

Balnespick Wind Farm

Environmental Impact Assessment Report Non-Technical Summary

January 2025



1

Contents

Background	2
Purpose of the Proposed Development EIA Report	2
The Proposed Development	4
Indicative Construction Programme	6
Design Process	7
Alternatives	
Community Ownership and Benefit	9
Consultation	
Landscape and Visual	11
Ornithology	
Ecology	13
Geology, Peat Hydrology and Hydrogeology	14
Cultural Heritage	
Noise and Vibration	
Traffic and Transport	15
Socio-Economic, Tourism and Recreation	
Aviation and Radar	17

Introduction

Background

- This document is the Non-Technical Summary (NTS) of the Environmental Impact Assessment (EIA) Report which supports an application made by Fred. Olsen Renewables Ltd. (the Applicant).
- The Applicant is applying to the Scottish Ministers for Section 36 (S36) consent and deemed planning permission, under the terms of the Electricity Act 1989 and the Town and Country Planning (Scotland) Act 1997, for permission to construct and operate Balnespick Wind Farm (hereafter referred to as the "Proposed Development"), located approximately 5 km east of Tomatin and 6 km north-west of Carrbridge in The Highland Council (THC) area (refer to Figure 1).
- 3. Renewable energy is a key factor in helping Scotland reach its target of Net Zero by 2045. The Proposed Development would make a meaningful contribution to those national targets for the generation of renewable energy and reduction in greenhouse gas emissions and contribute towards sustainable economic growth in the Highlands and Scotland as a whole.

Purpose of the Proposed Development EIA Report

- 4. ITPEnergised (now part of SLR) was appointed by the Applicant to assess the environmental impacts of the Proposed Development in accordance with The Electricity Works (Environmental Impact Assessment (Scotland) Regulations 2017.
- 5. The EIA process is reported in an EIA Report, which describes the methods used to assess the beneficial and adverse environmental impacts predicted to result from the construction, operation and decommissioning of the Proposed Development. Where appropriate, it also sets out mitigation and enhancement measures designed to prevent, reduce and, if possible, offset any significant adverse environmental impacts as well as delivering biodiversity enhancement. An assessment of residual effects, those expected to remain following implementation of mitigation measures, is also presented. This document is intended to present a summary of the findings of the EIA Report in non-technical language.

Availability of the EIA Report

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6. Hard copies of the EIA Report are available by request from:

Fred. Olsen Renewables Ochil House Springkerse Business Park Stirling FK7 7XE Email: <u>communities@fredolsen.co.uk</u> Website: <u>https://www.balnespickwindfarm.co.uk/</u>

- 7. Electronic copies of the EIA Report can be accessed at http://www.energyconsents.scot/
- 8. The cost of a hard copy of the EIA Report Volumes 1 to 5 is £1,800. In addition, all documents are available (as a PDF for screen viewing) on a USB for £15. The price of the hard copy reflects the cost of producing all of the Landscape and Visual photographs at the recommended size. As such, a USB version is recommended.

Representations to the Application

9. Any representations on the S36 application should be made directly to the Scottish Government Energy Consents Unit as follows:

Energy Consents Unit Scottish Government 4th Floor 5 Atlantic Quay 150 Broomielaw Glasgow G2 8LU Email: representations@gov.scot

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Web: www.energyconsents.scot/Register.aspx

Site Location and Description

- 10. The Proposed Development site ("the site") lies approximately 5 km east of Tomatin and 6 km north-west of Carrbridge in The Highland Council (THC) area (refer to **Figure 1.1**). The approximate site centre is British National Grid (BNG) 286646 829834.
- 11. The site area is approximately 1,063 hectares (ha) and comprises upland moor. There are two fairly prominent hill features, separated by the Allt Loisgte watercourse.
- 12. There are seven Scheduled Monuments within the 5 km of the site. The site is immediately adjacent to the boundary of the Cairngorms National Park (CNP) and approximately 14 km north of the Cairngorm Mountains National Scenic Area (NSA). It is approximately 9.8 km northeast of the Monadhliath Wild Land Area (WLA) and 18.3 km north-west of the Cairngorm WLA.
- 13. No residential properties lie within the site boundary. The closest residential properties are Balvraid Lodge (1.15 km west from the site boundary and 3.10 km from the nearest turbine) and Balmore (1.85 km west from the site boundary and 3.65 km from the nearest turbine).

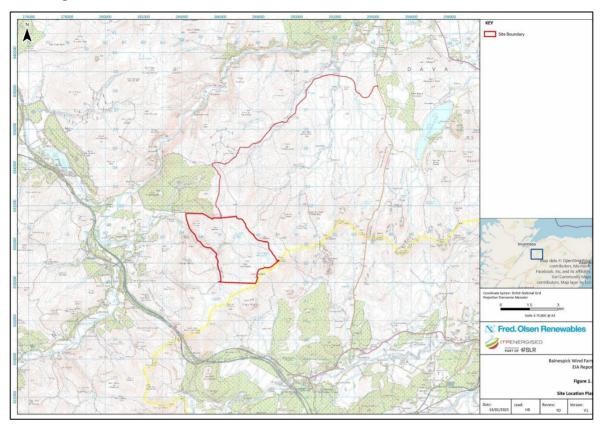
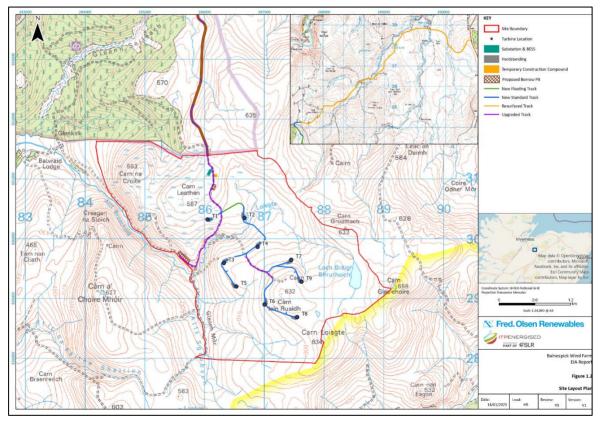


Figure 1 – Site Location

Figure 2 – Site Layout



The Proposed Development

- 14. The Proposed Development will comprise nine wind turbines up to 200 m tip height, with a total overall capacity of approximately 64.8 megawatts (MW), supported by additional energy storage provision (from an on-site battery storage facility) with an output capacity of up to 10 MW. The associated infrastructure will include: site access, access tracks; crane hardstandings; underground cabling; on-site substation and maintenance building; temporary construction compound; batching plant; and potential excavations/borrow pit workings. The proposed layout is illustrated on **Figure 2**.
- 15. Although the layout and locations of the tracks, substation etc. have been determined through an iterative environmentalbased design process (refer to the Site Selection and Design section below), there is the potential for the precise locations to be altered through micro-siting allowances prior to or during construction. A micro-siting allowance of up to 100 m in all directions is being sought in respect of all infrastructure, to suitably respond in the event that pre-construction surveys identify unsuitable ground conditions or environmental constraints that could be avoided by relocation. No micrositing will be undertaken that results in a significant adverse effect where there would otherwise not be one.
- 16. As mentioned previously, the Proposed Development will comprise nine wind turbines. Each of the wind turbines will comprise the following components: three blades; tower; nacelle; hub and transformer and switchgear. The wind turbines will be of a typical modern, three-blade, horizontal

Number of Turbines: 9

Dimensions: Maximum height of 200 m to blade tip

Operational Lifespan: 35 years

Generation Capacity: Around 7.2 MW per turbine or 64.8 MW in total

Energy Storage: On site energy storage facility of around 10 MW output

Community Benefit: £324,000 per year or £11.3 million in total*

Energy Generated: Provide electricity for approximately 66,455 average Scottish households*

Principal Access: Via the B9007

*Based on 9 x 7.2 MW turbines

axis design in semi-matt white or light grey with no external advertising or lettering except for statutory notices. For the purposes of the EIA, the turbine parameters for the Proposed Development have a maximum overall height (to blade tip) of 200 m, with a rotor diameter of 162 m and a hub height of 119 m. The rotor diameter and hub height of the final selected turbine model may differ from these values, however the turbine tip height will not exceed 200 m.

- 17. To enable the construction of the turbines, a crane hardstanding area (crane pads and laydown area) at each turbine location will be required to accommodate assembly cranes and construction vehicles. The crane hardstandings will remain in place during the lifetime of the Proposed Development to facilitate maintenance work.
- 18. The Proposed Development will be accessed from the B9007 via the existing access junction for the operational Tom Nan Clach Wind Farm, which is located approximately 7.5 km to the south of its junction with the A939 at Ferness. The access junction will provide access to the site for all AILs associated with the turbine deliveries, as well as access for heavy goods vehicles (HGVs) delivering construction materials and general site traffic. Access will utilise the existing track for the operational Tom Nan Clach Wind Farm and will proceed to enter the site via a 3.2 km new stretch of access track. During operation, the site entrance will be gated to prevent unauthorised access.

- 19. A Transport Assessment (**Chapter 11** of the EIA Report) has been undertaken which provides detail on access routes to the site for construction vehicles and provides an estimate of trip generation during construction. The Transport Assessment includes a review of the proposed route, construction traffic impacts, and an abnormal load route review. See the Traffic and Transport section below for a summary of the transport assessment findings.
- 20. The construction and material storage compound will be required during the construction period. The location of this compound is shown in **Figure 2**. The compound will comprise an area of approximately 2,500 m². On completion of construction works, all temporary structures will be removed and the compound area will be restored.
- 21. The electrical power produced by the individual turbines will be fed to an onsite substation and energy storage facility via underground cables. The substation and energy storage facility will be approximately 50 m by 100 m to incorporate a substation and control room building, and energy storage facility. The substation and control room building will accommodate all the equipment necessary for automatic remote control and monitoring of the Proposed Development.
- 22. The battery and energy storage system (BESS) with an output of around 10 MW is proposed adjacent to the control building. The footprint of the energy storage facility will be approximately 500 m².
- 23. The Proposed Development will include areas for habitat management and enhancement activities. These are outlined below:
 - Restoration of the peatland habitats within the site;
 - Enhancing existing juniper habitat;
 - Encouraging dwarf birch; and
 - Riparian broadleaved planting.
- 24. There are further details on these measures provided in **Appendix 7.2** the EIA Report.

Indicative Construction Programme

25. The Proposed Development will be constructed over a period of approximately 24 months as shown in **Table 1**.

Table 1: Indicative Construction Programme

Task	Year 1 (quarters)				Year 2 (quarters)			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Mobilisation								
Access & Site Tracks								
Foundations								
On-site Cabling								
Substation civils works								
Substation construction								
Crane Hardstanding								

Task	Year 1 (quarters)				Year 2 (quarters)			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Turbine Delivery								
Turbine Erection								
Commissioning & Testing								
Site Reinstatement								

- 26. Normal construction hours will be between 07:00 and 19:00 Monday to Friday and 07:00 and 13:00 on Saturdays. These times have been chosen to minimise disturbance to local residents. It must, however, be noted that out of necessity due to weather conditions and health and safety requirements, some generally quiet activities, for example abnormal load deliveries (which are controlled by Police Scotland) and the lifting of the turbine components, may occur outside the specified hours stated. Details of the construction programme will be provided to the Highland Council in the Construction Environmental Management Plan (CEMP) and the Construction Traffic Management Plan (CTMP) prior to the commencement of construction.
- 27. The lifetime of the Proposed Development is envisaged to be 35 years from the final commissioning to commencement of decommissioning. If any life extension or repowering was to be considered, that would be subject to a new planning process with the appropriate level of environmental assessment and scrutiny at that time.

Site Selection and Design

- 28. The site was identified by the Applicant as being suitable for a wind energy development for the following key reasons:
 - Strong wind resource;
 - Suitable topography;
 - Distance to residential properties over 3 km from turbine development area;
 - No Scheduled Monuments or other designated heritage assets within the site;
 - Good opportunity for genuine community engagement and benefit;
 - Opportunities for peatland habitat restoration and biodiversity enhancement, given extensive historical modification and degradation of the peat resource and peatland habitat at the site;
 - Opportunity to make use of existing infrastructure and tracks put in for construction of the Tom Nan Clach Wind Farm; and
 - The potential for the development to positively and significantly contribute to regional and national renewable energy and carbon reduction targets.

Design Process

- 29. Current best practice guidance contained in the 'Siting and Designing Wind Farms in the Landscape' (SNH, 2017) guidance provides a framework for the consideration of key design issues including turbine size, layout composition, wind farm design in relation to landscape character and designing for multiple wind farms.
- 30. The Applicant adopted the following principles during the design iteration process where possible to ensure the final design of the Proposed Development was the most suitable for the site:

- Avoid inconsistent turbine spacing, such as relatively large gaps, outliers or excessive overlapping turbines to minimise visual confusion and ensure a balanced / compact array from key views;
- Minimise effects on the Cairngorms National Park (CNP) as far as possible;
- Limit turbines within the far eastern extents of the site, for consideration to the setting of heritage assets within 10 km;
- Consider the position of existing and consented wind farm developments in the local area from key views;
- Consider how to utilise the existing topography to reduce the visual impacts of the development from key views;
- Avoid areas of deep peat wherever possible;
- Consideration and avoidance of sensitive habitats where possible;
- Location of watercourses and ground conditions/topography to minimise water crossings and cut and fill requirements;
- Create a scheme which maximises the potential of the site to generate renewable energy;
- Use of existing infrastructure as far as practicably possible; and
- Respect other environmental and technical constraints and associated buffers.

Alternatives

Turbine Layout and Scale

- 31. The Applicant has considered a number of alternative turbine layouts for the Proposed Development (described fully in **Chapter 2** of the EIA Report), developed from an initial desk-based study and survey data and each time taking into consideration information gathered at the site or comments from consultees, as well as the professional judgment of technical experts.
- 32. The iterative process of the Proposed Development design started in 2020, an initial design layout was developed that comprised 29 turbines and sought to maximise wind yield. This has since evolved through the feasibility study process, consideration of information gathered at the site or comments from consultees, as well as the professional judgement of the technical experts. After detailed consideration of environmental constraints, a nine turbine layout with tip height of 200 m has been produced. This final development layout has been designed to maximise renewable energy generation from the site, whilst minimising potential impacts on the environment.

Site Access

- 33. The proposed access to the site has been carefully considered throughout the design process, with several different construction and operational access options being identified and thoroughly considered.
- 34. The Applicant initially looked at entering the site via the existing access track, 2.1 km to the north-east of the site and constructing a new access track to the site. This option was discounted because it was preferred to come from Tom Nan Clach Wind Farm, so that the existing access infrastructure to the B9007 could be utilised.
- 35. Further route options were assessed coming from Tom Nan Clach Wind Farm. The currently proposed route was designed to follow a route which minimises the landscape and visual impacts, increases proximity from forestry and minimises impacts on peat.

Site Tracks

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36. Existing track within the site has been utilised where viable. Where not viable, proposed new tracks within the site have been designed to take into account existing site topography, ground

conditions including peat depth, and to minimise and appropriately locate water crossings. Where crossing areas of deep peat, floating tracks are proposed.

Ancillary Infrastructure

- 37. Borrow pits (i.e. small stone quarries) are required as a source of rock to be used in the construction of the tracks, hardstandings and foundations. Potential locations for the borrow pits were identified based upon a review of geological mapping and site investigation work to target suitable rock types, shallow peat depth, suitable topography, and avoidance of sensitive habitats. The borrow pit locations are also discretely located in the landscape to minimise any additional visual impacts.
- 38. Two borrow pit search areas are included as part of the Proposed Development. Both borrow pit search areas identified benefit from existing tracks leading to them, of which one will require upgrades. Both borrow pit search areas have relatively shallow peat (less than 0.25 m peat depth).
- 39. The location of the construction compounds and substation and energy storage facility have also been considered through the iterative design process and have been sited to avoid watercourses, areas of deep peat and to minimise impacts on sensitive habitats.

Community Benefit

- 40. In line with Scottish Government recommendations, the Applicant has committed to offering £5,000 per installed MW per year in community benefit funding for the local area. The indicative installed capacity of the Proposed Development is approximately 64.8 MW, so this would mean approximately £324,000 going into community benefit funding each year to support local groups and projects. This is an approximate total of **£13 million over the 35-year lifespan** of the Proposed Development.
- 41. The Applicant has undertaken extensive engagement with the communities closest to the site, – discussing at length the opportunities associated with the community benefit fund that Balnespick Wind Farm will deliver.
- 42. The Applicant has followed an approach that is focussed on developing an understanding of community needs and local aspirations. The Community Investment Fund will be distributed to support projects across the communities living in proximity of the Proposed Development. The Applicant is considering a number of potential schemes in order to best meet the needs of the local area, including a Local Energy Discount Scheme to provide local residents with an annual discount on the electricity bills and a Local Energy Efficiency Programme, helping households install energy efficiency measures such as insulation and heat pumps.

Consultation

Statutory Consultation

- 43. The Applicant participated in a formal online Pre-Application Consultation meeting was held on 23 November 2022 with the ECU, The Highland Council (THC), NatureScot, the Scottish Environment Protection Agency (SEPA) and various technical leads, where an introduction to the Proposed Development was given, survey efforts to date, proposed programme, and proposed scope of any future EIA Report.
- 44. A formal EIA Scoping Opinion was requested from the ECU in July 2023, through the submission of an EIA Scoping Report. The EIA Scoping Report contained information on the

current nature and condition of the site, and details of the Proposed Development. It also proposed which environmental impacts would be assessed in the EIA, and the assessment methodologies that would be used.

- 45. The ECU consulted with a variety of statutory and non-statutory consultees (for example the Highland Council, SEPA, NatureScot, and Historic Environment Scotland (HES) among others) before providing an EIA Scoping Opinion in December 2023. A summary of how the Scoping responses were addressed in the final submission is presented in an **EIA Gatecheck Report** that can be found in **Appendix 4.3** of the EIA Report.
- 46. Beyond the formal engagement platforms, the Applicant continued to liaise directly with key stakeholders in order to refine the approach to the EIA Report and develop the site design, where possible and appropriate, to reflect the feedback received. Direct consultation has also been undertaken with specific statutory consultees, to confirm and agree the detailed approach to the technical surveys and assessments on a topic by topic basis.

Public Consultation

- 47. A programme of pre-application community engagement and consultation for the Proposed Development has been undertaken by the Applicant. Communicating information about the project has been at the forefront of engagement and the Applicant has used a number of methods to communicate locally, including sending newsletters to all households within a 10 km radius of the Proposed Development and subsequently the Strathdearn Community Council boundary; launching a dedicated project website (www.balnepsickwindfarm.co.uk) and updates in the 'The Inverness Courier' and 'The Strathspey and Badenoch Herald'. This has been combined with a mixture of face to face meetings, telephone calls and written updates with local community councils, local MSPs and MPs, and key local stakeholders.
- 48. The Applicant has always sought to provide a dedicated point of contact via telephone number and email address and encourage local residents to get in touch. The project website has also provided a useful stream of information about the Proposed Development, including information about the Applicant; potential community benefits; the project background and timeline; a registration facility for local businesses interested in supplying the project; and contact information for the team.
- 49. Two rounds of in-person public exhibitions took place in October 2023 and August 2024. The Round 1 exhibition outlined the draft proposal for the site with the aim to gain initial feedback. Round 2 exhibitions intended to inform the local community of the design changes which had been made and demonstrate how the Applicant had considered the comments received to date.
- 50. A stand-alone **Pre-Application Consultation (PAC) Report** has been prepared which gives details of the correspondence, online and in-person public consultation and other discussions which have taken place with the communities closest to the Proposed Development. The PAC Report also details findings of that work and illustrates the ways in which community engagement has helped identify potential issues arising from the emerging development proposal, and where appropriate, shape the final proposal which is now the subject of an application for S36 consent.
- 51. Engagement with local people, organisations and local businesses continues and will continue after the submission of the S36 application.

Environmental Impact Assessment

- 52. The EIA considers the effects of the Proposed Development during construction, operation and decommissioning on the following topics:
 - landscape and visual (effects on the character of the landscape and views from agreed locations);
 - ecology (the effects on protected habitats, flora and fauna, excluding birds);
 - ornithology (the effects on birds and protected bird habitats);
 - hydrology, geology, hydrogeology and peat (the effects on surface water, groundwater, rocks and soils);
 - cultural heritage (effects on the integrity and setting of historic sites and/or features);
 - traffic and transport (effects from traffic travelling to, and from, the Proposed Development on local roads and receptors);
 - noise (effects on local properties from noise arising from the Proposed Development);
 - socio-economics, tourism, and recreation (effects on the local and national economy, local tourism businesses, and recreation facilities);
 - aviation and radar (effects on civil and military aviation facilities and air space); and
- 53. Chapter 4 of the EIA Report describes the EIA process in more detail.
- 54. For each topic the existing conditions (the baseline) was identified and the effects of the Proposed Development on these conditions assessed (the potential effects). Potential effects are assessed on a scale of negligible, minor, moderate and major, with effects of moderate or major deemed to be 'significant' in the terms of EIA. Mitigation measures have then been proposed to minimise significant adverse effects where required. These mitigation measures are commitments made by the Applicant and their implementation will normally be required by conditions attached to the S36, if granted. Following this, an assessment was undertaken of the effects of the Proposed Development on the existing conditions taking into consideration the committed mitigation measures (the residual effects).
- 55. In addition to the above, the cumulative effects of the Proposed Development, i.e. effects considered in conjunction with other developments in the local area, primarily other wind farms, were assessed.
- 56. A summary of the baseline conditions, the committed mitigation, the resulting residual effects and the cumulative effects for each topic is provided below. Full details of the assessment for each of the topics are provided in **Chapters 6** to **14** of the EIA Report.

Landscape and Visual

- 57. The full assessment of the effects on landscape and visual receptors is provided in **Chapter 6** of the EIA Report.
- 58. There are no international or national landscape designations covering the site. However, the Cairngorms National Park (CNP) is situated adjacent to the southern site boundary, approximately 0.6 km to the south of the nearest turbine. The site is located within the southwestern corner of the Drynachan, Lochindorb and Dava Moors Local Landscape Area (LLA). The Tom nan Clach and Moy wind farms are also situated within the western part of the LLA.
- 59. The Proposed Development is situated on undulating ground that forms part of an elevated plateau comprising upland moorland with a general absence of built structures apart from the Tom nan Clach Wind Farm that sits on the high ground to the north.

- 60. The design of the Proposed Development has sought to minimise landscape and visual effects whilst achieving the technical and commercial requirements to ensure project viability.
- 61. Appropriate distances from all properties and settlements have been maintained to ensure that no property would experience an overbearing visual impact. Mitigation has been designed into the proposed aviation lighting to reduce the intensity of the lights in certain atmospheric conditions by reducing their intensity and attenuating the amount of vertical downwards lighting in order to reduce the visual impact experienced by receptors below the lights.
- 62. The Landscape and Visual Impact Assessment (LVIA) identifies the likely significant effects arising from the Proposed Development on landscape character and visual amenity.
- 63. In terms of landscape character, significant effects would occur within the host character area Landscape Character Type (LCT) 221 Rolling Uplands Inverness. Significant effect would also occur in LCT 221 contained within 5 km to the west and in LCT125 Rolling Uplands Cairngorms within approximately 1 km of the Proposed Development.
- 64. In relation to visual effects, it is accepted that the Proposed Development would be visible from several nearby properties, settlements as well as parts of the surrounding road network and footpath network. It has been assessed that there would be a significant visual effect at three of the 24 representative viewpoints during daylight hours, namely Viewpoint 1 Carn Ghlas-Choire; Viewpoint 5 Creag Ealraich; and Viewpoint 10 Carn nam Bain-tighearna and two of the representative viewpoints during the hours of darkness, namely Viewpoint 1 Carn Glas-Choire; and Viewpoint 10 Carn nam Bain-tighearna.
- 65. The assessments of effects on residential properties and settlements, recreational routes, roads and railways found that none would experience a significant effect.
- 66. In terms of the overall totality of the cumulative landscape and visual effects when the Proposed Development is considered alongside the other operational and proposed developments. Collectively, the operational and proposed developments would serve to result in wind energy being seen as a noticeable feature in many views in the landscape of the wider study area to the west of the Site. The addition of the Proposed Development would serve to reinforce this pattern, albeit extending the significant visual and character effects into a separate area within the landscape.
- 67. In relation to effects on the special landscape qualities of the CNP, it is considered that there would not be any significant effects.
- 68. It is noted that localised significant effects on landscape character and visual amenity are inevitable as a result of commercial wind energy development anywhere in the UK. Whilst the LVIA identified some significant landscape and visual effects it is considered that the landscape has the capacity to accommodate the effects identified, particularly when the consented but as yet unbuilt wind farms in the surrounding landscape are taken into account in the baseline.

Ornithology

- 69. The full assessment of the effects on ornithology is provided in **Chapter 8** of the EIA Report.
- 70. The scope of the ornithological assessment and baseline conditions were determined through a combination of desk study, targeted surveys (including flight activity surveys, scarce breeding bird surveys, black grouse surveys, breeding bird surveys and winter walkover surveys), and consultation with relevant nature conservation organisations. This process established ornithological features that could potentially be affected by the Proposed Development.

- 71. In order to inform the preparation of the ornithological assessment, a desk study and baseline ornithology surveys were undertaken between March 2020 and March 2022, and March to August 2024. All surveys were undertaken following the most relevant industry guidelines and incorporated relevant scoping responses. The Proposed Development is not located within any statutory sites designated for ornithological interests.
- 72. An assessment has been made of the predicted significance of effects of the Proposed Development on ornithological interests. Following survey and assessment species considered to be Important Ornithological Features (IOFs) in the context of the Proposed Development and subject to further impact assessment, following guidance, were golden plover, dunlin, golden eagle and merlin. Following such further assessment (including collision risk modelling for appropriate species), no significant effects are anticipated upon any IOFs.
- 73. Six Special Protection Areas (SPAs) designated for breeding capercaillie were identified within 30 km of the Proposed Development. A screening exercise for Appropriate Assessment (AA) for these SPAs (Kinveachy Forest, Abernethy Forest, Craigmore Wood, Anagach Woods, Cairngorms and Darnaway and Lethen Forest), was carried out.
- 74. It was concluded that the Proposed Development shall not impact on birds belonging to the populations of all the concerning SPAs. It was concluded that there would be no adverse effects on the integrity of all six SPAs considered as a result of the Proposed Development either alone, or in combination with any other plans and projects.
- 75. Controls will be put in place during construction through creation of a site-specific Construction Environment Management Plan (CEMP), Species Protection Plan (SPP) and appointing an Environmental Clerk of Works (ECoW) to monitor adherence to such plans.

Ecology

- 76. The full assessment of the effects on ecology is provided in **Chapter 7** of the EIA Report. This chapter evaluates habitats and non-avian animal species and assesses the predicted significance of effects of the Proposed Development on ecological interests.
- 77. In order to inform the assessment, a desk study was undertaken in 2019. Baseline ecology surveys were undertaken in 2021, 2023 and 2024. All surveys were undertaken following relevant industry guidelines and incorporated relevant scoping responses. The Proposed Development is not located within any statutory sites designated for ecological interests.
- 78. Following survey and assessment, receptors considered to be Important Ecological Features in the context of the Proposed Development, and subject to further impact assessment, following guidance, were dry modified/blanket bog and soprano pipistrelle bats. Following such further assessment no significant effects are anticipated upon these IEFs.
- 79. However, controls will be put in place during construction through creation of a site-specific Construction Environment Management Plan (CEMP), Species Protection Plan (SPP) and appointing an Environmental Clerk of Works (ECoW) to monitor adherence to such plans. Further mitigation in the form of a Biodiversity Enhancement Management Plan (BEMP) to restore dry modified and blanket bog habitats, and to minimise impacts on bats is proposed. It is considered that implementation of these mitigation and biodiversity enhancement measures will reduce the likelihood of impacts on IEFs.
- 80. This assessment predicted no significant effects on all of the Important Ecological Features (IEFs) recorded and no significant cumulative effects on any IEFs

Geology, Peat Hydrology and Hydrogeology

- 81. The full assessment of the effects on geology, peat hydrology and hydrology is provided in **Chapter 9** of the EIA Report.
- 82. This chapter considers the potential impacts of the Proposed Development on the hydrology, geology and hydrogeological environment including peat. The assessment study area is larger in extent than the Site and includes the upper and lower reaches of watercourse catchments.
- 83. A desktop assessment supported by site investigations have been undertaken to identify and characterise the hydrological, geological and hydrogeological environment within the vicinity of the Proposed Development.
- 84. Deep peat and areas of Class 1 peat are present within the site boundary and were identified as a key potential receptor. An extensive peat depth and condition survey campaign was undertaken to locate and characterise the peat so that any potential impacts from the Proposed Development could be reduced as far as possible through site design and avoidance. The Peat Management Plan (**Technical Appendix 9.2** of the EIA Report) outlines the opportunities for the reuse of all excavated peat as part of the site reinstatement and peatland restoration.
- 85. The mitigation measures to avoid or reduce impacts on the identified receptors, include the implementation of a Construction Environmental Management Plan and specific mitigation relating to peat management.
- 86. It has been concluded that, with embedded and additional mitigation there are no likely significant adverse effects related to the Proposed Development in isolation. Furthermore, it has been concluded that there are no cumulative water effects with other developments within the Proposed Development or wider study area or in the same surface catchments.

Cultural Heritage

- 87. The full assessment of the effects on cultural heritage is provided in **Chapter 10** of the EIA Report.
- 88. The assessment identifies the archaeological and cultural heritage value of the site and assesses the likely significant effects on archaeological features and heritage assets resulting from the construction, operation and decommissioning of the Proposed Development.
- 89. The assessment has established the potential for direct and setting effects on archaeological features and heritage assets resulting from the construction, operation and decommissioning of the Proposed Development. The assessment has been informed by a desk-study, walkover survey and site visits to designated heritage assets which could have their setting affected.
- 90. No significant direct physical effects on known heritage assets during the construction phase are predicted. A significant effect is predicted upon Lochindorb Castle, a Scheduled Monument, during the operational phase. A significant cumulative effect on Lochindorb Castle has also been identified. Whilst considered significant in EIA terms, it is concluded that the changes to the factors of setting that contribute to the cultural significance of the monument would allow for adequate retention of the understanding, appreciation and experience of the castle and accordingly there would be no significant impact upon the integrity of the asset's setting.
- 91. There is potential for five non-designated heritage to experience direct physical effects resulting from construction works. Following implementation of mitigation, no significant effect are anticipated. Several assets are close to the Proposed Development and mitigation measures

will be put in place to prevent any accidental impacts resulting from plant movement within the site boundary.

92. This assessment has identified a low potential for archaeological remains of all periods to survive within the site. A programme of paleoenvironmental sampling will be undertaken within the site which may be able to provide information about past environmental conditions within the site and also improve the understanding of the landscape setting of archaeological monuments in the past.

Noise

- 93. The full assessment of the effects of noise is provided in **Chapter 12** of the EIA Report.
- 94. This chapter has considered the potential significance of noise impacts arising from operation of the Proposed Development. Noise impacts associated with the construction phase have been scoped out on the basis that these can be controlled through implementation of good practice measures.
- 95. It is concluded that there will be no significant noise impacts associated with operation of the wind turbines of the Proposed Development, on nearby residential properties. Furthermore, the predicted noise levels at these properties are sufficiently low that no cumulative effect would occur with other nearby developments.
- 96. Noise impacts associated with the proposed BESS and substation have also been assessed as not significant.
- 97. No specific mitigation measures are required or proposed.

Traffic and Transport

- 98. The full assessment of the effects on traffic and transport is provided in **Chapter 11** of the EIA Report.
- 99. This chapter provides an assessment of the potential effects of the Proposed Development on receptors along the transport routes resulting from vehicle movements associated with the construction phase.
- 100. The Proposed Development will take access directly from the B9007 in the form of a priority junction used to access the operational Tom nan Clach Wind Farm.
- 101. The Proposed Development will lead to increased traffic volumes on a number of roads in the vicinity of the site during the construction phase. These will be of a temporary timescale and transitory in nature.
- 102. The peak of construction activity is expected to occur in month eight of the construction programme when there will be an estimated total of 148 vehicle movements per day, comprising 100 Heavy Goods Vehicle (HGV) movements and car and light van movements.
- 103. No link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Proposed Development.
- 104. A sensitivity review was undertaken to inform the planning authorities of possible issues with other relevant schemes in the area, whose construction traffic would impact the study area, should they be constructed concurrently. The review found that there would be more than sufficient spare road capacity to accommodate all schemes being constructed at the same time. It is proposed that any effects of all the sites being constructed at the same time would be

mitigated through the use of an overarching Traffic Management and Monitoring Plan, which can be co-ordinated with The Highland Council (THC).

- 105. With the implementation of appropriate mitigation, no significant effects are anticipated in respect of traffic and transport issues.
- 106. Traffic levels during the operational phase of the Proposed Development will be up to two vehicles per week for maintenance purposes. Traffic levels during the decommissioning of the Proposed Development are expected to be lower than during the construction phase as some elements are likely be left in situ and others broken up onsite.
- 107. The movement of Abnormal Indivisible Loads (AIL) traffic will require small scale and temporary remedial works at a number of locations along identified delivery route.

Socio-Economic, Tourism and Recreation

- 108. The full assessment of the effects on socio-economics, tourism and recreation is provided in **Chapter 13** of the EIA Report.
- 109. This chapter assesses the potential socio-economic, recreation and tourism effects of the Proposed Development.
- 110. The population of the 'Local Area' surrounding the Proposed Development (comprising the electoral wards of Nairn and Cawdor, Badenoch and Strathspey, and Inverness South), and the region of Highland, is both ageing and declining in number, which are common indicators that there are a lack of employment opportunities in the area, since in these circumstances, working age people will tend to leave rural areas in search of economic opportunities elsewhere.
- 111. Accommodation and food services, associated with the tourism industry, accounts for a higher than average level of employment in the Local Area. The area also has above average employment in the construction sector. Similarly, the accommodation and food services sector are overrepresented across Highland when compared to Scotland as a whole, and the region features above average employment in the construction sector. The share of residents in Highland with degree level or equivalent qualifications is below average, suggesting a lack of opportunities in the region.
- 112. During the development and construction phase, it is estimated that the Proposed Development could generate up to:
 - £18.6 million and 197 job years (a job year being equivalent to one person employed for a year) in Highland; and
 - £31.6 million and 349 job years in Scotland (including Highland).
- 113. During each year of the operational phase, it was estimated that the Proposed Development could generate up to:
 - £0.6 million and 4 jobs in Highland; and

- £1.7 million and 13 jobs in Scotland (including Highland)
- 114. In addition to these economic benefits, the Applicant has a memorandum of understanding (MoU) committing to the development of a private wire connection to Tomatin Distillery. Subject to further investigations, this would not only support a local tourism business, but would increase the economic impact of construction by an estimated:
 - £3.3 million and 40 years of employment in Highland; and
 - £5.3 million and 63 years of employment in Scotland (including Highland)

- 115. In preparing the Proposed Development the Applicant has committed to maximising the beneficial effects for the local community by actively engaging with residents and developing a community benefit package worth around £324,000 each year.
- 116. The assessment has identified no significant negative effects. This includes no significant negative effects on local tourism assets (visitor attractions, accommodation providers and routes). This is consistent with the most recent evidence on the relationship between wind farms and tourism.

Aviation and Radar

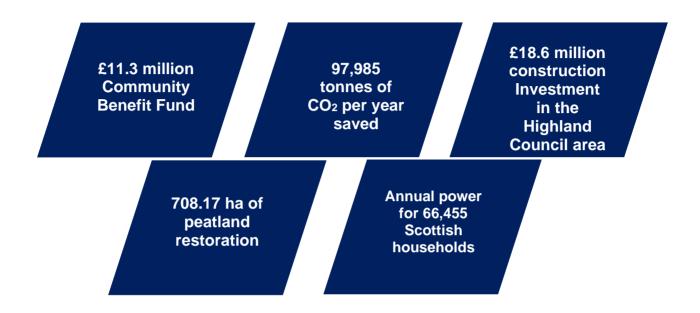
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- 117. The full assessment of the effects on aviation and radar is provided in **Chapter 14** of the EIA Report.
- 118. The site lies 22 km south of Inverness Airport. The Proposed Development does have the potential to affect current or proposed instrument flight procedures (IFPs) at Inverness airport. An IFP assessment has been commissioned to determine if any procedures would be affected. The findings of this work may result in a requirement to amend some procedures prior to the erection of the proposed turbines. In this event the Applicant would work with Highlands and Islands Airport Limited (HIAL) and their procedure designer to revise and implement affected procedures.
- 119. No other aviation impacts are anticipated for all phases of the Proposed Development: commissioning, operation and decommissioning. There are no potential impacts to key military or civil radar installations, the site lies within an area identified as of low priority for military low flying and the Proposed Development is well beyond the limits of safeguarding areas for any navigational aids or radio communication stations.
- 120. Because the turbines are over 150 metres tall, there is a statutory requirement for aviation lighting. The CAA and all other aviation stakeholders have approved a lighting scheme consisting of visible spectrum lighting on five turbines and infra-red lighting on all turbines.

Benefits of the Proposed Development

- 121. The addition of the Proposed Development will deliver the following key benefits:
 - The Proposed Development would contribute to the achievement of UK and Scottish Government targets for renewable electricity generation. The Proposed Development, with a total overall capacity of approximately 74.8 megawatts (MW) would make a valuable contribution to meeting such targets.
 - The Proposed Development would produce an estimated 224,220 megawatt-hours (MWh), annually, enough power to supply approximately 66,455 average Scottish households.
 - The Proposed Development is expected to save approximately 97,985 tonnes of carbon dioxide per year, meaning a total of approximately 3.4 million tonnes over the 35-year operational lifetime of the Proposed Development, through displacement of carbon-emitting generation.
 - Energy generated from renewable sources makes a significant contribution to Scotland and the UK's
 energy security. The Proposed Development will increase national production of renewable energy
 in Scotland while reducing the country's reliance on foreign fossil fuels, generating wealth from our
 own natural resources and improving the country's energy security. With increasing use of electricity,
 e.g. for electric vehicles, it is important that the additional generation capacity to meet that demand
 comes from renewable sources.
 - The Proposed Development will deliver significant biodiversity enhancement through implementation
 of a BEMP. The BEMP includes a total of 708.17 ha for peatland habitat restoration. Other biodiversity
 enhancement activities proposed within the site include enhancing juniper areas, encouraging growth
 of dwarf birch and planting of riparian woodland to increase habitat suitability for fish.

- The Proposed Development will deliver up to £324,000 per annum in Community Benefit Funding, and £11.3 million over its 35-year lifespan (not including indexation).
- The Applicant is committed to a local supplier approach which aims to deliver a significant proportion of construction and operational contracts to local companies.



Conclusion

- 122. This Non-Technical Summary of the EIA Report provides an overview of the EIA undertaken for the Proposed Development. Within **Chapter 15** of the EIA Report a schedule of commitments can be found which details the environmental mitigation measures, summarised above, which the Applicant has committed to implement.
- 123. **Chapter 16** of the EIA Report summarises the potential effects, the mitigation to be implemented and the resulting residual effects. It also provides a summary of the cumulative effects of the Proposed Development in combination with other proposed, consented and operational developments in the local area.
- 124. The final layout has been informed by a robust EIA and lengthy design iteration process, considering potential environmental impacts and their effects, physical constraints, and health and safety considerations. The information used to inform the design iteration process included consultation responses received, baseline data and the impact assessment undertaken.
- 125. Consideration has been given to a range of design issues as well as various environmental, ecological and technical requirements. Predicted environmental effects arising from the Proposed Development have been mitigated as far as possible, if not eliminated during the iterative design process.
- 126. Overall, the Proposed Development is an appropriately designed and sensibly located wind farm which is in line with policies in the local and strategic development plans and conforms to national policy. The Proposed Development has been designed to maximise energy production, within acceptable environmental limits. It will provide a valuable contribution towards the ambitious national targets for electricity generation from renewable sources and contribute towards sustainable economic growth of the local area, the Highlands and Scotland as a whole.

Fred. Olsen Renewables Ltd Ochil House, Springkerse Business Park Stirling FK7 7XE

Phone: +44-20-7963 8904 Telefax: +44-20-7931 7449 Email: communities@fredolsen.co.uk www.fredolsenrenewables.com