Volume 4: Technical Appendices – Table of Contents

Technical Appendix 1.1: Consultation Register

Pre-scoping				
Consultee Name	**Date**	**Topic**	**Consultee Comments**	**Response**
Statutory				
South Lanarkshire Council	19/05/2023	LVIA	Noted the key concern likely to be views from Tinto Hill	
	19/05/2023	Cumulative	Cumualtive impacts in general.	
ECU	26/06/2023		Submitted pre-application form	
Non-Statutory				
Scoping				
Consultee Name	**Date**	**Topic**	**Consultee Comments**	**Response**
Scottish Government				
Energy Consents Unit	15/04/2024	Consultation	Consultation on the scoping report was undertaken by the Scottish Ministers and commenced on 13 February 2024 and closed on 5 March 2024.	Noted.
			Unless otherwise stated, Scottish Ministers expect the EIA Report to include all matters raised in responses from the consultees and advisers and to consider in full all consultation responses received.	Noted. All matters raised, where appropriate, will be included within the EIA Report.
			No responses were received from: South Lanarkshire Council, British Horse Society, Civil Aviation Authority-Airspace, Clyde River Foundation, Duneaton Community Council, Fisheries Management Scotland, John Muir Trust, Mountaineering Scotland, Oban Airport, Scottish Rights of Way and Access Society (ScotWays), Scottish Wildlife Trust, Scottish Wild Land Group, Southern Uplands Partnership (SUP), South Strathclyde Raptor Study Group (SSRSG), Visit Scotland, West of Scotland Archaeology Service (WoSAS), Woodlands Trust. It is assumed that these consultees have no comment to make on the scoping report, however each would be consulted again when an application is submitted.	Noted. The SSRSG, SUP have been consulted seperately in relation to existing ornithological records for the Site and wider surrounding area, as detailed in **Chapter 7: Ornithology (EIAR Volume 2)**.
			The Scottish Ministers are satisfied that the requirements for consultation set out in Regulation 12(4) of the Electricity Works (Environments Impact Assessment) (Scotland) Regulations 2017 have been met.	Noted.
			The Scottish Ministers expect the EIA report which will accompany the application for the proposed development to consider in full all consultation responses attached in Annex A and Annex B.	Noted. This Consultation Register forms Technical Appendix 1.1 to the EIA Report; details of where the matters raised in the Scoping Opinion have been addressed are provided below.
		Scope	Scottish Ministers are satisfied with the scope of the EIA as set out in Section 3 of the Scoping Report.	Noted.
		Batteries / Solar Panels	The Proposed Development set out in the Scoping Report refers to wind turbines, and other technologies including battery storage and solar panels. Any application submitted under the Electricity Act 1989 requires to clearly set out the generation station(s) that consent is being sought for. For each generating station, details of the proposal require to include but not limited to: •the scale of the development (dimensions of the wind turbines, solar panels, battery storage) •components required for each generating station •minimum and maximum export capacity of megawatts and megawatt hours of electricity for battery storage	Noted. The development description includes a description of the key elements of the Proposed Development and the battery storage proposals have also been included within the noise assessment within **Chapter 10 (EIAR Volume 2)**.
		Mitigation Measures	The mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to each chapter. Applicants are also asked to provide a consolidated schedule of all mitigation measures proposed in the environmental assessment, provided in tabular form, where that mitigation is relied upon in relation to reported conclusions of likelihood or significance of impacts.	Noted. Mitigation measures identified in each chapter are summarised within a concluding paragraph. A schedule of mitigation is included within **Chapter 13 (EIAR Volume 2)**.
		Further consultation	Ministers are aware that further engagement is required between parties regarding the refinement of the design of the proposed development regarding, among other things, surveys, management plans, peat, radio links, and finalisation of viewpoints, cultural heritage, cumulative assessments and request that they are kept informed of relevant discussions.	Noted. Further consultation has been undertaken and included where relevant in sections below.
		Hydrology, Hydrogeology & Geology		
		Scottish Water - drinking water protected areas	Scottish Water advised that there were no Scottish Water drinking water catchments, or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed development. Scottish Water also provided general advice which should be addressed in the EIA report, including any relevant mitigation measures required.	Noted. Potential effects on the water environment are assessed in **Chapter 8: Hydrology, Hydrology and Geology (EIAR Volume 2)**.
		PWS	Scottish Ministers request that the Company investigates the presence of any private water supplies which may be impacted by the development. The EIAR should include details of any supplies identified by this investigation, and if any supplies are identified, the Company should provide an assessment of the potential impacts, risks, and any mitigation which would be provided.	South Lanarkshire Council has been contacted to provide records of PWS. The results have been considered in the Site's design have been reported in the EIAR. Postal enquiries were issued to land owners of properties within the redline boundary of the Proposed Development. The Proposed Development has been set out such that infrastructure shall be at a suitable buffer from private water supplies. On this basis, no further surveys of the PWS locations were carried out. Assessment of potential impacts, risks, and any mitigation which would be provided is included in **Technical Appendix 8.6 (EIAR Volume 4)**.
		Fish	In addition to identifying the main watercourses and waterbodies within and downstream of the proposed development area, developers should identify and consider, at this early stage, any areas of Special Areas of Conservation where fish are a qualifying feature and proposed felling operations particularly in acid sensitive areas.	Noted. Potential effects on ecology, including habitats and fish species, are assessed in **Chapter 6: Ecology (EIAR Volume 2)**.
			Marine Directorate – Science Evidence Data and Digital (MD-SEDD) provide generic scoping guidelines for onshore wind farm and overhead line development https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren) which outline how fish populations can be impacted during the construction, operation and decommissioning of a wind farm or overhead line development and informs developers as to what should be considered, in relation to freshwater and diadromous fish and fisheries, during the EIA process. MD-SEDD also provide standing advice for onshore wind farm or overhead line development (which has been appended at Annex B) which outlines what information, relating to freshwater and diadromous fish and fisheries, is expected in the EIA report. Use of the checklist, provided in Annex 1 of the standing advice, should ensure that the EIA report contains the required information; the absence of such information may necessitate requesting additional information which may delay the process. Developers are required to submit the completed checklist in advance of their application submission.	Noted. Refer to MD-SEDD response below. Fisheries work undertaken by Clyde River Trust is discussed in Chapter 6 Ecology (Technical Appendix 6.4, EIAR Volume 4). Fisheries work undertaken by Clyde River Trust in accordance with MSS guidance. Survey and findings are discussed in **Chapter 6 Ecology (Technical Appendix 6.4, EIAR Volume 4)**.
		Peat	The Scottish Ministers consider that where there is a demonstrable requirement for peat landslide hazard and risk assessment (PLHRA), the assessment should be undertaken as part of the EIA process to provide Ministers with a clear understanding of whether the risks are acceptable and capable of being controlled by mitigation measures. The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition), published at http://www.gov.scot/Publications/2017/04/8868, should be followed in the preparation of the EIA report, which should contain such an assessment and details of mitigation measures. Where a PLHRA is not required clear justification for not carrying out such a risk assessment is required.	Noted. PLHRA has been undertaken and is included as **Technical Appendix 8.3 (EIAR Volume 4)**. The stated guidance has also been taken into consideration.

		LVIA		
		Viewpoints	The scoping report identified viewpoints in Section 3 (table 3.3.2) to be assessed within the landscape and visual impact assessment. No additional viewpoints were suggested by consultees, however Historic Environment Scotland did provide advice in relation to this.	Refer to Historic Environment Scotland response below.
		Night time lighting	As the maximum blade tip height of turbines exceeds 150m the LVIA as detailed in section 3.3.5 of the scoping report must include a robust Night Time Assessment with agreed viewpoints to consider the effects of aviation lighting and how the chosen lighting mitigates the effects.	The Lighting Assessment is presented in **Technical Appendix 4.6 (EIAR Volume 4)**. A selection of representative night time viewpoints were identified, and representative visualisations are included in Technical Appendix 4.6.
		Noise	The noise assessment should be carried out in line with relevant methodology detailed in section 3.9 of the scoping report. The noise assessment report should be formatted as per Table 6.1 of the IOA "A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise.	The noise assessment has been undertaken in accordance with these documents. **Technical Appendix 10.2 (EIAR Vollume 4)** contains all the information requested in Table 6.1 of the IOA GPG.
		Eskdalemuir Siesmological Recording Station	The Scottish Ministers are aware that the proposed Development falls within the statutory safeguarded area around Eskdalemuir Seismological Recording Station. Scientific research has established that wind turbines of current design generate noise emissions that cause seismic vibrations which can interfere with the effective operation of the array. In order to ensure the United Kingdom can continue to implement its obligations in maintaining the Comprehensive Nuclear Test Ban Treaty, a noise budget has been allocated to regulate the development of wind turbines within a 50km radius of the array. As advised by the Defence Infrastructure Organisation ("the DIO"), the budget has been set at 0.336nm rms and at present the reserved noise budget has been reached. Consequently, the DIO has stated there would be concerns if this proposal progresses to application based upon current information. The Scottish Ministers request that the company keep up to date with the information provided by the Eskdalemuir Working Group (EWG) and contact the Defence infrastructure Organisation at the earliest opportunity to discuss any possible mitigation measures. Enquiries regarding the work being undertaken by EWG can be directed to temeeka.dawson@gov.scot	Refer to MOD response below.
		Ornithology surveys	It is recommended by the Scottish Ministers that decisions on bird surveys – species, methodology, vantage points, viewsheds & duration - site specific & cumulative – should be made following discussion between the Company and NatureScot	Refer to NatureScot response below.
		Borrow Pits	Where borrow pits are proposed as a source of on-site aggregate they should be considered as part of the EIA process and included in the EIA report detailing information regarding their location, size and nature. Ultimately, it would be necessary to provide details of the proposed depth of the excavation compared to the actual topography and water table, proposed drainage and settlement traps, turf and overburden removal and storage for reinstatement, and details of the proposed restoration profile. The impact of such facilities (including dust, blasting and impact on water) should be appraised as part of the overall impact of the working. Information should cover the requirements set out in 'PAN 50: Controlling the Environmental Effects of Surface Mineral Workings'.	A borrow pit assessment has been prepared in accordance with the requirements set out in PAN 50 and is included as **Techical Appendix 2.2 (EIAR Volume 4)**.
Statutory Consultees				
South Lanarkshire Council			No response received	No response required
SEPA	14/02/2024	Consultation	SEPA would especially welcome further pre-application engagement once initial peat probing and habitat survey work has been completed and the layout developed further as a result.	Habitat survey work - Phase 1 and NVC survey work completed within Site boundary and which includes survey coverage within 250m of all proposed deep excavations. Full details of survey methodologies and findings are presented within the EIA Report **(Technical Appendix 6.1, EIAR Volume 4)**. Peat probing - details of the Stage 1 and Stage 2 peat probing survey findings are illustrated on **Figure 8.7 (EIAR Volume 3a)**; Stage 1 peat survey findings were used to influence the design, including placement of turbines and infrastructure.
			To avoid delay and potential objection, the EIA submission must contain a scaled plan of sensitivities, for example peat, GWDTE, proximity to watercourses, overlain with proposed development. This is necessary to ensure the EIA process has informed the layout of the development to firstly avoid, and then reduce then mitigate significant impacts on the environment.	Noted. A description of the design evolution is provided in **Chapter 3 (EIAR Volume 2)**, which notes the number of constraints that were taken into account during the design process, including the siting of turbines and infrastructure following completion of a GWDTE risk assessment, the stage 1 and stage 2 peat probing, and to allow minimisation of watercourse crossings. **TA 8.5 (EIAR Volume 4)** provides a hydrological risk assessment of the potential GWDTE habitats identified during NVC surveys. This concludes that there are areas of moderate GWDTE present on the Site, located on the lower slopes of Black Hill. However, no development is proposed in the potential zone of contribution to these GWDTE.

			The issues covered in Appendix 1 below must be addressed to SEPA's satisfaction in the EIA process. This provides details on SEPA's information requirements and the form in which they must be submitted. a) Map and assessment of all engineering works within and near the water environment including buffers, details of any flood risk assessment and details of any related CAR applications. b) Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems and buffers. c) Map and assessment of impacts upon groundwater abstractions and buffers. d) Peat depth survey and table detailing re-use proposals. e) Map and table detailing forest removal. f) Map and site layout of borrow pits. g) Schedule of mitigation including pollution prevention measures. h) Borrow Pit Site Management Plan of pollution prevention measures. i) Map of proposed waste water drainage layout. j) Map of proposed surface water drainage layout. k) Map of proposed water abstractions including details of the proposed operating regime. l) Decommissioning statement.	Ecology work has included National Vegetation Classification (**TA 6.1; EIAR Volume 4**) and **Figure 6.3 (EIAR Volume 3a)**. **TA 6.6 (EIAR Volume 4)** and **Figure 6.11 (EIAR, Volume 3a)** present the proposed Outline Biodiversity Enhancement Management Plan. **Chapter 8: Hydrology, Hydrogeology and Geology (EIAR Volume 2)** provides an assessment of potential impacts on the water environment and on peatland. **TA 8.5 (EIAR Volume 4)** provides a hydrological risk assessment of the potential GWDTE habitats identified during NVC surveys. **TA 8.1: Peat Depth Survey Results (EIAR Volume 4)** presents the results of peat depth survey undertaken on the Site, and TA8.2: Outline Peat Management Plan (EIAR Volume 4) discusses the opportunities for peat re-use. **TA2.4: Forestry and Woodland (EIAR Volume 4)** provides mapping and tables detailing the proposed forestry removal. Borrow Pit locations are detailed in **TA 2.2: Borrow Pit Assessment (EIAR Volume 4)**. A schedule of mitigation is presented in **Chapter 13 (EIAR Volume 2)**, which provides a comprehensive description of all mitigation measures identified in the EIAR. An outline CEMP is provided in **TA2.1: OCEMP (EIAR Volume 4)**, which provides a framework for a Construction Environmental Management Plan, which will be prepared by the main contractor. The final CEMP will provide a schedule of all construction stage mitigation measures identified in the EIAR, as well as details of all additional construction and decommissioning stage good practice management measures; a schedule of roles and responsibilities; a method statement for monitoring, auditing, and templates for reporting and communication of environmental management performance on-site; and a template for the production of detailed and task/ site specific plans for on-site components of the construction work.
NatureScot (NS)	19/03/2023	**Protected Areas**	**Muirkirk and North Lowther Uplands Special Protection Area (SPA)** The Muirkirk and North Lowther Uplands SPA is designated for its breeding and wintering populations of hen harrier, and breeding populations of merlin, peregrine, short-eared owl and golden plover and is located within approximately 5.3km of the nearest boundary of the proposal site. At approximately 5.3km distant, the proposed development has potential connectivity to the Muirkirk & North Lowther Uplands SPA, primarily in relation to the breeding merlin qualifying interest. We acknowledge the rationale for scoping out the SPA as presented at Section 3.6.3 of the scoping report, but rather than scoping it out now we advise that the applicant provides information at application stage to inform a Habitats Regulations Appraisal to be undertaken in the light of the latest survey results. **Red Moss Special Area of Conservation (SAC)** The proposal could affect Red Moss SAC, designated for its active raised bog habitat. The red line boundary of the proposed development overlaps with the boundary of Red Moss SAC. Whilst no development is proposed within the SAC, there is potential for development, notably turbines 18 and 19, directly to the north east of the Red Moss SAC to impact on the SAC as this area drains into the Black Burn (which runs through the Red Moss SAC). Additionally, figure 3.5.1 indicates that much of this area is class 1 peat and drains, through the Wildshaw burn direct to the SAC. Consequently, there is a connection between Red Moss SAC and the development site. In our view, this proposal is therefore likely to have a significant effect on the active raised bog habitat of Red Moss SAC. Consequently, Scottish Ministers, as competent authority, will be required to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interest. This assessment is likely to require an appraisal of the impacts of the development on the quality and quantity of water reaching the SAC, including consideration of issues such as sedimentation, drainage pathways and pollution prevention. It should consider the use of existing access routes and the creation of any new sections of access track. **Muirkirk Uplands Site of Special Scientific Interest (SSSI) & North Lowther Uplands SSSI** The proposed application site is approximately 5.3km from North Lowther Uplands SSSI. The SSSI is notified for a range of features including breeding hen harrier and a Breeding bird assemblage. We advise that the SSSI is scoped in for further assessment as part of the EIA process as recommended above for the SPA. **Red Moss SSSI** Red Moss SSSI is notified for its raised bog habitat. The SSSI has the same boundary as the Red Moss SAC. Our advice in relation to the Red Moss SAC is therefore also applicable to the SSSI.	Noted consideration of these designated sites is included in this **Chapter 6: Ecology and Chapter 7: Ornithology (EIAR Volume 2)**. In relation to the Muirkirk and North Lowther Uplands SPA, primarily the designations qualifying breeding merlin feature, in review of NatureScot guidance regarding connectivity with SPAs and the core foraging ranges of merlin (5 km), there is considered to be no potential for connectivity between the Muirkirk and North Lowther Uplands SPA, its underpinning North Lowther Uplands and Muirkirk Uplands SSSIs, and the Site. Activity of merlin recorded during baseline surveys was also very low and restricted to the non-breeding period. The potential for impacts upon the Muirkirk and North Lowther Uplands SPA is therefore scoped-out of the assessment. In relation to the Red Moss SAC, the EIA Report includes details of standard good practice mitigation measures, which are in accordance with current guidance and are embedded in the Proposed Development at the outset. This includes mitigation by design, employment of an ECoW and pollution prevention measures which are detailed in an outline CEMP (Technical Appendix 3.1, Volume 4) with appropriate mitigation to be secured by condition. Given the proven efficacy of such mitigation measures in preventing impacts, it is considered there will be no likely significant effect on the Red Moss SAC from the construction and operation of the Proposed Development. Sufficient information for NatureScot to advice the ECU in the undertaking of a Habitats Regulations Appraisal (HRA) of the Proposed Development in relation to the Muirkirk and North Lowether Uplands SPA and Red Moss SAC (and underpinning SSSIs) is presented within the EIA Report.
		Landscape and Visual Impacts	We recognise that significant landscape and visual impacts are likely to arise as a result of this proposal. However, our approach to advising on wind farm applications is to focus upon impacts on Scotland's landscapes that potentially raise issues of national interest (i.e. as identified in our National Interest guidance). In this case, it is unlikely that we will consider that the landscape and visual effects of the proposal will raise natural heritage issues of national interest, and we are therefore unlikely to provide any specific landscape advice at application stage. NatureScot guidance on landscape and visual impacts of wind farms can be found on our website. Our recently update pre-application guidance for onshore wind farms (February 2024) includes updated advice on turbine lighting assessment, including potential mitigation options.	Noted.

		Protected Species	We welcome the proposed protected species surveys outlined in the scoping report. If these surveys record any protected species activity, then we advise that the relevant species should be scoped into the EIA for further assessment. If any impacts are identified, then mitigation measures should be outlined within a species protection plan. The habitat and species surveys proposed and the approach to the assessment of impacts broadly appear appropriate. We note that pre-construction surveys are proposed in section 3.5.4. We welcome this approach and advise that our current guidance is followed. The timing of pre-construction surveys depends on whether it is possible to survey a species at any time of year (e.g. otter and badger) or if there is restricted window within which a survey can be undertaken (e.g. breeding birds, bats and water vole). For species that can be surveyed at any time of year, pre-construction surveys should be undertaken as close to the construction period as possible, and no more than 3 months before the start of works. For species that have a restricted survey window the pre-construction surveys should be undertaken as close to the start of works as possible, and always within the most recent survey window. As noted in our pre-application guidance, we generally recommend the collection of a minimum of two complete years of bird survey data to allow for variation in bird use, unless it can be demonstrated that a shorter period of survey is sufficient. We advise that if the applicant is proposing less than two years of bird survey, it seeks agreement from Energy Consents Unit, who may then consult with NatureScot where appropriate. The rationale for less than two full years should be provided, in light of the most recent survey results. We advise that additional survey work is required to confirm the absence of black grouse and that at least a full year's data is required for turbines 19 and 21.	Noted. Results of surveys and desk studies undertaken to inform the design and assessment of the Proposed Development will be presented in the EIAR. A single year of ornithological surveys in accordance with NatureScot guidance, together with comprehensive existing ornithological data for the Site and surrounding area, is considered to provide sufficient information to inform the design of the Proposed Development, identification of biodversity enhancements and the assessment of potentially significant adverse effects upon ornithological features. In relation to black grouse, the distribution of the species locally is considered to be well understood from extensive existing information, including that gathered from immediately adjacent wind farm proposals, and which identifies the species association with habitat mosaics in closer proximity to larger continuous areas of woodland that are absent from the Site. On the basis of the species abscence during species-specific surveys in 2023, and lower suitabilty of habitats within the Site, the potential for significant effects upon black grouse can be scoped-out on the basis of information collected and presented within the EIA Report. Further details are provided in **Chapter 7: Ornithology (EIAR Volume 2)**. It is clarified that at least a full year's data has been captured for turbines T19 and T21 from the Vantage Point (VP) locations as illustrated in **Figures 7.2 and 7.3 (EIAR Volume 3a)**. Further discussion on the abscence of limitiations within the baseline ornithological field survey data is provided in **Chapter 7: Ornithology (EIAR Volume 2)**.
		Peatland	The Scoping report notes that the Carbon and Peatland 2016 map indicates that most of the peat present on site is shown as Class 3 or Class 5. Additionally, there is a large area of Class 1 peat ('nationally important carbon rich soils, deep peat and priority peatland habitat') indicated to be located in the area to the south of the B7078 road. Where new access tracks are required, consideration should be given to floating these tracks to reduce their impact on peatland habitats.	Noted. A description of the design evolution is provided in **Chapter 3 (EIAR Volume 2)**, which notes the siting of turbines and infrastructure followed completion of stage 1 and stage 2 peat probing. The peat depth survey results, outline peat management and PLHRA are presented in **Technical Appendices 8.1, 8.2 and 8.3 (EIAR Volume 4)**.
		Enhanced Biodiversity	We refer the applicant to updated advice on enhancing biodiversity that is contained in the latest (February 2024) version of our pre-app guidance.	Noted. An Outline Biodiversity and Environment Management plan (OBEMP) has been submitted as **Technical Appendix 6.6 (EIAR Volume 4)** and will address both compensation and enhancement requirements, in line with NPF4 Policy 3(b) to provide for positive effects for biodiversity.
Historic Environment Scotland (HES)		**General**	HES consider there is the potential for significant adverse impacts on the setting of historic environment assets in the vicinity of the proposed development. At this stage it is not clear that a development on this scale could be accommodated in this location without raising issues of national interest. We consider that there is the potential that we may object to the development based on the current design of the proposal. There are six scheduled monuments located within the development boundary. While we note that the current layout has development in locations which would avoid direct physical impacts on the scheduled monuments there remains the potential for physical impacts on these assets. There are a large number of nationally important historic environment assets within our remit both within and in the vicinity of the development whose settings have the potential to be significantly adversely impacted by it. The annex to this letter gives details of a number of assets which appear likely to experience impacts. This list should not be treated as exhaustive and is only intended as a reference to those assets which at this stage appear most likely to be significantly impacted. HES recommends that their Managing Change Guidance Note on Setting, as well as Appendix 1 of the EIA Handbook, be used to inform setting assessments and cultural heritage assessment methodologies. HES stresses the importance of assessing the potential cumulative impacts of the proposed development in combination with other developments in the vicinity. Visualisations from heritage assets should be provided to aid the assessment of potential impacts, including initial wireframes for scheduled monuments. HES expects an EIA Report to provide justification for any designated assets within the Zone of Theoretical Visibility (ZTV) that have been scoped out of the detailed assessment. HES advocates for a holistic assessment of all proposed infrastructure elements to fully understand the impact of the development, including the production of a bare-earth ZTV for solar elements. HES emphasizes the need for mitigation by design to minimize significant effects on the site or setting of designated assets, expressing the likelihood of objecting to the development based on current designs. HES requests further early consultation to discuss potential significant impacts, mitigation by design, and detailed advice on the proposals. HES points out that the cultural heritage section of the scoping report does not refer to mitigation for significant effects. They stress that	Noted. Further consultation with HES has been undertaken, in the form of a Teams meeting on 14/05/2024, to discuss the proposed layout in light of HES's key concerns, and a site visit on 14/08/2024.
		Physical Impacts	Based on the information currently provided, there is the potential for direct physical impacts on the six scheduled monuments located within the proposed development boundary: • Thirstone, stone circle 1300m NNW of (SM5094) • Netherton, cairn 800m SW of (SM4513) • Craighead, platform settlement 1200m WNW of (SM4485) • Craighead, barrow and cairn 820m NW of (SM4517) • Black Hill, fort 650m NW of Craighead (SM2606) • Abington, motte and bailey 1600m N of (SM2609)	The Proposed Development has been designed to ensure no physical impacts on assets of national importance would occur, including but not limited to the scheduled monuments listed.

		Impacts on Setting	From the proposed scoping layout and given the large scale of the proposed turbines and the large area of solar power generators for this wind farm, there is the potential for this proposed development to have significant adverse effects on the setting of the scheduled monuments within the site boundary and within the wider area: • Thirstone, stone circle 1300m NNW of (SM5094) • Netherton, cairn 800m SW of (SM4513) • Black Hill, fort 650m NW of Craighead (SM2606) • Craighead, platform settlement 1200m WNW of (SM4485) • Craighead, barrow and cairn 820m NW of (SM4517) • Abington, motte and bailey 1600m N of (SM2609) • Auchensaugh Hill, cairn (SM4234) • Wildshaw Hill, cairn 500m WSW of summit (SM4511) • Fagyad Hill, cairn (SM4254) • Arbory Hill, fort (SM264) • Dungavel Hill, cairn (SM4261) • Wandel, Roman fortlet and camp 460m SW of (SM2835) We consider that there is potential for significant adverse impacts on the setting of a number of scheduled monuments as a result of the proposed development. Of particular concern are the potential impacts on the integrity of setting of Thirstone, stone circle (SM5094), Netherton, cairn (SM4513), Wildshaw Hill cairn (SM4511) and Auchensaugh Hill cairn (SM4234). Deliberate placement in the landscape with a sense of remoteness, prominence and local and long distance views are essential factors in these monuments' settings and are key characteristics which contribute to their overall cultural significance. Based on the information provided so far, turbines would appear in close proximity to and/or appear between the monuments. This would disrupt their relatively undeveloped, immediate settings and important visual and spatial relationships between them. This would likely detract from their settings in a way that affects our ability to understand, appreciate and experience the monuments, their relationships and deliberate positions in the landscape. It is not yet clear what level of impact the solar power generators may have on the scheduled monuments within and in the vicinity of the development boundary Based on the current information, it is not clear that a development on this scale could be accommodated in this location without raising issues of national interest. We anticipate that a substantial re-design of the proposed development which would significantly reduce the development within the site would be required to avoid and reduce the level of impacts on scheduled monuments from the proposed turbine element of the development. Should the proposed development be taken forward we recommend the applicant explores design options to change or reduce the development layout, turbine heights and number of turbines in order to identify whether or not significant adverse impacts can be mitigated. For example, this could involve the removal or repositioning of turbines in close proximity to Thirstone, stone circle 1300m NNW of (SM5094); and removal of the cluster of turbines (numbers 18, 19, 20, 21, 23 & 24) located to the south west of the B7078 in order to help maintain the important visual relationship between Netherton cairn (SM4513) and Auchensaugh Hill cairn (SM4234), and between Auchensaugh Hill cairn and the valley of the Black Burn. We request further consultation with us as soon as possible so that our advice can be taken into account at a useful stage to determine whether any proposals can be accommodated at this site without raising issues of national interest.	**Chapter 3 (EIAR Volume 2)** describes the design evolution process and summarises the design changes made in response to potential impacts on heritage assets, including reducing the potential for impacts on the setting of scheduled monuments within the site boundary and in the wider area. A full assessment of potential impacts on the settings of these specific heritage assets is provided in **Chapter 5 (EIAR Volume 2)**.
		Summary	Overall, based on the available information on the proposed turbine size and locations, and the large area of proposed solar power generation there is the potential for significant adverse impacts on the setting of a number of scheduled monuments located within and in the vicinity of the proposed development and potentially physical impacts. Based on the information available, it appears likely that the proposed development would raise issues in the national interest such that we would object should it come forward as currently designed. Further information is required to determine the extent and significance of any potential effects from this proposed development. Should this development proposal progress, we request further early consultation with us to determine whether mitigation by design would be possible to reduce impacts on the setting of assets and allow us to provide further detailed advice on the proposals.	Further pre-application consultation with HES was undertaken, as detailed above, and further information was provided in the form of a technical note (issued on 5th June 2024) with wirelines and photomontages from specific heritage asset viewpoints.
Internal Scottish Government Advisors				
Transport Scotland	29/02/2024	**Assessment of Environmental Impacts**	Section 3.8 of the SR presents the proposed methodology for the assessment of Traffic and Transport. This states that a Transport Assessment (TA) will be prepared which will be appended to the EIAR and will be summarised into a Traffic and Transport Chapter within the EIA. We note that the assessment will be prepared in accordance with the Transport Assessment Guidance (Transport Scotland, 2012) and the Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment (IEA), 1993). Transport Scotland would wish to point out that new guidance has been published by IEMA. These Guidelines, entitled Environmental Assessment of Traffic and Movement (July 2023), are intended to update and replace the previous 1993 IEMA guidelines and provide enhanced and up to date advice on the assessment of traffic and movement. Transport Scotland would request that the thresholds as indicated within these new Guidelines be used as a screening process for the assessment. These specify that road links should be taken forward for further assessment where the following two rules are breached: • Rule 1: Include road links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%) • Rule 2: Include road links of high sensitivity where traffic flows have increased by 10% or more. For any trunk road links where the thresholds are breached, Transport Scotland would seek the following list of impacts be assessed: • Severance of communities • Road vehicle driver and passenger delay • Non-motorised user delay • Non-motorised amenity • Fear and intimidation on and by road users • Road user and pedestrian safety • Hazardous/large loads It is noted that "road user and pedestrian safety" and "driver delay" effects require further consideration even if the rules are not exceeded. The IEMA guidelines contain further advice on this.The SR states that the study area will include the M74 to the north and south of Junction 13, the A702 between Junction 13 at the A73 / A702 roundabout, the B7078 between Junction 13 and A70 and the unclassified Duneaton Road. Transport Scotland considers this study area to be acceptable.	Noted. The Transport Assessment has been undertaken in accordance with the guidance specified and is included within **Technical Appendix 9.1 (EIAR Volume 4)** and summarised **Chapter 9 (EIAR Volume 2).**

			We note that base traffic data for the M74 will be obtained from Transport Scotland sources, and will be factored to the peak construction year flows using National Road Traffic Forecasts (NRTF) Low Growth. This is considered appropriate. It is noted that any impacts associated with the operational and decommissioning phases of the development are to be scoped out of the EIA. We would consider this to be acceptable in this instance.	
		Abnormal Loads Assessment	The SR states that access for AIL traffic is expected to be direct from the M74 for the part of the site to the north of the M74, and from the B7078 and B740 for the remainder of the site. The SR also indicates that consultation with M6 Autolink is currently being progressed to confirm the most appropriate means of achieving deliveries direct from the M74. Transport Scotland would state that the Area Manager for the M74, who is Lee Waters and who can be contacted at lee.waters@transport.gov.scot, should be included in such discussions. We note that a Route Survey Report for Abnormal Indivisible Loads (AIL) will be prepared to support the EIAR. This will include detailed swept path analysis for the main constraint points on the route from the port of entry (likely to be King George V dock, Glasgow) through to the site access junction to demonstrate that turbine components can be delivered to site and to identify any temporary road works which may be necessary. Transport Scotland welcomes this and would add that any proposed changes to the trunk road network must be discussed and approved (via a technical approval process) by the appropriate Area Manager(s). To assist your planning of the abnormal load route I would make you aware that Transport Scotland is currently undertaking essential investigatory works on the Woodside Viaduct on the M8 northern flank. Temporary traffic management measures and weight restrictions are in force. The route is therefore not appropriate for abnormal loads at this time, with all HGV traffic encouraged to use the M74 and M73 as an alternative. At this time, there is no timeframe for completion of the works.	Noted. Further consultation with Transport Scotland with regards to AILTraffic was undertaken on 19/04/2024 to discuss the potential to make turbine deliveries directy from the M74, as well as to discuss any proposed changes to the trunk road network. The proposed AIL delivery route is presented in **Technical Appendix 9.1 (EIAR Volume 4)** and shows pinch points along the route as well as proposed mitigation measures. It is expected that the design of the AIL accommodation works would form a planning condition post consent.
Marine Directorate – Science Evidence Data and Digital (MD-SEDD)	15/04/2024	**Scoping Guidelines**	MD-SEDD provided generic scoping guidelines for both onshore wind farm and overhead line development https://www2.gov.scot/Topics/marine/Salmon-Trout-Coarse/Freshwater/Research/onshoreren) which outline how fish populations can be impacted during the construction, operation and decommissioning of a wind farm development and informs developers as to what should be considered, in relation to freshwater and diadromous fish and fisheries, during the EIA process.	MD-SEDD guidance will be followed.
		Guidelines - SACs	In addition to identifying the main watercourses and waterbodies within and downstream of the proposed development area, developers should identify and consider, at this early stage, any areas of Special Areas of Conservation where fish are a qualifying feature and proposed felling operations particularly in acid sensitive areas.	The Red Moss SAC and proposed felling operations have been considered in the site design and appropriate mitigation by design are presented within **Chapter 13 (EIAR Volume 2)**. Downstream receptors are included within the scope of the hydrology chapter, including Protected Areas.
		EIA Checklist	The generic scoping guidelines should ensure that all matters relevant to freshwater and diadromous fish and fisheries have been addressed and presented in the appropriate chapters of the EIA report. Use of the checklist, provided in Annex 1 of the standing advice, should ensure that the EIA contains the required information. The absence of this information could delay the process	MD-SEDD guidance will be followed.
Scottish Forestry	26/02/2024	**Forestry**	From the documents available, it appears that the proposed development will have limited impact on forestry and woodland interests, although there appears to be no direct statement to this effect within the scoping report. In particular we note that proposed wind turbine locations T18, T19 and T20 appear to coincide with an area of woodland created using funding offered under the Forestry Grant Scheme. If this is the case we suggest that the developer discusses the detailed proposals with Scottish Forestry at an early stage in order to understand the potential consequences of such a proposal. Generally though, if it is proposed to remove any trees permanently then the following guidelines should be followed. Scottish Government planning policy seeks to protect the existing forest resource in Scotland, and supports woodland removal only where it would achieve significant and clearly defined additional public benefits. A proposal for compensatory planting may form part of the determination. National Planning Framework 4 also places a responsibility on relevant authorities to identify how they will protect, enhance and improve the resilience of its woodlands and should take cognisance of this when making planning decisions that could reduce or detrimentally effect woodland extent.	A Forestry Appraisal is included as **Technical Appendix 2.3 (EIAR Volume 4)**.
		Woodland removal and compensatory planting	Where woodland is identified for permanent removal, a commitment to undertake compensatory planting is required. We recommend that the following is addressed explicitly within any planning consent under which woodland removal is being approved. • A Compensatory Planting Plan (content subject to agreement with Scottish Forestry) is provided that details the area of permanent deforestation that will result from the development. This plan should clearly articulate how that area has been calculated. The Compensatory Planting Plan must comply with the UK Forestry Standard and as a minimum include detail relating to species composition, design, cultivation and drainage, protection, deer management and ongoing maintenance requirements and monitoring. • The area of land for which compensatory planting is proposed should be either under developer ownership or managed under a third party lease agreement of suitable timescale. This land should be capable of supporting woodland growth sufficient to result in the delivery of the required compensatory outcomes. • Any appointed clerk of works should have an ecological background and their remit should include the monitoring of the establishment of any compensatory planting.	The Forestry Appraisal will contain details of the compensatory planting proposed on the Site. In addition, an outline Biodiversity Enhancement Management Plan (BEMP) will be prepared and will detail the measures proposed to enhance biodiversity across the site. Examples of such measures are tree planting along the Duneaton Water to reduce erosion and increase shade to support fish populations; screening plantation; and peat management in the area to the north of the Red Moss SAC/SSSI. Further consultation with Scottish Forestry has been undertaken, as detailed below.
Non Statutory Consultees				
Aberdeen Airport	21/02/2024	General	This proposal is outwith the consultation zone for Aberdeen Airport. As such we have no comment to make and need not be consulted further.	Noted.
British Horse Society			No response received	No response required
BT	16/02/2024	Telecoms	We have studied the proposed windfarm development with respect to EMC and related problems to BT point-to-point microwave radio links. The conclusion is that the Project indicated should not cause interference to BT's current and presently planned radio network	Noted.
Civil Aviation Authority - Airspace			No response received	The CAA ceased providing a safeguarding consultation service in 2013
Clyde River Foundation			No response received	No response required
Crown Estate Scotland			No response received	No response required

Edinburgh Airport	27/02/2024	Aviation	This proposal has been examined from an aerodrome safeguarding perspective and conflicts with safeguarding criteria. Edinburgh Airport therefore object to the development on the following grounds: Instrument Flight Procedure (IFP) Assessment No turbine tower of any turbine may be erected, unless and until such time as the Scottish Ministers receive confirmation from the Airport Operator in writing that: (a) an IFP Assessment has demonstrated that an IFP Scheme is not required; or (b) if an IFP Scheme is required such a scheme has been approved by the Airport Operator; and (c) if an IFP Scheme is required the Civil Aviation Authority has evidenced its approval to the Airport Operator of the IFP Scheme (if such approval is required); and (d) if an IFP Scheme is required the scheme is accepted by NATS AIS for implementation through the AIRAC Cycle (or any successor publication) (where applicable) and is available for use by aircraft. Reason: In the interests of aviation safety.	Following further consultations by the Applicant, Edinburgh Airport has confirmed that there will be no requirement for an IFP Assessment and that the Proposed Development will not affect the airport's IFPs.
Fisheries Management Scotland			No response received	No response required
Glasgow Airport	05/03/2024	Aviation	The scoping report submitted has been examined from an aerodrome safeguarding perspective and we would make the following observations: The site is outwith the obstacle limitation surfaces and radar consultation area for Glasgow Airport; It is within the instrument flight procedures safeguarding areas and may impact. Detailed assessments will be required. Our position with regard to this proposal will only be confirmed once the turbine details are finalized and we have been consulted on a full planning application. At that time we will carry out a full safeguarding impact assessment and will consider our position in light of, inter alia, operational impact and cumulative effects.	Noted; further consultation to be undertaken post-application
Glasgow Prestwick Airport	26/02/2024	Aviation	On behalf of Glasgow Prestwick Airport, I have reviewed the information available on the ECU portal for the M74 West Renewable energy Park. The proposed wind farm benefits from significant terrain shielding from the GPA Primary Surveillance Radar and is well clear of our Instrument Flight Procedures and other protected surfaces. Consequently, we would have no comment or valid objection to make.	Noted.
Highlands and Islands Airport Limited	06/03/2024	Aviation	This proposal is out-with HIAL's safeguarding criteria. Therefore, Highlands and Islands Airports Limited has no objections to the proposal.	Noted.
NATS Safeguarding	20/02/2024	Aviation	NATS (En Route) plc objects to the proposal. Lowther Radar: it has been determined that the terrain screening available will not adequately attenuate the signal, and therefore this development is likely to cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated. Cumbernauld Radar: it has been determined that the terrain screening available will not adequately attenuate the signal for turbines T1-T8, T10-T16, and T18-T23 and therefore these turbines are likely to cause false primary plots to be generated. A reduction in the RADAR's probability of detection, for real aircraft, is also anticipated. Prestwick Centre ATC: Anticpated impact deemed unaccaptable.	Noted. Further consultation with NATS will be undertaken post application in order to identify suitable mitigation, which is anticipated to include the inherent data processing capacity of the new Indra radar at Lowther Hill.
MOD / DIO	07/03/2024	Eskdalemuir Siesmological Recording Station	The principal safeguarding concerns of the MOD with respect to this development of wind turbines relates to the unacceptable impact the proposed wind energy development would have on the operation and capability of the Eskdalemuir Seismological Recording Station and the potential to create a physical obstruction to air traffic movements. At this time, there is no seismic noise budget available. The MOD must, therefore, make you aware that we will likely object to proposals for wind energy development in this location due to the unacceptable impact the proposed wind energy development would have on the operation and capability of the array.	The Propoesd Development lies within the 50km safeguarding zone for the Eskdalemuir Seismic Array. **Technical Appendix 1.5 (EIAR Volume 4)** calculates the required Seismic Vibration budget for the Proposed Development and compares this to the available budget based on most up to date science. It is expected that the Proposed Development will be capable of accommodation within the revised noise budget and safeguarding policy that are under consideration by the Scottish Government and the MoD.
		Physical Obstruction	In this case the development falls within Tactical Training Area 20T (TTA 20T), an area within which fixed wing aircraft may operate as low as 100 feet or 30.5 metres above ground level to conduct low level flight training. The addition of turbines in this location has the potential to introduce a physical obstruction to low flying aircraft operating in the area. If the developer is able to overcome the issues stated above, to address the impact up on low flying given the location and scale of the development, the MOD would require that conditions are added to any consent issued requiring that the development is fitted with aviation safety lighting and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction. As a minimum the MOD would require that the development be fitted with MOD accredited aviation safety lighting in accordance with the Air Navigation Order 2016. It is likely that the CAA specified lighting will exceed that required by the MOD but to ensure the safeguarding of any low flying/rotary military aircraft, the MOD would request the wind farm is lit with no less than 25cd visible or infra-red (IR) lighting on perimeter turbines.	The Applicant proposes a reduced lighting scheme for approval by the Civil Aviation Authority and the Ministry of Defence.
Mountaineering Scotland			No response received	No response required
Joint Radio Company	14/02/2024	Telecoms	The proposal is *cleared* with respect to radio link infrastructure operated by the local energy networks. Note, If any details of this proposal change, particularly the disposition or scale of any turbine(s), this clearance will be void and re-evaluation of the proposal will be necessary.	Noted. Consideration to be given to JRC if proposal details change and the need for re-evaluation.
John Muir Trust			No response received	No response required
Oban Airport			No response received	No response required
Ofcom			No response received	No response required
ONR	20/02/2024	Nuclear	With regard to planning application ECU00005019, ONR makes no comment on this proposed development as it does not lie within a consultation zone around a GB nuclear site.	Noted.

RSPB Scotland	22/03/2024	HRA	We note that the proposed site boundary overlaps the Red Moss SAC and SSSI, both of which are designated for raised bog. Although the scoping layout shows that no turbines are planned within the designated site boundary, proposed turbines 18 and 19 are located less than 400m from the boundary. We agree with the Scoping report that there is connectivity to this SAC, and that information to inform an Appropriate Assessment will be included in the EIA.	Noted. Information to inform a Habitats Regulations Appraisal (HRA) of the Proposed Development in relation to the Red Moss SAC (and underpinning SSSIs) is included within **Chapter 6: Ecology (EIAR Volume 2)**.
		Ornithology – Breeding Waders	The proposed development falls within an area that RSPB Scotland has identified as supporting a high density of breeding waders, and which forms part of the Clyde Valley Breeding Wader Project. Due to the importance of this site for breeding waders, we disagree with the conclusion in the Scoping report that the site is of "low ornithological value". Therefore, we strongly recommend the following: • A second year of full ornithological surveys are carried out in line with current NatureScot guidance on recommended bird survey methods for onshore wind developments. • An assessment of potential impact to all breeding wader species present on site should be scoped into the EIA assessment due to the importance of this site as outlined above, which should include an assessment of the cumulative impacts of the development on breeding waders.	See response to NatureScot presented above. It is understood the Proposed Development and wider Site is located in a monitoring area for the Clyde Valley Wader Initiative (CVWI). RSPB has therefore been consulted on the availability of existing ornithological records for the Site and wider area including those gathered during monitoring by the CVWI. Results of ornithological surveys and desk studies undertaken to inform the design and assessment of the Proposed Development are presented in **Chapter 7: Ornithology (EIAR Volume 2)** and associated technical appendices and figures. An assessment of the potential for significant effects upon breeding waders, including curlew and lapwing, is also presented within **Chapter 7: Ornithology (EIAR Volume 2)**. Opportunities to provide positive habitat management measures for breeding waders and support the work of the Clyde Valley Wader Initiative have also been identified for inclusion within the Proposed Development's BEMP **(TA6.6, EIAR Volume 4**).
		Survey Coverage	We are concerned that the ornithological surveys completed so far as described in the Scoping report have not adequately covered the site during winter or in the breeding season. Current NatureScot guidance on recommended bird survey methods for onshore wind developments state that VP surveys should cover the whole of the proposed turbine envelope, plus a buffer of 500m. However, it is clear from the Scoping report (page 41) and maps (Figs. 3.6.1 and 3.6.2) that turbines 23 and 24 were not covered by VP surveys during the 2023 breeding season, and turbine 24 was also not covered during winter VP surveys. We are also concerned that the winter walkover surveys did not cover the proposed solar photovoltaic (PV) areas, and that the ornithological surveys completed to date may therefore underestimate the ornithological interest on the proposed site. Due to the high level of breeding wader interest at this site as well as wintering raptors, we strongly recommend the following: • Additional VPs are included in further ornithological surveys to ensure full coverage of the proposed site, including turbines 23 and 24. • An additional year of ornithological surveys takes place covering the entirety of the proposed development including proposed PV areas. • Ornithological records are requested from neighbouring wind energy developments to inform the EIA for this site.	Desk studies undertaken to inform the design and assessment of the Proposed Development have included a review of publicly available information for adjacent wind farm developments. Results of desk studies are presented in **Chapter 7: Ornithology (EIAR Volume 2)** and associated technical appendices and figures. All ornithological field surveys have been undertaken in accordance with NatureScot guidance (SNH, 2017). It is clarified that turbines T23 and T24 (Scoping Layout) no longer comprise part of the Proposed Development. Further discussion on the absence of limitiations within the baseline ornithological field survey data is provided in **Chapter 7: Ornithology (EIAR Volume 2)**.
		Deep Peat	As per the Scoping report, proposed turbines 18 and 19 are to be located on areas of Class 1 priority peatland habitats of high conservation value. As such, we do not think that this is an acceptable location for development. As the proposed turbines 18 and 19 are located on deep peat and are in close proximity to the Red Moss SAC, we recommend the removal or relocation of turbines 18 and 19 to avoid unacceptable impacts on deep peat, rather than relying on compensatory measures, and thereby following the mitigation hierarchy. We are also aware of a winter raptor roost located within a few hundred metres of turbines 18 and 19. We recommend at this early stage in the design process that the turbine layout is revised to ensure that turbines 18 and 19 are relocated from the area identified as deep peat, or removed entirely, and that no turbines are sited on areas of deep peat habitat. Furthermore, we recommend that peat depth surveys are carried out across the site to determine the suitability of the other proposed turbine locations since the majority of these are also located on peatland habitats.	Stage 1 and Stage 2 peat probing has been undertaken and the design process has ensured that all turbines and infrastructure are sited such that areas of deep peat are avoided; a description of the design process is provided in **Chapter 3 (EIAR Volume 2)**. RSPB and the SSRSG were further consulted on the the location of and monitoring data for the winter hen harrier roost. This information is contained within Confidential Volume 5 of the EIAR, and an assessment of potentially significant effects upon non-breeding hen harriers presented within **Chapter 7: Ornithology (EIAR Volume 2)**.
Scottish Rights of Way and Access Society (ScotWays)			No response received	No response required

Scottish Water	26/02/2024	Water	Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced. Please read the following carefully as there may be further action required. Scottish Water would advise the following: Drinking Water Protected Areas: A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity. Surface Water: For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system. There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges. In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.	Noted. No connection request is required.
Scottish Wildlife Trust			No response received	No response required
Scottish Wild Land Group (SWLG)			No response received	No response required
Scotland Uplands Partnership			No response received	No response required. Consulted seperately on the availability of existing black grouse records within proximity to the Site.
South Strathclyde Raptor Study Group (SSRSG)			No response received	Consulted seperately and responded with existing ornithological records within proximity to the Site.
SPEN			Holding Objection with regards to proximity of the Proposed Development ot SPEN Transmission assets. SPEN request further detail regarding the Proposed Development's proximity to SPEN assets.	The Applicant has consulted further with SPEN with regard to set back distance from the OHL. A wake assessment has been carried out that has confirmed a set back of turbine tip height plus 10% is sufficient to demonstrate that there is a low risk of impact on the OHL.
Visit Scotland			No response received	No response required
West of Scotland Archaeology Service (WoSAS)			No response received	No response required
Woodlands Trust			No response received	No response required
Relevant Community Councils				
Duneaton Community Council			No response received	No response required
Post-scoping				
NatureScot	10/07/2024 11/07/2024	**Cumulative Ornithological Impacts**	Responded to request for NatureScot's current cumulative record of ornithological wind farm collision and displacement risks for Natural Heritage Zone 19 and advised that at this time it could not be provided as NatureScot does not consider it is yet suitable for informing robust cumulative impact assessment. Subsequently responded to advise that between EIA documentation for the Cloud Hill and Bodinglee Wind Farms, there should be sufficient information to put together a fairly comprehensive list of NHZ 19 developments with the potential for curlew displacement.	Noted. A review of the Cloud Hill and Bodinglee Wind Farm EIA documentation, together with a review of additional EIA documentation for other wind farm developments within NHZ 19 has been undertaken to inform an assessment of potentially significant cumulative displacement impacts upon curlew and which is presented within **Chapter 7: Ornithology (EIAR Volume 2)**.

	18-Jul-24	**Ornithological Survey Coverage**	In response to the provision of further clarity on the adequacy of existing ornithological information from a single year of ornithological surveys, in accordance with NatureScot guidance, to inform the design and assessment of the Proposed Development in relation to ornithological features: - NatureScot provided no comment on its knowledge of any additional existing datasets it is aware of and it believes should be reviewed to inform the design and assessment of the Proposed Development and which has therefore informed its advice. - NatureScot commented that based on distance to the Muirkirk and North Lowther Uplands SPA and low number of merlin recorded to date, at present, any impact of the Proposed Development on merlin is likely to be minimal. - NatureScot advised it considers existing ornithological records from prior to 2019/2020 (i.e. over five years old) are irrelevant and data should be presented for 2020-2024. - NatureScot commented that, in its view, the existing data presented shows there is a lot of historical activity of various species in the surrounding area, which indicates that there could be more happening on the Proposed Development site than has been recorded. - NatureScxot advised that, unless there is considerable spatial and temporal overlap with other sources of existing ornithological information, more contemporary data needs to be provided. - NatureScot commented that both Kennoxhead Wind Farm, Extension I and II and Bodinglee wind farms recorded lek sites, and requested further clarification on black grouse survey methodology.	Noted and disagreed. It is understood to be NatureScot's opinion that two years of ornithological surveys should be undertaken to inform the design and assessment of the Proposed Development, in relation to breeding merlin as a qualifying feature of the Muirkirk and North Lowther Uplands SPA and black grouse. In relation to breeding merlin and with reference to current NatureScot guidance, the Site and Proposed Development is located beyond the core foraging range of merlin from the SPA. Existing ornithological information reviewed including information obtained from the SSRSG, RSPB and collected to inform adjacent wind farm proposals over an extensive period has not recently or since 2014 identified the presence of breeding merlin in the locality of the Site, with very low levels of merlin activity recorded during baseline surveys for the Proposed Development restricted to the non-breeding season. This is considered consistent with the findings of baseline studies from adjacent wind farms and moorland habitats outwith the Muirkirk and North Lowther Uplands SPA, and therefore a representative account of the use of the Site by the species and upon which to base an informed assessment. It is not considered, or suggested from other existing sources identified and reviewed, that a supplementary year of surveys would result in the identification of substantially higher levels of merlin activity and therefore the potential for significant effects upon the species, or adverse effects upon the integrity of the Muirkirk and North Lowther Uplands SPA breeding merlin population and the requirement for additional mitigation. In relation to black grouse, it is similarly considered that existing information and habitat suitability does not suggest that a supplementary year of surveys would identify substantially different levels of black grouse activity within the Site, such as the identification of lek sites regularly used by large numbers of males, and therefore the potential for significant effects upon the species and requirement for additional mitigation. Further discussion is provided in **Chapter 7: Ornithology (EIAR Volume 2)**.
	10/07/2024 11/07/2024	**Ornithological Species Populations**	Provided advice on the current Natural Heritage Zone 19 breeding curlew population.	Noted. Information has been used to inform the assessment of potentially significant effects upon curlew presented within **Chapter 7: Ornithology (EIAR Volume 2)**.
Scottish Forestry	26/06/2024	**Telephone call with Tom Hobbs, Operations Manager, Scottish Forestry**	**Grant recovery -** SF would reclaim all grant awarded as this was under a "Conifer Option" which included the fencing and the broadleaved planting elements even if these items were retained. **Compensatory Planting** - TH is unclear how this will be dealt with and may be dependent on the view of the Planning Authority rather than SF. (a) If the grant is reclaimed did the woodland exist or more likley (b) since the woodland is shown on the National Forest Inventory of 2022 this is then recognised as woodland and therefore compensatory planting for the trees removed would be in accordance with the Control of Woodland Removal Policy.	Replanting in situ with low density native broadelaved trees, outside the permanent infrastructure and environmental (bat) buffers, would reduce the requirement for compensatory planting. The established planted native broadleaved trees would be retained. The balance of compensatory planting would be 8.13 ha. Further details are prpvided in **TA2.3: Forestry and Woodland (EIAR Volume 4)**.

Technical Appendix 1.2: Technical Team

Technical Appendix 1.2: Technical Team

1.1 Introduction

1.1.1 In accordance with regulation 5(5) of the EIA Regulations, the EIAR has been prepared by 'competent experts'. EIAR Volume 2: Chapter 1, Table 1.2 presents the project team and Table 1.2.1 below presents the technical leads within the project team and their relevant qualifications and experience.

Table 1.2.1: Technical Team Experience

Company Name	Roles & Responsibility	Team Lead	Qualifications & Professional Memberships	Experience
Ramboll UK Limited	EIA Project Director / Shadow Flicker	Peter Bruce	▪ MSc Environmental Protection and Management ▪ BSc (Hons) Geography ▪ Chartered Environmentalist (CEnv) ▪ Member of Institute of Environmental Management and Assessment	Peter Bruce is a Principal (Director) and Chartered Environmentalist with over 15 years' experience in environmental consultancy. Peter has taken a lead role in the co-ordination and management of numerous complex environmental impact assessments (EIA) in the power, renewables, transmission, urban development and oil and gas decommissioning sectors, guiding a wide range of clients through the consenting process. Peter has extensive experience of facilitating workshops, liaising and leading discussions with statutory bodies and other stakeholders, and in engaging with local communities through public consultation events. Peter also has deep experience in construction environmental management and sustainability strategy.
	Hydrology, Hydrogeology and Geology	Christopher Day	▪ BSc (Hons) Marine Geography ▪ MSc Flood Risk	Chris Day has over 13 years' experience in environmental consultancy with particular expertise in hydrological impact assessment of renewable energy and transmission infrastructure projects, flood risk assessment, hydraulic modelling, and conceptual surface water drainage design. Also experienced in the use of geographical information systems (GIS) and remote sensing, statistics, river and coastal hydraulics.
	Peat	Jeff Turner	▪ BSc (Hons) Aquatic, Marine and Freshwater Biology ▪ Chartered Environmentalist (CEnv) ▪ Member of Society for the Environment ▪ Member of Institute of Environmental Management and Assessment ▪ Member of Institute of Environmental Science	Jeff Turner is a Chartered Environmentalist and member of the Institute of Environmental Science, and Institute of Environmental Management and Assessment (CEnv, MIEnvSc, PIEMA, BSc (Hons)). Jeff has over 20 years' experience in the co-ordination and management of Environmental Impact Assessments, with over 15 years' in renewable energy developments. As part of this experience, Jeff has been responsible for managing the potential effects of wind farms on peat, and identification of suitable avoidance and mitigation measures to minimise the effects on carbon rich soils from development.
David Bell Planning Ltd	Planning	David Bell	▪ BSc (Hons) Town & Country Planning ▪ Dip Urban Design ▪ Member Royal Town Planning Institute ▪ Member Chartered Institute of Highways and Transportation	David Bell is a Chartered Town Planner with over 30 years' experience of planning and development practice in the private sector, advising on a range of developments in the UK and overseas. David is a recognised leading expert in energy and infrastructure planning specialising in onshore and offshore wind, solar, battery storage developments and overhead line projects and substations. He advises on feasibility studies, planning and section 36 and 37 applications and planning Appeals and frequently acts in the capacity of expert witness in Public Inquiries. David's experience covers practice in Scotland, England and Wales.
MVGLA Ltd	Landscape and Visual	Marc van Grieken	▪ MSc Landscape Architecture ▪ Chartered Member of the Landscape Institute (CMLI)	Marc van Grieken is a Chartered Landscape Architect, with more than 36 years' experience in landscape/townscape and visual impact assessment and in giving evidence as expert witness at public inquiries. He has particular expertise in the design and assessment of wind farms, having advised clients on in the order of 200 sites. Marc is Chair of the Landscape Institute's Technical Committee and of the GLVIA Advisory Panel. He is also a Trustee of the Landscape Institute, and an experienced speaker at conferences.
CFA Archaeology	Cultural Heritage	Linn Glancy	▪ MA Archaeological Survey ▪ MA (Hons) Archaeology ▪ Associate of the Chartered Institute for Archaeologists	Linn Glancy is a heritage consultant with 25 years' post graduate experience as an archaeologist, 17 years of which as a consultant. Linn has been the lead archaeologist for numerous planning projects carrying out the baseline research, field surveys, setting assessments, consultation with consultees, and preparing the Cultural Heritage EIARs for a wide variety of developments including wind farm projects, flood protection schemes, grid-connections and overhead power transmission lines and Masterplan developments.
MacArthur Green	Ecology	Drew Oliver	▪ BSc (Hons) Aquaculture ▪ MSc Aquaculture ▪ PhD Aquaculture ▪ Chartered Environmentalist (CEnv) ▪ Member of Chartered Institute of Ecology and Environmental Management (CIEEM) ▪ Full of Institute of Fisheries Management (MIFM) ▪ Member of the Association of Ecological and Environmental Clerks of Work (MECW)	Drew Oliver is a Principal Ecologist, with over 15 years' experience in ecological consultancy, leading on ecological impact assessment for onshore renewables, grid connections, residential, retail, commercial, industrial, mixed use, education, healthcare, prisons, highways, rail, river restoration, harbour development and coastal protection developments. Drew is a Chartered Environmentalist (CEnv), a full member of four professional bodies, holds multiple NatureScot licenses and survey accreditations and has extensive experience of undertaking protected species surveys and providing advice on terrestrial and aquatic species across the UK. Drew is experienced in the production of Preliminary Ecological Appraisals (PEA), Environmental Impact Assessment Report (EIAR) Chapters and associated Technical Appendices (TA), as well as providing inormation to inform Habitats Regulations Appraisals (HRAs) and the production of Biodiversity Enhancement Management Plans (BEMPs).

Table 1.2.1: Technical Team Experience

Company Name	Roles & Responsibility	Team Lead	Qualifications & Professional Memberships	Experience
MacArthur Green	Ornithology	Nicole Robinson	▪ BSc (Hons) in Ecological Sciences ▪ MSc in Ecological Management and Conservation Biology	Nicole Robinson is a Principal Ornithologist, with over 14 years' experience in ecological consultancy, leading on ornithological impact assessment for onshore renewables, grid connections and strategic infrastructure developments. Nicole has extensive experience in the design and undertaking of baseline ornithological studies in accordance with industry guidance, collision risk modelling, Habitats Regulations Appraisals (HRAs), Biodiversity Enhancement Management Plans (BEMPs) and engagement with statutory bodies and other stakeholders.
McKay Forestry	Forestry	Neil McKay	▪ National Diploma in Forestry ▪ Institute of Chartered Foresters, Professional Member (MICFor) and Regional Chair (2007 to present) ▪ NEBOSH National Diploma in Occupational Safety and Health	Neil McKay is an experienced chartered forester with a successful track record of forest management and forestry and ecology related tasks, now specialising in renewables planning through EIA and forestry advice to developers. He has exptensive experience in providing specialist forestry input into renewables projects planning, including EIA forestry chapters for more than 20 onshore renewable developments in Scotland and Wales. He also has experience in field survey for EIA and integration of developments into existing woodland plans and mitigation of woodland loss proposals.
Pell Frischmann	Traffic and Transport Assessment	Gordon Buchan	▪ B.Eng. (Hons) Civil & Transport Engineering ▪ MSc Transport Engineering & Planning ▪ CMILT ▪ MCIHT	Gordon Buchan is a Divisional Director in the Transport Planning team with over 24 years' experience and has provided abnormal load route survey, Transport Assessment and traffic impact review advice on over 500 wind farm sites across the UK, Ireland and Scandinavia.
TNEI Services Ltd	Noise	Gemma Clark	▪ MSc Clean Technology ▪ BSc (Hons) Environmental Science ▪ IOA Certificate of Competence in Environmental Noise Measurement ▪ Member of the Institute of Acoustics / PIEMA ▪ Practitioner member of the Institute of Environmental Management and Assessment	Gemma Clark is a Principal Consultant/ Head of Department with over 19 years experience working in the environmental consultancy sector. Gemma has primarily worked on wind farm noise assessments for the past 17 years. Gemma has been involved with all stages of assessment from initial feasibility assessments, baseline surveys, impact assessments through to assisting with collating information for Appeals and compliance monitoring.
TNEI Services Ltd	Glint and Glare	Jim Singleton	▪ BSc (Hons) Music Technology ▪ IOA Diploma in Acoustics & Noise Control ▪ Member of the Institute of Acoustics	Jim Singleton is a Specialist Consultant who has over 17 years experience in working in environmental consultancy for the renewable energy sector. Jim's specific focus is on Quality Assurance for TNEI's Environment and Engineering Team, including the review of noise assessments and other technical disciplines, including shadow flicker and glint & glare assessments. Jim has experience in glint and glare across a variety of scales of project, including both ground mount solar farms and roof mounted solar projects.
Aviatica	Aviation	Malcolm Spaven	▪ MSc Rural & Regional Resources Planning ▪ MA (Hons) Politics	Malcolm Spaven has more than 24 years' experience of aviation consultancy in the wind industry, with in-depth technical and operational knowledge of the aviation industry. Malcolm has worked on the development of solutions through sound analysis and negotiation with stakeholders and has a wide range of competencies in supporting planning applications, from pre-planning feasibility studies to expert witness at inquiries.
Pager Power	Telecommunications	Aaron Williams	▪ BSc (Hons) Mathematics	Aaron Williams is a Senior Technical Analyst at Pager Power with over four years of experience in the field of wind farm development and telecommunications impacts. Over the past four years, Aaron has worked on wind farms both within the United Kingdom and internationally, and understands how best practices within telecommunications assessments can lead to reduced delays and unexpected costs further down the project timeline. Aaron has experience dealing with all major UK telecommunications stakeholders and has managed projects involving impacts upon broadcast infrastructure, broadband technology and wireless point-to-point communications infrastructure in the microwave and Ultra-High Frequency range. Aaron has also undertaken numerous reception surveys pertaining to television and radio reception quality across the UK. Aaron is therefore well-placed to advise wind developers on the planning issues surrounding telecommunications infrastructure and the mitigation solutions available.
Biggar Economics	Socio Economics	Simon Cleary	▪ MA (Hons) Economics and Mathematics ▪ Member of Economic Development Association Scotland ▪ Member of Institute of Economic Development	Simon Cleary is the Energy Transition Director at BiGGAR Economics and in the last 12 years has become a well respected expert in assessing the socio-economic impacts of renewable energy projects and has developed expertise in modelling the economic impact of individual renewable energy projects and industry wide developments. Simon has contributed to socio-economic impact assessments of over 100 wind farm developments around the UK including projects that have focused on the development of clusters of projects within a given geography and cumulative potential of these. Simon has particular experience of assessing the economic impact of wind farms and has designed the economic models that are currently used to assess impacts of individual projects and the model used as part of our work for DECC and RenewableUK on the economic contribution of the onshore wind energy sector to the UK economy.