

Molly Greasley
Case Officer
Energy Consents Unit

By email only: Econsents_admin@gov.scot

cc. DevelopmentManagement@pkc.gov.uk; planning@lochlomond-trossachs.org

08 May 2025

Your ref: ECU00004700

Our ref: CDM178887

Dear Ms Greasley,

ELECTRICITY ACT 1989 SECTION 36: APPLICATION FOR THE PROPOSED GLENTARKEN WIND FARM IN THE PLANNING AUTHORITY AREA OF PERTH & KINROSS

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

Thank you for consulting NatureScot on the application and supporting Environmental Impact Assessment Report (EIA Report) for the Glentarken Wind Farm.

1. Summary

The proposed wind farm would comprise of up to 12 turbines with a maximum blade tip height of 180 metres and associated infrastructure including BESS, on site substation and up to 15.6km of on-site tracks, with an operational life of 50 years. As the turbines would be over 150m in height aviation lighting would be required. Access to the proposed development would be from the A85 to the south. The proposed development would produce capacity greater than 50MW and is therefore considered a national development.

We object to the proposed development as it would result in significant adverse effects on the Special Landscape Qualities of the Loch Lomond and The Trossachs National Park and the Loch Rannoch and Glen Lyon National Scenic Area.

We consider that effects on the Loch Lomond and The Trossachs National Park and Loch Rannoch and Glen Lyon NSA are such that the objectives of the designations and overall integrity of the areas would be compromised. These effects are unlikely to be overcome through re-design or removal of turbines.

Additionally, there would be significant adverse effects on the Special Landscape Qualities of the River Earn (Comrie to St Fillans) National Scenic Area. However, these are not to the extent that the overall integrity of the area would be compromised.

2. Appraisal of the Natural Heritage Impacts of the Proposal

2.1 Landscape and Visual

The proposed development would introduce a large-scale wind farm into an open upland area intervisible from popular slopes, summits and ridges of three nationally designated landscapes which are currently devoid of this type of development.

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Individually the proposed development would result in significant adverse effects on five SLQs of the Loch Lomond and The Trossachs National Park (LLTNP) experienced from Breadalbane including iconic Ben Vorlich; three SLQs of the Loch Rannoch and Glen Lyon National Scenic Area (NSA) associated with the internationally important Ben Lawers group and one SLQ of the River Earn (Comrie to St Fillans) NSA.

Cumulatively with the scoping Glen Lednock wind farm the proposed development would result in significant adverse effects on five SLQs of the LLTNP; four SLQs of the Loch Rannoch and Glen Lyon NSA and two of the SLQs of the River Earn (Comrie to St Fillans) NSA.

These impacts would be to a degree that would result in an evident and noticeable material change to the SLQs of the LLTNP and Loch Rannoch and Glen Lyon NSA such that the objectives of these designations and overall integrity would be compromised.

The location, size and scale of the proposed development represents a step change in the existing pattern of wind farm development close to the LLTNP, Loch Rannoch and Glen Lyon NSA and River Earn (Comrie to St Fillans) NSA. NatureScot advises the proposed development does not meet Policy 4c of the National Planning Framework 4 (NPF4), due to the extensive nature of the effects on the popular summits, slopes and ridges within the Breadalbane area of the LLTNP and Loch Rannoch and Glen Lyon NSA. We advise these effects would result from the proposed siting, scale and type of development which we consider would not be feasibly overcome within the site parameters.

We provide further detailed advice in Annex 1. Our advice focuses on the potential for significant adverse effects on the SLQs of the LLTNP, River Earn NSA and Loch Rannoch and Glen Lyon NSA. This does not mean there are no other significant landscape and visual effects that need to be considered when determining the application.

2.2 Peatland

The proposed site survey area includes 280.72ha of blanket bog (NVC habitat types M17 and M19 with M2 and M3 infrequently occurring) and 63.9ha wet modified bog (M20 and M25a). The applicant has estimated direct loss of blanket bog and wet modified bog as 18.91ha and indirect losses of 10.87ha. The report and maps demonstrate that while there is priority peatland at the location and it covers a large area of the site, the condition of the peatland in terms of the surface pattern and in areas there is evidence of drying of the peat, and the presence of drainage and peat hags, suggests that the peatland is not of the highest value.

The habitat restoration plan, although the applicant has stated that they have not included the loss of peatland from the indirect impacts, they have proposed 276.19ha of restoration which is in the region of 9 times the loss of both the direct and indirect impacts. It appears from the NVC maps and the peat depth surveys that they could minimise the losses more by further consideration of the location of the infrastructure and this could bring the same restoration extent closer to the 10 times recommendation.

2.3 Protected Areas:

The proposed site boundary is adjacent to Dalveich Meadow Site of Special Scientific Interest (SSSI) protected for its lowland neutral grassland and lowland calcareous grassland interests. The proposed development will have no adverse effect on site integrity. The proposed bracken control which has been included as part of biodiversity enhancement is approximately 750m from the SSSI, NatureScot advises this is not likely to impact the protected features of the SSSI.

The proposed development is unlikely to have an effect on Ben Chonzie SSSI protected for its breeding bird interests, upland and vascular plant assemblages. The proposed development is also unlikely to have an effect on the South Tayside Goose Roosts Special Protection Area (SPA)/Ramsar and its component SSSIs protected for a number of internationally important

interests including non-breeding populations of pink-footed and greylag geese, breeding widgeon and non-breeding waterfowl assemblage. This due to the distance between the protected sites and the proposed development.

2.4 Ornithology

Wider Countryside Birds

In relation to wider countryside birds (i.e. those not connected with a protected area), we are content that the proposal will not have an adverse impact on species populations at the Natural Heritage Zone (NHZ) level. We acknowledge that measures to safeguard breeding birds during construction will be detailed in the final Bird Disturbance Management Plan (BDMP). We advise that pre-construction checks and mitigation measures detailed in the BDMP should cover all proposed works associated with this development (i.e. wind farm construction and biodiversity enhancement works etc.).

NHZ 15 Black Grouse

We note there is a black grouse lek within 10m of a proposed access track. In addition to the mitigation already proposed we agree that to prevent disturbance, vehicle access within 750m of the lek site is kept to a minimum during April and May. We further advise that maintenance within 750m of leks is not planned between April and May (unless absolutely necessary). These measures should be included in the bird disturbance protection plan for black grouse.

2.5 Ecology

Protected Species

Surveys have identified the presence of otter, reptiles, bats and badger within the survey boundary. Advice on the timing of pre-construction surveys is now available in our standing advice for the relevant species. A watching brief should then be implemented by the ECoW during construction. The ECoW should also have a role in amending or drafting any Species Protection Plans (SPP) that are required, using the information from the EIAR alongside any additional mitigation and/or compensatory measures identified as necessary as a result of the pre-construction surveys. We advise that the applicant should consider the need for species licences as part of any development. Please contact our licencing colleagues if further advice on licensing is required (licensing@nature.scot).

The protected species figures and report note a number of common lizard sightings with a potential of 5 hibernaculum. The proposed site is suitable habitat for reptiles, and it is likely that other species such as adder are also present on site. In addition to our standing guidance, if construction is to take place over the winter period, hibernaculum should be clearly marked, with a suitable buffer to prevent disturbance. If work is to take place during the active period for reptiles, mitigation should include methods such as a watching brief and ensuring access tracks are clear before use. This mitigation should take into consideration weather and timing as to how active reptiles will be and how quickly they are able to avoid machinery.

We advise that further survey work may be required prior to biodiversity enhancement works, particularly if these take place sometime after construction of the wind farm. This is to ensure protected species likely to use this area are safeguarded throughout these works. Provision for further surveys and any proposed mitigation throughout the duration of all works should be detailed within the final BEMP/Construction Environmental Management Plan (CEMP), which should be agreed with the Scottish Government (in consultation with NatureScot where required) prior to works commencing.

2.6 Battery Energy Storage System (BESS)

The applicant has stated that as no infrastructure is located within the Tay catchment, the River Tay Special Area of Conservation (SAC) has been scoped out for assessment. The proposed BESS is approximately 1km from watercourses connected to the River Tay SAC. In this response we are not including our advice on any impacts that could arise from fire. We will submit this advice next week when we have concluded our internal review on the potential risks.

2.7 Decommissioning

Should the wind farm be granted consent, we recommend that an additional consultation is carried out well in advance (e.g. 3-5 years) of the year of decommissioning to ensure all natural heritage considerations are taken into account. Our advice is that further survey work may be required in the year or more prior to decommissioning to fully assess the likely impacts.

3. Conclusion

We have considered other interests, including the proposal's potential for biodiversity enhancement and taken them into account in reaching our conclusions on this proposal.

The advice in this letter is provided by NatureScot, the operating name of Scottish Natural Heritage. If you require any further information or advice in relation to this proposal, please contact Louise.Clark@nature.scot.

Yours sincerely,

[By email]

Chris Donald
Head of Operations – Central Highland

Annex 1 – Further advice on landscape and visual impacts, focused on Special Landscape Qualities of the LLTNP, the Loch Rannoch and Glen Lyon NSA and the River Earn (Comrie to St Fillans) NSA.

The hills and mountains of the Breadalbane area of the LLTNP, the Loch Rannoch and Glen Lyon NSA and the River Earn (Comrie to St Fillans) NSA are valued as popular visitor destinations nationally and internationally and are within easy access of Central Scotland. Key areas which form an important part of the identity of these nationally designated landscapes include, Ben Vorlich and Loch Earn within the LLTNP, the 'Ben Lawers group' within the Loch Rannoch and Glen Lyon NSA and St Fillans Hill and Mor Bheinn within the River Earn (Comrie to St Fillans) NSA.

Within 20 km the closest operational wind farms are located over 15 km from the proposed development and do not significantly affect the SLQs of the LLTNP, the Loch Rannoch and Glen Lyon NSA, and the River Earn (Comrie to St Fillans) NSA. Operational wind farms are either not apparent or seen as either distant or very distant features from key elevated locations within the Breadalbane area of the LLTNP, from the Loch Rannoch and Glen Lyon NSA and from the River Earn (Comrie to St Fillans) NSA.

With regards to emerging applications, we note that scoping Glen Lednock wind farm (ECU00004966), 25 turbines up to 220 m to blade tip height would be located directly east of the proposed development. Given that Glen Lednock is likely to progress as a full application this scoping wind farm is considered in this advice.

1. The applicant's assessment of effects on SLQs of the LLTNP and NSAs

While we agree with some of the conclusions relating to significant adverse effects on SLQ 2 and SLQ 7 of the LLTNP, and SLQ 12 of the Loch Rannoch and Glen Lyon NSA, we consider that the applicants assessment underplays the significance of effects on other SLQs within the LLTNP and within the Loch Rannoch and Glen Lyon NSA. It is important to note that for LLTNP Viewpoint 9: Meall na Samhna, Viewpoint 22: Meall an t-Seallaidh, and Loch Rannoch and Glen Lyon NSA Viewpoint 11: Meall Ghaordaidh, and Viewpoint 19: Lochan na Lairige pass we consider that effects would be greater than reported. We disagree that there would be no potential for significant adverse effects on SLQs within the River Earn (Comrie to St Fillans) NSA resulting from the proposed development alone.

With regards to the supporting visualisations, for several viewpoints the baseline photography has been taken in hazy conditions meaning the various elements in the landscape are not sufficiently clear. These visualisations are therefore not fit for purpose as they do not meet the standards required by our Visual Representation of Wind Farms Guidance (2017), particularly sections 110 and 111 of the guidance.

We note that night-time viewpoints are provided for Viewpoint: 19 Lochan na Lairige within the Loch Rannoch and Glen Lyon NSA and for Viewpoint: 21 St Fillans Hill within the River Earn (Comrie to St Fillans) NSA also within the LLTNP. For Viewpoint: 7 Ben Vorlich, a manipulated daytime photomontage is provided given the applicants concern for visiting this viewpoint at night. While we acknowledge the element of risk involved in taking night-time viewpoint photography from summits such as Ben Vorlich, we consider it would have been helpful for the applicant to have provided night-time photography as a minimum from the northern slopes where there would be potential for northward looking views of the aviation lights.

We consider that the manipulated day-time visual for Viewpoint 7 is insufficient for the consideration of night-time effects that would be experienced from Ben Vorlich, as previously noted in our Gate Check response 7th October 2025. Our Guidance on Aviation Lighting Impact Assessments (2024) states it is only appropriate to use manipulated day-time photography where no other sources of artificial light are present in the baseline. Having visited the viewpoint at sunset 19th March 2025 we can confirm that some other sources of artificial light are present at

lower elevations in the baseline. The manipulated day-time photography for viewpoint 7 does not represent the baseline as would be experienced in reality and it not fit for purpose.

It would have been helpful for the LVIA to identify which key landscape characteristics and SLQs of the LLTNP, Loch Rannoch and Glen Lyon NSA and the River Earn (Comrie to St Fillans) NSA that would be notably affected during the day, would progress into night-time effects or otherwise. We consider this a notable omission from the assessment.

2.1 NatureScot's appraisal of effects on SLQs of the LLTNP

We consider the following SLQs are those likely to experience adverse effects resulting from the introduction of the proposed development, some of these effects are significant and adverse:

1.0 General Qualities

- SLQ 2. Wild and rugged highlands contrasting with pastoral lowlands
- SLQ 7. Tranquillity
- SLQ 8. The easily accessible landscape splendour

4.0 Breadalbane

- SLQ 9. Steep mountains and long glens
- SLQ 11. A landscape of distinctive glens and straths
- SLQ 14. Wide and straight Loch Earn

SLQ 2. Wild and rugged highlands contrasting with pastoral lowlands and SLQ 9. Steep mountains and long glens

Given that both these SLQs provide a similar narrative on the highlands and mountains they are grouped and considered together.

While we would generally agree with the applicant's assessment that significant adverse effects would be largely focused on the wild and rugged highlands quality, the proposed development would affect the contrast between lowland and highland gained from some lower elevations and the transition of these SLQs experienced when traversing key summits within ZTV coverage. From lower elevations this would include some areas on the southern side of Loch Earn where some of the turbine hubs and blades would be seen in northward looking views against the skyline formed in part by Creag Meacan 367 m AOD (Viewpoint D: Caravan Park at Ardrostan) encroaching on Loch Earn below.

The wild and rugged highland quality is well expressed across the hills and mountains within the Breadalbane area of the LLTNP with the site forming of part the middle distance intervisible between the River Earn (Comrie to St Fillans) NSA to the east and the Loch Rannoch and Glen Lyon NSA to the north, experienced from: *"Individual well known summits"* including Ben Vorlich (Viewpoint 7). The slopes and summits provide a degree of physical challenge and sense of remoteness due to their elevation and the experience of climbing slowly for several hours, gradually leaving behind the sparsely settled straths below.

In northward looking views from key summits including Ben Vorlich and Stuc a'Chroin and eastward looking views from summits including Meall an t-Seallaidh (Viewpoint 22) and Meall na Samhna (Viewpoint 11) the proposed development would introduce a large scale vertical man-made focal point into an area of undeveloped uplands devoid of wind farm development. This would erode the perception of wild and rugged highlands, that: *"the hills dominate the scene, with human activity constrained"* and diminish the sense of achievement gained from the physical challenge of climbing these popular summits.

The proposal would adversely affect the perceived wildness of upland landscapes defined by SLQs 2 and 9. These effects are considered to be significant and adverse on the appreciation of wild and rugged highlands and mountain qualities of SLQ 2 and SLQ 9.

SLQ 7. Tranquillity

From the aforementioned accessible high points within approximately 16 km this quality is well expressed, where: *“uncrowded places where there is a predominance of natural sounds and sights”* and a *“sense of peacefulness is enhanced by the small scale of human settlement within the expansive landforms, and by the general absence of large-scale development”* are sought and experienced by walkers visiting the slopes and summits within Breadalbane. Although there is some evidence of man-made influences including wind farms seen from elevated positions such as Ben Vorlich (Viewpoint 7) and Meall an t-Seallaidh (Viewpoint 22) these are seen in successive views away from the site of the proposed development which forms part of the wider undeveloped upland plateau and helps to contribute to qualities of tranquillity experienced from summits and slopes.

Activity and movement are focussed within some of the glens and lower lying areas, while the uplands are generally quiet with a strong sense of naturalness. The proposed development would introduce a large-scale wind farm highly visible in views from key slopes and summits, evident in northward and eastward looking views between other designated landscapes. The resultant movement of blades would distract and detract from the sense of naturalness, stillness and tranquillity currently experienced from these locations in clear contrast with the current: *“general absence of large-scale development”*.

The proposal would notably detract from the current sense of tranquillity experienced from a number of key summits and the movement of blades would notably distract from these otherwise still landscapes. These effects are considered to be significant and adverse on the appreciation of SLQ 7.

SLQ 8. The easily accessible landscape splendour

Relating to the LLTNP and its hills accessibility from major: *“centres of population within the Central Belt”* and *“... a prime tourist destination, and an end in itself, with many not venturing further into the Highlands beyond”*. It is also a major destination for visitors from all over the world and as such a tourist destination. Hills within Breadalbane such as Ben Vorlich (Viewpoint 7) are very well known and well visited.

Large numbers of people visit the slopes and summits within Breadalbane to enjoy the scenic panoramas and experience the sense of expansiveness and space created by the nationally designated composition of hills, lochs, and receding layers of hills. The introduction of a large-scale wind farm into an upland area devoid of development of this nature would notably detract from the grandeur and splendour of the mountain landscape. Visitors to hills within Breadalbane would experience views of the proposed turbines and significant adverse effects when looking northward towards the Glen Lyon NSA and Cairngorms beyond and eastward when looking back into the LTTNP and the River Earn (Comrie to St Fillans) NSA.

The proposed development would introduce an incongruous man-made element interrupting the synergy of the upland landscape and northward and eastward looking parts of some of the dramatic panoramas distinctive to many Breadalbane hilltops, ridges and slopes. These effects are considered to be significant and adverse on the appreciation of SLQ 8.

SLQ 11. A landscape of distinctive glens and straths and SLQ 14. Wide and straight Loch Earn

Breadalbane SLQs 11 and 14 are grouped and considered together given some of the similar qualities relating to glens and straths.

These SLQs are well expressed within Breadalbane and the western side of Strathearn with: *“uninhabited side glens”* and *“Landmarks natural and man-made, ancient and modern, contributing to the individual sense of place”* found within 15 km of the proposed development either within full or partial ZTV coverage. The distinctive glens and straths are experienced during ascent and descent from key summits including from Glen Vorlich climbing Ben Vorlich (Viewpoint 7) where the undeveloped nature of the site helps contribute to a sense of lack of habitation. From Glen Kendrum which forms in part one of the possible ascents and descents for high point Meall an t-Seallaidh (Viewpoint 22) provides appreciation of: *“Wide and straight Loch Earn”*.

As shown by Viewpoint 21: St Fillans Hill and Wireline D. Caravan Park at Ardrostan some of the turbine hubs and blade tips would impinge on *“Landmarks natural and man-made”* and areas of the: *“ground between the loch and the hill slopes”*. From other elevated positions within the glens including from Glen Vorlich and Glen Kendrum the proposed development would introduce a new man-made focal point detracting from the transitions between qualities of the lower straths and glens of SLQ 11 / SLQ 14 and the higher wild rugged highlands and mountains of SLQ 6 / SLQ 9 as experienced on the ascents and descents of key summits.

These effects are considered to be significant and adverse on the distinctive glens and straths quality of SLQ 11 and adverse but not significant effect on SLQ 14.

2.2 Effects of visible aviation lighting on the SLQs of the LLTNP

In preparing this advice we considered views from Ben Vorlich at dusk March 19th, 2025, where we encountered hikers visiting the summit to experience the sunset. From the northern slopes, we noted the limited levels of baseline lighting at lower elevation on the northern side of Loch Earn.

Under the 2000 candela aviation lighting scenario we consider that daytime effects would extend into night-time effects on SLQs 2, 7, 9 and 11 where the turbine lighting would detract from: *“the hills dominate the scene, with human activity constrained”* would notably affect the: *“sense of peacefulness”* and would impinge on the transitional experience of *“uninhabited side glens”* when descending key summits at dusk. We consider that under this scenario that areas of Breadalbane where these SLQs are experienced and would be affected by night-time lighting would include Ben Vorlich neighbouring Munro Stuc a'Chroin, the ridge formed between Cam Chreag, Meall an t-Seallaidh, and Auchtuohmore Hill, Creag Mac, the south eastern side of Loch Earn, Glean Fhuarchois and Fin Glen, western elevated sides of Glen Vorlich, the north western side of Glen Ample and the elevated eastern side of Glen Kendrum. These are areas people visit at night to experience the sunset.

We consider that significant adverse daytime effects on LLTNP SLQs 2, 7, 9 and 11 would extend into significant adverse night-time effects under the 2000 candela light scenario where the aviation lights (when visible) would introduce night-time lighting into an open upland area devoid of this type of lighting.

2.3 Cumulative effects on the SLQs of the LLTNP

The introduction of scoping Glen Lednock directly east of the proposed development would extend the presence and influence of wind farm development experienced from slopes and summits within Breadalbane within ZTV coverage. We consider that where visible both the proposed development and scoping Glen Lednock would read as one large wind farm. While Glen Lednock is likely to have a greater effect given the larger number of turbines (25) and larger height (220m to blade tip) the proposed development would extend the portion of available views affected.

We consider that under a scenario that would result in the introduction of both the proposed development and Glen Lednock would result in a significant adverse cumulative effect on SLQs 2, 7, 8, 9 and 11.

2.4 Summary of effects on SLQs of the LLTNP

The location, size and scale of the proposed development represents a step change in proximity and prominence of wind farms to the northeastern area of the LLTNP. This is an area currently devoid of wind farm development with the closest operational wind farms over 15 km away to the south and northeast.

The proposed development either individually or cumulatively with scoping Glen Lednock would significantly affect five SLQs of the LLTNP. Significant adverse daytime effects extending into night-time effects would be to a degree that would result in an evident and noticeable material change to the SLQs across key slopes and summits of Breadalbane such that the objectives of the designation and overall integrity would be compromised.

The hills and ridges north of Glen Tarken provide a layered upland composition with a strong visual relationship with other nationally designated landscapes and other notable high points within the wider landscape. While the turbine height and number could be reduced, accounting for the sites' location north of Glen Tarken which is inter visible across a large geographical extent of many slopes and summits within the Breadalbane area of the LLTNP, it is considered unlikely that significant effects identified could be notably reduced.

We therefore consider that these effects are unlikely to be overcome through re-design or removal of turbines. We advise that the proposed development does not meet Policy 4 c) of National Planning Framework 4 (NPF4).

3.1 NatureScot's appraisal of effects on SLQs of the Loch Rannoch and Glen Lyon NSA

We consider the following SLQs are those likely to experience adverse effects resulting from the introduction of the proposed development, some significant and adverse:

- SLQ 3. A combination of natural and cultural beauty
- SLQ 5. Secluded side glens and ancient shielings
- SLQ 6. The wild summits
- SLQ 12. The dominance of Ben Lawers

SLQ 3. A combination of natural and cultural beauty and SLQ 5. Secluded side glens and ancient shielings

These SLQs provide some similar narrative concerning human influence experienced from the NSA and are therefore grouped together.

Relating to: *"The mountain ranges are timeless and unchanging in comparison to the small scale human activity on the lower ground. They frame the scenic views and panoramas gained from within the NSA and are the focus or backdrop of views into the NSA" and "Development and human activity is centred along the two main glens running east-west, and most roads also follow these".* The introduction of the proposed development would be incongruous to the existing relatively small scale of human influences presently experienced within this NSA and would where visible from higher (Viewpoint 8: Ben Lawers) and lower elevations (Viewpoint 19: Lochan na Lairige pass) introduce a large scale wind farm that would be seen as a new focal point above Loch Tay.

Effects are considered to be significant adverse on the appreciation of SLQ 3, where the: "combination of natural and cultural beauty" are experienced within part of the Lochan na

Lairige pass, and from the slopes and summit associated with the Ben Lawers group and the Tarmachan ridge.

Some effects on SLQ 5 are considered adverse but not significant given the short section of the Lochan na Lairige pass that would be affected.

SLQ 6. The wild summits

The wild summit quality is well expressed across the Ben Lawers group and Tarmachan ridge and actively sought by walkers as: *“A climb to the summits is a journey from habitation into a wild landscape of ridges, corries and cliffs, seemingly remote from civilisation and at the mercy of the elements”*.

The undeveloped open upland plateau of the site seen in the middle distance of southward looking views with the hills of the LLTNP in the background helps contribute to the wider sense of the remote. The proposed development would introduce a large-scale wind farm seen constantly in southward looking views during the climb on southern slopes within approximately 11 to 14 km above Loch Tay, this would erode the sense of journey from habitation and being seemingly remote from civilisation.

These effects are considered to be significant and adverse on the appreciation of the wild summits of the Ben Lawers Group and the Tarmachan ridge reflective of SLQ 6.

SLQ 12. The dominance of Ben Lawers

Relating to the: *“...high massif of Ben Lawers and its associated peaks, together with the more uneven ridge of the Tarmachan range to the west, dominate the landscape around Loch Tay. The open hills provide a dramatic and contrasting backdrop to the farmed and wooded shores of the loch”*. As shown by Viewpoint 8: Ben Lawers in southward looking views existing operational wind farms Calliachar and Griffin are seen as very distant features over 20 km away. Walkers actively seek: *“internationally important”* Ben Lawers and associated summits for the: *“spectacular vantage point for vistas to the surrounding highlands, and also down to the gently curving Loch Tay”*.

The introduction of the proposed development in southward looking views above Loch Tay would introduce a dominant new contemporary focal point which would be seen from the very popular Ben Lawers Group and the Tarmachan ridge and would detract from the key focus across Loch Tay.

Looking south from some summits within the Ben Lawers group including An Stùc and Meall Garbha the proposed development would be seen with Ben Lawers in a similar portion of view looking southward detracting from the *“dominance of Ben Lawers”*.

These effects are considered to be significant and adverse on the appreciation of SLQ 12.

3.2 Effects of visible aviation lighting on the SLQs of the Loch Rannoch and Glen Lyon NSA

Under the 2000 candela aviation lighting scenario we consider that daytime effects would extend into night-time effects on SLQs 2, 6 and 12 where the turbine lighting would diminish the experience of: *“the mountain ranges are timeless and unchanging in comparison to the small scale human activity on the lower ground”* the journey from: *“habitation”* the vista across Loch Tay and intervisibility between summits across the Ben Lawers group. We consider that under this scenario that areas where these SLQs are experience and would be affected by night-time lighting would include five of the other six Munros within the 'Ben Lawers group' - Beinn Ghlas, Meall Garbh, Meall Corranaich, An Stùc, and Meall Greigh, the Tarmachan ridge, the Lochan na Lairige pass and areas of the Ben Lawers National Nature Reserve. These are areas people visit at night to experience the sunset.

We consider that significant adverse daytime effects on the Loch Rannoch and Glen Lyon NSA SLQs 2, 6, and 12 would extend into significant adverse night-time effects the 2000 candela where the aviation lights (when visible) would introduce night-time lighting into an open upland area devoid of this type of lighting.

3.3 Cumulative effects on the SLQs of the Loch Rannoch and Glen Lyon NSA

The introduction of scoping Glen Lednock directly east of the proposed development would extend the presence and influence of wind farm development experienced from the Ben Lawers group, the Tarmachan ridge and Lochan na Lairige pass. We consider that where visible both the proposed development and scoping Glen Lednock would read as a single wind farm. Although we consider that Glen Lednock is likely to have a greater effect given the larger number of turbines (25) and larger height (220m to blade tip).

We consider that should Glentarken and Glen Lednock be constructed, significant adverse cumulative effect on SLQs 3, 5, 6, and 12 would occur.

3.4 Summary of effects on SLQs of the Loch Rannoch and Glen Lyon NSA

The location, size and scale of the proposed development represents a step change in proximity and prominence of wind farms south of the Loch Rannoch and Glen Lyon NSA. This is an area currently devoid of wind farm development with the closest operational wind farms over 20 km away to the south.

The proposed development individually would affect three SLQs and cumulatively with Glen Lednock would significantly affect four SLQs of this NSA. Significant adverse daytime effects extending into night-time effects would be to a degree that would result in an evident and noticeable material change to the SLQs across popular slopes and summits within the Loch Rannoch and Glen Lyon NSA such that the objectives of the designation and overall integrity would be compromised.

While the turbine height and number could be reduced, accounting for the sites' location north of Glen Tarken which is inter visible across key slopes and summits, it is considered unlikely that significant effects identified could be notably reduced.

We therefore consider that these effects are unlikely to be overcome through re-design or removal of turbines. We advise that the proposed development does not meet Policy 4 c) of National Planning Framework 4 (NPF4).

4.1 NatureScot's appraisal of effects on SLQs of the River Earn (Comrie to St Fillans) NSA

We consider the following SLQs are those likely to experience adverse effects resulting from the introduction of the proposed development, some significant and adverse:

- SLQ 1. A harmonious combination of highland and lowland
- SLQ 2. An enclosed and unified strath
- SLQ 8. The viewpoint of Dundurn, St Fillans Hill

The River Earn (Comrie to St Fillans) NSA encompasses a relatively small geographical area within the upper western part of Strathearn which: *"lies at the conjunction of highland and lowland scenery and the variety of landscape elements that derive from this combination result in a very distinctive character of pleasing appearance"*. A small western part of this NSA overlaps the LLTNP.

SLQ 1. A harmonious combination of highland and lowland

From higher elevations within ZTV coverage within the western part of the River Earn (Comrie to St Fillans) NSA the site forms an important part of the backdrop of layered hills seen in northward

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looking views in front of some of the background summits within the Loch Rannoch and Glen Lyon NSA as shown by Viewpoint: 20 Mor Bheinn (Ben Ghlas and Ben Lawers right of image and Meal nan Tarmachan left of image). Experience of how the: *“lowland features soften the harsher highland elements, resulting in a harmonious and aesthetically pleasing landscape of great charm”* are well expressed from the slopes and summits within the western part of this NSA including from Mor Bheinn 640 m AOD (Viewpoint 20) with similar views gained from the northern sides of Am Bioran 616 m AOD further west.

We consider that from these higher elevations that the proposed turbines given the height and horizontal spread (with some turbine hubs and blades seen on the skyline) would notably affect the perceived scale of the settled lowlands below and interrupt the undeveloped existing view of the intermediate uplands and background highlands within the Loch Rannoch and Glen Lyon NSA.

While lower elevations where SLQ 1 is experienced would remain unaffected we consider that given the few high points within this NSA which are clustered to the west would be significantly and adversely affected where the: *“harmonious combination of highland and lowland”* are experienced while climbing the slopes and summits within the western part of the NSA.

SLQ 2. An enclosed and unified strath and SLQ 8. The viewpoint of Dundurn, St Fillans Hill

Given some of the similarities in description these SLQs are considered together. As shown by Viewpoint 21: St Fillans Hill the: *“feeling of enclosed and encircled space”* is well expressed from the slopes and low summit of St Fillans Hill which offers: *“grand views of the ordered landscape of Strathearn”*. As shown by Viewpoint 21 some of the proposed turbine hubs and blades would be seen in north westward looking views against the skyline above Strathearn from St Fillans Hill impinging on the sense of enclosure and detracting from the *“grand views”*. Similar views affecting the sense of enclosure would be experienced when ascending and descending the high points (Mor Bheinn and Am Bioran) and within the western part of this NSA.

We consider that given that much of the proposed development is screened by intervening landform within lower lying areas of the NSA that effects on SLQ 2 and SLQ 8 would be adverse and not significant.

4.2 Effects of visible aviation lighting on the SLQs of the River Earn (Comrie to St Fillans) NSA

In terms of assessment viewpoints within the River Earn (Comrie to St Fillans) NSA we largely agree with the significant adverse night-time effects reported for Viewpoint: 20 Mor Bheinn approximately 7.5 km southeast. We disagree with the not significant night-time effects reported for Viewpoint 21: St Fillans Hill. We consider that under the 2000 candela light scenario that the aviation lighting when visible experienced from Viewpoint 21: St Fillans Hill would further impinge on the low light levels within the western side of Strathearn below given the proximity of the turbines, approximately 5.3 km northwest.

We consider that significant adverse daytime effects on the River Earn (Comrie to St Fillans) NSA SLQ 1 and not significant adverse effects on SLQ 8 would extend into significant adverse night-time effects under the 2000 candela where the aviation lights (when visible) would introduce night-time lighting into an open upland area devoid of this type of lighting and impinge on the low baseline light levels of enclosed Strathearn.

4.3 Cumulative effects on the SLQs of the River Earn (Comrie to St Fillans) NSA

As shown by Viewpoints 20 and 21 scoping Glen Lednock would further extend the presence and influence of visible wind farm development directly east of the proposed development. We largely agree with the applicant that significant cumulative effects would be experienced from Mor Bheinn and that from St Fillans Hill the cumulative effect would be significant and adverse where scoping

Glen Lednock would extend the number of turbines breaking the skyline further impinging on Strathearn below.

It should be noted that as shown in Figure 5.16c - Cumulative Zone of Theoretical Visibility Glen Lednock and Proposed Development that scoping Glen Lednock could introduce further visibility of wind farm development into a large central lower lying portion of this NSA around Drumlochan Wood and the River Earn, with potential to affect other SLQs.

We consider that should Glentarken and Glen Lenock be constructed significant adverse cumulative effects on SLQs 1 and 8 and to a lesser degree SLQ 2 would occur.

4.4 Summary of effects on SLQs of River Earn (Comrie to St Fillans) NSA

We consider that on its own the proposed development would have a significant adverse effect on SLQ 1. As daytime effects progress into night-time effects, we consider that the proposed development would result in significant adverse night-time effects on SLQ 1 and 8. Cumulatively with Glen Lednock we would anticipate significant adverse effects on SLQ 1 and 8.

Although there would be significant adverse effects on some of the SLQs of the River Earn (Comrie to St Fillans) NSA either individually or cumulatively effects would be largely limited to higher elevations within western parts of the NSA. We note that the majority of the lowland area of this NSA would not be adversely affected and therefore consider that the overall integrity of the River Earn (Comrie to St Fillans) NSA is unlikely to be compromised by the proposed development.

5. Conclusion

The proposed site is part of a wider area of layered open upland summits and plateaux which plays an important role in occupying the uninterrupted middle distance intervisible from key slopes and summits within three nationally designated landscapes.

The location, size and scale of the proposed development represents a step change in prominence and proximity of wind farms to the LLTNP, the Loch Rannoch and Glen Lyon NSA, and the River Earn (Comrie to St Fillans) NSA. The proposed development individually would significantly adversely affect five SLQs of the LLTNP, three SLQs of the Loch Rannoch and Glen Lyon NSA and one SLQ of the River Earn (Comrie to St Fillans) NSA. Cumulatively with scoping Glen Lednock the proposal would significantly adversely affect five SLQs of the LLTNP, four SLQs of the Loch Rannoch and Glen Lyon NSA and two SLQ of the River Earn (Comrie to St Fillans) NSA.

These impacts would be to a degree that would result in an evident and noticeable material change to the SLQs of the LLTNP and the Loch Rannoch and Glen Lyon NSA such that the objectives of these designations and overall integrity would be compromised.

While the turbine height and number could be reduced, accounting for the sites' location north of Glen Tarken which is inter visible between key slopes, summits and ridges within these designated landscapes, it is considered unlikely that significant effects identified could be notably reduced.

We therefore consider that these effects are unlikely to be overcome through re-design or removal of turbines.