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FAO Mr Josh McCormack
Senior Case Officer
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Scottish Government

26th October 2018

Dear Mr McCormack

**THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND)
REGULATIONS 2017
ELECTRICITY ACT 1989 : APPLICATION FOR SECTION 36 CONSENT FOR THE PROPOSED
GLENDYE WIND FARM IN THE PLANNING AUTHORITY AREA OF ABERDEENSHIRE
COUNCIL**

1. Introduction

Glendye Wind Farm Ltd, a joint venture between wind farm development company Coriolis Energy and Irish state-owned energy supplier ESB, has applied for planning permission for 26 wind turbines of 149.9m blade-tip height at base elevations of around 370-440m OD on the southwestern slopes of Glen Dye.

Mountaineering Scotland has assessed the proposal, for its operational phase, in terms of its likely effect upon mountain assets and mountaineering activities. Based on this assessment, the proposed development is considered strongly detrimental to both because of its visual impact and consequential impacts on recreation. These impacts cannot be mitigated. **We therefore object to this proposal.**

2. Mountaineering Scotland

Mountaineering Scotland is a membership organisation with over 13,000 members and is the only recognised representative organisation for hill walkers, climbers, mountaineers and ski-tourers who live in Scotland or who enjoy Scotland's mountains, and acts to represent, support and promote Scottish mountaineering. Mountaineering Scotland also acts on behalf of the 80,000 members of the British Mountaineering Council (BMC) on matters related to landscape and access in Scotland, and provides training and information to mountain users to promote safety, self-reliance and the enjoyment of our mountain environment.

Mountaineering Scotland agrees with the need to move to a low carbon economy but does not believe that this transition need be at the expense of Scotland's marvellous mountain landscapes. It objects only to the small proportion of proposals – around one in twenty – that are potentially most damaging to Scotland's widely-valued mountain assets, consistent with our policy set out in *Respecting Scotland's Mountains*. This has been endorsed by our members and by kindred

organisations such as The Cairngorms Campaign, North East Mountain Trust and The Munro Society.

3. Material considerations

a) Preamble

The landscape and visual impact assessment (LVIA) compiles data and presents results within an objective structure but ultimately applies subjective judgement. In our experience, such commissioned assessments consistently downplay the impact of proposed development. The Glendye LVIA outcome uses "... the application of professional judgement and experience ..." (EIA-R para 6.28), informed by five months of local fieldwork in 2018 (EIA-R para 6.22). Mountaineering Scotland's assessment has been informed by the compilers and reviewers of this objection having well over 100 years of experience on Scottish and other hills, and 'fieldwork' in the Glen Dye and Glen Esk area stretching over decades. We do not suggest that either professional or consumer judgement trumps the other; simply that each has a distinct place in informing decision-making.

b) Need

Scottish Government (but not UK) energy policy supports the 'need' for more onshore wind deployment and an individual planning application is not the place to question policy. However, Scottish policy is no less clear that 'need' is only one factor in the planning balance in the determination of an individual planning application.

Each development needs to be judged on its own merits and in its geographical context. Decision-makers are not bound by national energy and planning policies to consent any particular scheme for electricity generation if its anticipated benefits are outweighed by its anticipated negative consequences. There are multiple ways through which to derive the anticipated benefits of low-carbon electricity generation: if one site with one particular technology is not consented, there are other sites and technologies available.¹ The adverse consequences of a scheme, however, are often site-specific and should weigh more heavily in the balance because of this.

The applicant claims that the proposal is supported by Aberdeenshire Council's LDP 2017 policy C2 but only does so by ignoring the clear statement in the policy that "The areas shown in orange hatching have been assessed as having strategic capacity for turbines over 15 metres when local landscape considerations are taken into account."² The proposed site is not in such an area. Generalised support for renewable developments in Policy C2 is countered for this particular application by an explicit lack of support for a development in this location.

The proposed Glendye wind farm is not consistent with Scottish Planning Policy if its putative benefits are outweighed by its potential detriments because it is inappropriately located. Mountaineering Scotland believes that this is the case.

c) Landscape and visual impact (including cumulative impact)

¹ Under the Climate Change Plan for Scotland 2018, it is expected that installed renewable electricity generation capacity will total 12-17GW by 2030 (as cited in EIA-R Para 5.30). Data for June 2018 shows that there is 10.3GW operational and 1.5GW under construction – already nearly reaching the lower expectation (Energy Statistics for Scotland Q2 Figures, September 2018, Scottish Government). Adding the 7.3GW consented but not yet built brings the total to 19.1GW, exceeding the 2030 expectation (ibid). Wind is 76% of operational capacity; 89% of under construction capacity; 93% of consented but not built capacity; and 93% of the 3.4GW in planning (Renewable Electricity Planning Statistics for Scotland, data for June 2018, Scottish Government). We offer these statistics not to suggest that the 2030 expectations are any sort of cap – we are not aware of any limit on the Scottish Government's appetite for turbines – but simply to show that pursuing ambition for renewable electricity (and in particular wind generation) is not reliant upon the consenting of one individual scheme of 0.1GW regardless of adverse impacts.

² Online LDP web page. Accessed 12 Oct 2018.

<https://abdshire.maps.arcgis.com/apps/MapJournal/index.html?appid=e7809d67e5054534b25194a4a4767b0b#>

As lay consumers of mountain landscapes, we find the professional distinction drawn between landscape and visual impacts often rather theoretical. How we experience landscape is not separated into component parts but merges as a total experience. That is how we have developed the assessment presented here.

The development site and its management are typical of the rounded elevated moors of the eastern Grampians. It comprises the upper south-western slopes of Glen Dye, with a complex topography of incised burns and small rounded interfluvies, with the proposed turbine locations mostly on the latter (Fig. 4.1). It is partly contained by surrounding ridges; more so to the north and south but less so to the west and open to the east. Partial containment by ridges does not make the site a topographic 'natural bowl' as it is several times unhelpfully described in the LVIA (e.g. Tables 6.26, 6.31, 6.34, 6.39, 6.62).

Mountaineering interest can be summarised in five areas, the visual impact for which is assessed here from a mountaineering perspective. Mention in this assessment of Wild Land or the Cairngorm National Park (CNP) should be read in the context of this being a mountaineering analysis. We have not attempted an assessment from a Wild Land or CNP perspective.

Clachnaben-Mount Battock

There is substantial local mountaineering interest in the popular hills of Clachnaben (589m) and Mount Battock (778m), often climbed together from the east along the northern ridge enclosing Glen Dye, which rarely drops below 550m. There would be almost constant visibility of the proposed wind farm from this ridge at less than 5km distance from the nearest turbines.

Clachnaben and Mount Battock are Viewpoints 4 and 5, respectively (Figs 6.14 & 6.15). Proximity and popularity make them the most heavily impacted hills from the proposed wind farm. Hill-walkers would be looking down onto the development at distances of under 5km with almost all turbines wholly in view and much of the road system. At places on the ridge between them the walker would be looking across from below blade-tip height of the highest altitude turbines (at c.590M OD).

Even though the light grey turbines would be to the side of the viewer, they would be dominant and overwhelm other elements of the mountaineering experience with the eye attracted by movement and the effect exacerbated by backclothing. It is difficult to understand how consultants with the experience of LUC could be under a misapprehension that backclothing mitigates visibility. Their mitigation by design includes: "... ensuring the turbines are predominantly backclothed when seen from Clachnaben ..." (EIA-R Table 3.1). In most instances, backclothing does not diminish visibility or impact, and it certainly would not do so here.

We fully agree with the applicant that visual impacts from a commercial scale wind farm are inevitable. That is why location is so important. We do not agree that the wrong location can be mitigated by design. This is demonstrated by the overlapping and clashing of turbines from these viewpoints, even though Mount Battock was one of the viewpoints used to supposedly optimise the design.

Mount Battock is also climbed from Glen Esk. From Craig Soales (7km distance) onwards the proposed development would be in sight ahead on the right for most of the ascent. Mount Ean (Viewpoint 9, Fig. 6.19) illustrates this, showing most turbines visible from below hub height and with the observer steadily seeing more of the turbines as progress is made to Mount Battock. The comments already made on movement and backclothing apply.

Mount Battock and Clachnaben would also experience cumulative impact with Mid Hill wind farm (Mid Hill 1 and Mid Hill 2). This consists of 33 turbines of up to 125m BTH. A further extension of up to 10 turbines of up to 200m BTH is being scoped (under the name of Fetteresso but really it is Mid Hill 3) but we have not had regard to that in our assessment.

Mid Hill is in direct sight on the eastward route from Mount Battock to Clachnaben, at an approximate distance of 12km at Mount Battock reducing to 7km at Clachnaben. It is a definite

'presence' (cf baseline photography for Viewpoints 5 and 4, Figs 6.15 & 6.14), largely backclothed by forestry. We had previously judged its effect to be insufficiently adverse for an objection, given the need to accommodate some wind farms within the uplands. However, adding Glen Dye would give an intensified effect of turbines advancing into the hills to a degree we would regard as unacceptable.

Glen Dye

Glen Dye (including Charr bothy) is a pleasant and popular walk in its own right as well as being part of circular walks from the hills north and south of the glen. It would be dominated by the sight and sound of the proposed turbines

A walker heading westward up Glen Dye would have direct forward visibility of the wind farm. Depending on the start point, there would be full or partial views of a number of turbines for much of the way (cf Viewpoints 6 and 7, though neither is taken from a walking route (Figs. 6.16 & 6.17)). By the time the walker reached Charr bothy (Viewpoint 2, Fig. 6.12), 2.2km from the wind farm, the turbines would occupy 90° of the view, with 20 turbines visible: 13 at full rotor, 3 at hub height and 4 at blade-tip. By any account this is a major adverse effect.

Heading eastward the wind farm is behind the walker though it would remain audible for some distance, depending on whether the glen attenuates or amplifies turbine noise. However, the Mid Hill wind farm is in direct view eastward from the glen. A walk in Glen Dye would thus always have the presence of turbines visibly, audibly or psychologically since even when not visible or audible they would remain in the memory as a, or more probably *the*, prime characteristic of the walk.

Lower Glen Esk hills

The hills either side of lower Glen Esk, such as Sturdy Hill and Hill of Wirren, although less popular than those north of Glen Dye, would have direct close views of the proposed development.

Sturdy Hill forms the southwestern corner of a high-level hill-walking circuit above Glen Dye. It can also be a destination in its own right from Cairn o' Mount or Glen Esk. It is within 2km of the closest turbines and the proposed development is almost completely visible from it, occupying nearly 90° of the view (Viewpoint 1, Fig 6.11). If approaching from Cairn o' Mount, less than 4 km from the nearest turbine, the wind farm would be in sight throughout (cf Viewpoint 3, Fig. 6.13). The substantial adverse effect is similar to that already described for Clachnaben and Mount Battock.

Hill of Wirren is most commonly approached from the south and would have no view of the wind farm until the summit plateau (10km from the nearest turbine). Approaches from the north could have the proposed development in view for much of the descent, depending on route, to within 5km of the wind farm (Viewpoint 10, Fig. 6.20). From the summit area, the visual effect might be lessened (compared with the locations already considered) by distance but this would be somewhat offset by the backclothed turbines being front-lit in sunshine. The view to the eye-catching tor of Clachnaben is a distinctive element of the view and would be disrupted by being over clearly visible rotating blades. The overall visual impact on Hill of Wirren is notably adverse.

There would be a cumulative impact with Mid Hill from Sturdy Hill, with Mid Hill extending the width of turbines in the view somewhat, more obviously so as the walker proceeds eastward along the ridge towards Cairn o' Mount, with Mid-Hill in front at c.10km reducing to 6km distance, partly skylined and partly backclothed.

Upper Glen Esk hills

There is substantial mountaineering interest in a band of ground with Mount Keen in the north, the Glen Esk hills around Loch Lee in the centre, and Ben Tirran in the south. These are all popular areas, attracting visitors from some distance, and lying within the CNP and mostly within (and otherwise adjacent to) the Lochnagar and Mount Keen Wild Land Area. The uppermost parts of

Mount Keen and Ben Tirran would have visibility of the proposed wind farm while the hills around Loch Lee would have substantial visibility from slopes and summits. This area is accessed by routes from Glens Tanar, Clova and Muick as well as Glen Esk but can be considered together since its hills share the same general angle of view of the proposed development at a distances of 12-22km.

The angle of view is important because the topographic containment is leaky on the west side of the proposed development (cf EIA-R Fig 6.2). As a generalisation, the applicant's assertion that the scheme is "... broadly contained by the topography of the site and its immediate setting ..." (EIA-R Para 3.61) is reasonable. However, the western containing ridge does not exceed 500m OD for most of its length, while blade-tip elevations are 520-590m OD (and hub elevations 460-530m OD). Not surprisingly, this means there is visibility of the scheme from elevated locations to its west.

There would be limited skylined views from parts of Glen Esk and its surroundings (Viewpoint 15, 6.25). However, visibility of the proposed development would increase rapidly as one gains height (Viewpoints 12 & 18, Figs. 22 & 28). From the summits and higher ridges, there would be substantial visibility of full rotors (and of towers depending on location) (Viewpoints 17 & 19, Figs 6.27 & 6.29). At mid altitudes the appearance would be of a mix of skylined and backclothed rotors; at higher altitudes Glendye would be seen backclothed by a moorland ridge, giving the impression of the turbines being located *within* the hills. The homogeneity of the rolling moorland hills would be disrupted by the appearance of large kinetic structures. A similar impression can occasionally be gained of Mid Hill but more often it is perceived as being on the edge of the hills.

From much of this area, Glendye would be the only wind farm in view (Figures 6.10a & b). Where another wind farm is currently visible, it is Mid Hill with smaller turbines, at 25-30km (Figure 6.10c). From many locations this would be seen over Glendye, about 8km further away, rather than separately, reinforcing the impression of the proposed development penetrating into the hills in a way current developments do not. Mid Hill is seen as separate viewed from Mount Keen and the northern Mounth hills and, despite differences of scale and distance, this would create some adverse cumulative effect by extending the spread of wind farms across the horizon.

The main consideration for these hills is the acceptability of a substantial number of large turbines being placed closer to these hills than existing wind farms, creating new impact where none currently exists, and increasing impact markedly where the proposed development is perceived as coming within the hills rather than being on their edge or beyond (as current wind farms are). For all locations where turbines are visible within this area, the apparent size of the turbines would diminish the perceived scale of the landscape. Maintaining the quality of mountaineering experience on these hills should also be attributed a somewhat higher weight in planning terms because of their location within a National Park and a Wild Land Area. Taken overall, and notwithstanding the distances involved, the impact is unacceptable.

Lochnagar area

Lochnagar (Viewpoint 22, Fig. 6.32) and the high hills around it have a national reputation and attract large numbers of mountaineers from far and wide. Although 34km from the nearest turbines – a distance normally discounted in planning assessments – we are dealing here with turbines much larger than those on which there is any independent research in Scotland. (The most recent research was in 2002 on turbines of 53.5-85.5m blade-tip height.) An impact at this distance should not be completely discounted.

The visibility of the proposed development from Lochnagar would be very dependent upon the direction of illumination. The development would become eye-catching when lit by late afternoon and evening sun, the pale grey turbines being backclothed by dark moorland. Blade movement could also create a 'twinkling' effect as they catch the light. There may be a similar effect from Mid Hill in similar light but those turbines are skylined and 10km further away, both factors diminishing impact. Because Glendye would be observed with a ridge behind it, it would be seen as being within the hills rather than on the margins (which *is* the perception of skylined Mid Hill).

By itself, the impact on Lochanagar and neighbouring hills would usually count for little in the planning system. However, it is a further adverse impact – albeit small – attributable to this proposed development that has been avoided thus far in the development of wind farms in northeast Scotland. The effect may be Minor, but it is not wholly insignificant.

Landscape and visual impact conclusion

This is not the right place for a wind farm. The proposed development would devastate the popular Clachnaben-Mount Battock, Glen Dye and Sturdy Hill (and adjacent ridges) walks, with a lesser but still seriously adverse impact on Hill of Wirren. It would extend the reach of wind turbines visually and perceptually far into the hills surrounding upper Glen Esk (which are in the CNP and Mount Keen WLA), which have so far been largely spared impact from wind farms. Cumulative interactions with Mid Hill wind farm will be modest but notable along the Clachnaben-Mount Keen and Strudy-Hill Cairn o’ Mount axes. Other cumulative impacts are negligible by virtue of existing turbines being lower BTH, lower altitude OD and more distant.³

The EIA-R understates the impact of both close and, more especially, mid-range views. MScot would score a higher level of visual effect for several viewpoints (in red below) where Glendye would, in our view, be a more prominent element of the view than allowed by the LVIA judgement, because of its disruptive visual impact due to scale, size and movement.

Viewpoint	1	2	3	4	5	9	10	12	15	17	18	19	22
EIA-R	Maj	Maj	Maj	Maj	Maj	Mod	Mod	Mod	Neg	Min	Min	Min	Min
MScot	Maj	Maj	Maj	Maj	Maj	Maj	Mod	Mod	Min	Maj	Maj	Mod	Min

d) Socio-economics

We do not dispute that constructing a wind farm creates some financial benefits. However, in a dynamic energy economy, achieving those benefits for the region and nation is not reliant upon the consenting of any one proposal.

The EIA-R (Chapter 13) comes to a benign conclusion regarding the perception and tourism impact of wind farms in its limited review of the literature: “... that the majority of those surveyed do not have a negative perception of wind farms, and that in general, wind farms do not have a detrimental effect on tourism.” (EIA-R para 13.60). Mountaineering Scotland would not disagree with this *as a generality*, but the problem is that it *is* a generality. The planning system is not concerned with generalities but with the specific impacts of specific proposed developments in specific locations. That requires a properly focused approach to tourism and recreation impacts both in research and in practical application.

From a review of the evidence undertaken for Mountaineering Scotland⁴, the hypothesis that best fits the available, far from perfect, evidence is that wind farms do have an effect on tourism and recreation but the effect is experienced predominantly in areas where large built structures are dissonant with expectations of desired attributes such as wildness or panoramic natural vistas, and where a high proportion of visitors come from the 25% of tourists in Scotland who are particularly drawn by the quality of upland and natural landscapes, with mountaineering visitors prominent amongst these. In much of Scotland, and for most tourists, wind farms are no serious threat to tourism: the nature of the local tourism offer and good siting of wind farms mean they can co-exist.

The main adverse effect of wind farms on hill-walking recreation, thus far, is self-reported displacement within Scotland from areas perceived as being sullied to areas seen as still retaining the desired sense of naturalness and space.⁵

³ Only Mid Hill and the 20km-distant in-planning Craigneil have onshore turbines over 100m BTH.

⁴ [Wind farms and tourism in Scotland: A review with a focus on mountaineering and landscape](#) (2017)

⁵ Wind Farms and Mountaineering in Scotland (2016) <https://www.mountaineering.scot/mountain-wind-farm-research>

An analysis of the tourism and recreation implications of a particular proposal needs to consider the nature of visitors to the area and the quality of landscape they are visiting. In areas of higher quality landscape, both the landscape and those visiting it might have higher sensitivity to wind farms than would be expected in areas of more modest landscape quality. The only empirical research on impacts in areas local to wind farms is the poorly conceived and executed Biggar Economics (BE) study, the 2016 version of which is cited by the applicant (para 10.57). Amongst its flaws is the mixing of windfarms in all types of landscape into one unstructured analysis.

Using the 2017 version of the BE report and a list of windfarms consented in local landscape designations (Special Landscape Areas (SLAs) or their equivalent), an analysis for Mountaineering Scotland has demonstrated a negative impact on tourism from wind farms operational in SLAs. This limited study is the only attempt to date to analyse wind farm impact on tourism/recreation in Scotland in relation to the quality of host landscape.

“It can be cautiously concluded, from the limited evidence available, that **wind farms in locally designated landscapes have an adverse impact upon tourism-related employment in their local area**. All three wind farms in such areas in this study lost employment (averaging -7%), compared with a Scottish increase of 15% between 2009 and 2015, and an increase of 35% in the vicinity of wind farms in non-designated areas.”⁶

This is very relevant to the present application which lies in the Clachnaben and Forest of Birse SLA, with the access road in the Braes of the Mearns SLA. It suggests that the likelihood of an adverse tourism and recreation reaction to the proposed windfarm is higher than would be expected from the general analyses drawn on for the EIA.

The likelihood of an adverse impact is further increased by the nature of the visitors to the SLA. In our experience it is largely day visitors from the surrounding area. The same recreational opportunities are part of the short-break and longer holiday tourism offer of the area but we have no information on the balance between day recreation and tourism (nor does the EIA-R offer any) so we frame our comments here in terms of recreation.

Hill and country walkers visiting the area do so because of the quality of the landscape and the experience it offers. They are receptors of high sensitivity to the type of industrial landscape which would result from the proposed development.

Based on Mountaineering Scotland's 2016 survey, a net 22% of hillwalking recreational visits can be expected to be displaced from the SLA around Glendye if the development is built. Some displacement could also be expected around Hill of Wirren and the upper Glen Esk hills. Displacement from Lochnagar is unlikely. This analysis, based on evidence specific to the landscape designation of the site and the type of receptors involved, is at odds with the EIA-R's conclusion.

“The effect which changes in views will have on recreational activity will depend on the personal opinion of the viewer and is subjective; some people may be predisposed to dislike wind turbines while others could view them as complementary to the landscape. As a consequence, the alteration in views from surrounding areas (including hill summits and walking routes) may influence some individuals in their choice of location to visit or recreational activities to undertake. However, it is not considered that the changes in views from the viewpoints assessed (from which recreational users will be receptors) will constitute a significant negative effect on informal recreation.” (EIA-R para 13.110)

A proper consideration of the evidence leads to the conclusion that a wind farm in this location would have a substantial negative effect on informal recreation. Any increase in usage due to the wind farm tracks would be very minor (and probably cyclists) and far outweighed by the loss of hill-walker visits. To the extent that tourism is encouraged by the walking opportunities available in the affected areas and is of similar sensitivity, this would also translate into a loss of tourism income.

⁶ <https://www.mountaineering.scot/assets/contentfiles/pdf/Wind-farms-and-tourism-in-Scotland-Supplement-December-2017-20171121.pdf> (para 20)

e) Decommissioning

If the development is consented, it should be a condition that decommissioning includes the removal of all tracks constructed solely for the purposes of the development. (cf EIA-R Para 4.117)

4. Conclusion

Having carefully assessed the proposed development, Mountaineering Scotland is of the view that it is not 'the right development in the right place'. This is the wrong place. The scheme would have major adverse visual impacts and a consequential negative impact on recreational visitation. It would devastate the popular Clachnaben-Mount Battock and Glen Dye walks and reach visually into the upper Glen Esk hills which have thus far avoided impact from wind farms. The needs case does not outweigh these adverse impacts since the need for low carbon electricity can be met in many places but the adverse impacts are site-specific.

Mountaineering Scotland objects to the proposed wind farm.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Stuart Younie'.

Stuart Younie
CEO, Mountaineering Scotland