receptors

- Considering the potential for cumulative effects with the existing Clashindarroch turbines and other windfarms in the study area

- Reducing or eliminating visual effects on the nearest residential properties including the Tillathrowie and Deveron Valley areas

While these objectives are achieved to varying degrees, it is the case that some significant adverse effects remain, particularly in relation to landscape and visual receptors to the southeast including both the setting and appreciation of the landmark feature of Tap o' Noth, and in views from its summit. The potential effects of aviation warning lighting on dark rural skies is also a consideration.

Involving all or a combination of the following options these effects could be reduced:

- Reducing the size of some or all turbines to below 150 m to reduce effects on Tap o' Noth and remove the need for aviation warning lights. This in turn would reduce the pronounced scale disparity between the existing and proposed developments at Clashindarroch and improve the overall wind farm design, reducing effects on receptors to the east and northeast;

- Relocating or removing turbines at the southern end of the scheme to achieve a closer visual integration with the existing turbines when seen from the southeast and east;

- Where smaller turbines below the 150 m threshold are not proposed, all available aviation lighting mitigation measures, including proximity detection and shielding, should be implemented to minimise effects on dark skies.

Further advice is provided in Annex 1

4. Concluding remarks

Should you have any queries regarding our advice please contact me on mobile number 07733 145 890 or at Jennifer.heatley@nature.scot

Yours sincerely

Jennifer Heatley
Operations Officer
Tayside and Grampian

Annex 1. Further comments on landscape, visual and cumulative impacts

Wind Energy Guidance

Strategic Landscape Capacity Assessment for Wind Energy in Aberdeenshire 2014
Aberdeenshire's detailed wind energy capacity guidance assesses the Moorland Plateaux Landscape Character Type (LCT), including the Grampian Outliers Landscape Character Area (LCA), as having no capacity for large scale wind energy development. The study acknowledges that, in other areas, this is nevertheless the type of landscape which is most appropriate for this scale of development[2]. The reason for limited capacity in Aberdeenshire in particular relates to the position of the LCT as a backdrop to the extensive lowland areas, as well as its scenic and recreational value. The occasional distinctive tops such as Tap o' Noth are noted in respect of the Grampian Outliers LCA.

The study acknowledges that, nevertheless, there are several operational/ consented developments already within the LCT or in adjacent Moray. Taking this into account we note that Clashindarroch II extends an existing scheme rather than occupying an unaffected location.

As detailed below, the proposed development extends the influence of wind energy further across the area of Grampian Outliers LCA. Notably from some directions, the substantially greater height of the turbines significantly extends the influence of wind energy across the skyline, affecting the setting of one of the most distinctive hills. Furthermore the scale disparity clearly visible to the east and north east increases the extent and severity of cumulative effect. However, from other directions and generally across the lowland areas to which the hills are a backdrop, it would not be a widely visible or a dominant feature.

SNH Siting and Design Guidance 2017
SNH's guidance considers many factors relating to the location, design and appearance of windfarms singly and cumulatively. The following considerations are most relevant to this application:

- **Landscape Character:** the proposed turbines are located within a large scale upland landscape with a simple rolling landform, modified by extensive commercial forestry planting, characteristics that are generally considered suitable for large scale commercial developments.
- **Landform:** The proposed turbines are in an upland area that forms a backdrop and skyline to the lowlands of Aberdeenshire. They are located such that the enclosing landforms partially or fully screen the turbines from most of the lowlands to the east and north. Furthermore, they are successfully screened from the adjacent Deveron Valley to the north and west. However, they are visible from hilltops in other areas of the Grampian Outliers which interdigitate with lowland areas and valleys and also lie closer to the distinctive landmark hill of Tap o'Noth than the existing Clashindarroch turbines.
- **Skyline:** The proposed turbines seen from most directions lie at least partially below the skyline and are partially or fully screened by neighbouring landforms. Where seen, they mostly occupy a small proportion of the skyline. However, from the southeast they add to the significant proportion of skyline already occupied by Dorenell and Clashindarroch I schemes (VPs 4, 12 and 17).
- **Focal Points:** from the southeast the proposed turbines are seen in close proximity to the distinctive landmark hill of Tap o' Noth (VPs 12 and 17). The blade tips of the highest

[2] SLCAWEA (2014) Section 6.4.4

located turbines would be higher than the hill, although from the VP12 perspective at lower elevation this does not appear so.

- **Wind Farm Extensions - Turbine Size:** At 180 m the proposed turbines would be significantly larger than the adjacent operational turbines which are 110 m tall. Their appearance together varies according to the position and aspect of the viewpoint. As discussed in respect of cumulative effects, the size disparity is a significant feature when seen from the southeast through to the east and north.
- **Wind Farm Extensions - Turbine Layout**: the proposed turbines have a close relationship to the operational Clashindarroch turbines, lying to the north and east on similar rolling ridges and slopes, at a similar distance of separation between turbines. From higher viewpoints to the southwest and south they appear as an extension of the existing group, creating a larger single wind farm. However, from the southeast and east in particular they appear more separated (VPs 4 and 12); a perception that is exacerbated by the significantly larger scale of the proposed turbines.

Landscape and Visual effects

As there are several other wind farms in this and in surrounding LCTs, including the adjacent Clashindarroch wind farm, the proposed wind turbines would not be novel features in the Moorland Plateaux LCT nor in views from the majority of visual receptors in the surrounding uplands and lowlands.

There would be limitations to visibility and effects on most roads, which mainly follow valleys winding through the hills. Significant visual effects would be limited to sections of minor roads east and southeast of the site including the minor roads serving the scattered dwellings around Tillathrowie and Coynachie and in the elevated land southeast of Rhynie (see VP12 Suie viewpoint).

There would be significant effects on a limited number of paths and recreational routes:

- Users of publicly accessible paths and tracks in Clashindarroch Forest, passing through or close to the site would experience substantial effects
- Users of the upper part of the core path to the summit of Tap o' Noth would experience substantial adverse effects similar to those on the summit (VP4).

The ZTV and selection of representative viewpoints shows that the most extensive visual effects would be on the many summits in the surrounding Grampian Outliers LCA and Open Uplands LCT to the west in Moray:

- Walkers visiting the closer summits of Tap o' Noth (VP4), The Buck (VP5) and Clashmach Hill (VP6), all well within 10 km of the turbines, would experience adverse significant visual effects, assessed as Substantial in the case of Tap o' Noth.

  From Tap o' Noth, the introduction of Clashindarroch II effectively doubles the horizontal spread of turbines in combination with Clashindarroch (and more recessive in the view, Dorenell at 14 kms). Located slightly closer to the viewer but with significantly larger turbines, the development appears substantially closer increasing the level of effect.

  The substantially larger turbines (relative to the existing Clashindarroch wind farm to the immediate south) contributes to the disproportionally greater significance of effects on receptors in particular to the north and northeast of the development, illustrated on the ZTVs and represented (to a lesser or greater degree) in VPs 1, 6, 8, 9,11, 12, 17. The

scale disparity experienced between the existing and proposed wind farms from these locations is pronounced. Moving from the north to the east around the proposal, the changing angle of view (looking across the existing and proposed turbines at Clashindarroch, rather than along the 'spine' of the development) increases this disparity, increasing significance of cumulative effect. This is contrary to SNH siting and design guidance.

- From VP12 (and at a greater distance from VP 17 Oxen Crag), a viewpoint on an elevated minor road to the southeast, there would be significant adverse effects due to the proximity of the proposed turbines to the of Tap o' Noth, where they would adversely affect the setting and appreciation of this distinctive landmark hill.
- The proposed turbines would be visible from higher summits to the west and southwest; close to or within the Cairngorms National Park, including the nearest Corbett, Ben Rinnes (VP13) and the Ladder Hills (VP19). From these hills the proposed turbines would be seen with the existing Clashindarroch turbines, but further away or behind them. At distances of 18 km or more the effects would not be significant.

Cumulative Effects Annex

The proposed wind farm is located within a study area and landscape character type already characterised by many operational wind energy schemes, with further consents and applications:

- The operational Clashindarroch wind farm (18 turbines at 110 m height) immediately to the southwest in the same area of Grampian Outliers LCA. The two schemes are largely seen in combination.
- Several smaller schemes in lowland LCAs within 10 km
- Several schemes within the same or similar upland LCAs to the south (Kildrummy with 9 x 93 m turbines at 10.9 km); the west (Dorenell with 59 x 126 m turbines at 9.3 km) and northwest (Hill of Towie at 21 x 100 m at 14.5 km)

Many further wind farms and smaller schemes lie in the Agricultural Heartlands LCT to the east and northeast beyond 10 km and a cluster of larger wind farms in the Moray Uplands LCT to the northwest beyond 25 km.

The proposed turbines would be seen as a northeasterly extension of the existing wind farm. However, the degree to which the schemes would be seen to merge together and the perception of the significant size differences between the proposed and existing turbines would depend on the direction and elevation from which they are viewed and the proximity of the viewpoint:

- From the closest viewpoint to the northeast (VP1) the existing turbines are barely visible as blade tips and the proposed turbines would appear as a single scheme.
- From higher ground to the northeast (VP6) the existing turbines are a noticeable feature on the skyline. The proposed turbines would lie in front of them, appearing as an extension, however, their closer proximity and greater scale would make them appear much more prominent. This clear difference reduces with distance as both become minor features in the wider landscape (VPs 8 and 9)
- From the southeast, although the two schemes are adjacent to one another, the proposed turbines appear slightly separated from the existing. From both VP4 and VP12 the proposed turbines would also appear significantly larger, extending wind energy further across the Grampian Outliers LCA. From VP4 the proposed turbines are a distinguishable group from the existing turbines as they are separated by a small gap and the noticeably greater scale. They significantly extend the effects of the overlapping Dorenell and

Clashindarroch schemes further to the north and east, being the most prominent of a swathe of turbines across from the Moray Open Uplands into the Grampian Outliers. From VP12 the three schemes appear slightly separated, but nevertheless occupy much of the upland skyline between the enclosing slopes to the left and the prominent landmark of Tap o'Noth to the right of the view; with the proposed turbines appearing prominently adjacent to the hill.

- From the south (VP5) and southwest (VP 19) the proposed turbines lie behind the existing. As they are seen at a further distance and overlap partly or completely, the scale differences are less apparent, and they appear as one integrated group. VP19 at Ben Rinnes shows the two schemes appearing in a line, apparently as one scheme. While the proposed turbine rotors are clearly larger, the distance from the viewpoint and partial screening by landform mean this would not be an easily discernible feature.

The cumulative baseline is only modestly extended by consented schemes to the west and north, which would have little effect on the key additional cumulative effects already apparent against the operational baseline.

In respect of proposed schemes, a significant expansion of schemes is proposed in the northwest. However, these would all be located at least 25 km from the proposed scheme and have little bearing on its cumulative effects.

Method of Assessment

The assessment method broadly conforms to current practice and guidance given in GLVIA3. However, on review of the detailed assessment we note a number of issues relating to the assessment of solus[3] and cumulative effects which are unclear:

- The detailed assessment reports only cumulative effects and does not appear to separately assess solus effects
- The detailed statements of effects on some receptors are written in a way which is not entirely clear as to whether the cumulative effects stated relate to the *addition* of the proposed turbines to the baseline, or the *combined effects* of the proposed plus the baseline
- Each assessment includes two baseline scenarios: *existing + consented* and *existing + consented + proposed*.
- The assessment for representative viewpoints assesses both landscape and visual effects; but with only one assessment of magnitude of change which is applied to both receptors at that viewpoint, despite their being two separate and fundamentally different receptors.
- These matters appear not to conform to aspects of GLVIA3[4] and SNH's guidance on cumulative assessment[5]. Nevertheless, we broadly agree with most of the assessments of effects for the most significantly affected receptors. While there are some differences between our assessment of effects and that of the applicant; these can largely be explained by differences in professional judgement.

[3] i.e. the effects of the wind farm considered on its own against the existing landscape and visual baseline including operational wind energy schemes

[4] Paras 20.20 - 22 refer to the separate assessment of landscape and visual effects and para 3.22 distinguishes between the effects of the development itself and its additional effects when considered with other similar developments. The guidance for these is also considered in separate chapters

[5] Para 7 explains what is meant by cumulative impacts Para 26 refers to the various cumulative scenarios including operational wind farms

The EIAR night-time visuals presented both 2000 cd and 200 cd intensities in the photomontages which was useful to see. However it is considered that the photomontages (e.g. VP 11 Huntly Figure 7.32) in some cases underestimated the likely brightness of the 2000 cd lighting (based on experience of viewing turbines and mast with lighting in the landscape).

Annex 2. Compilation of recommended measures

Protected species

In agreement with the applicant's own EIAR conclusions we advise that the following mitigation is appropriate to minimise impacts and afford important species protection throughout all stages of the development. The applicant's proposed mitigation is summarised in EIAR chapter 18.

The key documents that hold the mitigation and positive conservation measures for important species are; -

- Technical appendix 8.4 – outline Bird Protection Plan
- Technical appendix 9.4 – outline Species Protection Plans
- Technical appendix 9.4 – outline Habitat Management Plan

Landscape and visual effects

Involving all or a combination of the following options effects could be reduced:

- Reducing the size of some or all turbines to below 150 m to reduce effects on Tap o' Noth and remove the need for aviation warning lights. This in turn would reduce the pronounced scale disparity between the existing and proposed developments at Clashindarroch and improve the overall wind farm design, reducing effects on receptors to the east and northeast;

- Relocating or removing turbines at the southern end of the scheme to achieve a closer visual integration with the existing turbines when seen from the southeast and east;

- Where smaller turbines below the 150 m threshold are not proposed, all available aviation lighting mitigation measures, including proximity detection and shielding, should be implemented to minimise effects on dark skies.