15 Schedule of Mitigation

15.1 Introduction and Schedule of Commitments

- 15.1.1 Chapter 15 of the EIA Report October 2023 presented a summary of mitigation and commitments (Table 15.1), which identified the mitigation, compensation and enhancement measures proposed to prevent, reduce or offset the effects of the original proposed development on the environment.
- AEI Table 15.1 presents an updated summary of mitigation and commitments deemed appropriate as a result of the revised proposed development. The mitigation and compensation presented in the EIA Report October 2023 that continues to remain applicable to the revised proposed development, is also presented. AEI Table 15.1 is therefore intended to supersede Table 15.1 of the EIA Report October 2023.

15.2 Statement of Significance

- 15.2.1 Provided that the proposed mitigation measures are successfully implemented, the residual effects related to most environmental disciplines would not be considered significant in the context of the EIA regulations, with the exception of some localised landscape and visual effects on the Scottish Borders LLA6 Lammermuir Hills Local Landscape Area (LLA), however the revised proposed development would not compromise the overall integrity of this LLA. Localised significant night time effects on the LLA6 Lammermuir Hills and LCT 90 Dissected Plateau Moorland would be experienced due to the introduction of new light sources into the area. Overall, the assessment of the likely significant landscape and visual effects associated with the construction, operation and decommissioning of the revised proposed development concludes that those relevant landscape and/or visual resources potentially affected by the revised proposed development would not be affected to a greater degree than the original proposed development.
- 15.2.2 All renewable energy developments incorporating wind turbines are likely to give rise to some significant landscape and visual effects. In the case of the revised proposed development, significant landscape and visual effects would be localised and confined to a distance of approximately 5 km of the proposed wind turbines. It is considered that the landscape can accommodate the revised proposed development, alongside other existing operational, consented and proposed wind farms.
- 15.2.3 Through the removal of seven wind turbines, adverse effects on cultural heritage from the revised proposed development have been lessened. Moderate effects have been identified with regard to Addinston, Fort (SM362), Glenburnie, Fort (SM4473) and Minor effects have been identified with regards to Longcroft Hill, Homestead (SM4480), all of which are considered not significant in EIA terms.
- 15.2.4 Moderate effects, which are considered significant in EIA terms, continue to be identified with regards to Longcroft, Fort (SM372). However, aspects of this asset's cultural significance, which are integral, are still appreciable and understood, such that the integrity of its setting is retained. Therefore, it is considered that with the proposed design mitigation in place, the revised proposed development will be in line with NPF4 policy.

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AEI Table 15.1: Summary of Mitigation and Compensation

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
AEI Chapter 3: Revised Proposed Development Description	Environmental management	Construction	The applicant would engage an Environmental Clerk of Works (ECoW) on-site during the construction phase. The Principal Contractor (PC) will ensure construction activities are carried out in accordance with the mitigation measures outlined in the EIA Report October 2023, this AEI Report and any planning conditions, this will be monitored by the applicant and the ECoW. An outline Construction Environmental Management Plan (CEMP) is provided as Technical Appendix 3.1. This sets out the applicant's requirements for inclusion within a detailed CEMP and other documents including guidance and best practice for adoption during construction of the proposed development. The outline CEMP provides an overview of the following aspects of environmental management required to mitigate any potential environmental incidents during construction: design philosophy and construction methodologies; surface and ground water management; water quality monitoring; flood risk management; private water supply management; waste and resource management;

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
ALI CHAPCEI			 wastewater and water supply monitoring and control; noise and vibration control; dust and other emissions to air control. spoil management; peat slide monitoring and control; oil and chemical delivery and storage; temporary lighting management; existing on-site utilities management; post construction reinstatement; construction traffic management; health and safety management; public liaison provision; and decommissioning and restoration methodologies. To ensure all mitigation measures outlined within this EIA Report are carried out on-site, contractors will be required to develop a detailed CEMP which will form an overarching document for all site management requirements, including: a Pollution Prevention Plan; a Soils Management Plan; a Construction Traffic Management Plan; a Site Waste Management Plan; a Borrow Pit Management Plan;

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 a Fire Risk Management Plan; a Outdoor Access Management Plan; and a Water Quality Monitoring Plan. The detailed CEMP would be agreed in advance with Scottish Borders Council (SBC) in consultation with other stakeholders, prior to commencement of construction. Performance against the CEMP would be monitored by the applicant, the ECoW and PC throughout the construction period.
AEI Chapter 6: Landscape and Visual Impact Assessment	Wind turbine layout and height of wind turbines	Operation	The design of the wind turbine layout has taken into account the local and wider landscape and visual receptors to best design a scheme which minimises the impact on the landscape. This takes account of adjacent and nearby wind farms and those in the planning system.
	Aviation lighting	Operation	The applicant is committed to reducing significant environmental effects predicted during the development of its projects and the following mitigation measures will be deployed at the revised proposed development as part of the reduced Aviation Lighting Scheme agreed with the Civil Aviation Authority (CAA). Medium intensity steady red (2000 candela) lights will only be required on the nacelles of wind turbines T5, T8, T11, T13 and T16;

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 A second 2000 candela light on the nacelles of the above wind turbines to act as an alternative in case of failure of the main light (note that both lights should not be lit at the same time);
			The visible lights on these wind turbines to be capable of being dimmed to 10% of peak intensity when the visibility as measured at the wind farm exceeds 5km;
			 A scheme of infrared lighting to be agreed with MoD;
			 Intermediate 32 candela lights are not required to be fitted on the wind turbine towers.
AEI Chapter 7: Cultural Heritage & Archaeology	Protection of on-site assets	Construction	The revised proposed development has the potential to result in direct impacts to heritage assets as a result of any groundworks or ground disturbance undertaken as part of the construction phase.
			As outlined in paragraph 7.5.6 and shown in Table 7.7 of Chapter 7 of the EIA Report October 2023, mitigation is proposed for those heritage assets where there is the potential for direct impacts, subject to agreement with the SBC archaeologist.
			The following mitigation is proposed for those assets which may be present within the footprint of any ground disturbance:

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 SLR16, SLR17 and SLR18 – No mitigation proposed; SLR57 – watching brief;
			 Unknown Prehistoric remains – watching brief or archaeological recording;
			 Unknown buried remains – watching brief or archaeological recording.
			The precise scope of the proposed mitigation measures would be agreed with the SBC archaeologist on behalf of the applicant and the agreed mitigation programme would be outlined and carried out following a Written Scheme of Investigation. Temporary fencing is proposed within 50 m of the assets within the site to ensure no accidental
			damage occurs during construction.
	Protection of on-site assets	Operation	AEI Technical Appendix 8.6: OBERP ensures the original 500 m to the scheduled assets has been maintained with no enhancement of biodiversity proposed within this buffer.
AEI Chapter 8: Terrestrial Ecology	General	Pre-construction	The applicant has committed to the production of a CEMP to the satisfaction of NatureScot and other relevant stakeholders, before construction commences, and would follow <i>Windfarm Good Construction Guidance</i> , Scottish Renewables et al (2010). An outline CEMP is included within

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			Technical Appendix 3.1 of the EIA Report October 2023. A Species Protection Plan (SPP) will be required to ensure compliance with the Wildlife and Countryside Act (a) to avoid any impacts to species specially protected under Schedule 5 of that Act and (b) to avoid any damage to active setts/holts/hibernacula. The SPP would be agreed in writing with SBC, in consultation with relevant stakeholders, prior to the commencement of revised proposed development.
	Protected species	Pre-construction	Though no species specially protected under Schedule 5 of the Wildlife and Countryside Act or the Badgers Act were found within the potential impact zone of the revised proposed development, species such as badger, otter and water vole could move into that area in the future. Further surveys for these species will therefore be undertaken immediately prior to construction. If any were found, then appropriate mitigation would be implemented and/or licence sought from NatureScot.
	Bats	Pre-construction	Evidence of bats using buildings B and C as roosts and features on one ash tree (TN43) that could be used by multiple bats will require further presence/likely absence surveys pre-construction to establish use, species and individual number estimates (since the features exist just within a 30

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			m zone of influence of potential indirect disturbance effects) resulting from access track works. See EIA Technical Appendix 8.3 of the EIA Report October 2023 for more details. No direct impacts of habitat loss/ damage to any confirmed/ suspected roosts are predicted based on current survey evidence. Therefore, there is potential for works to disturb roosting bats if they create a higher level of noise, vibrations and dust than current use of access track. Presence/likely absence surveys should be conducted preconstruction in the optimal months (May – August inclusive) to add to the baseline data collated. These surveys will provide evidence to support a bat species licencing application to NatureScot (to permit what would be otherwise unlawful acts within 30 m of these features). Licensed bat ecologist supervision and mitigation will be prescribed in a mitigation plan (e.g., restricting timing of works seasonally and at dusk/dawn plus lighting considerations within 30 m of the features) to support the licence application accordingly and will require to be strictly adhered to, to protect the legal status of the roost and individual bats.
	Wild pansy	Pre-construction / construction	To mitigate and compensate for the loss of any wild pansy plants during construction, plant rescue and relocation should be carried out prior to construction. In addition, seed rescue should

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			be carried out to allow seeds to be used in reinstatement works where suitable soil conditions exist for this species.
	River Tweed SAC watercourse crossings	Construction	The watercourse crossing at location 11 which is likely associated with bog pools (Priority peatland communities- NVC M1 or M2) will be bottomless and designed to avoid negative impacts on the pools or their hydrology.
	Bats	Operation	No tree clearance will be required so wind turbines are set within locations that will reduce the risk of collision to bat species that do not tend to fly across open space. A distance of at least 95 m between wind turbine blade tip and the nearest woodland will be established during the construction phase of the proposed development and maintained as per current bat guidance (NatureScot, 2021, see Section 8.6 of Chapter 8: Terrestrial Ecology of the EIA Report, October 2023). Mitigation will be implemented during operation in order to reduce the risk of wind turbine-related bat mortality specifically for Pipistrellus and Nyctalus species, though this will also further mitigate for all bat species. The mitigation measures will comprise curtailment of the operation of all wind turbines during certain weather conditions at certain times of year (in particular spring and summer). In the event the

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			revised proposed development is consented, a Bat Mitigation and Monitoring Plan will require to be provided pre-construction.
			Based on work done at other operational windfarms in upland forested sites (in south-west Scotland), 90% of Pipistrellus bat activity occurs when wind speeds are below 5.5 m/s and temperatures are above 11°C at nacelle height. The curtailment will therefore apply between 30 minutes post-sunset and 40 minutes pre-sunrise and will be implemented at each wind turbine between 1st April – 31st October each year. The mitigation will be implemented for the lifetime of the revised proposed development, unless monitoring results necessitate a change in curtailment regime.
			The implementation of the curtailment will be via software which will automatically send a "pause" command to the relevant wind turbine, when the parameters are met, initiating a feathering of the blades. This will slow the rotation speed of the blades to below 1 RPM (i.e., slower than the second hand of a clock). This is a tried and tested method, already being successfully applied on other wind farm sites in Scotland.
			Monitoring would comprise measurement of bat activity and fatality rates and would be undertaken annually until validation of the initial curtailment parameters and any amendments are

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			established in consultation with NatureScot. Bat activity monitoring would comprise the use of static bat detectors (based at ground level) at five randomly selected wind turbines during July – September inclusive which is when most fatalities are found to occur. This represents a precautionary approach, because if bat fatality rates are sufficiently low during this period, they are unlikely to be greater at other times of year - if the mitigation is effective during this period, it will also be effective during periods of lower levels of activity. The use of five wind turbines is considered to provide a representative sample (41.7%) of turbines to be sampled) and is coincident with the number of turbines which can reliably be searched by a dog team in a single day.
			Carcass searching would be undertaken within a 50 m radius at the same six wind turbines every two weeks from 1st July until end of September i.e., seven searches in total. The estimate of two weeks persistence of corpses, and therefore the intervals between search dates will be further confirmed by undertaking a carcass persistence trial at the site prior to undertaking carcass searching. Carcass searching will be undertaken using dogs, so that an effective observer efficiency rate of 80% or more can be achieved. Following each annual monitoring period, if the number of bat fatalities is less than two bats per

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			wind turbine per year, the operator may propose amendments to reduce the curtailment parameters. If the number of bat fatalities is greater than two bats per wind turbine per year, the operator shall be obligated to propose amendments to strengthen the mitigation. Any changes proposed will be consulted on with NatureScot and implemented the following year with repeated monitoring using the methods described above unless otherwise varied (e.g., to investigate condition in which fatalities are occurring). No other specific mitigation measures are required for the operational phase. However, compensation and enhancement measures provided as part of the outline BERP (AEI Technical Appendix 8.6) would remain in place during the operational phase.
AEI Chapter 9: Ornithology	Birds	Pre-construction / construction	The applicant has committed to the production of a CEMP to the satisfaction of NatureScot and other relevant stakeholders, before construction commences, and would follow <i>Windfarm Good Construction Guidance</i> , Scottish Renewables et al. (2019). An outline CEMP is included as EIA Technical Appendix 3.1 of the EIA Report October 2023. An ECoW will be appointed to monitor the implementation of the CEMP, the Breeding Bird Protection Plan (BBPP) and the BERP. Several species specially protected from disturbance

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			during breeding under Schedule 1 of the Wildlife and Countryside Act were recorded during the surveys, including merlin and common crossbill. It will be essential to ensure that no Schedule 1 species are disturbed during the breeding season, particularly during the construction phase, therefore, a BBPP will be developed and implemented. Further surveys for merlin and common crossbill and any other Schedule 1 species will be undertaken to inform the BBPP at fortnightly intervals through the breeding season (March-August) during the construction period. If any nesting Schedule 1 birds are found then potentially disturbing activities would be suspended for the breeding season within an appropriate zone (dependent on the location of the birds and the species involved, to be agreed with NatureScot and SBC, following Ruddock and Whitfield 2007). The BBPP will also include measures to ensure the protection of all other nesting birds. Where works affecting habitats that could be used by nesting birds take place between March and August (inclusive), they will only be carried out following an on-site check for nesting birds by an experienced ecologist. If this indicates that no nesting birds are likely to be harmed by the works, then the works will proceed. If nesting birds are found to be present, work will not take

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			place in that area until the adult birds and young have left the nest. A protection zone will be clearly marked around the nest site to prevent accidental disturbance or damage.
			A BBPP would therefore be developed and be in place prior to the onset of construction activities. The BBPP will describe survey methods for the identification of sites used by protected birds and will detail protocols for the prevention, or minimisation, of disturbance to birds as a result of activities associated with the proposed development. The final BBPP would be agreed in writing with SBC, in consultation with relevant stakeholders, prior to the commencement of the revised proposed development. Implementation of the BBPP would be monitored by the ECoW.
	Breeding birds	Operation	The outline BERP, presented in AEI Technical Appendix 8.6 , outlines proposals to increase the suitability of the upland habitats for breeding curlew and other breeding waders including snipe and lapwing, thus providing enhanced breeding habitat over 500 m from the proposed wind turbines. The outline BERP will also deliver onsite habitat enhancement that will benefit breeding merlin, including peatland re-wetting and restoration of dry heath. The final BERP would be agreed in writing with SBC, in consultation with relevant stakeholders, prior to

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			the commencement of the revised proposed development.
AEI Chapter 10: Geology, Hydrology and Hydrogeology	Ground investigation water quality	Pre-Construction	Prior to construction being undertaken, relevant detailed site investigations would be conducted. This could include investigations of underlying deposits, in particular where the revised proposed development is sited, to inform detailed design and suitable micro-siting of the revised proposed development civil infrastructure.
			If there are assessed to be potential effects to surface watercourses or groundwater, baseline water quality monitoring will be undertaken as required. A Water Quality Monitoring Plan (WQMP) will be prepared and agreed with SBC, in consultation with SEPA, prior to commencement of construction. It is anticipated that this will include a programme of pre-construction monitoring, over a period to be set out in the WQMP.
	Impacts on surface water quality Impacts to groundwater flow Impacts to groundwater quality Compaction of soils Private water supplies Impacts to designated sites (River Tweed SAC, SSSI)	Construction	Specific mitigation measures as outlined in Chapter 10 of the EIA Report October 2023 include: Use of existing infrastructure as far as practicable. Implementation of mitigation measures in CEMP.

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
	Removal and impact on peat		 Pollution Prevention Plan (PPP) to be agreed and implemented.
			 Final design of watercourse crossings to be implemented.
			 Any private water supply pipework will be marked and avoided with a detailed design strategy to ensure continuation of supply.
			 Dewatering undertaken for as short a time as practicable.
			 Pre-construction ground investigation works.
			 WQMP to be agreed and implemented.
			 Siting civil infrastructure to minimise peat excavation requirements.
			 Management, storage and restoration in line with best practice guidance, detailed in CEMP.
			Following a review of best practice outlined in relevant guidance and legislation a detailed CEMP will be compiled. The Principal Contractor will implement measures outlined within the CEMP, as agreed with relevant consultees. This would also include a construction method statement, which would account for:
			Pollution risk assessment;

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 Identification of controlled waters and temporary discharge points to these watercourses;
			 Planning and design of dewatering activities to minimise the local drawdown;
			 Planning and design of pollution control measures, such as drip trays, bunds and spill kits, in particular during earthworks;
			 Storage of fuel and chemicals in a designated area in accordance with best practice procedures, outwith 50 m watercourse buffers;
			 Designated area for concrete batching, 100 m from watercourses;
			 Pollution control system management, including dewatering of excavations;
			 Contingency planning and emergency procedures; and
			 Ongoing monitoring of construction procedures.
			Embedded measures within the CEMP to prevent
			sedimentation pollution and erosion will include:
			 All earthworks would be carried out in accordance with BSI Code of Practice for Earth Works BS6031:2009;

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 Stockpiles will be placed at least 50 m from watercourses. The height and maximum slope angle will be in accordance with BSI guidance. Where there are stockpiles of peat, re-wetting will occur to prevent peat drying out. Sediment pollution mitigation measures, including swales will be implemented at the base of stockpiles. Sediment pollution mitigation measures will be emplaced across the revised proposed development, this may include: drainage, silt fencing, settlement ponds and check dams. Plant movements will be minimised through management measures. Measures to prevent sediment on public roads may include wheel washing or road sweeping at the site entrance. Any CAR licences required for site discharges or watercourse crossings will be applied to from SEPA prior to construction. A 'wet weather policy' will be in place, given that there are likely to be periods of significant rainfall at the site. The policy will include that site management checks local weather forecast daily, regularly checks and maintains pollution

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			control system and suspends work during adverse conditions.
			 Where topography dictates that working platforms are needed, these would be formed to ensure that surface water drains away from watercourses.
			To avoid unnecessary compaction and disturbance to site soils, working areas and corridors would be established and demarcated, with construction operatives appropriately inducted and trained to avoid work outside the designated work areas.
			Embedded measures within the CEMP to prevent chemical pollution include:
			 A suitable surface water drainage strategy with detailed drainage design will be prepared and agreed prior to construction, but the following outline measures will be included.
			 Identified watercourse crossings as shown on AEI Figure 10.3 will be designed to convey flows of 0.5%AEP (1:200yr) plus climate change, to prevent exacerbating downstream flood risk.
			 Track-side swales will be designed to ensure separation of clean water from potentially contaminated water.

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			 Check dams will be employed to slow down the flow of water and decrease erosion within drainage swales.
			 Sumps and settlement ponds will be used to treat and slow down the flow of water during periods of high rainfall. This will be employed at drainage outlets prior to reaching watercourses.
			 Areas of excavation and earthworks will have drainage designed to drain to a sump to prevent pollution and increase surface water run-off.
			 Hydrological connectivity between upslope and downslope will be maintained through cross-drainage and culverts.
	Impacts on surface water flow	Operation	Embedded design and good practice mitigation.
	Impacts on fluvial geomorphology Impacts on groundwater flow and		 PPP, to include track-side and cross drainage.
	drying out of peat Impacts on surface water quality		 Regulation of watercourse crossings by CAR, to include maintenance and removing any blockages.
			 Implement best practice and correct storage of fuels and management plans in the event of spills.
			 Embedded design and good practice mitigation.

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
AEI Chapter 11: Transport & Traffic	Construction traffic	Construction	A Construction Traffic Management Plan will be agreed with SBC as a condition of consent.
			An Abnormal Indivisible Load (AIL) Transport Management Plan will also be developed and agreed with SBC which will reduce the effects of AIL convoys on the road network.
AEI Chapter 12: Noise	Construction noise	Construction	A range of noise mitigation measures are proposed for the construction phase in accordance with measures outlined in BS 5228-1:2009.
			Site operations to be limited to 07:00 – 19:00 Mondays to Saturdays (except during wind turbine delivery/erection and commissioning/periods of emergency work).
	Construction noise	Construction	Additional noise mitigation measures are proposed to reduce the acoustic impact of construction further during Saturdays 13:00-
			19:00.
			Good practice on blasting shall be followed along with guidance on blast frequency and timing.
			Noise mitigation measures would be implemented as part of the detailed CEMP which would be required to be agreed as a condition of consent.
	Operational noise	Operation	The revised proposed development operating in isolation and cumulatively with other existing operational and proposed wind farm

AEI Chapter	Matter / Effect requiring Mitigation	Timing / Phase	Mitigation Measure
			developments meet the limiting requirements of ETSU-R-97. As a result, no mitigation is required.
AEI Chapter 14: Aviation, Radar & Other Issues	Shadow flicker	Operation	Impacts of shadow flicker on residential receptors within 2 km of the wind turbine locations will be controlled by installing shadow flicker shut down modules in the wind turbines and shutting down individual wind turbines during times when wind and climactic conditions are such that shadow flicker could occur.

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