BODINGLEE WIND FARM

FEI VOLUME 1 NON TECHNICAL SUMMARY

1. NON-TECHNICAL SUMMARY

INTRODUCTION

1.1 OnPath Energy (Bodinglee Wind Farm) Limited (formerly Banks Renewables (Bodinglee Wind Farm) Limited) ('the Applicant') is proposing to develop Bodinglee Wind Farm (the Revised Proposed Development) on land to the south-east and south-west of Douglas, South Lanarkshire. The Revised Proposed Development comprises up to 35 turbines which would utilise the area's natural wind resource with an estimated generating capacity of 245 megawatts (MW) of renewable electricity. The Revised Proposed Development also comprises a Battery Energy Storage Solution (BESS) of up to 100 MW.

1.2 The Revised Proposed Development has been through an extensive design iteration process to ensure that it represents the optimal development for the Site, balancing the technical and economic requirements whilst minimising environmental effects. The feedback from the community and stakeholder consultation has been fed into this process. The Site is located solely within administrative boundaries of South Lanarkshire Council (SLC).

1.3 This Non-Technical Summary (NTS) summarises the findings of the Further Environmental Information (FEI) submission (May 2025), which forms part of the wider Environmental Impact Assessment Report (2023 EIA Report) and application made in June 2023 to Scottish Ministers through the Energy Consents Unit (ECU) under Section 36 of the Electricity Act 1989. The FEI has been prepared to accompany the application, in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations').

1.4 The FEI collates information and analysis regarding the predicted environmental effects of the Revised Proposed Development. This NTS contains a description the Revised Proposed Development, presents the findings of the assessment of the predicted environmental effects and details the measures taken to prevent and reduce these effects.

THE APPLICANT

1.5 The application is being made by OnPath Energy (Bodinglee Wind Farm) Ltd. OnPath Energy Ltd's development team works with landowners to take renewable and flexible energy projects including onshore wind, solar and battery storage projects from inception to completion, handling all aspects of the planning and delivery process. The Applicant:

- currently owns and operates 252 MW of renewable energy generation across 12 onshore wind farms;
- has developed over 340 MW of renewable electricity generation;
- has secured consent six times for the UK's tallest turbines;
- We have more than 3 GW of renewable energy generation and electricity storage in our pipeline

- We have planning permission for up to 568MW of renewable electricity generation and flexible energy storage projects, with a further 217MW in the planning system.

- Estimates that 114,182 tonnes of carbon dioxide (CO2) has been displaced in the UK electricity grid in 2024 from its renewable energy operations;

- Employs a team of 70+ industry specialists; and

- Over £2 million delivered in community funding from our projects and community bodies in 2024.

ENVIROMENTAL IMPACT ASSESMENT (EIA) AND FURTHER ENVIROMENTAL INFORMATION (FEI)

1.6 EIA is a process that identifies the potential environmental effects (both adverse and beneficial) of a proposed development and proposes mitigation to avoid, reduce and offset any adverse environmental effects which are predicted. EIA is required where a proposed development is "*likely to have significant effects on the environment by virtue of factors such as its nature, size or location*".

1.7 The Applicant prepared a Scoping Report and an accompanying request for a Scoping Opinion, and these were submitted to the ECU in January 2021. A Scoping Opinion was provided by the ECU on 14th April 2021.

1.8 In addition to seeking a Scoping Opinion, the Applicant conducted two public exhibitions to seek the views of the local community. The first round of public consultation was held between the 18 July 2022 and 15 August 2022 in a hybrid format (online and in-person) with appointment only (surgery style) events. This was to provide information on the project and to gain feedback from the local community. A second round of public consultation events was held in early 2023.

1.9 The EIA Regulations require that aspects of the environment which are likely to be significantly affected by the Proposed Development are clearly defined within the EIA Report. To achieve this, it is necessary to gather environmental information on the current and existing status of each topic proposed for consideration as part of the EIA, i.e. 'baseline conditions'.

1.10 Following the baseline characterisations, the environmental constraint information was used to inform the consideration of design alternatives for the proposed wind farm. This was an iterative process, whereby the Applicant considered various turbine layouts and heights and revised the wind farm layout to take account of environmental and technical constraints wherever practical. Avoiding likely significant environmental effects through the design was key to the process.

1.11 The next stage in the EIA process was to complete an impact assessment to evaluate the likely significant effects remaining following the implementation of mitigation by design (embedded mitigation). In May 2023 the EIA Report was submitted to the ECU as part of the application to Scottish Ministers. Within the 2023 EIA Report, an assessment chapter was provided for each issue where it was considered that there could be likely significant effects associated with the 2023 Proposed Development.

1.12 Where was not possible to avoid likely significant adverse effects through design of the turbine or infrastructure layout, the 2023 EIA Report identified additional mitigation

requirements and the residual effects are predicted taking account of the mitigation measures proposed.

1.13 The application and 2023 EIA Report was subsequently consulted on by a range of statutory and non-statutory consultees.

1.14 Following this consultation process, the Applicant decided to make design changes and provide additional information to reflect the comments received. This FEI has been submitted (May 2025) to the ECU for consideration. It provides updated technical assessments, figures and visualisations that reflect the design changes and demonstrate the improvements made to the Revised Proposed Development since 2023.

THE PROJECT TEAM

1.15 The Further Environmental Information (FEI) has been compiled by OnPath Energy Ltd and by a team of technical specialists preparing the assessment chapters and providing expert technical and specialist input to the FEI and development design process.

1.16 The Applicant has ensured that the FEI has been prepared by 'competent experts'. The competent experts hold the appropriate professional qualifications for their area of expertise. These are documented in the respective chapters and assessments within the FEI.

THE SITE

1.17 The Site is located solely within the administrative boundary of SLC and generally comprises areas of open undulating moorland. The M74 motorway separates the eastern section of the Site (referred to in this report as Bodinglee East) from the western section of the Site (Bodinglee West) and the A70 road is located to the north of Bodinglee West and Bodinglee East.

1.18 Features of the historic landscape which are present onsite include three Scheduled Monuments: Auchensaugh Hill Cairn; Wildshaw Hill Cairn; and Thorril Castle, which is thought to comprise the remains of a group of late 16th or early 17th century farm buildings.

1.19 The Site is located within a number of river catchments including Douglas Water, Parkhall Burn, Glespin Burn, Black Burn and Roberton Burn / Milking Burn and respective tributaries. Small tributary watercourses are present across the Bodinglee East section of the Site, rising in the higher grounds in the north and flowing towards the River Clyde in the east / south-east. In the Bodinglee West section of the Site there are several burns that drain into Douglas Water in the north and Duneaton Water in the south.

1.20 The main access the to the Site is via Junction 11 of the M74, located north of the Site. Additionally, there are a number of access tracks on the periphery of the Site, which connect to the wider road network, which include the A70 in the north / northwest and the B7078 in the south.

1.21 The area immediately around the Site is sparsely settled with a number of isolated farms and dwellings. The village of Douglas is the closest settlement, located approximately 1.5 km to the north-west of the Site. There are also two other

settlements, Rigside, approximately 2km north-east of the Site and Roberton, approximately 3.5 km to the south-east of the Site.

THE PROPOSAL

Key Facts

- Current Site use: Pastoral agriculture.
- Revised Proposed Development Area: Approximately 2394 hectares (ha).
- Number of turbines: Up to 35.
- Turbine heights: The Revised Proposed Development comprises up to 35 turbines with a maximum blade tip height estimated to range between 210 and 250 m and a rotor diameter of 170 m. It is anticipated that the following turbines within the proposed range will be constructed:
    - 9 turbines with a maximum tip height of 210 m.
    - 11 turbines with a maximum tip height of 230 m.
    - 15 turbines with a maximum tip height of 250 m.
- Rated output of the turbines: 7 MW
- Length of access tracks: 38.4 km of internal access tracks. This consists of 30.9 km of founded track, 3.0 km of floating track and 4.5 km of existing track to be upgraded.
- Life Span: 40 years once operational.
- Vehicle movement: A maximum of approximately 268 two-way heavy goods vehicle movements per day during the busiest construction months.
- Grid Connection: The Revised Proposed Development would be connected to the grid at the proposed Redshaw substation in South Lanarkshire.

1.22 The Revised Proposed Development will contribute significant environmental and socio-economic benefits at both a national and local level.

Environmental Benefits

- Produce an indigenous energy supply, reducing reliance on imported fossil fuels.
- Reduce greenhouse gas emissions by harnessing renewable power from the wind.
- Generate enough renewable electricity to power over 200,000 homes per year and provide a carbon saving of over 352,320 tonnes per annum (and

14,092,800 tonnes over the lifetime of the Revised Proposed Development) when compared to fossil fuel-mix energy generation.

- Make a positive contribution to the UK and Scottish Government's renewable energy targets.
- Contribute to ecological enhancement through measures set out in the Outline Habitat Management Plan which seeks to provide a framework for habitat management and enhancement.
- Contribute to landscape enhancements with associated benefits for tourism, recreation and outdoor access within the Douglas Valley Special Landscape Area.

Economic Benefits

1.23 Through OnPath Energy's commitments to maximising investment into the local economy and ensuring benefits for the local economy, it is estimated that the Revised Proposed Development will result in circa £510 million total investment.

1.24 The development and construction of the Revised Proposed Development could generate:

- £27 million Gross Value Added (GVA) and a peak of 150 jobs in South Lanarkshire.
- £131 million GVA and 780 jobs in Scotland.
- £219 million GVA and 1150 jobs in the UK.

1.25 On average in each year of its 40-year operational life, Bodinglee Wind Farm is expected to generate:

- £5 million GVA and 40 jobs in South Lanarkshire.
- £10 million GVA and 80 jobs in Scotland.
- £15 million GVA GVA and 130 jobs in the UK.

1.26 In total, over the development, construction and operation phases of Bodinglee Wind Farm, it was estimated that it could contribute:

- £218 million GVA in South Lanarkshire;
- £522 million GVA in Scotland; and
- £808 million GVA in the UK.

Social Benefits

1.27 The applicant will create a Community Benefit Fund that will serve local communities within 10 km of the Revised Proposed Development1. This will be divided as follows:

- Over £50 million will be put into the Clydesdale Community Energy Transition Co (CCETco). This organisation will be owned and governed by the local community, and will provide a service to local residents to assess the energy efficiency of their homes, identify credible installers of energy efficiency and low carbon energy solutions, and fund local residents to make recommended home energy improvements.

- A £200,000 grant to be advanced from the community benefit fund to renovate a local historic building(s) to a sustainable standard and develop local skills in the restoration of historic buildings.

- A 1% ownership of the wind farm offered to the community at no cost, with the option to buy up to a total of 10% of the overall project. If this offer is not taken up by the local community, an enhanced community benefit payment will be made, broadly equivalent to the income from a 1% stake in Bodinglee.

- New and improved tracks available once construction has been completed allowing for improved non-motorised user access around and between Rigside, Robert, Douglas and Coalburn.

MAIN ELEMENTS

1.28 The layout of the Revised Proposed Development is presented in FEI Volume 3a Figure 2.1.

Turbines

1.29 There is a total of up to 35 turbines. 9 turbines will have a maximum tip height of 210 m, 11 turbines will have a maximum tip height of 230m and 15 turbines will have a maximum tip height of 250 m. This represents the maximum number of turbines as well as the maximum tip heights upon which this application for consent is based. The Revised Proposed Development will have an installed capacity of approximately 245 MW.

1.30 All of the turbines proposed will be of modern design with three-bladed rotors. The turbines will be of a variable speed type, so that the turbine speed will vary according to the energy available from the wind. A modern wind turbine produces electricity between 70 % and 85 % of the time but generates different outputs dependent on wind speed. On average over a year, it is expected to generate between circa 37% and 41% of its maximum theoretical power output. At average speeds greater than 22-28 metres per second the turbines would shut down. Subject to agreement with SLC, the finish and colour of the turbines is likely to be semi-matt and white.

Turbine Lighting

1.31 The Civil Aviation Authority (CAA) requires all structures, including wind turbines larger than 150 m, to be lit during night-time hours for health and safety reasons. The Applicant has worked with the CAA since the 2023 EIA Report was produced to design a lighting scheme that is acceptable, the current proposals are for a reduced lighting scheme with 10 lit turbines. However, as this was only confirmed by CAA in April 2025, for the purposes of the 2023 EIA Report it was assumed that 16 turbines would be lit (15 within the FEI owing to the removal of one of the lit turbines). The turbines will be fitted with two lights on the nacelle which is the top of the tower section. One light will

be permanently lit and second will act as alternate in the event of a failure of main light.

1.32 The Applicant also consulted Ministry of Defence (MOD) and agreed a strategy for infrared (IR) lighting. The current proposal is for 26 IR hub mounted obstruction lights including all perimeter turbines and a selection of central turbines.

1.33 Typically three dimmer lights (32 candela) providing 360 degrees coverage approximately halfway up the tower are also required to provide vertical reference when fitted to a single vertical structure. However, for a group of structures, such as multiple wind turbines, this requirement is much diminished, and proposals have been made to the CAA to request the requirement for mid mast lights to be removed. As per CAA letter, dated April 2025, these lights are no longer required and will not be installed for the Revised Proposed Development.

1.34 If the visibility surrounding the turbines is good, for example in clear weather conditions when the turbines could be seen in all directions from more than 5 km away, the lighting intensity will be reduced. The final lighting requirement will be agreed with the CAA.

Foundations

1.35 It is anticipated that the foundations for the turbines will be reinforced concrete pads. The turbine foundation will extend above ground level to enable connections to the turbine towers to be achieved. There may also be a requirement to construct piled turbine foundations in some locations which will have similar or smaller dimensions to the reinforced concrete pads. The foundations will be landscaped to the surrounding environment to allow ground restoration.

Crane Pads and Assembly Area

1.36 Each turbine location will require an area of hardstanding to accommodate two cranes required to construct the turbine. These areas will be approximately 75 m x 40 m adjacent to each of the turbines. The hardstanding will consist of compacted rocks with layers of geotextile as required. In addition, three assembly areas of 18 m x 12 m and a laydown area of approximately 85 m x 20 m will be required. This area is for blade and hub assembly on the ground before being lifted onto the tower.

Access Tracks

1.37 The construction of approximately 38.4 km of internal access tracks will be required to provide access during construction and operation. The total site track length now consists of 30.9 km of founded track, 3 km of floating track and 4.5 km of existing track to be upgraded. The tracks would typically be five metres wide, widening at bends where appropriate and would be designed to allow the efficient drainage of rainwater. It is expected that new stone for the tracks would be extracted from borrow pits within the Site.

Temporary Construction Compounds

1.38 Up to four temporary construction compounds will be required during the construction phase. One is located in Bodinglee West and three located in Bodinglee East. Each compound will be fenced off and will include a temporary lay down area for storage of materials. Within the boundary of the compound will be an office and welfare facilities for staff onsite.

Cabling and Grid Connection

1.39 Electrical power will be transferred from the turbines to an onsite substation via underground cables within the verges of the access tracks. Depths for the cables will depend on ground conditions but, in general, trenches will be generally no more than 1.4 m wide and 1.5 m deep.

1.40 A control building and substation will be built in a compound area from which electricity generated by the turbines will be fed into the national grid.

1.41 The connection to the national grid connection does not form part of this application and would be undertaken by Scottish Power Energy Networks (SPEN).

Battery Storage

1.42 There is a national requirement to balance the peaks and troughs associated with electricity supply and demand to avoid strains on transmission and distribution networks, and to keep the electricity system stable. A battery facility is proposed as part of the Revised Proposed Development to support the flexible operation of the National Grid and reliability of electricity supply from renewable sources.

1.43 The battery storage facility will be located within a separate compound adjacent to the onsite substation compound. The storage facility will contain approximately 75 battery and inverter containers and two water tanks to incorporate the potential for additional fire safety measures if required.

Wind Monitoring Mast

1.44 Two permanent anemometer masts are required to monitor the performance of the wind turbines by gathering data on wind speeds and direction. The masts would be slim-line steel lattice towers and would be a maximum of 150 m in height.

Traffic and Site Entrance

1.45 Access is proposed to be taken from three separate access junctions in order to reach Bodinglee West and Bodinglee East. Bodinglee West will be accessed from the existing Andershaw Wind Farm access junction from the B7078. The access will be upgraded in order to accommodate deliveries for the larger turbine components. Bodinglee East will be accessed via an existing access track from the B7078 to Maidengill, which will be upgraded. A newly constructed access junction on the A70 in Uddington is also proposed for larger deliveries, for example turbine components or large vehicles that are unsuitable to access via the Maidengill underpass.

1.46 It is anticipated that turbine components will be brought in by sea to the likely port of entry at King George V Docks in Glasgow and then transported to Site by road as a series of abnormal loads. The preferred routes from the port of entry to the Site access points have been identified as being via Kings Inch Drive, M8, M74 with the access route for Bodinglee East continuing on the B7078 and A70, whilst for Bodinglee West will continue on the A702 and B7078 to access the Site.

1.47 A number of pinch points along the route have been identified where works will be required to facilitate the movement of the abnormal loads. These works include temporary modifications to street furniture along with areas of temporary widening into verge areas and third-party land. A detailed Construction Traffic Management Plan will be produced and agreed with the relevant Councils, and with Transport Scotland and

Police Scotland prior to construction and delivery of wind turbine components to the Site. The plan will include mitigation measures to ensure that impacts on local communities and the road network are minimised. It will include details for avoiding transport during key dates and times, liaison with the local communities and emergency services, and provision of information on traffic movements through signage, direct liaison and press coverage. The traffic and transportation assessment concludes that there will be no significant residual traffic and transportation effects.

Borrow Pits

1.48 Nine borrow pits within the Site are proposed to be used for the extraction of stone for construction of the new access tracks and temporary compound area etc. This will minimise the impact on the public road network associated with transportation of stone to the Site. This is one less borrow pit than proposed as part of the 2023 Proposed Development.

Watercourse Crossings

1.49 The internal track layout has been designed to minimise the number of new and upgraded watercourse crossings required as far as is practical to do so. Thirteen new watercourse crossings are required and one existing watercourse crossing needs to be upgraded. One of these watercourse crossings will be a spanned bridge crossing. There is an additional watercourse crossing than previously proposed as part of the 2023 Proposed Development.

Forestry

1.50 Felling of 0.90 ha of woodland area is required for the construction of the access to the Revised Proposed Development. The Applicant is committed to providing appropriate compensatory planting of at least 0.9 ha and further enhancement of up to 17 hectares of broadleaved woodland planting.

DESIGN EVOLUTION AND ALTERNATIVES

1.51 The Revised Proposed Development has evolved over a number of years through the EIA process. The Site Layout and turbine heights have been considered carefully and refined to produce the optimal layout for the Site. This process has been informed by site assessments and feedback from community and stakeholder consultation.

1.52 The Site has been selected as it is known to have favourable characteristics for development of a wind energy project. This includes having excellent wind resource and being accessible from the national road network. It is also in a positive location in terms of adopted planning policies and outside of internationally and nationally protected sites for landscape and ecological designations.

1.53 The location of the Site is largely within a landscape that is considered broadly suitable for large scale wind energy development, as evidenced by existing consents for nearby wind farms within the same landscape type.

1.54 The principles of the design strategy were to arrange turbines and other infrastructure to maximise energy yield whilst minimising environmental effects. During each design iteration, careful consideration was given to this principle and maintaining the objectives of the design strategy. A number of other environmental characteristics have

been identified as key environmental considerations during the EIA process which has led to the evolution of the design layout in its current form.

1.55 The design has predominantly sought to minimise adverse effects relating to landscape and visual amenity and cultural heritage which were identified as key sensitivities. At the same time, it has sought to address other technical and environmental constraints identified. This has been achieved through the removal of 25 turbines from the original Scoping layout, the removal of a further 2 turbines from the 2023 Proposed Development and lowering in tip height of a further 9 turbines, establishing minimum buffer distances from key nearby properties and heritage assets to guide the design evolution, and reviewing the Revised Proposed Development against the landscape to create a more balanced layout overall. The design and size of turbines used throughout responds to the underlying scale of the landform, whilst avoiding/minimising potential effects.

1.56 Careful placement of the proposed turbines and other infrastructure onsite has avoided or minimised potentially significant effects as far as reasonably practicable through the design process. Overall, the result of the design process is the application layout, comprising up to 35 turbines with associated infrastructure, which has been carefully sited and designed to reflect technical and environmental sensitivities.

KEY UPDATED FINDINGS OF THE EIA AND FEI

Landscape and Visual Impact

1.57 The Landscape and Visual Impact Assessment (LVIA) chapter of the FEI Report considers the potential effects of the Revised Proposed Development on landscape character and resources, and visual amenity. Whilst no objections were received from statutory consultees on LVIA grounds, the Revised Proposed Development aims to provide improvements on the landscape and visual effects arising from the 2023 Proposed Development.

1.58 To help reduce visual and landscape effects, changes were made to the design of the project. These changes, such as reducing the height of some turbines and removing others, offer slight but perceptible improvements when compared to the 2023 Proposed Development, however, overall in EIA terms there would be no change to the number of significant landscape and visual effects identified in Chapter 4 of the 2023 EIA Report.

1.59 There would be no change to the identified significant residual effects on landscape character set out in the 2023 EIA Report which were predicted to extend across the Site and the surrounding landscapes concentrated to a distance within approximately 6 km of the nearest turbine. This includes significant effects on the ‘host’ Landscape Character Type (LCT 213: Plateau Moorlands – Glasgow and Clyde Valley) as well as four neighbouring LCTs. There would be no significant effects on any other LCTs that have been assessed.

1.60 Significant residual effects on visual amenity have been identified at 15 of the 23 representative viewpoints used for the LVIA, up to a distance of around 11 km from the Site. Significant effects will also be experienced by road users on parts of the A70, B7078 and B7055, as well as users of some sections of the National Cycle Network Route 74 and the core path network within 5 km of the Site.

1.61 There have been some changes to the significance of cumulative landscape and visual effects in relation to the Revised Proposed Development, due to changes in the cumulative baseline. Significant cumulative effects have been identified for the 'host' LCT and three neighbouring LCTs. Significant cumulative visual effects have also been identified for some visual receptors. Significant cumulative visual effects would increase at a small number of viewpoints as the Glentaggart Wind Farm is no longer considered in the assessment (was at scoping) and the M74 West Renewable Energy Park Wind Farm has been introduced (at application).

1.62 There will be no significant effects on the integrity of locally designated landscapes, or any effects on nationally designated landscapes.

Ornithology

1.63 The Ornithology chapter of the FEI Report considers the potential effects of the Revised Proposed Development on ornithological interests present at the Site, including Important Ornithological Features (IOFs).

1.64 The Design Changes directly relate to consultation points raised by NatureScot and RSPB regarding specific turbines. Furthermore, the Collision Risk Modelling (CRM) was amended to take into account the Design Changes and to address the consultation response received from NatureScot which requested some changes to the CRM approach and methodology. Based on the available data, the following IOFs were identified: Muirkirk and North Lowther Uplands SPA, North Lowther Uplands Site of Special Scientific Interest (SSSI), and key species of golden plover, curlew, goshawk, hen harrier, red kite, short-eared owl, merlin and peregrine. An assessment of potential effects of the Revised Proposed Development on each IOF during each phase of the project lifecycle was completed. Potential cumulative effects were also considered for relevant IOFs.

1.65 Operational collision risk for the Muirkirk and North Lowther Uplands SPA and its qualifying species was re-assessed regarding population viability. For all qualifying species (hen harrier, short-eared owl, merlin, peregrine, and golden plover), the risk was found to be of negligible or low magnitude and not significant under EIA criteria. Similarly, regional population viability for both SPA and non-SPA species (curlew, goshawk, and red kite) was unaffected, with collision risks assessed as negligible and not significant.

1.66 Cumulative collision risk for non-breeding hen harrier was also reassessed and found not to significantly impact the SPA's conservation objectives. For other SPA qualifying species, predicted cumulative collision risks were too low to warrant assessment. Likewise, for non-SPA species (curlew, goshawk, and red kite), cumulative collision impacts were too small to materially contribute to significant effects, and they were scoped out of further assessment.

1.67 Embedded mitigation will comprise a Bird Protection Plan (BPP) to safeguard breeding birds, lekking black grouse and roosting raptors, and a Habitat Management Plan (HMP), which includes measures to improve existing and create new habitats for breeding, roosting and foraging birds. No additional mitigation is considered necessary. As an enhancement, it is proposed that nest boxes for barn owl and kestrel, and baskets for long-eared owl are installed in suitable areas to provide additional breeding sited for these species.

1.68 A programme of ornithological monitoring will be undertaken by a suitably experienced ecologist during construction and operation of the Revised Proposed Development, comprising surveys for black grouse, breeding waders, and breeding and roosting raptors, and annual checks of any nest boxes installed.

1.69 All potential effects of the Revised Proposed Development are assessed as being of low to negligible magnitude and, following implementation of embedded mitigation measures to protect breeding birds including lekking black grouse and roosting raptors, no significant effects on any IOFs are predicted.

Ecology and Nature Conservation

1.70 The Ecology and Nature Conservation chapter of the FEI presents the findings of an Ecological Impact Assessment (EcIA) for the construction and operation of the Revised Proposed Development.

1.71 The study area was found to support a number of important ecological features (IEFs), amongst which were sites designated for nature conservation, areas of peatland habitats, groundwater dependent terrestrial ecosystems (GWDTEs) and protected species, including, badger, otter and bats, with assigned ecological importance ranging from Site to International level.

1.72 Potential construction and/or operational phase impacts were identified for blanket bog, heathlands, marshy grasslands, GWDTEs, badger and bats. However, as a result of embedded mitigation and/or application of a hierarchy of other mitigation measures, none of these are considered to be significant. Embedded mitigation measures include the use of 'stand-off' zones and a curtailment strategy to protect bats, and the adoption of standard pollution prevention measures to protect other IEFs within the study area.

1.73 The assessment finds that following the implementation of mitigation and enhancement measures, including those contained in an Outline Habitat Management Plan (OHMP), there will be no significant residual adverse effects of the Revised Proposed Development, and there will be positive effects for upland habitats. These effects are considered to be in the same order of magnitude as those assessed for the 2023 Proposed Development.

1.74 Design Changes recommended by NatureScot relating to ecological receptors have been implemented as part of the Revised Proposed Development. In particular, the removal of T09 and BP09, and the rerouting of access tracks south of T31, will reduce the likely impacts on peatlands.

Noise

1.75 The Noise Chapter of the FEI presents the findings of a noise and vibration assessment for the construction and operation of the Revised Proposed Development.

1.76 The noise and vibration assessment has considered the construction and operation of the Revised Proposed Development. Noise and localised vibration will be emitted by equipment and vehicles used during construction and decommissioning of the Revised Proposed Development. However, no significant effects are predicted due to the temporary nature of these activities, the commitment to good practice construction and mitigation, and consideration of factors such as restricted hours of working.

1.77 Noise will also be produced by the turbines, substation and energy storage equipment during operation.

1.78 The noise and vibration effects associated with construction activities and construction traffic would remain negligible to minor, and temporary, and therefore Not Significant. Decommissioning is likely to result in less noise than during construction of the Revised Proposed Development and would therefore, in the worst-case, have minor temporary adverse noise effects which are Not Significant. In both cases, standard management measures and restricted hours of working would still represent sufficient mitigation, and no additional measures would be required.

1.79 Predicted operational noise levels from the Revised Proposed Development are reduced compared to those for the 2023 EIA Report. Operational noise levels from the Revised Proposed Development turbines, in combination with the cumulative wind farms assessed, are still predicted to be compliant with applicable noise limits. This can still be secured in practice through an appropriate planning condition.

1.80 In conclusion, operational noise can be controlled to suitable noise limits, derived following consideration of existing baseline noise levels in the area, such that no significant adverse effects are predicted.

Cultural Heritage and Archaeology

1.81 The Cultural Heritage chapter of the FEI considers the potential effects of the Revised Proposed Development on the Historic Environment resource, as a result of the Design Changes. Design Changes were made to directly respond to concerns raised by Historic Environment Scotland (HES).

1.82 There would be no change to the number of significant effects on key historic environment receptors identified in the 2023 EIA Report. The detailed assessment of impacts to the asset of Auchensaugh Hill cairn (SM4243) is the focus of this FEI chapter.

1.83 The assessment identified that the removal of turbines T9 and T10 and reduction in height of turbines T5, T6 and T7 has reduced the magnitude of impact that will occur. The Revised Proposed Development leads to a moderate operational impact to an asset of high sensitivity, resulting in a moderate and therefore significant level of effect for the purposes of the EIA Regulations – albeit at a meaningfully lower level than identified with respect to the design of the 2023 Proposed Development. Based on this reduction in the level of impact, HES confirmed (in consultation received in April 2025) that they no longer consider the effects of the Revised Proposed Development to raise heritage issues of national interest.

1.84 An updated cumulative assessment has also been undertaken, taking into account changes in the cumulative baseline since the 2023 EIA Report. Taking into account the updates to the cumulative baseline, the M74 West Renewable Energy Park and the Revised Proposed Development would result in significant cumulative effects to identified historic environment receptors, principally Auchensaugh Hill Cairn (SM4234). All other cumulative effects remain as detailed in the 2023 EIA Report.

Access, Traffic and Transportation

1.85 The Access, Traffic and Transport FEI chapter considers the potential effects of the Revised Proposed Development on Access, Traffic and Transport during construction of the Revised Proposed Development.

1.86 The Revised Proposed Development will be accessed from three separate access junctions in order to reach the Bodinglee West Site and Bodinglee East Site.

1.87 Bodinglee West Site will be accessed from the existing Andershaw Wind Farm access junction from the B7078. The access will be upgraded in order to accommodate deliveries for the larger turbine components. Bodinglee East Site will be accessed via a newly constructed access junction from the A70 in Uddington (for heavy goods and abnormal load vehicles), as well as an upgraded existing access from the B7078 to Maidengill (for light goods vehicles only).

1.88 Paths along the Core Path / Rights of Way network are located within the vicinity of the Revised Proposed Development and National Cycle Network Route Number 74 is located along the B7078, and mainly comprises segregated paths.

1.89 The maximum traffic impact associated with construction is still predicted to occur in Month 13 of the indicative construction programme. The traffic associated with the Revised Proposed Development, at the peak of construction, would result in 268 HGV movements per day (134 inbound and 134 outbound) and 98 Cars & Lights movements per day (49 inbound and 49 outbound). This represents a modest reduction in construction traffic during the peak month.

1.90 The assessment of significance suggests that traffic flows associated with the wind farm's construction interacting with the Core Path / Right of Way network are considered moderate adverse, prior to the application of mitigation measures. Mitigation would include implementation of a Construction Traffic Management Plan (CTMP) and an Access Management Plan.

1.91 A sensitivity review was undertaken in the 2023 EAIR Chapter 9 to inform the relevant planning and transport authorities of possible issues if consented schemes in the area, whose construction traffic would impact the study area, were 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 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.

1.92 The originally assessed schemes of Cumberhead Wind Farm and Broken Cross Wind Farm will be complete prior to works commencing on the Revised Proposed Development. Kennoxhead Extension 2 Wind Farm and Priestgill Wind Farm were previously assessed as cumulative development and have yet to commence on site. As such, these projects are still considered as cumulative development and the results including these development are therefore still valid. There are no further committed developments within the study area. However, should other nearby developments be consented and constructed concurrently with the Revised Proposed Development, then the Applicant will work with neighbouring developers to develop common traffic management measures. This would include the use of an overarching Traffic Management and Monitoring Plan.

1.93 With the implementation of appropriate mitigation, no significant residual effects are anticipated in respect of traffic and transport issues. The residual effects are all

assessed to be minor or negligible. As they will occur during the construction phase only, they are temporary and reversible.

Hydrology, Hydrogeology and Geology (including Peat)

1.94 The Hydrology, Hydrogeology, Geology chapter of the FEI evaluates the effects of the Revised Proposed Development arising from the construction, operation and decommissioning phases on the hydrology, hydrogeology and the geological resource of the site and linked catchments. The Design Changes reflect consultation feedback from SEPA and NatureScot on the 2023 Proposed Development.

1.95 The assessment was based on a desk study, consultation and site surveys undertaken for the 2023 Proposed Development. These identified a number of surface watercourses within the Site, two designated sites (Red Moss SSSI, SAC and Miller's Wood SSSI) that are potentially in hydraulic connectivity with the Site and one private water supply (Coalgill PWS), which while not being in hydraulic connectivity with the Site, has the potential to have the infrastructure damaged during construction or decommissioning.

1.96 An impact assessment was then undertaken to determine the likely impact of the Revised Proposed Development on the water environment, including surface watercourses groundwater, groundwater dependent terrestrial ecosystems, designated sites and PWS.

1.97 Localised deep peat was identified as a sensitive receptor within the Site following peat probing surveys although over 95% of probes recorded peat depths at 1.0 m or less. One of the key design objectives for the Revised Proposed Development was to ensure that turbines were located in less than 1.0 m of peat which was largely achieved, with the exception of T1 which encroaches into an area of deeper peat. T9 which previously encroached into an area of deep peat has now been removed as part pf the Revised Proposed Development thereby providing an improvement on the 2023 Proposed Development. Additional areas of floating track have been incorporated into the Revised Proposed Development to reduce the likely effects on peat.

1.98 Construction mitigation will allow for the micro siting of infrastructure up to 50 m to avoid pockets of deep peat (for example at T1). The adoption of best practice for storage and re-use of peat onsite as well as drainage measures will be developed throughout the construction period to include robust peat management and a monitoring programme.

1.99 The potential effect on receptors from potential peat slide is the same as per the 2023 Proposed Development (ie. Low magnitude) although localised medium risk areas were identified as per the 2023 Proposed Development, mainly across a section of access track in the north of Bodinglee East. Notwithstanding this, infrastructure locations and existing site conditions would be checked at the time of construction and micro siting adopted if required in order to maintain the design objective of avoiding any potential deep peat and to minimise peat slide risk.

1.100 Implementation of the embedded and additional proposed mitigation measures and undertaking the construction works in accordance with best practice will ensure that there are no significant residual effects on hydrology, hydrogeology and geology, including soils and peat, from the Revised Proposed Development.

Telecommunications

1.101 Consultation and analysis has indicated that communications links operated by Airwave, Arqiva, Atkins, BT, Joint Radio Company, Mobile Broadcast Network Limited, and Virgin Media O2 are not predicted to be adversely affected from interference by the Revised Proposed Development. Impacts from interference with three Vodafone microwave communications links are predicted prior to mitigation.

1.102 A technical mitigation solution is currently being investigated and will be implemented prior to construction of the wind turbines through consultation and in agreement with Vodafone. No impacts are predicted on other telecommunications links.

Shadow Flicker

1.103 Under certain times of day and year due to climatic conditions or the position of the earth, the sun may pass behind the rotor of wind turbines and cast a shadow over neighbouring buildings' windows. When the blades rotate, and the shadow passes a window, to a person within that room the shadow may appear to flick on and off; this effect is known as shadow flicker.

1.104 This effect has been assessed, and maximum theoretical occurrences of shadow flicker have been calculated. The Applicant has committed to fully mitigate any shadow flicker arising from the Revised Proposed Development for dwellings within 10 rotor diameters distance of turbines. A protocol for this mitigation will be agreed with SLC.

Carbon Balance

1.105 The Revised Proposed Development would result in carbon savings by displacing fossil fuel generated electricity with low carbon energy.

1.106 The wind farm is predicted to save approximately 14,092,800 tonnes of carbon dioxide emissions over its 40 years' operating period which is equivalent to the emissions from supplying fossil-fuel source electricity to over 200,000 average homes.

1.107 Approximately 1.3 years after construction, the wind farm is expected to have paid back the carbon that was used in its construction.

AVAILABILITY

1.108 An electronic version of the reports supporting the application, including the FEI, will be available to download from the project website at:

https://www.onpathenergy.com/bodinglee

1.109 The FEI will also be available for public viewing online via the ECU portal (www.energyconsents.scot). Hard copies of the FEI will also be made available for public viewing at the following locations for the period of consultation following submission of the application:

- St Bride's Centre, Braehead, Douglas, Lanark ML11 0PT
- Rigside Community Hall, 59 Muirfoot Rd, Rigside, Lanark ML11 9LX

1.110 Any representations in relation to the application can be made to the Energy Consents Unit in a number of ways:

- via email to representations@gov.scot

- via the ECU website: www.energyconsents.scot
- or by post to:

The Scottish Government
Energy Consents Unit, 4th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow, G2 8LU

1.111 Responders should identify the proposal and specify the grounds for representation. Written or emailed representations should be dated, clearly stating the name (in block capitals), full return email and postal address of those making representations.

2. SECTION HEADER (ARIAL BOLD FONT SIZE 18)

A summary box is available to use at the beginning of each section to highlight text as required.

Text, Arial Font 11, Black – justified and indented at 1.25cm

Box text should not incorporate bullets or other types of numbering.

2.1 Bullet Numbering - Numbered Text, Arial Font Size 11 – Justified

2.2 Bullet Numbering - Numbered Text, Arial Font Size 11 – Justified