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Mark Ashton
Energy Consents Unit
Scottish Government

Our Ref: CNS/REN/WF/157312

12 February 2020

Dear Mr Ashton

**The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Electricity Act 1989 Section 36 and Schedule 8: Application for the Proposed Kirkan Wind Farm in the Planning Authority Area of the Highland Council**

Thank you for your consultation on the supplementary environmental information (SEI) provided in support of the Kirkan wind farm application.

We work in support of the government's vision for an energy sector that delivers secure, affordable and clean energy for Scotland. We provide advice in the spirit of the government's Onshore Wind Energy Strategy that says 'developments can and must strike the right balance between utilising Scotland's significant renewable energy resources whilst protecting our finest scenic landscapes and natural heritage'.

Summary

We object to this proposal due to the significant adverse effects on the qualities of wild land areas (WLA) 28 Fisherfield – Letterewe - Fannichs, and 29, Rhiddorroch - Beinn Dearg - Ben Wyvis. However, we consider that a wind farm may be accommodated on this site subject to the significant effects of the turbine lighting being substantially reduced. We are happy to provide further advice on how this could be achieved.

Background

We have had a number of pre-application communications with the applicants and their agents, including attending the formal pre-application meeting at the Inverness Town House, and provided scoping and gatecheck advice. On 2 July 2019 we responded to the Section 36 application, objecting until further information on the nature of proposed lighting was provided. This Supplementary Environmental Information (SEI) we requested was provided on 1 November 2019.

This letter supersedes the advice on WLAs within our letter of 2 July 2019; our advice on 'Other landscape and visual effects' in para 2.1 of the Annex to that letter still stands.

Scottish Natural Heritage, Fodderty Way, Dingwall Business Park, Dingwall IV15 9XB
Tel: 01463 701 610 www.nature.scot

Dualchas Nàdair na h-Alba, Slighe Fodhraitidh,
Pàirc Gniomhachais Inbhir Pheofharain, Inbhir Pheofharain IV15 9XB
Fòn: 01463 701 610 www.nature.scot

Appraisal of the impacts of the proposal and advice

Due to the poor design of the proposal, as a result of the 175m turbines contrasting with the neighbouring existing smaller 125m turbines, there will be significant adverse effects on the qualities of WLAs 28 and 29. The proposal to light all 17 turbines means that this element of the proposal would further contribute to these significant effects. Any lighting as a result of this proposal will undermine the efforts of the adjacent schemes to avoid cumulative effects from lighting on WLAs.

Our detailed advice on these effects is included at Annex A.

Concluding remarks

We ask to be advised at the earliest possible stage about any proposed modification, conditions or legal agreements relevant to our interest, in particular any proposed changes to the lighting aspect of this proposal.

We have considered other interests and taken them into account in reaching our conclusion on this proposal. The proposed development does not form part of any nationally agreed strategic programme such as the National Planning Framework and is not specifically allocated in the Local Development Plans.

Should you have any queries about this letter, please contact Nathan McLaughlan (nathan.mclaughlan@nature.scot) for further advice.

Yours sincerely

Graham Neville
Area Manager

graham.neville@nature.scot

Annex A

Landscape Advice

1 Applicant's assessment of effects

1.1 We welcome the high standard of the night time visualisations provided in the SEI as these have enabled us to better understand the likely effects and, together with our own site visits after dark, now provide a view on the significance of the effects of the lighting element of the proposal. Figure 5.2 (SEI) is helpful in identifying the cumulative effects of turbine lighting from this cluster. We understand that this cumulative ZTV shows the four hubs representing the existing lights of Lochluichart Extension I and all of the Kirkan hubs (which illustrate the worst case scenario as cardinal lighting has yet to be approved by CAA).

1.2 When assessing the effects of lighting (from three assessment points) within WLA 28 and WLA 29 the SEI identifies that if all the Kirkan turbines are lit there will be a localised significant effect in combination with the existing lights from Lochluichart Extension 1 as illustrated in VP 6. However, no conclusion has been drawn on the significance of effect from VP13 or VP14 for the worst case scenario. The applicant's assessment only makes reference to one physical attribute, remoteness with no reference to how the lighting would affect the wild land qualities. This raises some concern as to the thoroughness of the assessment.

1.3 The information provided in the form of SEI is sufficient to allow us to take a view on the degree of effects of the lighting element of this proposal. We consider that the applicant's assessment underplays the degree of effect on wild land qualities of WLA 28 and 29.

2 SNH appraisal of effects

2.1 WLA 28 lies to the west of the proposal where the turbines will generally be seen adjacent to and behind the existing Lochluichart and Corriemoillie cluster appearing as an extension with little notable physical separation between the schemes (VP 13). WLA 29 is extensive and lies to the north-west, north and east of the proposal. The proposed turbines will either be viewed in front of the existing Lochluichart and Corriemoillie cluster or to the side of it, appearing as an extension with little notable physical separation between the schemes (VPs 15, 16, 6 and 19).

2.2 Dark skies make a direct contribution to a range of the physical attributes and perceptual responses for both WLAs 28 and 29, for example the sense of risk is highly likely to be increased after dark once orientating features are no longer visible. This is something we experienced on our own site visits at dusk and after dark. **We have considered the effects of the whole proposal on the qualities of the WLAs in this advice.**

Effects on Rhiddoroch - Beinn Dearg - Ben Wyvis WLA 29

2.3 **Quality 1 *A range of awe-inspiring massive, high rounded hills and plateaux, as well as steep rocky peaks and ridges, offering elevated panoramas:*** There will be significant adverse effects on the appreciation and sense of awe from the wide open elevated panoramas (as represented by VPs 15, 6 and 19) together with a sense of sanctuary and solitude as a result of the proposal being both physically closer to WLA 29 than the existing Lochluichart/Corriemoillie cluster, and of greater prominence as the Kirkan turbines are of a scale which contrasts with other built elements in the landscape. We recognise that there are existing significant adverse effects on these attributes and responses as a result of the existing Lochluichart/Corriemoillie cluster which weakens the strength of this quality at the margins of this WLA. However the strong horizontal emphasis, which is a key aspect of this quality, can still be experienced in panoramic views out to the south.

2.4 We also recognise that lighting is an existing, albeit very limited, feature experienced from within some parts of the WLAs in the location of the proposal, and that these lights can appear relatively bright (SEI para 3.8). The existing cardinal lights that form part of the

baseline are eye catching and have adverse effects on the appreciation of wild land qualities of both WLAs. Specifically the lights draw attention to modern human artefacts which would otherwise not be visible after dusk, especially where they are seen to flash (due to rotor blades moving in front of them), whilst providing clear points of reference in the landscape, aiding navigation and reducing the sense of risk. Effects from other lights are minimal as they are all low down in the glens where human intervention is more common and expected, and the majority of these are moving lights from vehicles therefore the effects are not permanent. In addition due to the convex landforms common across WLAs 29, these glens are often hidden from view.

2.5 Whilst we are in agreement that there would be limited areas of new visibility across WLA 29 (based on the information within Figure 5.2), the proposed lighting of all 17 turbines would nonetheless substantially extend the current intensity (brightness) of artificial lighting, highlighting and drawing greater attention to its prominence, this is illustrated well in Figures 5.4b and 5.5b. The extended array, increased elevation and intensity of lighting would result in the underpinning wild land attributes (lack of human artefacts and remoteness) and responses (sense of risk, sense of sanctuary and solitude) being eroded. These attributes and responses are important components of this wild land quality. The introduction of 175m turbines within close proximity of this WLA will add substantially to the baseline effects, further weakening the degree to which this quality can be appreciated. The lighting of all 17 turbines would have a significant effect on quality 1 of WLA 29.

2.6 Quality 3 *A very large interior with a strong sense of remoteness and sanctuary that seems even more extensive where appearing to continue into neighbouring wild land areas:* There will be significant adverse effects on the perceived extent of this WLA and the resulting sense of remoteness particularly from areas where the adjacent wind farms are not visible. These effects will occur in locations within WLA 29 where currently views extend into the neighbouring WLA 28 due to intervening human elements not being seen. The turbines will add a complexity, due to the contrasting scale of the turbines, to a landscape where currently human influences clearly indicate the limits of WLAs in certain views. Where existing turbines are visible during daylight, the proposal will be of poor design fit with the existing turbines, further drawing the eye by adding very large scale indicators which are visually confusing.

2.7 When existing turbines are not visible such as after dusk, the four existing cardinal lights appear in the upland landscape, and are often the only form of lighting seen (see 2.4 above). The lighting from the Kirkan turbines will substantially add to this adverse effect, further emphasising the limits of the WLA, reducing its perceived extent. This increase in prominence of lighting is considered to be substantial and significant, and a step change from what is currently experienced at the baseline.

2.8 Effects on wild land qualities 1 (both as a result of the scale of turbines in relation to neighbouring wind farms, and their requirement to be lit) and 3 (as a result of the location and scale of the turbines between WLAs and the requirement to be lit) of WLA 29 are of a magnitude that is significant.

Effects on Fisherfield – Letterewe - Fannichs WLA 28

2.9 **Quality 1 *An awe inspiring range of colossal, steep, rocky and rugged mountains interlinked around deep and arresting corries, glens and lochs:*** The extension of obvious human elements in addition to the substantial increase in prominence of turbines will affect parts of this WLA which are very susceptible to this form of development (represented by VP 13). The currently very strong sense of naturalness and remoteness resulting from the arresting large scale rugged mountains extends across a vast area of this WLA. Although there is some reduction in the expression of these attributes as a result of the existing wind farm cluster, particularly in eastward facing views, the effects as a result of the additional Kirkan turbines will be substantially greater. The current cardinal lighting is a feature of the nightscape providing orientation and highlighting human development, thus reducing the sense of naturalness and remoteness. This is illustrated well in Figures 5.6a.

2.10 The introduction of 17 additional lights to those in the baseline (described in 2.4 above) would introduce a substantial new cluster of lights clearly separated from the existing lights from some locations (Figure 5.6b). The effects of these lights would substantially amplify the adverse effects of the existing lights on the attributes (sense of naturalness and remoteness) and responses (sanctuary and solitude) which underpin this wild land quality.

2.11 Effects on wild land quality 1 (both as a result of the scale of turbines in relation to neighbouring wind farms, and their requirement to be lit) of WLA 28 are of a magnitude that is considered to be significant.

2.12 In addition to effects on the baseline, there is currently an application for five turbines within the Lochluichart Extension II. The SEI for this extension states (3.1.2); "*The Applicant is committed to installing infra-red lighting, as installed at the operational Lochluichart Wind Farm, to avoid any potential light pollution impacts on the Wild Land Area nearby, following a request from SNH and in their response to the Original Scheme, a matter which the MoD is also comfortable with.*" We understand that technology is evolving rapidly and CAA are currently reviewing their aviation lighting policy. We encourage collaborative working with other developers in the vicinity and CAA to seek a lighting solution for this cluster of wind farms which results in the minimal amount of lighting necessary. We would be pleased to contribute to these discussions if useful.

2.13 If the Kirkan application is consented and all 17 turbines are lit as per the application, we consider it will undermine the efforts of the adjacent schemes to avoid cumulative effects from lighting on WLAs.